VISIONIAS
INSPIRING INNOVATION

September, 2021

Monthly CURRENT AFFAIRS

8468022022 | 9019066066

www.visionias.in

DELHI | JAIPUR | PUNE | HYDERABAD | AHMEDABAD | LUCKNOW | CHANDIGARH | GUWAHATI

"You are as strong as your Foundation"

FOUNDATION COURSE
GENERAL STUDIES
PRELIMS CUM MAINS 2022 & 2023

Approach is to build fundamental concepts and analytical ability in students to enable them to answer questions of Preliminary as well as Mains examination

- Includes comprehensive coverage of all the topics for all the four papers of GS Mains, GS Prelims & Essay
- Access to LIVE as well as Recorded Classes on your personal student platform
- Includes All India GS Mains, GS Prelims, CSAT & Essay Test Series
- Our Comprehensive Current Affairs classes of PT 365 and Mains 365 of year 2022

Live - online / Offline Classes

ONLINE Students

NOTE - Students can watch LIVE video classes of our COURSE on their ONLINE PLATFORM at their homes. The students can ask their doubts and subject queries during the class through LIVE Chat Option. They can also note down their doubts & questions and convey to our classroom mentor at Delhi center and we will respond to the queries through phone/mail.

DELHI Regular Batch
13 OCT 9 AM | 5 OCT 1 PM

8 OCT | AHMEDABAD | HYDERABAD

18 OCT | PUNE

6 OCT | JAIPUR

GS FOUNDATION COURSE 2023 | DELHI: 25 NOV | LUCKNOW: 11 Jan | CHANDIGARH: 18 Jan

ADVANCED COURSE
GS MAINS

Targeted towards those students who are aware of the basics but want to improve their understanding of complex topics, inter-linkages among them, and analytical ability to tackle the problems posed by the Mains examination.

Covers topics which are conceptually challenging.

Approach is completely analytical, focusing on the demands of the Mains examination.

Comprehensive current affairs notes

Mains 365 Current Affairs Classes (Offline)

Sectional Mini Tests

Duration: 12 weeks, 5-6 classes a week (If need arises, class can be held on Sundays also)

Scan the QR CODE to download VISION IAS app

STARTING 19 October 1 PM

LIVE/ONLINE CLASSES AVAILABLE

Table of Contents

1. POLITY AND GOVERNANCE _____ 3

1.1. Social Accountability _____ 3

1.2. People's Plan Campaign _____ 5

1.3. Deputy Speaker of Lok Sabha _____ 7

1.4. News in Shorts _____ 7

1.4.1. Amendment in All India Services (AIS) (Conduct) Rules, 1968 _____ 7

1.4.2. Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM-CARES) Fund _____ 8

1.4.3. An institution's right to government aid is not a fundamental right: Supreme Court _____ 8

1.4.4. Meghalaya Enterprise Architecture Project (MeghEA) launched _____ 8

2. INTERNATIONAL RELATIONS _____ 9

2.1. First Quad Summit _____ 9

2.1.1. EU Indo-Pacific startegy _____ 12

2.1.2. Formation of AUKUS _____ 13

2.1.3. India-France Relations _____ 14

2.2. Free Trade Agreements (FTAs) _____ 15

2.3. India And Multilateral Development Institutions18

2.4. News in Shorts _____ 21

2.4.1. UNSC resolution addresses 'key concerns' on Afghanistan: India _____ 21

2.4.2. 21st meeting of Shanghai Cooperation Organization (SCO) Council of Heads of State in Dushanbe _____ 21

2.4.3. Eastern Economic Forum _____ 22

2.4.4. India endorses objectives of Global COVID-19 Summit _____ 22

2.4.5. U.S.-India Joint Leaders' Statement: A Partnership for Global Good _____ 22

2.4.6. India and USA sign project agreement for Air-launched Unmanned Aerial Vehicle (ALUAV) _____ 23

3. ECONOMY _____ 24

3.1. Urban Planning in India _____ 24

3.2. Agricultural Indebtedness in India _____ 26

3.3. Agreement on Agriculture _____ 28

3.4. India's Exports _____ 30

3.5. Ease of Doing Business _____ 35

3.6. Production Linked Incentive (PLI) Scheme for Textiles _____ 37

3.7. Telecom Sector _____ 39

3.8. Civil Aviation Sector _____ 43

3.9. News in Shorts _____ 45

3.9.1. Card Tokenization _____ 45

3.9.2. Account Aggregator system launched to bolster lending ecosystem _____ 46

3.9.3. Government proposes new Code of Conduct for Committee of Creditors (CoC) under Insolvency and Bankruptcy Code _____ 46

3.9.4. SEBI lays the framework Social stock exchanges (SSE) _____ 46

3.9.5. Reserve Bank of India (RBI) announced opening of the third cohort under Regulatory Sandbox (RS) _____ 47

3.9.6. T+1 (Trade plus 1 day) settlement cycle _____ 47

3.9.7. Special Drawing Rights (SDRs) _____ 48

3.9.8. Ministry of Food Processing Industries (MoFPI) launched the PMFME Scheme Seed Capital Module __ 48

3.9.9. Rail Kaushal Vikas Yojana (RKVY) _____ 48

3.9.10. DigiSaksham _____ 48

3.9.11. Capacity Building Program For Women In Dairy Farming _____ 48

3.9.12. Transport and Marketing Assistance (TMA) scheme _____ 48

3.9.13. India's first ever Euro-denominated green bonds49

3.9.14. Centre to raise farmers database from 5.5 crore to 8 crore by December end _____ 49

3.9.15. Government Issues Orders to Set Up District-Level Power Committees _____ 49

3.9.16. India Jumps 2 Spots to 46th Rank in the Global Innovation Index (GII) 2021 _____ 50

3.9.17. UNCTAD Trade and Development Report 2021, released _____ 50

4. SECURITY _____ 51

4.1. Overground Workers (OGWs) _____ 51

4.2. Military Logistics Agreements _____ 52

4.3. News in Shorts _____ 53

4.3.1. Theatre commanders will report to Chief of Defence Staff (CDS) _____ 53

4.3.2. HELINA (Helicopter based NAG) _____ 54

4.3.3. Exercises in News _____ 54

5. ENVIRONMENT _____ 55

5.1. Protecting the Antarctic Environment _____ 55

5.2. Climate Action Plan for Coastal Cities _____ 57

5.3. Air Pollution Measurement _____ 61

5.4. Circular Plastic Economy _____ 63

5.5. Renewable Energy Certificate (REC) _____ 66

5.6. Methanol Economy _____ 67

5.7. Possibly Extinct Species _____ 69

5.8. News in Shorts _____ 71

5.8.1. Tamil Nadu to set up India's first Dugong Conservation reserve _____ 71

5.8.2. UNESCO declares world's first 5-country biosphere reserve in "Amazon of Europe" _____ 72

5.8.3. Hybodont sharks _____ 72

5.8.4. Prime Minister (PM) dedicates to the nation 35 crop varieties with special traits _____ 72

5.8.5. The Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970–2019) _ 73

5.8.6. Climate change can force 216 million people to migrate within their own countries by 2050 _____ 73

5.8.7. A Multi-Billion-Dollar Opportunity: Repurposing Agricultural Support To Transform Food System _____ 74

5.8.8. Green Voyage 2050 Project _____ 74

5.8.9. Climate Action and Finance Mobilization Dialogue (CAFMD) _____ 75

6. SOCIAL ISSUES ____ *76*

6.1. Child Marriage ____ **76**

6.2. Private Sector Participation in Education System78

6.3. Feminization of Agriculture ____ **80**

6.4. Secondary Health Care in India ____ **82**

6.5. Crime In India 2020 Report ____ **84**

6.6. Swachh Survekshan ____ **85**

6.7. News in Shorts ____ **87**

6.7.1. Ministry of Education (MoE) Releases India Rankings Of Higher Eduction Institutes (HEIS), 2021 _ 87

6.7.2. Saath Initiative ____ 87

6.7.3. The Ministry of Women and Child Development (MWCD) to bring rules to ease inter-country adoption 87

6.7.4. Centre Announces Uniform Specifications for Fortified Rice ____ 88

7. SCIENCE AND TECHNOLOGY ____ *89*

7.1. Use of Technology in Agriculture ____ **89**

7.2. Coal Based Hydrogen ____ **92**

7.3. News in Shorts ____ **94**

7.3.1. Space Programmes in News ____ 94

7.3.2. Blue straggler ____ 94

7.3.3. Havana Syndrome ____ 94

7.3.4. National Action Plan for dog mediated Rabies Elimination (NAPRE) launched ____ 94

7.3.5. United in Science 2021 report released ____ 94

7.3.6. Ministry of Health and Family Welfare releases 3rd State Food Safety Index (SFSI) ____ 95

7.3.7. Government launches Ayushman Bharat Digital Mission (ABDM) ____ 95

8. CULTURE ____ *96*

8.1. Ancient temple of Gupta period ____ **96**

8.2. News in Shorts ____ **97**

8.2.1. ThaPorunai River (Thamirabarani) civilization in Tamil Nadu Dating Back 3,200 Years (1155 BC) ____ 97

8.2.2. Paryushan and Das Lakshan ____ 97

8.2.3. National Mission On Cultural Mapping (NMCM) 98

8.2.4. GI tag to Judima Rice wine ____ 98

8.2.5. Meenakari ____ 98

9. ETHICS ____ *99*

9.1. Media Ethics: Examining the foundation of the fourth pillar of democracy ____ **99**

10. GOVERNMENT SCHEMES IN NEWS ___ *102*

10.1. National Scheme for PM Poshan Shakti Nirman102

10.2. Pradhan Mantri Ujjwala Yojana ____ **103**

10.3. Atal Pension Yojana ____ **104**

10.4. Production Linked Incentive (PLI) Scheme For Auto, Drone Industries ____ **105**

NOTE:

Dear Students,

Memorisation and recollection of information in Current Affairs is as important as understanding the articles. In order to enhance the learning outcomes from the Monthly Current Affairs Magazine, we are introducing following additions:

A thematic based colors has been used in the document in the boxes, tables etc to enable easy identification and recollection of various concepts and topics.

Questions are an important tool to assess and retain information. To enable this we are adding a Smart Quiz at the end of each section in the document for practicing the questions.

A wide variety of infographics have been added to ensure smoother learning experience and enhanced retention of the information. This will also help in effective presentation of information in the answer writing as well.

Places and persons in news are being presented in an objective manner through Maps, Tables & Pictures. This will help in easier recollection of factual information.

Copyright © by Vision IAS

All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Vision IAS.

1. POLITY AND GOVERNANCE

1.1. SOCIAL ACCOUNTABILITY

Why in news?

Recently, a State-wide campaign has been launched in Rajasthan for demanding passage of the social accountability law in the next Assembly session.

What is Social Accountability?

- Social accountability refers to a **wide range of actions and mechanisms** that the citizens, communities, independent media and civil society organizations can use **to hold public officials accountable.**
- **Common tools of Social Accountability** at various stages of service delivery involves the following:

Tool	Description	Already in practice in
Participatory budgeting	A process through which citizens participate directly in budget formulation, decision- making, and monitoring of budget execution. It creates a **channel for citizens to give voice to their budget priorities** particularly at the local level of government.	**Gujarat**
Participatory Planning	It is a process whereby **beneficiaries of government programs are involved in the planning and design** of programme components in order to determine local problems, priorities and solutions.	**Kerala**
Public expenditure tracking	Involve citizen groups in **tracing the flow of public resources** for the provision of public goods or services from origin to destination. It can **help to detect bottlenecks, inefficiencies, or corruption.**	**Delhi, Rajasthan**
Citizen Report Card	**Participatory surveys that provide quantitative feedback to service providers** on the satisfaction levels amongst citizens on the quality of public services in a particular geographical area.	**Bangalore, Maharashtra**
Community Scorecard	It is a community-based **monitoring tool that assesses services, projects, and government performance** by analysing qualitative data obtained through focus group discussions with the community.	**Maharashtra, Andhra Pradesh**
Social audit	Also called **Social Accounting**, it is a process whereby a government program is audited with the active participation of the intended beneficiaries of the program. Process culminates with the organization of public hearings where the findings are discussed and discrepancies are exposed in the presence of service providers, officials and beneficiaries.	
Citizen Charter	A document that **informs citizens about the service entitlements** they have as users of a public service, the standards they can expect for a service (timeframe and quality), remedies available for non-adherence to standards, and the procedures, costs and charges of a service.	**Andhra Pradesh, Karnataka**

Challenges and vulnerabilities inherent to social accountability efforts

- **Resistance to reform:** This can result in vested interests **withholding crucial information providing inadequate information** – such as budget documents, necessary for the conduct of many Social Accountability initiatives.
- **Complacency on part of citizens:** This usually happens either when powerful members of the community are co-opted into the system, or where an entire community stands to benefit from the spoils of corruption and malfeasance. This **can result in citizens not speaking up against corruption and refusing to co-operate** in Social Accountability efforts.
- **Disruption by powerful vested interests: Threats and coercion** can result in communities becoming hesitant to directly participate and speaking up in Social Accountability initiatives.
- **Lack of effective grievance redressal:** Strict and unfailing follow-up action on Social Accountability findings through effective grievance redressal mechanisms is crucial to the success of Social Accountability initiatives.

Imperatives for a sound Social Accountability Law

Social accountability is a product of two things working together: **a system of institutions** that creates platforms for citizen participation, and **an informed and mobilized citizenry** that can draw upon these platforms to make accountability demands on the system. This requires:

- **Effective Decentralization:** All schemes and programs must be designed following the "principle of subsidiarity" where local governments – panchayats and municipalities - are given powers and resources for implementation.
    - **Principle of subsidiarity** says that an action which can be better executed at the local level *must* be executed at the local level.
- **Information and Awareness:** Enforcing proactive disclosure of relevant and reliable information by **strengthening Section 4 of RTI Act.**
- **Capacity Building and Community Mobilization:** Regular training for the officials, as well as citizens must be conducted and help of local NGOs, SHGs, and other Community Groups must be enlisted to raise awareness about schemes and mobilize people for participation.
- **Making social accountability mandatory in program guidelines:** Every scheme must be required to conduct a social accountability tool (depending on the context, the stage of service delivery etc) in its implementation. For instance, in schemes that have a large public impact, social audits could be made mandatory.
    - There are many examples where citizen participation has been successful when mandated in policy. *(See box)*
- **Grievance Redressal** by setting up of on-line portals, helplines and detailed code of conduct for complaints received.

Success Stories

- **People's Campaign for Decentralized Planning in Kerala:** Its success has been attributed to significant financial and functional devolution and the institutional incentives for participation which led to increased representation of hitherto marginalised voices like those of SCs, STs and women.
- **Mazdoor Kisan Shakti Sangathan (MKSS)** – a Rajasthan based grassroots organization employed 'social audits' which breaks the state's monopoly over official oversight and legitimizes citizen-inclusion into hitherto exclusive affairs of the state.
- **MGNREGA**: It empowers panchayats to conduct regular social audits of all projects being undertaken under the scheme to address the problems of corruption and mismanagement that have plagued earlier wage employment.

Conclusion

Emerging time demands a central law on Social Accountability in order to make the system more accountable, transparent and efficient and, in turn make the programmes launched by the government more accessible to the poor, marginalized and disadvantaged segments of the society and, will help in poverty reduction and development of the country.

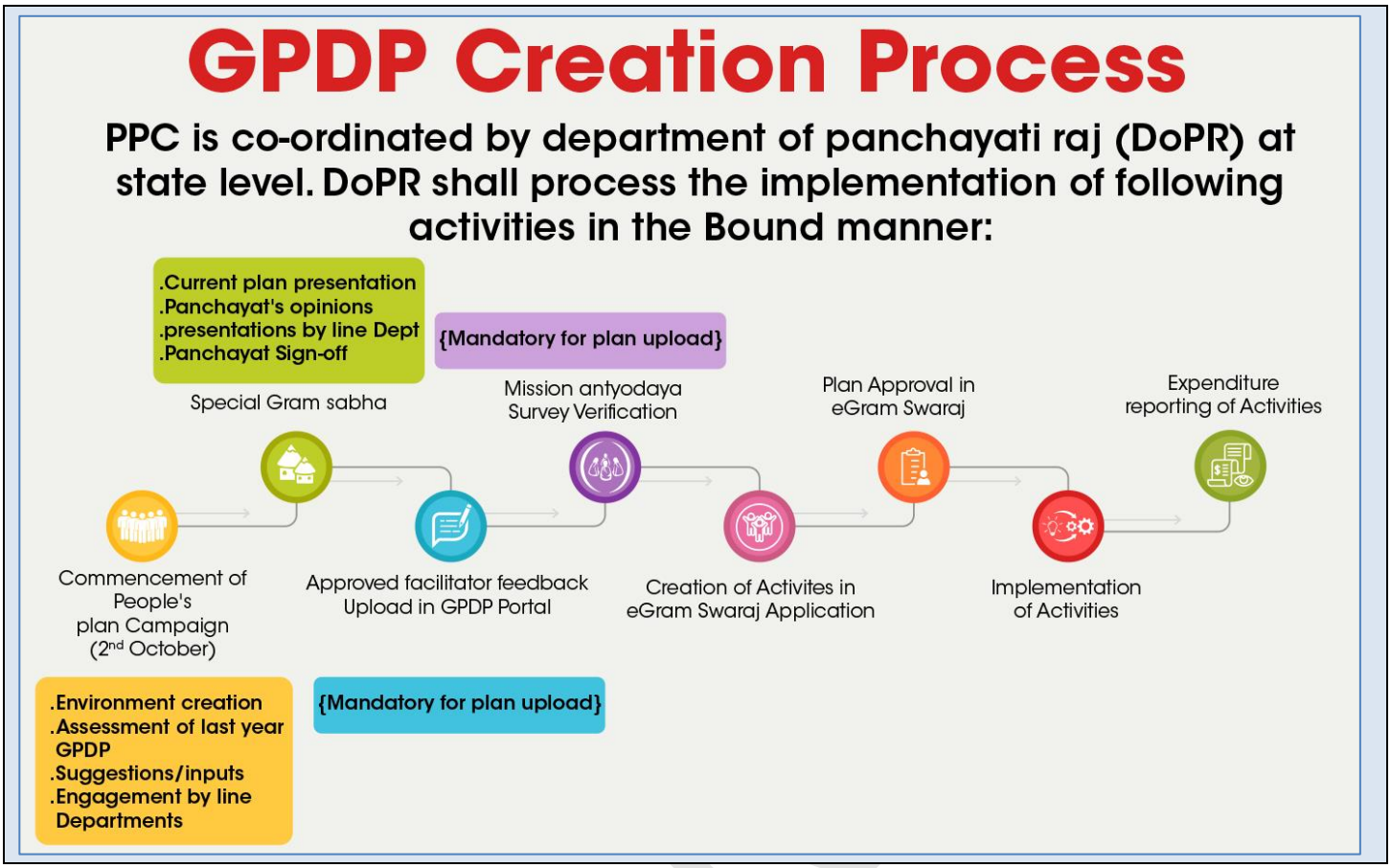
1.2. PEOPLE'S PLAN CAMPAIGN

Why in news?

Union government launched **People's Plan Campaign 2021- Sabki Yojana Sabka Vikas** and Vibrant Gram Sabha Dashboard.

About People's Plan campaign

- The People's Plan Campaign (PPC) is an effective strategy for ensuring the **preparation of GPDP in a campaign mode.** During the campaign, **structured Gram Sabha meetings** will be held for preparing **Panchayat Development Plans** for the **next financial year 2022–2023**.
- The meetings will involve physical presence and presentation by frontline workers/supervisors on 29 sectors. Special efforts have been made to ensure **maximum participation of vulnerable sections** of society like SC/ST/Women etc.
- The Panchayat Development Plan aims to strengthen the role of **elected representatives of Panchayats** and **SHG Women under DAY-NRLM** in effective Gram Sabha. There are **31.65 lakh elected Panchayat representatives** across the country in which **14.53 lakh are women.**



Gram Panchayat Development Plan (GPDP) and its importance

- **Article 243G** of the Constitution of India mandates the **Gram Panchayats (GPs) to prepare and implement GPDP** for economic development and social justice. The GPDP does three essential things:
  - It provides a **VISION** of what the people would like their village to look like;
  - It sets out clear **GOALS** to achieve that vision, and
  - Gives an **ACTION PLAN** to reach those goals.
- The GPDP should be **comprehensive and based on participatory process** involving the community particularly Gram Sabha, and in convergence with schemes of all related Central Ministries / Line Departments **related to 29 subjects listed in the Eleventh Schedule** of the Constitution.
- The convergence assumes greater significance in view of the fact that Panchayats can play an important role for **effective implementation of flagship schemes on subjects of National Importance** for transformation of rural India.
- **Ministry of Panchayati Raj has prepared model guidelines** for GPDP and circulated the same to all the States where part IX of constitution is applicable.

Gram Sabha dashboard

Dashboard will help in **increasing maximum participation** through the meeting of Gram Sabha, Standing Committee meeting of Gram Panchayat, meeting of elected Panchayat public representatives **throughout the year.**

1.3. DEPUTY SPEAKER OF LOK SABHA

Why in News?

Recently, the Delhi High Court sought Lok Sabha Secretariat reply to a petition on the vacant post of deputy speaker for over 2 years.

More about the Deputy Speaker and his election

- The Speaker and the Deputy Speaker are the **Presiding Officers** of the **Lok Sabha**.
- While the office of Speaker is vacant or during the absence of the Speaker from any sitting of the House, the **duties of the office shall be performed by the Deputy Speaker.**
- Under **Article 94**, the speaker resigns from his office by writing to the Deputy Speaker.
- Under **Article 93**, "The House of the People shall, **as soon as may be**, choose two members of the House to be respectively **Speaker and Deputy Speaker** thereof and, so often as the office of Speaker and Deputy Speaker becomes vacant, the House shall choose another member to be Speaker or Deputy Speaker, as the case may be."
- Though **no timeline on election** is provided under **Article 93**, being an important constitutional office, the election is usually held on next sitting after Speaker selection as President fixes date for Speaker election and after being elected the Speaker fixes the date for Deputy Speaker election.

Rules of Procedure and Conduct of Business in Lok Sabha and the Deputy Speaker

Being a **constitutional post** with important functions to perform, electing a Deputy Speaker will only strengthen Indian Democracy. **Rule 8** of the Rules of Procedure and Conduct of Business in Lok Sabha leaves it to the speaker to fix the date for holding the election of the Deputy Speaker.

Though the **Rule 9** of it provides for up to 10-member **Panel of Chairpersons**, nominated by Speaker, to preside over the House in the absence of the Speaker and the Deputy Speaker, they are not equipped/empowered to handle all duties of the Deputy Speaker.

Why has the office remained vacant?

For 17th Lok Sabha, the date of elections for Deputy Speaker is pending even after more than two years of Lok Sabha constitution in 2019.

The post of deputy speaker (since **Morarji Desai Government**) is conventionally given to the biggest opposition party in the house, with few exceptions. As the **combined opposition lacks in strength** to elect a member of their choice in present Lok Sabha, the choice for Deputy Speaker falls on the government of the day to either-

- **Continue with parliamentary convention** and elect Deputy Speaker from biggest opposition party, or
- **Reach settlement with any other party** in Lok Sabha for choice of Deputy Speaker. E.g., in 16th Lok Sabha it was held by AIADMK.

Conclusion

The vacancy in the post of deputy speaker not only affects the functionality of the Lok Sabha but also symbolically dents the importance of Parliamentary democracy. In this context, it is pertinent that the post of Deputy Speaker is filled at the earliest.

1.4. NEWS IN SHORTS

1.4.1. AMENDMENT IN ALL INDIA SERVICES (AIS) (CONDUCT) RULES, 1968

- Amendment will allow IAS, IPS and IFoS officers **to retain gifts received from foreign dignitaries** while being members of the Indian delegation.
    - **Presently there are no provisions** under the AIS (Conduct) Rules, 1968, with regard to receipt/retention of gifts from foreign dignitaries.
- Existing **rules allowed these officers to accept gifts from their near relatives or from personal friends** having no official dealings with them, on occasions such as weddings, anniversaries, funerals and religious functions.
    - However, they are supposed to **report to the government if the value of such gift exceeds ₹25,000.**

1.4.2. PRIME MINISTER'S CITIZEN ASSISTANCE AND RELIEF IN EMERGENCY SITUATIONS (PM-CARES) FUND

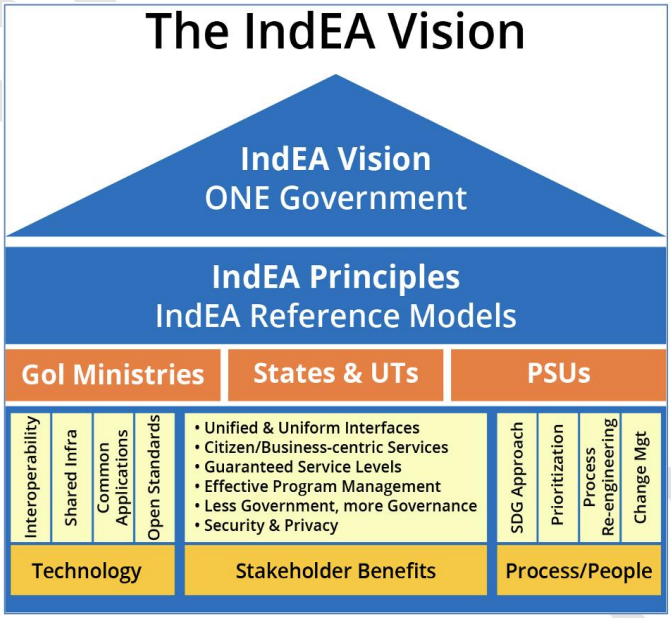
- Centre has informed Delhi High Court that **PM-CARES Fund,** charitable trust, **is not a government fund** as the **amount collected by it does not go to the Consolidated Fund of India**.
  - It was made in response to a petition seeking that PM-CARES Fund be declared as '**The State' under Article 12** of the Constitution.
- The **Prime Minister is Chairperson (ex-officio) of the PM CARES Fund** and Minister of Defence, Minister of Home Affairs and Minister of Finance, Government of India are ex-officio Trustees of the Fund.

1.4.3. AN INSTITUTION'S RIGHT TO GOVERNMENT AID IS NOT A FUNDAMENTAL RIGHT: SUPREME COURT

- The remark was made in a judgment where top **court upheld a 2010 policy decision of the Uttar Pradesh government** to outsource appointment of Class IV employees **in all state-run and aided institutions and schools.**
- **Key highlights of the judgement**
  - **Government aid to an institution** is a matter of policy and it is **not a fundamental right:** If the government made a policy call to withdraw aid, an institution cannot question the decision as a "matter of right".
    - ✓ Policy depends on various factors including financial constraints and deficiencies, the interests of the institution itself etc.
  - **Article 30 of the Constitution is subject to reasonable restrictions:** For aided institutions, there cannot be any difference between a minority and non-minority one, but **if an institution does not want to accept and comply with the conditions accompanying such aid, it is well open to it to decline** the grant and move in its own way.
    - ✓ **Article 30(2) states that state shall not, in granting aid to educational institutions, discriminate against any educational institution** on the ground that it is under the management of a minority, whether based on religion or language.

1.4.4. MEGHALAYA ENTERPRISE ARCHITECTURE PROJECT (MEGHEA) LAUNCHED

- MeghEA aims **to transform traditional service delivery process into a digital service system.**
  - **MeghEA is spread across 6 pillars** i.e. Governance, Human Resources, Entrepreneurship, Primary Sector, Infrastructure and Environment.
- Meghalaya is the first state to implement **India Enterprise Architecture (IndEA) as MeghEA.**
- IndEA (by Ministry of Electronics and Information Technology) is a framework that **enables the development and implementation of Enterprise Architectures independently and in parallel by all governments and their agencies** across India, conforming to the same models and standards.
  - It is a way to establish **Unity in Diversity in the domain of e-Governance.**
- The framework consists of eight reference models such as **Business, Application, Data, Technology, Performance, Security, Integration and Architecture Governance.**



2. INTERNATIONAL RELATIONS

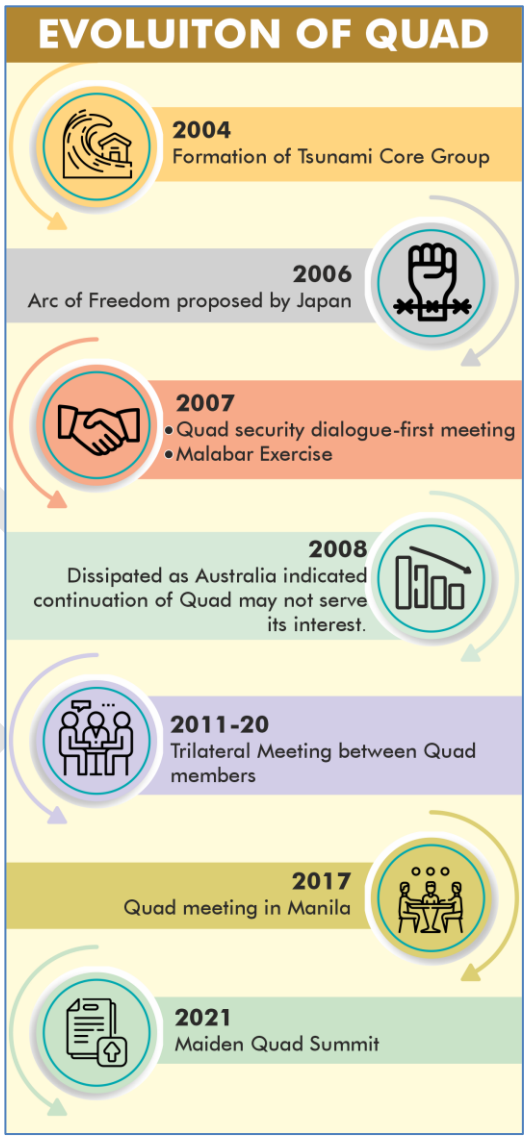
2.1. FIRST QUAD SUMMIT

Why in News?

Recently, first ever in-person meeting of the Quad was held.

About Quad

- Quadrilateral Security Dialogue (Quad) is an **informal association of India, the United States, Australia, and Japan.** The group met for the **first time in 2007 on the sidelines of the Association of Southeast Asian Nations (ASEAN).**
  - Its origin can be traced back to the **evolution of Exercise Malabar and the 2004 Tsunami** when India conducted relief and rescue operations for itself and neighboring countries and was later joined by the US, Japan and Australia.
- Set up **to counter the growing might of China economically and militarily**, this version eventually dissipated in 2008.
  - The **lack of a common approach and vision** was considered a primary reason for the **partnership's demise in 2008.**
  - India was particularly **sensitive to China's reaction** at the time given its desire for a Nuclear Suppliers' Group waiver. Also, there have been **doubts about the utility of a quadrilateral** since India already has trilaterals with Japan and the U.S., and Australia and Japan.
- **In 2017, faced again with the rising threat of China,** the four countries revived the Quad. **Quad 2.0 is the outcome of substantial groundwork over the 2017-2021 period.**
  - The core objective of the Quad is to secure **a rules-based global order, freedom of navigation and a liberal trading system.**
  - It is considered an alliance of maritime democracies, and the forum is maintained by meetings, semi-regular summits, information exchanges and military drills of all the member countries.



Significance of Quad for India

- **Balancing China's influence:** If Chinese hostilities rise on the borders, India can take the support of the other Quad nations.
  - India is working with Quad partners to offer alternatives to China's Belt and Road Initiative, a project that undermines India's territorial sovereignty and regional primacy.
- **Rising importance of Indo-Pacific:** Due to its favorable topographical location and peninsular geography, India has widespread trade and cultural connections with the Indo-Pacific littorals. QUAD provides India with a **powerful platform to advance East Asia's interests and further strengthen its Act East policy.**
  - Also, it promotes inclusivity in the region by participating in various forums like Asia Africa Growth Corridor, Indian Ocean Commission etc.

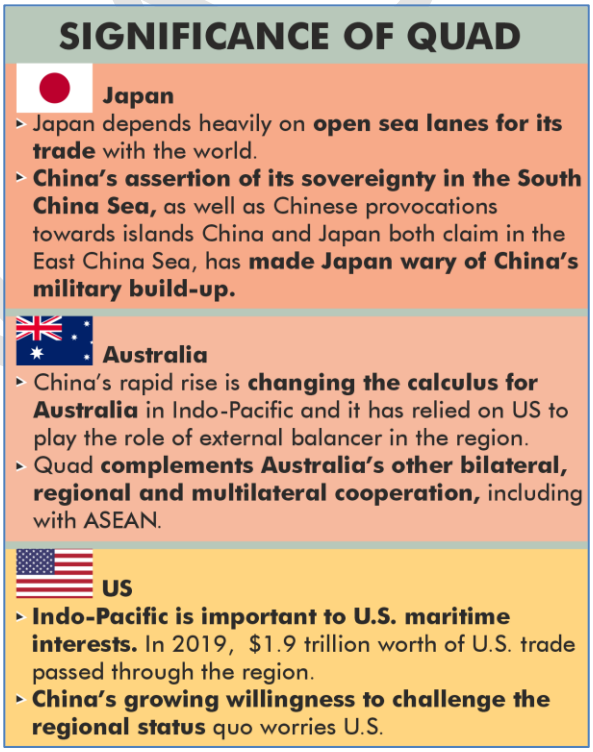
Related news
China's new maritime law comes into force

- As per this law, **foreign vessels will have to submit details to Chinese authorities** when transiting through its 'territorial waters'.
  - This claim is contested by its neighbours in the region and by US.
  - The waters around China are hotly contested. **Under a "nine-dash line" map, China claims most of the South China Sea (SCS)** as its sovereign territory.

- **Evolving Foreign policy strategy:** Aligning with like-minded countries without making a formal alliance or discounting its relationship with countries outside Quad is a hallmark of India's evolving foreign policy strategy.
- **Supplementing India's defense capabilities:** Cooperation in the field of defence among Quad members through joint patrols, exchange of strategic information, etc. can help India overcome its limitations pertaining to finances, naval capacity, military reconnaissance, and technological and surveillance capabilities.
- **Additional collaboration on emerging threats:** Additional collaboration can be expected in the cyber, space and maritime domains to enhance surveillance and deterrence. All four states have been the subject of extensive and persistent cyberattacks emanating from nation-state-supported institutions, notably from China.

Challenges for Quad

- **Implication on India's other bilateral/multilateral engagements:** Recently, China argued that by moving closer to the US and the US-led Quad in recent years India has worsened India-China and India-Russia relations and halted progress in the development of BRICS and Shanghai Cooperation Organisation.
- **Unclear objectives:** Such ambiguity does not project a good signal because many political observers are simply viewing it as an anti-China alliance, which undermines its potential in other essential areas such as climate change issues and vaccine diplomacy.
- **Unresolved issues**
  - **Countering COVID and a Vaccine initiative:** India's proposal at the WTO still blocked, and India has blocked giving indemnity to US vaccines.
  - **Climate Change issues:** India has worked with Quad countries on the Solar Alliance, Paris Accord etc., but has not yet signed on to Net Zero and ending coal deadline.
  - **Critical Technologies and Resilient Supply Chains**: While India is keen on building alternate supply chains especially on technologies with partners keen to end dependence on China, it is not part of the Osaka track, that includes other Quad countries, when it comes to cross border data flows
- **Conflicting signals from US:** Even as the agenda for the Quad meeting is being evolved, the US announced a new trilateral defence partnership with Australia and the UK (AUKUS) leaving friends and allies mystified.
- **Divergence on acceptable risks and costs:** This divergence in threat perceptions is based on a range of factors, including the existence or absence of direct territorial disputes with China, perceptions of the potential risks of retaliation by Beijing, other higher order national priorities and threats, and finally the limitations of each nation's strategic culture.



- **China's influence:** China has strong economic ties with Quad members, especially Australia, which can be used to coerce or influence nations in its favour. This can turn out to be problematic for India.

Way forward for Quad

- **Collective action:** Collective security among the Quad nations has to be worked to safeguard the member nations' freedom and security. Quad grouping with a combined pre-pandemic GDP of USD 30 trillion and a combined defence budget of USD 800 billion can counter China easily.
- **Need for clear vision:** Quad nations need to explain the Indo-Pacific Vision in an overarching framework to advance everyone's economic and security interests. This will reassure the littoral States that the presence of QUAD benefits the region.
- **Expanding the Quad:** India has many other partners in the Indo-Pacific. Therefore, India should pitch for countries like Indonesia, Singapore to be invited to join the Quad in the future.
- **Need for a Maritime Doctrine:** India should develop a comprehensive vision on the Indo-Pacific, which would ideate on the current and future maritime challenges, consolidate its military and non-military tools; and, engage its strategic partners.

KEY HIGHLIGHTS OF THE QUAD SUMMIT

COVID and Global Health

- Quad countries have **pledged to donate more than 1.2 billion vaccine doses globally**, in addition to the doses Quad financed through COVAX.
- Quad welcomed **India's announcement to resume exports of safe and effective COVID-19 vaccines,** including to COVAX, beginning in October 2021.
- **Build Back Better Health Security in the Indo-Pacific** by conducting at least one pandemic preparedness tabletop or exercise in 2022.
- **100-Day Mission** - to have safe and effective vaccines, therapeutics, and diagnostics available within 100 days.

Infrastructure

- Building on the G7's announcement of **Build Back Better World (B3W).**
- **Quad Infrastructure Coordination Group** to share assessments of regional infrastructure needs and coordinate respective approaches to deliver transparent, high-standards infrastructure.

Climate

- Quad partners will launch a **Quad Shipping Taskforce** and will invite leading ports to form a network dedicated **to greening and decarbonizing the shipping value chain.**
- Quad Shipping Task Force aims to establish two **to three Quad low-emission or zero-emission shipping corridors by 2030.**
- Quad will announce a clean-hydrogen partnership to strengthen and reduce costs across all elements of the clean-hydrogen value chain, leveraging existing bilateral and multilateral hydrogen initiatives in other fora.
- Quad countries will convene a **Climate & Information Services Task** Force and build a new technical facility through the Coalition for Disaster Resilient Infrastructure that will provide technical assistance in small island developing states.

Critical and Emerging Technologies

- Quad will launch a **statement of principles on technology design, development, governance, and use** that will act as a guide towards responsible, open, high-standards innovation.
- Quad partners will launch a **joint initiative to map capacity, identify vulnerabilities, and bolster supply-chain security for semiconductors** and their vital components.
- **Support 5G Deployment and Diversification** and monitor biotechnology scanning.

Others

- **Launch of Quad Fellowship:** a first-of-its-kind scholarship program (with focus on STEM), operated and administered by a philanthropic initiative and in consultation with a non-governmental task force comprised of leaders from each Quad country.
- Quad will start **discussions to exchange Earth observation satellite data and analysis on climate-change risks** and the sustainable use of oceans and marine resources.
- Quad will launch a **senior cyber group for implementation of shared cyber standards;** development of secure software; building workforce and talent.

2.1.1. EU INDO-PACIFIC STARTEGY

Why in News?

Recently, European Union (EU) released **"EU Strategy for Cooperation in the Indo-Pacific".**

Why an EU Indo-Pacific strategy?

- **Assertive China:** With slowly increasing concerns over China's rise and its aggressive and expansionist policies, concerns about the future of the EU-China relations started making imprints in the minds of the policymakers of EU member states as well.
  - Earlier, Germany released its "Policy guidelines for the Indo-Pacific region" in September 2020, soon followed by the Netherlands'.
- **Growing US-China rivalry** and how that could negatively impact European interests was one of the factors that could not be taken lightly any longer by Europe.
- **Greater role in Indo-Pacific:** EU is feeling the need to play a bigger role in Asia, to bear greater responsibility and to have an impact on the affairs of this region, whose fate is intertwined with that of Europe.
  - Tide of international politics has shifted to Asia in general, and the Indo-Pacific in particular, with the economic rise of countries like India, China, Singapore, Vietnam, and Indonesia among others.
- **Securing Sea Lanes of Communication (SLOCs):** Given Europe has mostly engaged with this region in the trading realm, security of the SLOCs and the safe passage of commercial vessels is an important concern for the EU.
- **Other imminent issues** which the Indo-Pacific region faces that can have an impact on EU own security interests too, like the potential risks of emerging technologies, ensuring supply chain resilience, and countering disinformation.

Key objectives of EU Indo-Pacific Strategy

- **Solidify and defend the rules-based international order,** by promoting inclusive and effective multilateral cooperation based on shared values and principles.
  - It is **pointed more towards building on established partnerships and developing new ones** with like-minded countries in the Indo-Pacific.
- Promote a **level playing field and an open and fair environment for trade and investment.**
- Establish mutually **supportive trade and economic relations with the region** that foster inclusive economic growth and stability, and promote and facilitate connectivity.
  - **EU is seeking new digital partnerships with Japan, South Korea and Singapore,** which would enhance cooperation and interoperability on emerging technologies like Artificial Intelligence.
  - It further looks to **complete and finalise EU trade negotiations with Australia, Indonesia and New Zealand;** and resuming trade negotiations and **starting investment negotiations with India.**
- **Pursue its long-standing multilateral and regional cooperation** with the United Nations and Bretton Woods Institutions, ASEAN, African Union etc.
- **Contribute to achieving the Sustainable Development Goals (SDGs),** to addressing climate change and environmental degradation on land and in the ocean.

To know more on the **Indo-Pacific region,** kindly refer to our Weekly Focus document on **"India and the Indo-Pacific"**

India and the Indo-Pacific

The emergence of the Indo-Pacific as a new geographic space represents the new strategic reality of the twenty-first century. The Indo-Pacific therefore is a new domain in India's foreign policy engagements. The document examines issues relating to India's unique geography, interests, and potential role in the Indo-Pacific region against the backdrop of a rapidly evolving geostrategic environment. It further discusses new opportunities in the region to secure India's strategic interests and secure its profile as the responsible global power.

2.1.2. FORMATION OF AUKUS

Why in News?

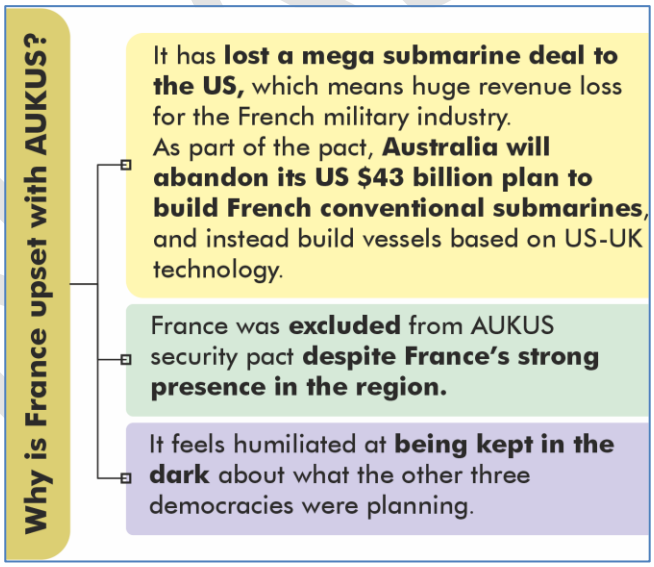
Recently, **Australia, UK and US have announced a new trilateral program AUKUS.**

More on News

- Recently, India's Foreign Secretary stated that **AUKUS had no links with the Quad** and won't impact the functioning of the grouping.
  - He also stated that Quad is "not a military alliance" and is "not directed" at any country in particular.

About AUKUS

- **AUKUS,** by Australia, UK and US, is **a new security alliance that** aims **for deeper cooperation in the Indo-Pacific and greater sharing of defence capabilities** within the alliance.
- The plan is to give **access to cutting edge military technology to Australia** by its two partners, including futuristic capabilities like artificial intelligence and quantum technologies.
  - As part of the pact, **Australia will abandon its US $43 billion plan to build French conventional submarines,** and instead build vessels based on US-UK technology.



AUKUS and India

- **Complications**
  - **New Challenge in Indo-pacific:** There is apprehension that the deal could eventually lead to a crowding of nuclear attack submarines in the Eastern Indian Ocean, eroding India's regional pre-eminence.
  - **U.S's unreliability:** France's unhappiness with AUKUS has complicated the situation a bit from India's perspective. In the light of these issues, some experts suggest that US cannot be completely relied on, as it has excluded its long-time ally France from the grouping despite being a NATO partner.
  - Sceptics suggest if Australia and U.S. could deceive a North Atlantic Treaty Organization (NATO) partner, they ask, what is to prevent them from doing the same with lesser allies?
  - **AUKUS vs Quad:** AUKUS has taken the focus away from the Quad. The agreement suggests preferential treatment on the part of US for a close Anglo-alliance partner.
  - **Impact on other multilateral engagements:** Recently, France has pulled out of India-France-Australia foreign ministers trilateral (formed to counter balance China) to protest against AUKUS.
  - **Technology Pursuit:** Following the deepening of Quad ties, some in India were hopeful that U.S. would consider providing the Indian Navy with nuclear submarine propulsion technology.
    - ✓ Clarification by U.S. that the deal with Australia is a "one-off" puts paid to Indian expectations.
- **Opportunities**
  - It will **strengthen the Quad's agenda to keep the Indo-Pacific region free,** open and inclusive.
    - ✓ AUKUS could also extend itself to bolstering the Quad's efforts **on maritime exercises, security and efforts in countering COVID-19, climate change,** cooperating on critical technologies, and building resilient supply chains.
  - Another potential benefit could be the **leverage the AUKUS rollout gives India in both the diplomatic and defense trade realms,** particularly with France.
  - It reflects **continued and intensifying U.S. and Australian concerns about China.** Moreover, it is designed to increase their capabilities in the region (which will also, consequently, increase the cumulative capabilities of the Quad).

2.1.3. INDIA-FRANCE RELATIONS

Why in News?

Recently, India and France reviewed their increasing bilateral collaboration in Indo-Pacific region.

More on News

- Move came **against the backdrop of France's anger over the creation of AUKUS,** by Australia, UK and US.
- This gives India considerable leverage in both the diplomatic and defense trade realms, particularly with France.

Significance of a deepening alliance For India

- **Alignment of outlooks:** India stands to benefit by deepening ties with a partner that shares its ideals of multilateralism, pluralism and a non-military, deterrence-based policy.
  - Furthermore, it gains an ally that shares its interpretation of **what constitutes the region**, as India includes Gulf of Aden in the West to Burma and Thailand in the East **as the Indian Ocean** — a vision shared by the French.
- **Defence modernization:** A market to procure increasingly critical military technologies as India struggles with its indigenous defence industries and increasingly strained defence budgets.
  - For example, India can engage with France to **acquire critical naval nuclear reactor technology.**
  - **Also, Rafale jets**, manufactured by French aerospace major Dassault Aviation, are **India's first major acquisition of fighter planes in last 2 decades.**
- **New economic opportunities:** Joint economic cooperation between Indian and French companies is well set up to find common ground in the Gulf to build further economic partnerships.
  - Many Gulf nations are showing intent towards a more liberalised economic and social order to secure its future beyond oil.
- **Cooperation in space activities:** India can partner with France to use outer space assets in developing maritime domain awareness in addition to focusing on areas of cooperation including satellite navigation, space transportation, and human exploration of space.
- **Additional security:** Proposed Joint Patrols are also to be executed in the north-western Indian Ocean, which provides additional security for India.
  - IORIS, the Indian Ocean Regional Information Sharing & Incident Management web-platform has been initiated under EU CRIMARIO (European Union Critical Maritime Routes in the Indian Ocean), a program run with France's support.

Significance for France

- Closer relations with India and increased involvement in the Indian Ocean pave way for **greater French engagement with the South and Southeast Asian countries.**
- It would help France diversify its existing relations and also give it a **greater voice in the Indo-Pacific.**
- **Getting a direct line and a seat at** the table in what is widely regarded as the new centre of **the global balance of power, w**ould thus also give France an advantage over other European nations.
- India is a **vast market for defence sales,** a hyper-competitive space where French companies have struggled.
  - As per data from 2013-17 (compared with the previous five years), France recorded an increase of more than 500 percent in its arms exports to India.

- **Others:** Opportunities for greater collaboration in other significant sectors such as health, education, research and innovation, energy and climate change.
  - **With International Solar Alliance (ISA)**, France and India can spearhead the development of multilateral initiatives which accommodate the voices of those who are most at risk.
  - **By cooperating within frameworks such as COVAX and ACT,** France and India can work towards engaging with and defending the interests of Lower and Middle Income Countries (LMICs).

Conclusion

Instead of constricting India, **AUKUS has opened a window of strategic opportunity and a chance for India to deepen its partnership** with France provided it plays the cards well. By leveraging the potential of convergences, **France can be India's gateway to Europe.** With intense and mature diplomacy, **India can leverage AUKUS as significant step towards managing the geopolitical turbulence in the Indo-Pacific and** can use its formation to complement the importance of Quad.

Related news

Recently, **India-France Agree on Space Security Dialogue (SSD)**

- The bilateral space security dialogue will be the **third for India. Earlier, India has had such arrangement with two countries – United States (2015) and Japan (2019).**
  - For France, **India will be the first Asian country** with which it will have such a dialogue.
  - Cooperation between India and France **across space and nuclear domains reflect the confidence and trust the two enjoy with each other.**
- Through SSD, both countries will arrive at a **common multilateral understanding of the emerging space environment and the possible threats to the safe, secure, sustainable, and continued access to outer space.**
- **Significance of SSD**
  - **Indication of India's changing space orientation:** India's civil space cooperation engagements with different countries have evolved to focus more on space security.
  - **To protect space assets,** as the rapid growth of counter-space capabilities by China is a serious threat for India, France, Japan, and U.S.
  - To address **global navigation satellite system**, **space situational awareness, space security,** sustainability of the outer space environment and collision avoidance in outer space**.**
  - Such conversations with like-minded partners would give India a **prominent leadership role in global governance**.

2.2. FREE TRADE AGREEMENTS (FTAS)

Why in news?

To fast-track **free trade agreement (FTA) negotiations** with several countries like the UK, Australia, the European Union, and Canada, India is keen to conclude an **"early harvest" trade deal** with some of these countries.

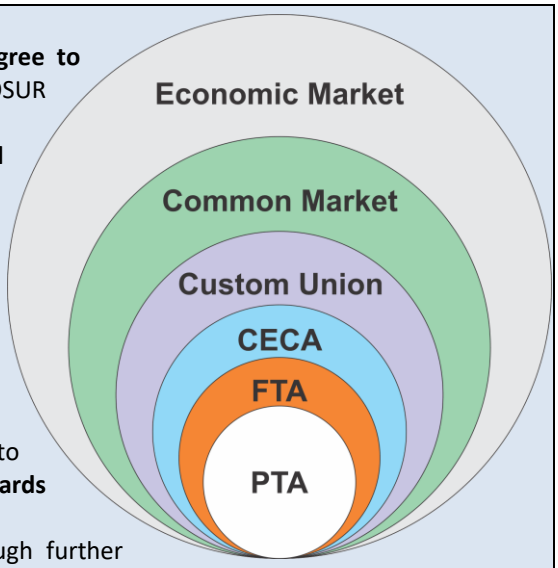
How Early harvest scheme (EHS) is different from an FTA?

- Early harvest scheme is a **precursor to an FTA** between two trading partners. This is to help the two trading countries **identify certain products for tariff liberalisation pending the conclusion of FTA** negotiation. It is primarily a **confidence building measure**.
- A good example of an **EHS is the one between India and Thailand which was signed in October 2003**, wherein several products were identified to be reduced to zero in a phased manner.

What are FTAs and other types of trade agreements?

- FTAs are arrangements between two or more countries or trading blocs that primarily agree to **reduce or eliminate customs tariff and non-tariff barriers on substantial trade** between them.
- FTAs, normally cover **trade in goods** (such as agricultural or industrial products) or **trade in services** (such as banking, construction, trading etc.), but can also **cover other areas** such as intellectual property rights (IPRs), investment, government procurement etc.

Other types of trade agreements



- **Preferential Trade Agreement (PTA):** In a PTA, two or more partners **agree to reduce tariffs on agreed number of tariff lines**. For example, India MERCOSUR PTA.
- **Comprehensive Economic Cooperation Agreement (CECA) and Comprehensive Economic Partnership Agreement (CEPA):** These terms describe agreements which consist of **an integrated package on goods, services, and investment** along with other areas including IPR, competition etc. The **India Korea CEPA** is one such example.
- **Custom Union:** In a Customs union, partner countries may decide to **trade at zero duty among themselves**, however they maintain **common tariffs against rest of the world**. An example is Southern African Customs Union (SACU).
- **Common Market:** A common market is a Customs Union with provisions to facilitate free **movements of labour and capital, harmonize technical standards** across members etc. European Common Market is an example.
- **Economic Union:** Economic Union is a Common Market extended through further **harmonization of fiscal/monetary policies and shared executive, judicial & legislative institutions**. European Union (EU) is an apt example of this type.

Why are FTAs significant?

- **Market access:** By eliminating tariffs and some non-tariff barriers, FTA partners get **easier market access** into one another's markets. The **non-tariff barriers** include Sanitary and Phytosanitary (SPS) measures, Technical Barriers to trade (TBT), customs procedures, and so on.
- **Preferential treatment over non-FTA member country**: For instance, in the case of ASEAN, ASEAN has an FTA with India but not with Canada. ASEAN's **custom duty on leather shoes is 20%** but under the FTA with India the same is reduced **to zero.**
  - Further, FTAs may also **protect local exporters from losing out to foreign companies** that might receive preferential treatment under other FTAs.
- **FTAs offer better alternative to multilateral negotiations:** Some experts are of the view that **slow progress** in multilateral negotiations due to **complexities arising from large number of countries** to reach a consensus on **polarising issues**, may have provided the **impetus for FTAs.**
- **Other Benefits:** FTAs **encourages competition** which consequently **increases efficiency** of products and services in order to be on par with its competitors. FTAs also provide opportunities for **greater integration with Global Value Chains, specialization** and **efficient usage of resources**.

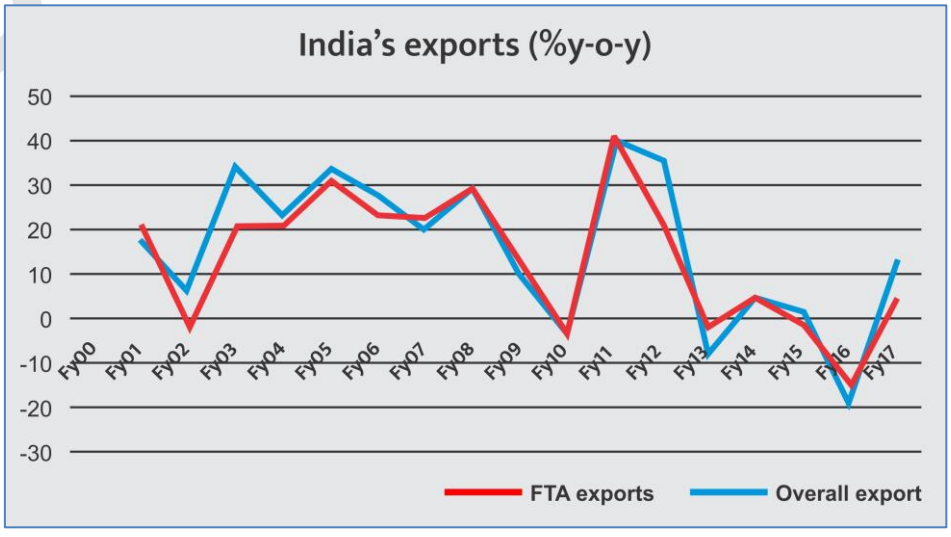
How has India participated in Trade Agreements (FTAs)?

- **Involvement in Regional trade agreements (RTAs): RTAs** have become increasingly prevalent **since the early 1990s**. Currently, **14 RTAs are in force in India** with a dozen more under negotiation.
  - **Asia Pacific Trade Agreement (APTA):** The first RTA of which India became a member was the **Bangkok Agreement in 1975**. In 2005, this regional initiative between developing economies was re-incarnated as **APTA.**
  - **Regional Comprehensive Economic Partnership (RCEP):** India **withdrew from the RCEP in 2019 after seven years of protracted negotiations** due to concerns like large trade deficits with RCEP countries, inadequate protection against import surge, lack of service component etc.
  - **ASEAN FTA:** The FTA with ASEAN had taken **seven years for finalisation** and is currently under review.
- **Involvement in Bilateral agreements:** India's **first bilateral FTA with Sri Lanka** (ISFTA) came into effect in 2000. However, India has **not signed any major FTA in the last 10 years**.
  - India signed its last trade agreement, a **Comprehensive Economic Cooperation Agreement (CECA) with Malaysia in 2011**. Since then, only a comprehensive economic cooperation and partnership agreement, covering a small number of commodities, was signed with **Mauritius**. The FTA with Korea is **under review**.

India's reluctance towards FTAs can be attributed to its "**not very encouraging" experience with past FTAs.**

What has been India's experience with FTAs?

- **Substantial gains from SAFTA:** Since the SAFTA became effective (in 2006), Indian exports to SAFTA countries have increased faster than its imports from them leading to a **significant rise in trade surplus with these economies** from about US$ 4 billion (in 2005-06) to US$ 21 billion (in 2018-19).
  - The maximum growth in exports to SAFTA region has been recorded **with Bangladesh and Nepal.**
- **No significant increase in exports due to FTAs:** India's exports to FTA countries have **not outperformed overall export growth** or exports to rest of the



VISION IAS

world. Since 2006, India's **exports to RTA partners increased by 13% y-o-y**. The trend to **non-partner countries** was no different with exports increasing at the same pace (Refer graph).
    - India's **exports are much more responsive to income changes** as compared to price changes and thus a tariff reduction/elimination does not boost exports significantly.
- **Widened trade deficit:** FTAs have led to increased imports and exports, although the **former has been greater.** India's trade deficit with ASEAN, Korea and Japan has widened **post-FTAs**.
    - The share of ASEAN in India's total trade deficit increased from **about 7 percent in 2009-10 to 12 percent in 2018-19**.
- **Low utilisation:** According to Asian Development Bank, the utilisation rate (percentage of trade conducted through preferential route) of India's FTAs **varies between 5% and 25%**, which is **one of the lowest in Asia.**

Why are FTAs not working as expected for India?

- **Tariff related issues:** While India's obligation under the WTO was to remove tariffs on just 2 per cent imports, tariff cuts it offered in its FTAs was in the range of 74 percent to 86 percent. This has not turned out feasible for India since it stands at a **disadvantage with nations like Japan and Singapore in terms of industrial development and capacity of local industries** to compete on global platforms.
    - **Further,** while FTAs removed tariff barriers substantially, Indian exporters still face a **variety of nontariff barriers** like import controls, import permits, SPS measures etc. For example- **76 per cent products exported to Japan face some non-tariff regulation.**
- **Absence of services component**: Services is considered as India's strong area but its performance under FTAs is hampered due to **absence of mutual recognition agreements (MRAs)**, which allow qualified personnel in one region to automatically qualify for offering services in any partner country.
- **Domestic factors**: Exporters in India face issues such as **higher logistics costs, supply-side constraints** like energy shortages etc.
    - Lack of information on FTAs, complex rules of origin criteria, low margins of preference, higher compliance costs and administrative delays **dissuade exporters from using preferential routes**.
- **Circumvention of rules of origin:** Authorities in India have not been **effective in checking illegitimate practices** such as re-routing of imports from non-FTA partner countries through FTA partner countries, **manipulative measures** to obtain Certificate of Origins (CoO) etc.
- **Inconsistencies due to overlapping RTAs:** The multiplicity of RTA's may lead to inconsistencies, **reducing effectiveness.** For example, India has an RTA with Malaysia and Singapore separately while they are **also a member of India ASEAN CECA.**
- **Global perception of India being protectionist:** Several Indian policies in the recent times have pointed towards a **potentially inward orientation** on trade. For example, focus on self-reliance under Atmanirbhar Abhiyan, revised public procurement order giving preference to local content etc.
    - This perception **directly affects the FTA negotiations** with prospective partner nations and **indirectly clouds** the current trading arrangements.

Steps taken by India to strengthen FTAs

- **Strengthening RoO mechanism:** The processes for **claiming exemptions under related customs exemption notifications has been tightened** by placing onerous obligations on the importers through the Customs Administration of Rules of Origin under Trade Agreement Rules, 2020 (CAROTAR, 2020).
    - CAROTAR 2020 has made it incumbent on the importer **to collect sufficient information/documents to convince the authorities** that rules of origin criteria for the imports have been met in order to get preferential tariff.
- **Revision of Bilateral Investment Treaties (BITs):** In 2015, India **decided to review all of its existing BITs** and released a **Model BIT** in 2016. The revised model BIT will be used for re-negotiation of existing investment chapters in CECAs/ CEPAs / FTAs and negotiation of future BITs.
    - The model BIT includes an **"enterprise" based definition** of investment, non-discriminatory treatment through due process, national treatment, a refined Investor State Dispute Settlement (ISDS) provision etc.

Way Forward

- **Strong safeguard clauses:** Safeguard clauses need to be designed in a way that the **domestic industry gets protection** in case of material injury well within time. Within the FTA, provision could be made for **safeguard measures to be invoked** if a volume or price trigger for the concerned products is reached.
- **Aligning future FTA negotiation strategy/tariff schedules with the Atmanirbhar Bharat strategy**: This does not imply complete protection for concerned industries, but a **phase-wise reduction of import tariffs** over years under the FTA in order for them to completely integrate with global value chains (GVCs).
- **Building new relationships in Post-COVID world order:** The post-COVID world trade order will most likely be influenced by geo-political decisions. This gives India an opportunity to **leverage its geopolitical relations to create economic relations** via creation of newer FTAs and also revision of its existing FTAs.
- **Picking and choosing partners carefully**: India should focus on negotiating bilateral FTAs with countries where **trade complementarities and margin of preference are high**. For example, India can find more opportunities in markets like the US, EU etc where it already has a bigger presence.
- **Domestic measures**: These include reducing compliance cost and administrative delays, **proper safety and quality standards** to avoid dumping of lower quality hazardous goods into the Indian market, **conducting awareness outreaches**, **low level of service link cost** i.e., costs related to transportation, communication etc.

To realize the potential benefits of FTAs, it is important to ensure that they are on **mutually reciprocal terms** and at the same time **focusing on products and services with maximum export potential**.

2.3. INDIA AND MULTILATERAL DEVELOPMENT INSTITUTIONS

Why in News?

Recently, the BRICS New Development Bank (NDB) admitted Bangladesh, UAE, and Uruguay as its new members as part of its extensive membership expansion program.

More about NDB

- NDB is a **Multilateral Development Institution** (MDI) established during the **6th BRICS** (Brazil, Russia, India, China, and South Africa) **Summit in Fortaleza** (2014).
- **Purpose:** With an **authorized capital** of **US$ 100 billion**, NDB supports public and private infrastructure and sustainable development projects in BRICS nations, and other emerging and developing economies
- **Governance Structure:** It functions through a Board of Governors, a Board of Directors, a President and Vice-Presidents, with the President being elected from one of the founding members on a rotational basis.

What are Multilateral Development Institutions (MDIs)?

Starting from **Bretton Woods Institutions** to rebuild war-ravaged nations and stabilize the global financial system, MDI is defined as "an international financial institution chartered by two or more countries for the purpose of encouraging economic development in poorer nations".

- The primary goal of MDIs is to issue **grants and low-cost loans** for improvement in the **social** and **economic conditions** of impoverished or developing nations.
- **Traditionally an initiative from developed countries**, in the last few decades emerging economies have also started building MDIs. For example, NDB, Asian Infrastructure Investment Bank (AIIB) etc.
- They help developing countries to fund capital intensive activities like **infrastructure, energy, education,** and **environmental sustainability**.

Major Global and Regional MDIs with Indian Membership

Name of MDI	Year of Formation	Headquarter	Total Member	Type of Financing
World Bank Group*	IBRD-1944, IFC-1956, IDA-1960 MIGA-1988	Washington D.C., USA	IBRD-189, IFC-185 & IDA-173 MIGA-182	Concessional and Non-concessional loans, equity investments, Grants and loan guarantees with some differences within the sub-institutions.
International Monetary Fund (IMF)	1944	Washington D.C., USA	190	Mainly Policy-based loans with financing in exchange of particular policy reform like Privatization, Agricultural or electricity policy reforms.
African Development Bank Group (AFDB)	AFDB-1964, African Development Fund-1972	Abidjan (Ivory Coast)	81	Non-concessional and concessional loans, equity investments, and loan guarantees **Grants by African Development Fund.**
Asian Development Bank (ADB)	ADB-1966, Asian Development Fund-1973	Mandaluyong of Metro Manila (Philippines)	68	Non-concessional and concessional loans, equity investments, and loan guarantees **Grants by Asian Development Fund.**
New Development Bank	2014	Shanghai, China	8** (after latest expansion)	Guarantees, syndicated loans with private investors, equity investments, project bonds and co-financing arrangements with other MDIs.
Asian Infrastructure Investment Bank	2016	Beijing, China	103	Loans, investing in the equity capital of an enterprise, and guaranteeing with open option of underwriting.

*The World Bank Group includes the International Bank for Reconstruction and Development (IBRD), The International Development Association (IDA), The International Finance Corporation (IFC), The Multilateral Investment Guarantee Agency (MIGA) and The International Centre for Settlement of Investment Disputes (ICSID). The term World Bank is collectively referred for IBRD and IDA.

Note that India is not part of ICSID.

**Please note that UAE and Uruguay are prospective members and will officially become a member country once they deposit their instrument of accession.

Importance of Multilateral Development Institutions for Developing Countries like India

- Working closely with the **public and private sector** of developing countries, MDIs are a major **source of financial** and **technical assistance** for developing nations.
- MDIs provide not just loans and grants but offers expert assistance on policies, implementation and monitoring the projects being funded etc. E.g., the **IMF policy-based loans** helped Indian economy to move from the **License-Quota-Permit (LQP) regime** to **Liberalisation-Privatisation-Globalisation (LPG)**
- MDIs **borrow funds** from **international capital markets** to lend it to developing countries. It helps developing nations to **overcome disadvantages** suffered due to **low credit ratings**.
- They support in coordinating responses to **regional and global challenges**, helping developing countries in-
  - Improving **social** (**health and education**) and **physical** (**roads, railways etc.**) **infrastructure**. E.g., World Bank has given loans assistance to Sarva Shiksha Abhiyan, the Green National Highways Corridors Project etc. in India.
  - **Poverty Reduction** through higher growth and employment generation,

- Promotes **international monetary cooperation**,
- **Reach global goals** like the Sustainable Development Goals, and
- **Provide climate finance assistance** to overcome factors of forced displacement.

- It helps the **investors and business leaders** in expansion through new, fast-growing markets.
- It helps developing nations create **solutions to global challenges**. E.g., World Bank support to **International Solar Alliance** led by India and France

Concerns on Multilateral Development Institutions highlighted by India

- **Dominance of Developed Countries:** The most significant MDIs like the IMF and World Bank are dominated by Global North with under-representation of the Global South, i.e., lack of voice representation from developing countries in governance.
- **Imposition of Conditionality:** Some funding agencies have special terms over sourcing of equipment, infringing sovereignty and detrimental to interests of domestic industries.
  - E.g., As part of its Development Policy Financing, World Bank uses loan conditions which undermine borrower country ownership with restricted policy space and often are seen as illegitimate political activity through neoliberal bias.
- **Purpose of Help:** MDIs are criticized for behaving as international bureaucracies with greater focus on moving capital to developing countries instead of delivering results. E.g., the poverty level in Africa remains high despite presence of several MDIs for over decades.
- **Crowding out Private Funding:** With increased access to capital for developing countries, the MDI funding may lead to crowding out of private investment in developing countries.
- **Lack of Transparency and Accountability:** Being actors in their own rights, they are mainly driven by self-regulatory frameworks with no external oversight.

Way Forward: Making MDIs more inclusive, representative and developmental

- In the aftermath of COVID-19 pandemic, MDIs will be a **critical source of financing** and **capacity support** for developing countries to overcome financial distress.
  - E.g., during the 2008 Global Financial Crisis, MDIs provided nearly **$222 billion** in financing to overcome the liquidity crisis with very little financing from profit-oriented commercial banks.
  - Recently, IMF allocated **Special Drawing Rights of US$ 650 billion** to extend financial support for softening the COVID impact of global economies.
- **Phasing out of direct and indirect conditionalities** with no one-size fit all approach from by World Bank and IMF can be the first step to overcome developing nations concerns.
- Introduce changes in **internal administrative laws** and subject themselves to **external oversight** for better transparency and accountability.
- **Governance Reforms** in World Bank and IMF to increase representation of developing nations for an inclusive and representative governance structure.
- **Strengthening of new** MDIs to diversify options and promote South-South cooperation.

Most importantly, the MDIs should focus on development of local markets with local production and distribution, building self-reliance for developing countries, resulting in a **resilient** and **sustainable recovery from pandemic**.

Related news

Suspension/Expulsion of countries from International Organisations

Ever since the Taliban took over Afghanistan, questions are being raised over the membership of Afghanistan in various International Organisations.

- The International Monetary Fund has announced suspending its engagement with Afghanistan until there is clarity within the international community on the recognition of the government led by the Taliban.
- The World bank has halted funding for projects in Afghanistan.
- Decision over Afghanistan's membership in United Nations is pending.
  - The UN refused to recognise the Taliban government when the group was in charge of Afghanistan from 1996 to 2001.
- In SAARC as well, Pakistan's insistence that the Taliban be allowed to represent Afghanistan, which other SAARC member states didn't agree to has led to recent cancellation of the group's meeting.

International Law on expulsion or suspension of member countries from International Organisations (IOs)

On this issue, IOs are broadly divided into two categories	
IOs that explicitly provide for expulsion or suspension of member countries	**IOs do not contain any provision on expulsion or suspension of its member countries**
• **For instance,** ○ Article 6 of the UN Charter **allows the UN General Assembly to expel a country, on the recommendation of the UN Security Council, if the country has persistently violated the principles reflected in the UN Charter.** ○ Article 5 of the UN Charter **allows for the suspension of a country from UN membership.** ○ Article XXVI (2) of the International Monetary Fund (IMF) **envisages suspension and expulsion of a member country if it fails to meet its obligations under the IMF Articles. In the IMF terminology, this is called** 'compulsory withdrawal'.	• For such IOs , there is no inherent right in the organisation to expel or suspend a member state. **SAARC fall under this category.** • However, such IOs have an **implied power to suspend or expel countries based on the doctrine laid down by the International Court of Justice** in the Reparation for Injuries Case. • As per the doctrine, there are **three situations when a country can be expelled or suspended** from the IO: ○ If the **regime in a country changes from democratic to anti-democratic.** For instance, the African Union suspended Mali and Niger in 2010 after a deadly coup. ○ If there are **human rights violations.** For instance, the Commonwealth of Nations suspended Fiji in 2009 for human rights violations such as restrictions on free speech, assembly, and arbitrary arrests. ○ If the **country commits an act of armed aggression.**

2.4. NEWS IN SHORTS

2.4.1. UNSC RESOLUTION ADDRESSES 'KEY CONCERNS' ON AFGHANISTAN: INDIA

- The United Nations Security Council (UNSC) adopted the **UNSC Resolution 2593** with **India as the chair and sponsored by France, UK and US** with 13 members voting in favour, none against.
  - **Concerns shared by Russia and China** (abstained from voting) included that **groups, especially Islamic State (ISIL) and the Uighur East Turkestan Islamic Movement (ETIM) were not named** specifically in the document.
- **Key points of resolution**
  - **Afghan territory not be used to threaten or attack any country** or to shelter and train terrorists and plan or finance terrorist attacks.
  - **Specifically mentions individuals designated by the UNSC resolution 1267** which includes the Lashkar-e-Taiba (LeT) and the Jaish-e-Mohammad (JeM).
  - However, the resolution **did not condemn the grouping.**
- India played an active role in ensuring the passage of Resolution that **brought international pressure on state actors in Afghanistan and highlighted specifically the role of LeT and JeM.**
  - India began **its two-year tenure as a non-permanent member of the UNSC** in January 2021 (India's eight term) and was president for the month of August.

Permanent members, veto rights (5)
- China, France, Russia, UK, USA

Non-permanent members, two-year terms (10)
- Africa (3)
- Asia (2)
- Latin America (2)
- Western Europe and others (2)
- Eastern Europe (1)

- The Security Council has the primary responsibility within the UN of maintaining international peace and security
- It is the only United Nations organ that has the power to make decisions that member state are obligated to implement

2.4.2. 21ST MEETING OF SHANGHAI COOPERATION ORGANIZATION (SCO) COUNCIL OF HEADS OF STATE IN DUSHANBE

- **The Heads of State Council is the highest decision-making body** in SCO.
  - The SCO is a **permanent intergovernmental political, economic and military organization** founded in Shanghai in 2001.
  - **The Secretariat** which coordinates the activity of the SCO, and **Regional Anti-Terrorist Structure (RATS)** for combating regional terrorism,

separatism and extremism are other important bodies.

- **Key Highlight of the meet**
  - **Iran joined as a permanent SCO member** with Saudi Arabia, Egypt and Qatar as new dialogue partners of SCO.
    - ✓ Experts observe that **Iran's inclusion as a member makes SCO 'a more organic part of the larger Central Asia-Middle East system'.**
  - **SCO Summit was followed by an Outreach session on Afghanistan** between SCO and the Collective Security Treaty Organisation (CSTO) where **India highlighted the problems caused by growing radicalization and extremism in the broader SCO region.**
    - ✓ The CSTO is a Russia-led **military alliance that promotes the collective defence** of any member that comes under external aggression.
    - ✓ Current CSTO members are **Armenia, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation and Tajikistan.**
  - India demanded that **Connectivity projects should be transparent, participatory and consultative, in order to promote mutual trust.**

For more information about Shanghai Cooperation Organization (SCO), kindly refer to Article 2.3 Shanghai Cooperation Organization (SCO) of the Monthly Current Affairs magazine (June 2021).

2.4.3. EASTERN ECONOMIC FORUM

- Speaking **at 6th Eastern Economic Forum summit,** India highlighted the time tested friendship between India and Russia.
- **About Eastern Economic Forum**
  - Established in 2015, Eastern Economic Forum is an **international forum held each year in Vladivostok (Russia).**
  - It works towards the economic **development of Russia's Far East** and expand international cooperation in the Asia Pacific region by encouraging foreign investment.
  - In 2019, India launched **its Act Far East Policy at the forum, providing a US$1 billion line of credit** for development of the resource-rich region.

2.4.4. INDIA ENDORSES OBJECTIVES OF GLOBAL COVID-19 SUMMIT

- Summit, organized by US, **aims to align around the global targets** (set out by G7, G20 etc.) and taking **associated required actions to end COVID-19 pandemic and build back better.**
- **Key targets that would be covered:**
  - **Vaccinate the world** by supporting G20 40% global vaccination by end of 2021, WHO goal of at least 70% global vaccination by 2022 and manufacturing doses for adequate supplies to all countries by 2022.
  - **Save lives now** by solving oxygen crisis, eliminating testing gaps, building surge PPE manufacturing capacity along with timely access to therapeutics and better detection, monitoring and mitigation of new COVID-19 variants.
  - **Build Back Better** by creating sustainable health security financing, catalyzing political leadership (set up of Global Health Threats Council in 2021) and supporting G20's call for a Global Ministerial Health and Finance Board
- **Prime Minister while addressing the summit stated that:**
  - **Supply chains of raw materials** needed for vaccine production **must be kept open.**
  - **Mutual recognition of vaccine certificates** to make international travel easier **thereby addressing the pandemic's economic effects.**

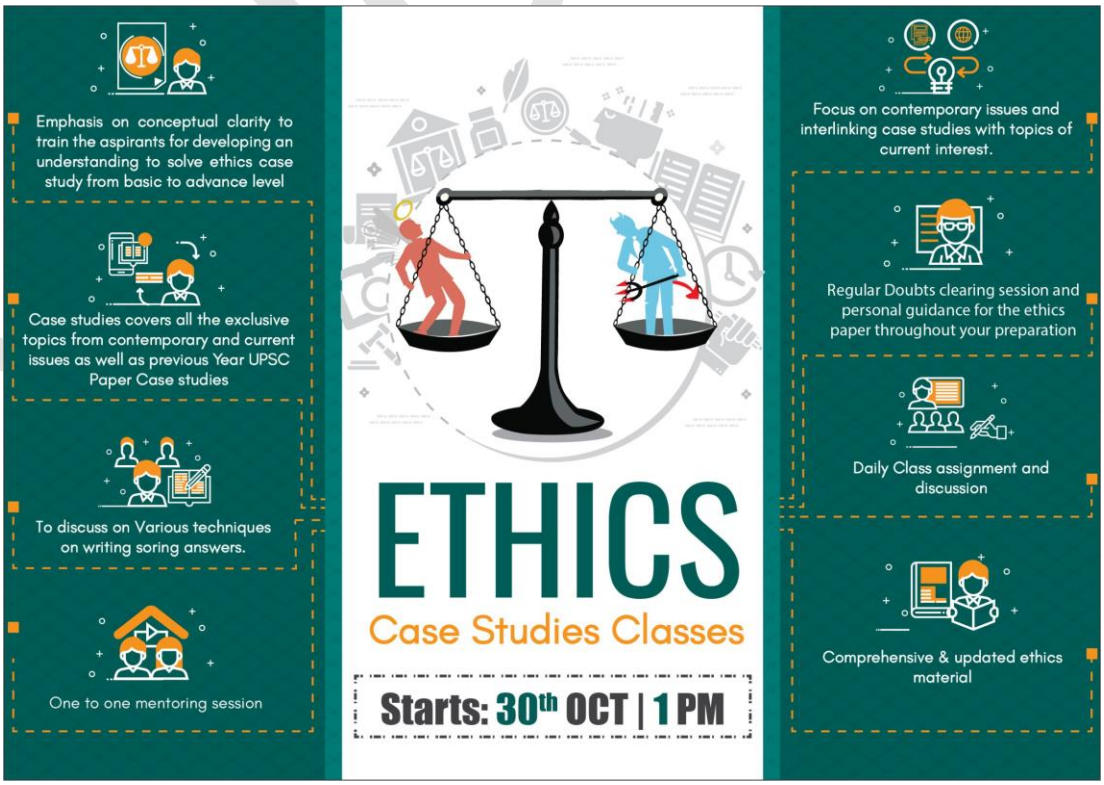
2.4.5. U.S.-INDIA JOINT LEADERS' STATEMENT: A PARTNERSHIP FOR GLOBAL GOOD

- In their **first in-person Leaders' engagement**, both sides renewed their close relationship **and affirmed a clear vision that will guide the U.S.-India relationship forward.**
- **Key highlights of statement**
  - **Promote shared interest in Indo-Pacific** by increasing cooperation with regional groupings, including ASEAN and Quad members.

- **Developing a trade and investment partnership** by reconvening India-U.S. Trade Policy Forum to enhance the bilateral trade relationship by addressing trade concerns and identifying specific areas.
- **Clean Energy Cooperation** through Strategic Clean Energy Partnership and the Climate Action and Finance Mobilization Dialogue under the U.S.-India Climate and Clean Energy Agenda 2030 Partnership.
- **Fight against global terrorism** by taking concerted action against all terrorist groups, including groups proscribed by the UNSCR 1267 Sanctions Committee.
- **Expanding partnership in new domains** and many areas of **critical and emerging technology** – space, cyber, health security, semiconductors, AI, 5G, 6G etc.
  - ✓ Both sides **will finalize a Space Situational Awareness Memorandum of Understanding** for sharing data and services to ensure long-term sustainability of outer space activities.

2.4.6. INDIA AND USA SIGN PROJECT AGREEMENT FOR AIR-LAUNCHED UNMANNED AERIAL VEHICLE (ALUAV)

- The Project Agreement for ALUAV is under the umbrella **Defence Technology and Trade Initiative (DTTI).**
  - **Under DTTI,** there are 2 categories of projects, **one, related to industry-to-industry projects facilitated by export licenses and second done via Project Agreements (PA).**
  - The **PA for ALUAV is a project of second category undertaken under Research, Development, Testing and Evaluation (RDT&E) Agreement** which was first signed in January 2006 and renewed in January 2015.
- **India-US defence relationship**
  - In 2016, the United States designated India as a **Major Defense Partner** which was elevated to **Strategic Trade Authorization Tier 1 status in 2018**.
  - **2+2 dialogue** between the defence and foreign ministers.
  - India **has signed four foundational defence agreement of USA**.
    - ✓ **General Security of Military Information Agreement (GSOMIA)** in 2002 on military information exchange.
    - ✓ **Logistics Exchange Memorandum of Agreement (LEMOA)** in 2016 to use each other's military base.
    - ✓ **Communications Compatibility and Security Agreement (COMCASA)** in 2018 for interoperability between the two militaries and sale of high-end technology to India.
    - ✓ **Basic Exchange and Cooperation Agreement (BECA)** in 2020 to share high-end military technology, logistics and geospatial maps.



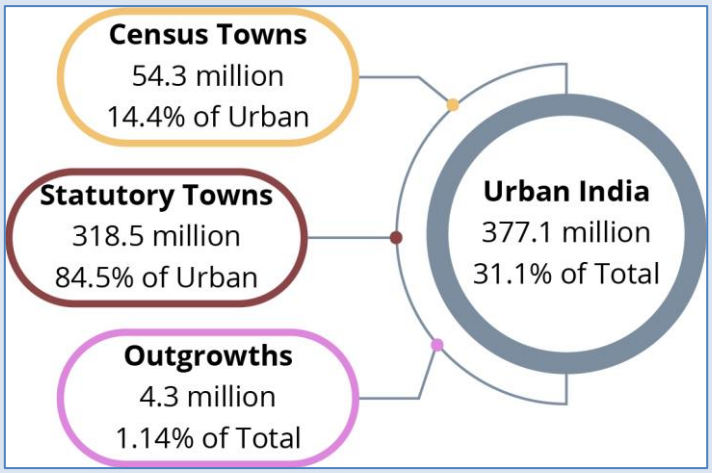
3. ECONOMY

3.1. URBAN PLANNING IN INDIA

Why in news?

NITI Aayog recently launched a report titled **'Reforms in Urban Planning Capacity in India'** on measures to ramp up urban planning capacity in India.

Overview of Urbanization in India



- **Population**: India's urban population stands at around 377 million (Census of India, 2011).
  - During 2011–36, urban growth will be responsible for 73% of the rise in total population (MoHFW, 2019). Earlier estimations indicate that India will be 50% urban by 2050 (UN-Habitat, 2017).
- **Economic contribution**: Urbanization contributes nearly 60% to India's Gross Domestic Product (GDP).
- **Geographical share:** Urban land in India is 3.1% of the total land area of the country.
- **Classification of Urban agglomerations:**
  - **Statutory Towns:** Settlements that are notified under law by the concerned State/UT government and with local bodies such as municipal corporations, municipalities, municipal committees, etc.
  - **Census Towns**: Settlements that are classified as urban in the census after they have met a set of criteria like at least 75% of the male 'main workers' engaged in non-agricultural pursuits etc. These are governed as villages and do not necessarily have urban local bodies.
  - **Outgrowths:** These are viable units, such as a village, clearly identifiable in terms of their boundaries and locations. Outgrowths possess urban features in terms of infrastructure and amenities, such as pucca roads, electricity, etc., and are physically contiguous with the core town of the urban agglomeration.

Need for reforms in Planned Urban development

- **Accelerated growth in Urban population:** This will bring immense stress on the infrastructure of many Indian cities and towns which along with unregulatable development may be detrimental to the society, economy, and environment.
  - Further, Covid-19 revealed the dire need for planning and management of our cities, with an emphasis on the health of citizens.
- **Significance of Urbanization for India's economy:** Effective interventions incorporating urban and spatial planning, urban land markets, and governance are needed to tap unutilised potential of economies of scale presented by Urban centres of India.
- **Fulfilling India's global commitments:** Cities play a decisive role in achieving India's commitments to the global agendas, such as Sustainable Development Goals (SDGs) 2030; United Nation Habitat's New Urban Agenda; and the Paris Climate Agreement.
- **Achieving India's national growth targets:** Strategic spatial planning will be instrumental in attaining India's growth targets, such as: USD 5 trillion economy by 2024; creation of 11 large industrial corridors as part of the National Industrial Corridor Programme etc.

- **Infrastructure development:** The urban sector has a significant share (17%) in the National Infrastructure Pipeline (NIP) for FY 2020–25 to facilitate infrastructure projects in the country.
- **Ensuring Multi-sectoral Convergence**: Stronger urban planning ecosystem in the country is needed to converge unlinked sectoral schemes that are executed by different government departments.
    - For instance, Smart Cities Mission of Ministry of Housing and Urban Affairs and National Mission on Electric Mobility of Ministry of Heavy Industries can gain significantly from coordination.
- **Interstate disparities**: While certain States such as Goa, Tamil Nadu, Kerala, Maharashtra, and Gujarat have attained over 40% urbanization, other States such as Bihar, Odisha, Assam, and Uttar Pradesh continue to be at a lower level of urbanization than the national average of 31.1%.
- **Multidimensional issues emanating from unplanned development:** Issues like slums, traffic congestion, pressure on basic infrastructure, sub-optimal utilization of urban land, extreme air pollution, urban flooding, water scarcity and droughts indicate a deep and substantial lack of adequate urban planning and governance frameworks.

Steps taken in India for urban development and planning

- **Constitution (Seventy-Fourth Amendment) Act 1992:** It gave a thrust to decentralization and mandated the setting up of Urban local bodies (ULBs) in urban areas.
    - It also provided for setting up of **Metropolitan Planning Committees (MPCs) and District Planning Committees (DPCs)** with responsibility of preparing 'draft development plan' on matters of common interest between the panchayats and the municipalities.
- **Model Building Bye Laws 2016** are legal tools to ensure orderly development of an area.
- **Schemes:** The government introduced **Smart Cities Mission** and **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)** for planned and integrated urban management. **Pradhan Mantri Awas Yojana (Urban)** and **Swachh Bharat Mission – Urban** were introduced to ensure housing for all and clean urban environment respectively.
- **The Ease of Living Index (EoLI)**: published by the Ministry of Housing and Urban Affairs (MoHUA) promotes competitive spirit among the states to ensure sustainable urbanization.
- **The 15th Finance Commission has recommended a performance-based challenge fund of ₹ 8,000 crore to States for incubation of new cities.** The amount available for each proposed new city is ₹ 1,000 crore and a State can have only one new city under the proposed scheme.

Key Challenges to urban-planning capacity of India

- **Lack of institutional clarity:** Multiplicity of authorities dealing with planning of land and sectors like water, sewerage, solid waste etc. at the city as well as State level often creates ambiguity, overlaps and even discord over division of functions and responsibilities.
- **Absence of effective decentralisation**: This can be highlighted by issues such as-
    - Most of the ULBs have not been allocated the 'urban planning' function.
    - MPCs and DPCs are not functional in most of the States and in a few States, they are not even constituted yet.
- **Absence of participative decision making**: States have created parastatals like metropolitan development authorities, urban development authorities, etc., to serve the functions which should have been accorded to ULBs. These bodies are not directly answerable to the citizens.
- **Functional issues in municipal governance bodies**:
    - In most Indian cities, the mayor is endowed with limited executive responsibilities.
    - Many States have a skeletal machinery of planning which are not necessarily headed by qualified urban planners.
- **Non-Recognition of 'Urban' Areas**: Around 8000 towns are counted as urban for population estimation under the Census of India (2011); however, half of them, known as census towns, are still administratively 'rural'. Also, parameters that define 'urban' in context of India are outdated.
- **Lack of Planning of Cities and Regions**: Presently, about 52% of the statutory towns and 76% of the census towns do not have any Master Plans to guide their spatial growth and infrastructural investments.
- **Other issues-**
    - **Lack of adequate and technically qualified planners** in public sector.
    - **Low participation of private sector** in Urban planning.

- **Lack of Specialised Professionals** in the specific areas like rural area planning, coastal area planning, industrial area planning and hill area planning.
- **Limited Awareness about Urban Planning** and its associated socio-economic benefits among administrators or elected officials.

Way Forward: Recommendations of the Report

Planning of healthy cities	• A central sector scheme, '500 Healthy Cities Programme', for a period of 5 years where in priority cities will be selected jointly by state and local bodies.
Interventions and advancements in existing approaches of master plan preparation	• Assessment of the needs and aspirations of citizens. • Development and inclusion of specific proposals with clear responsibilities of the agencies concerned and a financial implementation plan in the master plan report. • Preparation of an interoperable base map of the city on GIS platform • Mapping of all the relevant sub-sectors of a city.
Optimum utilization of urban land	• A sub-scheme 'Preparation/Revision of Development Control Regulations' for optimum utilization of urban land based on scientific evidence to maximize the efficiency of urban land of the cities under the 'Healthy City Programme'.
Re-engineering of urban governance	• Clear division of the roles and responsibilities of various authorities, appropriate revision of rules and regulations, etc. • Creation of a more dynamic organizational structure, standardization of the job descriptions of town planners and other experts. • Extensive adoption of technology for enabling public participation and inter-agency coordination.
Focusing on Human Resource Development and Capacity Building	• To combat the shortage of qualified urban planners in the public sector, states/UTs may need to- o expedite the filling up of vacant positions of town planners. o sanction additional town planners' posts as lateral entry positions. o undertake requisite amendments in their recruitment rules to ensure the entry of qualified candidates into town-planning positions. o Undertake regular capacity building of their town planning staff. National Urban Learning Platform, operationalized by MoHUA, can be leveraged for this purpose.
Revision of Town and Country Planning Acts	• Formation of an apex committee at the state level to undertake a **regular review of planning legislations** (including town and country planning or urban and regional development acts or other relevant acts).
Demystifying Planning and Involving Citizens	• Conducting 'Citizen Outreach Campaign' with strategies like- o Publishing Master plans/regional plans on the National Urban Innovation Stack of MoHUA and on the websites of respective city governments. o Advertising Opportunities for participation by citizens.
Building Local Urban Leadership	• Design and organisation of 'Short-Term Training Programme for City-Level Elected Officials on Economic and Social Benefits of Urban Planning'.
Steps for Enhancing the Role of Private Sector	• Adoption of fair processes for procuring technical consultancy services. • Strengthening project structuring and management skills in the public sector. • Empanelment of private sector consultancies.
Steps for Strengthening Urban Planning Education System	• Establish a 'Department of Planning' in Each Central University. • Encourage Programmes on 'Rural Area Planning'. • Inclusion of 'Planning' As a Discipline in National Institute Ranking Framework (NIRF) etc.
Measures for Strengthening Human Resource and Match Demand–Supply	• Constitution of a 'National Council of Town and Country Planners' as a statutory body of the Government of India and a 'National Digital Platform of Town and Country Planners' to enable self-registration of all planners.

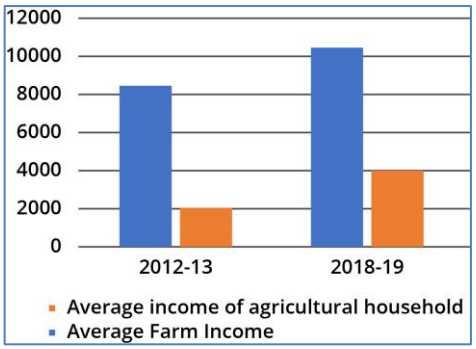
3.2. AGRICULTURAL INDEBTEDNESS IN INDIA

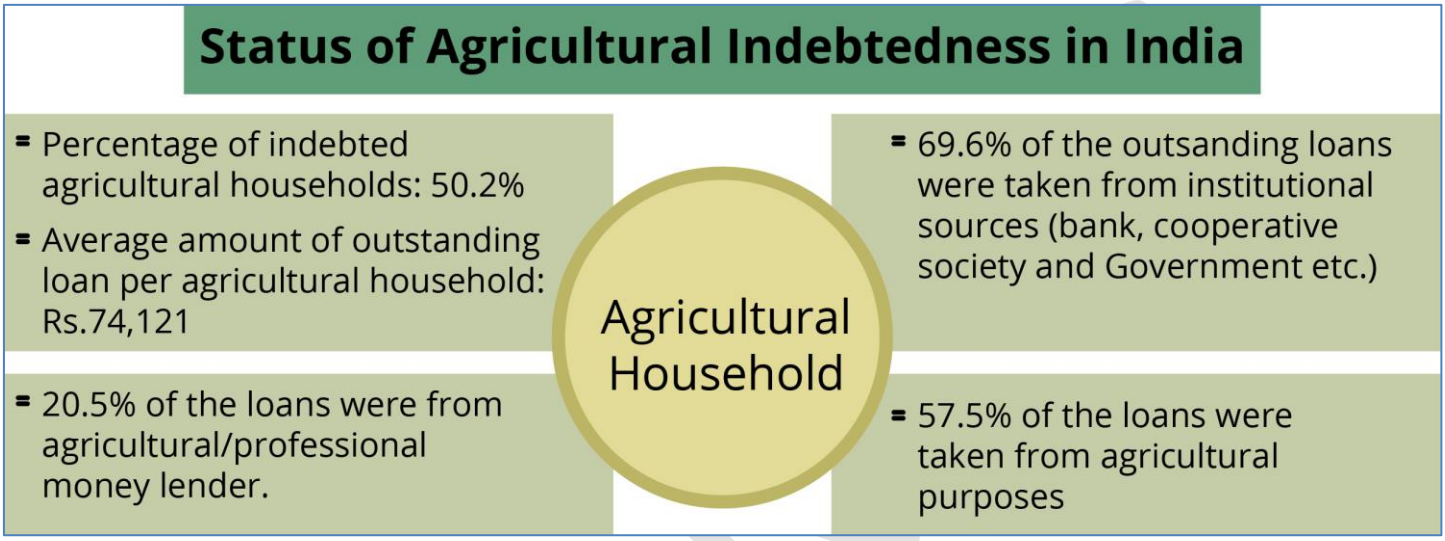
Why in News?

The average outstanding loan per agricultural household increased 57.7 per cent from 2013 to 2018, according to the latest findings of a **'Situation Assessment of Agricultural Households and Land Holdings of Households in Rural India, 2019' survey by the National Statistical Office**.

Key findings of the report

- **Average income of agricultural households** and farm incomes have **increased** (see graph).
- Andhra Pradesh to have the highest average outstanding loan, at Rs 2.45 lakh. The state also had the highest proportion (93.2 per cent) of agricultural households under debt, followed by Telangana (91.7 per cent) and Kerala (69.9 per cent).





Reasons for rising indebtedness

Indebtedness can be described as impoverishment by debt or as a situation where a household is caught in spiral debts. Following factors can be held responsible for rising indebtedness in agricultural households-

- **Increasing access to institutional finance due to Government efforts**: Ground level credit (GLC) to agriculture has nearly doubled (from Rs.7.30 lakh crore to Rs.13.92 lakh crore) during the period 2013–14 to 2019–20.
- **Inadequate growth in farm productivity and income**: This can be attributed to factors like-
  - **Rising cost of cultivation:** The loans are used to invest in farm mechanization (almost 95 per cent tractors are taken on loans) and acquire modern inputs like seeds, fertilizers, insecticides, pesticides etc.
  - **Climate change** affects weather and rain patterns leading to decline in agricultural productivity.
  - **Price volatility and poor agricultural marketing practices and value addition.**
  - **Subsistence farming of small landholdings** makes it impossible to meet the needs required for their living.
- **Poor risk mitigation mechanism:** Crop Insurance uptake is still low in India due to lack of awareness and delays in claim payments.
- **High cost of informal loans:** The small and marginal farmers, tenants and agricultural labourers still heavily depend upon informal sources of finance to meet their credit needs and pay very high rates of interest, which pushes them into debt cycle.
- **Ancestral/Inherited Debt:** Rural people incur debts for non-productive purposes such as to meet the family needs, perform social functions (related to marriages, birth, death), etc. This debt burden traps farmers into an intergenerational debt cycle which becomes harder to break due to uncertainty of farm income.
- **Farm loan waivers:** With more agriculture loans being waived-off, it is easier for farmers to take loans without the fear of repaying the amount if there is a loss.
- **Litigation:** Agriculturists in India are involved in various kinds of disputes related to land, property, etc., which involve heavy expenditure and time.

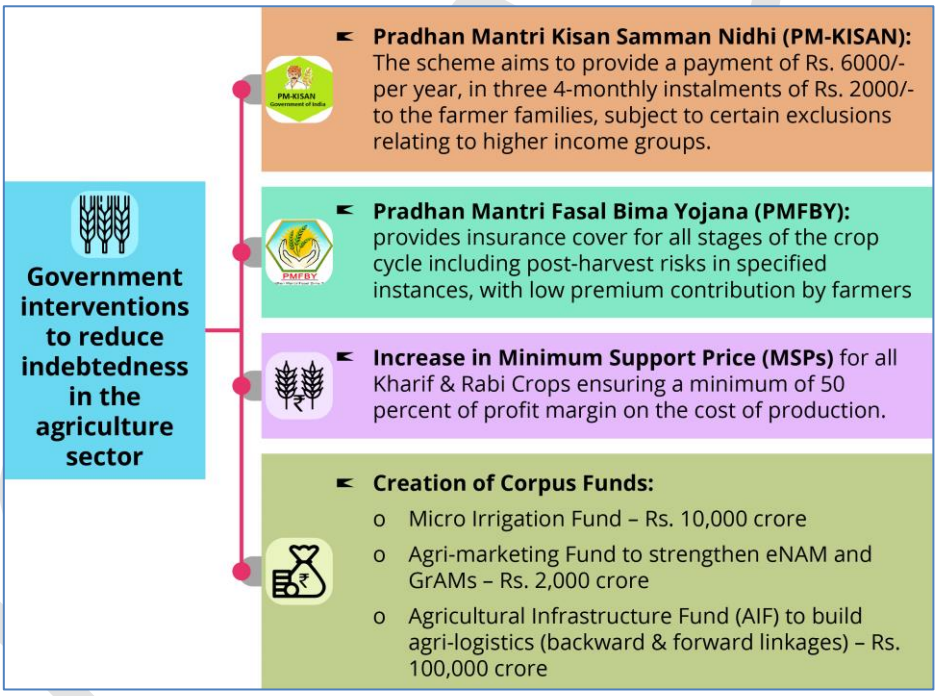
Impacts of indebtedness

While sustainable debt incurred to buy farm machinery or to invest in crop diversification can boost future income and enhance agriculture productivity, unsustainable debt can lead to issues such as-

- **Reduced investment** in modernisation of agriculture.
- **Distress selling to fulfil debt obligations**.
- **Marginalization of farming community** and in extreme cases farmer suicides.
- **Enhanced rural poverty and impact on overall socioeconomic growth** in agricultural households in terms of educational and health outcomes.
- **Indebtedness inhibits the provision of new loans** and creates pressure on the banking system due to increased possibility of default.
- **Loss of property rights to money lenders** can turn famers into landless labourers which limits their ability to take farming decisions.
- Mounting debt **exacerbates the unviability of agriculture as an economic activity**, threatening food security and pushing farmers into a seemingly endless spiral of debt.

Way Forward

To resolve the issue of rising debt, a holistic approach is needed that focuses on-



- **Enhancing agricultural productivity and farmers income** by initiating programmes that focus on teaching farm-related technologies to the farmers and promote climate suitable and high value agriculture.
- **Risk mitigation** by raising awareness about crop insurance schemes.
- **Enhance accessibility of institutional credit facilities**, especially for small and marginal farmers through steps such as setting-up mobile branches of banks in rural areas, reducing the transaction costs, computerisation of lands records etc.
- **Establishing Financial Literacy and credit Counselling Centres (FLCCs)**: Training can be provided to banks SHG federations, agri clinics and other similar institutions to educate farmers about sustainable debt practices.
- **Setting up of a "Money Lenders Debt Redemption Fund"** as a one-time measure for providing long-term loans by banks to farmers to enable them to repay their debts to the moneylenders. Local Civil Society Organisations, NGOs or Panchayati Raj Institutions could be involved in arriving at negotiated settlements with the moneylenders.

3.3. AGREEMENT ON AGRICULTURE

Why in News?

Recently, Minister of Commerce & Industry stated that World Trade Organization (WTO) Agreement on Agriculture is tilted against developing countries.

About Agreement on Agriculture (AoA)

- **AoA** concluded by WTO members **came into force in 1995.**
- It **provides a framework for the long-term reform of agricultural trade and domestic policies,** with the aim of leading to fairer competition and a less distorted sector.

- **Agreement covers:**
  - **Market access:** the use of trade restrictions, such as tariffs on imports
  - **Domestic support:** the use of subsidies and other support programmes that directly stimulate production and distort trade
  - **Export competition:** the use of export subsidies and other government support programmes that subsidize exports.
- Under the Agreement, **WTO members agree to "schedules" or lists of commitments that set limits on the tariffs they can apply** to individual products and on levels of domestic support and export subsidies.
- Agricultural trade reform did not end with the birth of the Agriculture Agreement. **WTO members are continuing to negotiate agricultural trade reform.**

Agreement on Agriculture: Negotiation Timeline

<table>
<tr><th>Round</th><th>Key Provisions</th></tr>
<tr><td>Uruguay Round</td><td>

AoA was signed by WTO members.
Specific commitments to reduce support and protection in the areas of domestic support, export subsidies and market access.
It also takes into account non-trade concerns, including food security and the need to protect the environment, and provides special and differential treatment for developing countries.
Special Agricultural Safeguard (SSG) was provided to developing economies under which they can impose an additional duty in case of import surge (volume) or fall of import price below a specified reference price.
Uruguay Round created certain categories of domestic support:

Green Box
= These measures are exempt from reduction commitments and, indeed, can even be increased without any financial limitation under the WTO.
= Applies to both developed and developing country members but in the case of developing countries special treatment is provided in respect of governmental stockholding programmes for food security purposes and subsidized food prices for urban and rural poor.
(India's PDS does not come under Green Box)
Amber Box
= All domestic support measures considered to distort production and trade (with some exceptions) fall into the amber box.
= For instance, MSP, Procurement Price, sum total of subsidies on inputs like fertilizer, water, credit, power, etc
Blue Box
= These are basically Amber Box subsidies, but they tend to limit the production. Any support that would normally be in the amber box, is placed in the blue box if the support also requires farmers to limit their production.
= These measures are also exempt from reduction commitments.
Special and Differential Treatment Box
= It comprises of investment subsidies like tractors and pump sets, Agricultural input services like fertilizers to farmers etc.
= SDT box subsidies can be given by only developing and low-income countries.

De Minimis: Minimal amounts of domestic support that are allowed even though they distort trade- up to 5% of the value of production for developed countries, 10% for developing.
Peace Clause: Provides protection to domestic support measures and export subsidies of a WTO Member from challenge other WTO Members.

Peace Clause expired on January 1, 2004. Another temporary peace clause was made at the WTO Bali conference in December 2013 for four years until 2017.

✓ It stipulated that no country would be legally barred from food security programs for its own people even if the subsidy breached the limits specified in the WTO AoA.

</td></tr>
<tr><td>Doha Round</td><td>2013 Bali Ministerial Conference

An agreement to negotiate a permanent solution to Public Stockholding for food security purposes.
To expand the Green Box list of "general services".
A declaration to reduce all forms of export subsidies and to enhance transparency and monitoring.
A temporary peace clause was added in Bali.

</td></tr>
</table>

	2015 Nairobi Package • Decision to **eliminate agricultural export subsidie**s and set disciplines on export measures with equivalent effect. • WTO members agreed to **engage constructively in finding a permanent solution to developing countries' use of public stockholding programmes** for food security purposes. • Ministers also agreed to continue **negotiations on a special safeguard mechanism (SSM).**

Concerns raised by India and other developing nations on AoA

Provisions	Concerns	India's proposals to address these concerns
Permanent & Workable solution to food security	• India insists that member countries of the WTO agree to a **permanent solution to the dispute over public stockholding of foodgrains.** • Developing countries insist that they **should not be penalized for breaching any limits,** arguing that such stockholdings are crucial for food security. • India is **not satisfied with the peace clause negotiated at Bali conference** that allowed it to go beyond the 10 % cap for its MSP with immunity from legal challenge from other WTO member countries for the next four years. • Furthermore, even at Nairobi and the eleventh Ministerial Conference in Buenos Aires, there was **no outcome on public stockholding for food security purposes or on other agriculture issues.**	• Food security which is not only of great economic relevance but also a very important socio-political concern in large agrarian economies like India **needs to be addressed up-front in the ongoing negotiations** on agriculture. • All measures taken by the developing countries for **poverty alleviation, rural development, rural employment and diversification of agriculture should be exempted** from any form of reduction commitments. • **Product coverage requires rationalisation** by including primary agricultural commodities such as rubber, primary forest produce, jute, coir, abaca and sisal etc.
High farm subsidies provided by developed countries	• WTO rules make it possible for **rich countries to get away with such high subsidies**. But as per developing nations these subsidies **destabilise and depress the international market prices** impacting adversely farm incomes in developing countries. • In 2015, **US government provided a subsidy of $7,860 on an average to each of its farmers.** On the contrary, in 2014, Indian government provided on average a subsidy of $417 to 9.05 crore farmers.	• **All forms of export subsidisation** including export credit, guarantees, price discounts and insurance programmes etc. in developed countries **should be added to the export subsidies.**
Market Access	• Opening of the markets has taken place **mainly in the developing countries.** • Access for products from developing countries, **continues to be impeded in the developed country markets** due to their high trade distorting domestic support policies coupled with high tariffs. • **Use of Sanitary & Phytosanitary (SPS)Measures & Technical Barriers to Trade by Developed Countries** to selectively ward off imports from developing countries by imposing higher standards than those imposed by international bodies.	• Developed country members **should not be allowed to use** overly stringent trade restrictive **SPS measures for protectionist purposes** against developing countries. • Developing country members **should be exempt from any obligation to provide any minimum market access.** • Developing country members **should be allowed to maintain appropriate levels of tariff bindings** keeping in mind their developmental needs and the high distortions prevalent in the international markets.

3.4. INDIA'S EXPORTS

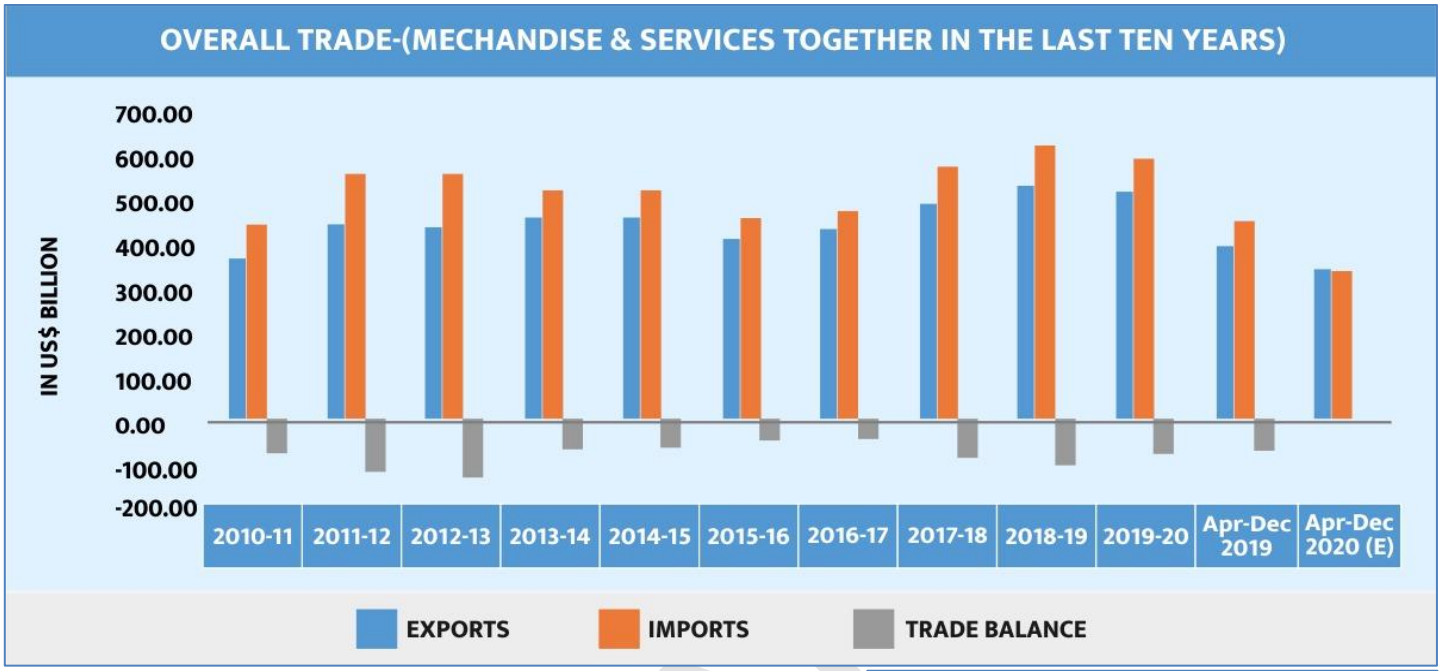
Why in news?

Recently various developments took place in India's exports sector.

More on news

- India's **quarterly exports cross $100 bn mark** for the first time as a result of sector specific interventions taken by the government during the COVID crisis.

- Government has set **merchandise export target of $400 billion** for the year 2021-22 and overall export target of 1 trillion exports by 2027.
- Cabinet has announced **measures to provide a boost to the exports sector** and issued guidelines for the **RoDTEP (Remission of Duties and Taxes on Exported Products) Scheme**.

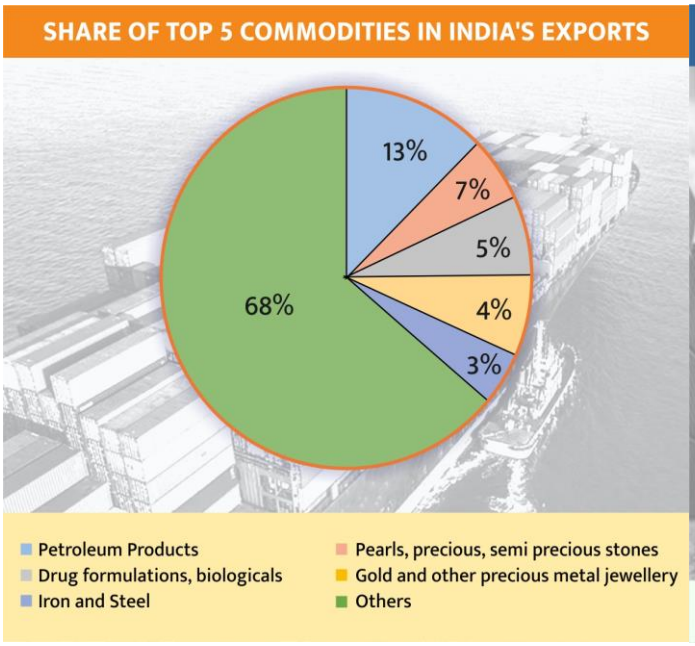


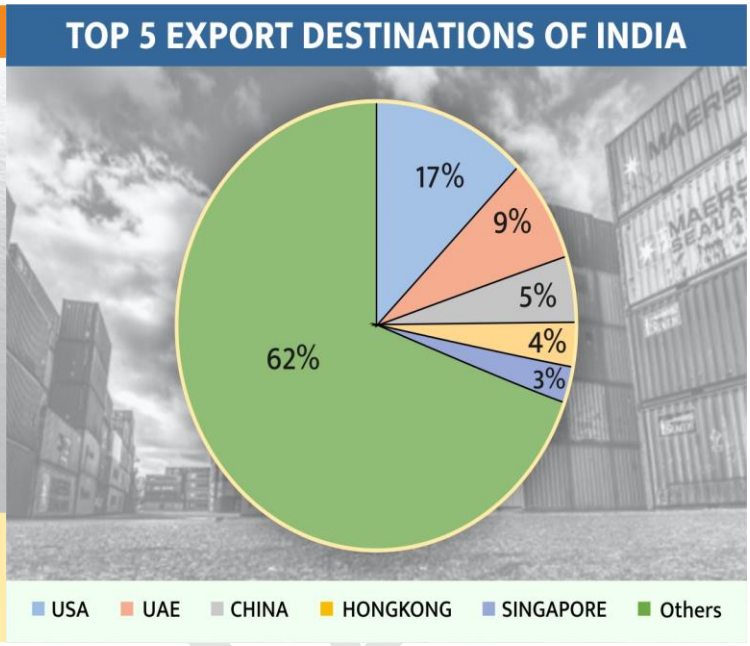
Trends in India's overall trade

- India's overall exports (merchandise and services combined) in 2019-20 were US$ 526.6 billion as against US$ 538.1 billion in 2018-19.
    - Decline in exports has been mainly due to the ongoing global slowdown, which got aggravated due to the current Covid-19 crisis. The latter resulted in large scale disruptions in supply chains and demand resulting in cancellation of orders.
- India's **share in world exports has increased from 0.6% in 1991 to 1.7%** in 2018 but remains paltry compared with China's ~13% and US' ~9%.
    - **India ranked 18th** on the list of the top exporting countries worldwide in 2019.
- As percentage of GDP, **India's exports are about 18 per cent of GDP.**
- India's **services trade has been a major driver of its exports** due to its high growth and services trade surplus has been financing almost 50% of India's merchandise trade deficit.

Initiatives taken by the Department of Commerce to boost India's Exports in the COVID/Post-COVID times

- **Relief for exporters:** By extending Import Validity period and Export Obligation period in Advance Authorizations.
- **Export of medical supplies to the world** such as Hydroxyhloroquinine and Paracetamol, N95 masks, 2/3 ply surgical masks, alcohol-based sanitizers, PPE etc.
- **Enhanced Ease of Doing Business** through electronic governance and trade facilitation: Various technology driven solutions were undertaken for foreign trade facilitation for instance, electronic platform for Preferential Certificate of Origin (COO) was released.
- **Adoption of Technical Regulations (TRs) and Quality Control Orders (QCO's)** to strengthen the quality ecosystem
- **Fast track mechanism for trade remedy** to promote transparency, efficiency, and expeditious relief to the domestic industry, such as the e-filing facility for anti-dumping investigations.
- **Developing Districts as Export Hubs:** In this regard, various measures have been undertaken viz., preparation of State export strategy/ policy by all State/UT Governments, product/service identification in each District, preparation of District Export Action Plans (DEAPs) by DGFT among others.





Reasons for India's Underperformance in Exports

- **Low Level of Participation in Global Value Chains (GVCs):** India's participation in GVCs has been low compared to the major exporting nations in East and Southeast Asia.
  - For instance, export growth of capital intensive products from China has been mainly driven by its participation in the GVCs.
- **Limited diversification of India's export basket:** The top 10 principal exports in terms of commodity groups accounts for as much as 78 per cent of total merchandise exports.
- **Low competitiveness of Indian Products**: The domestic factors like lackluster infrastructure, complex land and labour laws, fragmented and unregulated logistics sector have impeded the creations of conditions for Indian companies to compete in global markets.
- **Regional Disparities:** 70 per cent of India's export has been dominated by five states — Maharashtra, Gujarat, Karnataka, Tamil Nadu, and Telangana. India faces three fundamental challenges **with regard to export promotion**:
  - **Intra- and inter-regional disparities in export infrastructure** as coastal states have performed extremely well compared to the landlocked states in developing export promotion parks and hubs.
  - **Poor trade support and growth orientation among states.** Other than Uttarakhand and the coastal states, there is an absence of strong support towards the exporters from the respective state governments in improving their quality or quantity.
  - **Poor research & development infrastructure to promote complex and unique exports** curbing the innovative tendencies at the sub-national level: 'Himalayan' states for instance have performed inadequately in this area due to the scarcity of research and quality check institutes.
- **Inability to exploit comparative advantage** in lower-skilled and labor-intensive exports. India has seen its share of world trade in textiles, garments and footwear decline in recent years while Bangladesh has almost caught up to India, and Vietnam has well overtaken it.

Why India needs an Export Led growth?

Economic Survey 2019 has advocated an export-led growth model for India for reasons such as:

- Exports can help India to achieve the target of making India a developed economy by focusing on '**Atma Nirbhar Bharat'**.
- **Economic Growth:** Higher exports draw more foreign remittances, create more jobs and lower the current account deficit, creates demand and infrastructure.
  - Major economies around the world are also major exporters. To corroborate this claim, it is to be noted that China is the world's leading exporter of goods.

- **Becoming a part of Global Value Chains:** Exports give domestic sellers increased access to the market that helps in presenting a golden opportunity to capture a good chunk of global market share.
- **Mitigate Regional Disparities:** Improving the export competitiveness of states can mitigate regional disparities through export-led growth and the consequent rise in standard of living.
    - The Economic Survey established that states which engage with the world markets as well as with the other states within the country are richer.

Steps taken to boost India's exports

India's Foreign Trade Policy (FTP) 2015-20 (extended till March 2022) advocates various export incentives that are in line with the government's 'Aatmanirbhar' and 'Make in India' initiatives to attain self-sufficiency and ensure higher reach of local products:

Export Promotion Schemes	• **RoDTEP (Remission of Duties and Taxes on Exported Products) Scheme:** It **enables zero-rating of exports by ensuring domestic taxes are not exported** and aims to refund all hidden taxes, such as the central and state taxes on the fuel used for transportation of export products, duties levied on electricity used for manufacturing, MANDI tax and others. ○ It replaced the old **Merchandise Exports from India Scheme (MEIS)** as it was not WTO-compliant. Under this, incentives were provided to exporters in the form of duty credit scrips to refund losses on paid duties. ○ **Features of the scheme:** ✓ The **tax refund rates range from 0.5% to 4.3%** for various sectors. ✓ The **rebate will have to be claimed as a percentage of the Freight On Board (FOB) value** of exports (i.e. value of goods excluding shipping, insurance and freight) ✓ **Rebates will be issued in the form of a transferable duty credit/electronic scrip** (e-scrip) which will be maintained by the Central Board of Indirect Taxes and Customs (CBIC). ✓ **Steel, pharma, and chemicals have not been included** under the scheme and for garment exporters, the Rebate of State and Central Levies and Taxes (RoSCTL) Scheme has been notified separately. • **Service Exports from India Scheme (SEIS):** Service providers of notified services are eligible for freely transferable duty credit scrip @ 5% of net foreign exchange earned.
Duty Exemption/Remission Schemes	• **Advance Authorisation Scheme (AAS)** allows traders to import raw materials at 0% import duty if those raw materials will be used to manufacture export products. • **Duty Drawback Scheme (DBK Scheme)**: Exporters are given compensation on customs and central excise duties incurred on materials used in the manufacture of exported goods.
Export Promotion Capital Goods Scheme (EPCG Scheme)	Facilitates the imports of capital goods to produce goods and services by manufacturers to enhance India's export competitiveness.
Export Oriented Units (EOU)	Aims to increase exports by providing a favorable ecosystem to companies, which are 100% exporters. This scheme allows certain waivers and concessions in compliance and taxation matters.
Recent Initiatives	• **IndiaXports Initiative:** Aiming to increase MSME exports by 50% in 2022, it features an Info Portal which will serve as a knowledge base for exports by Indian MSMEs with the required information related to export potential, potential markets as well as trends in exports, etc. • **Capital Infusion in Export Credit Guarantee Corporation:** ECGC was set up in 1957 to promote exports by providing Credit Risk Insurance and related services for exports. • **Production-Linked Incentive (PLI) is provided** for 13 high-potential sectors, including auto, battery cell, pharma, telecom networking, food, and textiles to promote their manufacturing. • **Export Preparedness Index' (EPI) was r**eleased by NITI Aayog recently which discusses the export potential of each state and the role of regional level economies in enhancing India's share in the global trade. • **Draft National Logistics Policy** has been introduced which will create a single-window e-logistics market that will cut logistics costs, from 13-14% of GDP, to 10%. • **Foreign Trade Policy (FTP) extended by six months till March 31, 2022:** FTP provides **guidelines for enhancing exports to push economic growth** and create jobs and incentives under different schemes.

	• **Continuation of National Export Insurance Account (NEIA) and infusion of 1,650 crore** over five years (2021-2022 to 2025-2026).
	  ○ It will help Exporters **to tap potential of project exports in focus market** and will **enhance manufacturing in India**.
	  ○ NEIA Trust was established in 2006 **to promote project exports from India that are of strategic and national importance.**

Others	• **GST Refund for Exporters** • **Transport and Marketing Assistance Scheme (TMA Scheme)**: freight costs up of to a certain amount will be reimbursed by the government to make Indian agricultural products competitive in the global space. • **Market Access Initiative (MAI) Scheme** to promote marketing, market research, promotion and branding in new markets. • **Interest Equalisation Scheme (IES)** provides 5% interest support to all manufacturers in the MSME sector and 3% support to all exporters in the identified 416 tariff lines. • **NIRVIK Scheme**: Introduced by the Export Credit Guarantee Corporation of India (ECGC) it provides high insurance cover, reduced premium for small exporters and a simplified claim settlement process.

Way ahead for post COVID times

- **Increasing Competitiveness of Made in India Products:**
  - **Promoting Ease of doing Business:** Need to focus on boosting competitiveness — building infrastructure, ensuring cheap power, reforming land and labour markets, and creating conditions for companies to compete in global markets. It **will also improve India's FDI attractiveness.**
  - **Improving India's manufacturing base:** This can be achieved by augmenting the competitiveness of MSMEs and make India a preferred destination for manufacturing for the world.
    - ✓ MSMEs have been contributing nearly 40% of overall India's exports
  - **Trade Liberalization:** In order to improve the country's participation in the global value chain it is important to **bring down import tariffs**, which have been raised in the past few years. An open and facilitative import environment is also **vital to attract global companies and to ensure competitive access to intermediate goods.**
  - **Research and Development(R&D):** R&D plays a significant role in **improving the quality of products** to match up to the international standards and enables greater innovation.
- **Exploring and strengthening potential sectors:**
  - **Need for diversification of India's export basket** as well as identification of new products that can be exported and relevant markets for such items and prepare strategies for that.
    - ✓ For instance, India's **textile portfolio can be diversified to include man-made fiber and technical textile** in addition to cotton and cotton based textile.
  - **Promote local manufacturing in potential sectors:** SEZs can be set up in sectors identified under the PLI scheme for improving the manufacturing infrastructure.
- **Robust Foreign Trade Policy:** It is important to adopt an integrated approach in the new FTP which is being formulated for implementation.
  - The new FTP should **explore the under-tapped markets like Africa** by reviving ties with them through trade and investment. It should also find ways for **increasing people-to-people cooperation and providing technical support to exporters** for understanding the legal and business environment.
- **Enhancing trade relations with countries:** Emphasis must be given to enhancing trade relations with neighboring countries like Bangladesh and Sri Lanka strengthening the Act East policy. India should pave the path for meaningful negotiation with the EU for a free trade agreement (FTA).
- **Learning from neighbors:** Bangladesh has become the second largest apparel exporter after China, Vietnam's exports have grown by about 240% in the past eight years.
  - Vietnam pursues an open trade policy mainly through Free Trade Agreements (FTAs) which ensure that its important trading partners do not charge import duties on products made in Vietnam. For example, 99% of EU products will soon enter Vietnam duty-free.

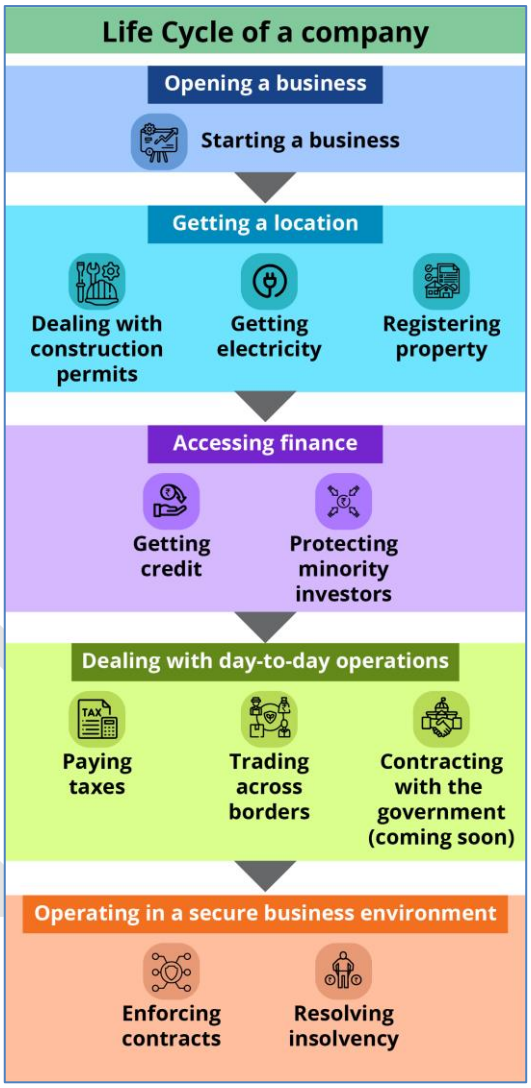
3.5. EASE OF DOING BUSINESS

Why in News?

Recently, World Bank Group announced that it has decided to discontinue publication of its 'Doing Business' rankings of country business climates.

About Ease of Doing Business Rankings

- Doing Business project, launched in 2002, **provided objective measures of business regulations and their enforcement** across 191 economies and selected cities at the subnational and regional level.
  - It **looks at domestic small and medium-size companies** and measures the regulations applying to them through their life cycle (refer infographic)
- The Ease of Doing Business (EoDB) index is a ranking system established by the World Bank Group wherein the **'higher rankings' (a lower numerical value) indicate better**, usually simpler, regulations for businesses and stronger protections of property rights.
- **India moved to 63rd position** (from 142nd in 2014) on Ease of Doing Business Ranking 2020.



Issues with Ease of 'Doing Business' rankings

- **Irregularities in ranking:** Decision to discontinue came **after a review of data irregularities found in 2018 and 2020 reports.**
  - Irregularities had affected four countries: China; Saudi Arabia; UAE; and Azerbaijan.
- **Libertarian bias:** It tends to reduce the complexity of economic activity to a few quantifiable metrics with a libertarian bias. It **creates an incentive for countries to pursue economic policies that conform with the World Bank's vision of economic development**: eliminating regulations and barriers to investment, pushing for market-friendly reforms, reducing labor protections, etc.
- **Ignore deeper structural, social, or political issues:** Ranking have been criticized for gaming the system (obsessing over moving up in the rankings) rather than pushing for real and lasting structural reforms.
- **One size fits all approach**: A one-size-fits-all approach to measuring and understanding economic growth and development, especially one based on the ideological priors of institutions and stakeholders, is always likely to contain some fatal flaws.

Why is Ease of Doing business needed?

- Various experts are supportive of idea that there is an **important and robust relationship between the business regulatory environment and economic outcomes.**
  - Regulatory environment for business **affects productivity, growth, employment, trade, investment, access to finance,** and the size of the informal economy.
- Ease of doing business points to transparent rules on the ground to promote efficient markets, rev up enterprise and boost the development delivery mechanism, and, therefore, **help change perceptions and investor sentiments.**
- **Regulatory burden on a business has a significant impact on its performance.** To ensure compliance, regulations impose both time and cost and affect competitiveness of business.
  - Low regulatory burden means that entrepreneurs devote their time on productive activities.
- NITI Aayog came out with a State-level EoDB ranking as well. It is based on the progress of states in completing annual reform action plan.
  - State rankings will **help attract investments, foster healthy competition and increase Ease of Doing Business in each State.**

Challenges to Ease of Doing Business in India

Lagging on critical parameters

- Though progress has been made, India still lags behind many larger nations in critical metrics such as starting a business, enforcing contracts and registering property.

High tariffs and protectionist policies

- India's tariffs and trade regulations were already non-transparent and often unpredictable, leaving many U.S. investors and exporters with limited access to the market.
- India's average applied tariff is among the highest bound tariff rates in the World Trade Organization (WTO).

Unstable Policy Environment

- A good example of the recent past is the telecom sector, which saw a huge enthusiastic entry of large MNCs when the sector was opened up for FDI, and soon enough, many exited, thanks to the ever-changing policy framework.

Infrastructure

- India's infrastructure of roads, railroads, airports, seaports, power grids, and telecommunications infrastructure present challenges to its growing economic status and ability to deliver public services.

Safeguarding intellectual property

- Although local laws are thorough and generally compatible with EU and U.S. IP laws, there is some concern about enforcement of these laws.
- Bureaucratic delays and a general lack of transparency are both areas of concern in terms of protecting sensitive intellectual assets.

Some Ease of Doing Reforms implemented by India to improve its ranking

- **Make in India** led to launch of reforms like getting FDI, foster business, alleviate the business environment from outdated policies and regulations, infrastructure development etc.
- **Launch of web-based SPICe+ and AGILE-PROform** has enabled new company incorporation in 3-steps as compared to the 14 steps process in 2014.
- **Establishment of a modern insolvency regime through Insolvency and Bankruptcy Code (IBC)** in 2016 as part of a comprehensive strategy to reform corporate law.
- **One stop shop portal** has been launched in Mumbai & Delhi
- **Easy procedure for filing GST returns,** elimination of incorporation fees for small businesses etc.
- Number of days required for **getting electricity connection reduced from 105 days in 2014 to 53 days** in 2019 in India.

- **Dedicated Commercial Courts with modern facilities** in Delhi and Mumbai have been established for early redressal of commercial disputes.
- **Single window for all import and export transactions,** integration of all stakeholders such as port and terminal operators at a common platform and fast-tracking clearances of consignments at ports.
- Passage of the **Taxation laws (amendment) Act, 2021** which scrapped the retrospective taxation bringing certainty in taxation laws.

3.6. PRODUCTION LINKED INCENTIVE (PLI) SCHEME FOR TEXTILES

Why in news?

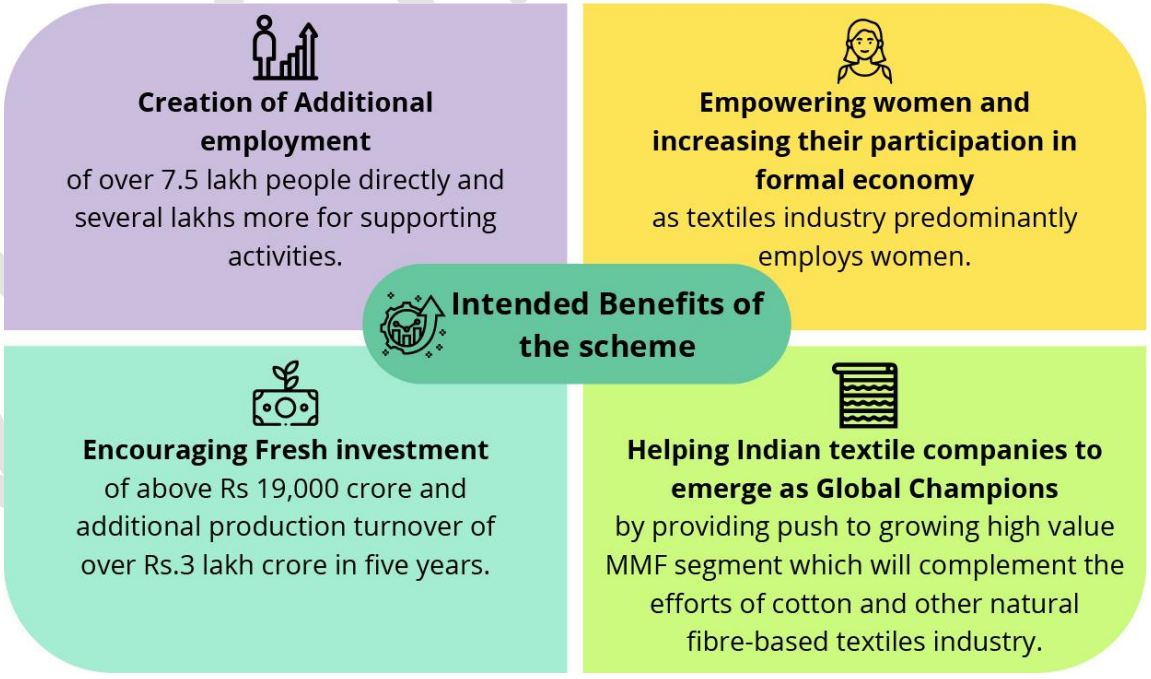
Government has recently approved the PLI Scheme for Textiles for man-made fibre (**MMF**) Apparel, MMF Fabrics and 10 segments/ products of Technical Textiles.

Definitions of key terms

- **Man-made fibres (MMF):** are Textiles artificially made out of synthetic and cellulosic fibres.
  - Synthetic fibres are produced from crude oil and cellulosic fibres are from wood pulp. The main varieties of synthetic staple fibres are polyester, acrylic and polypropylene.
  - Cellulosic fibre is viscose fibre, modal, etc.
- **Technical textiles:** are textiles materials and products **manufactured primarily for technical performance and functional properties** rather than aesthetic characteristics. They have applications across various industries including automobiles, civil engineering and construction, agriculture, healthcare, industrial safety, personal protection etc.

Key Features of the scheme

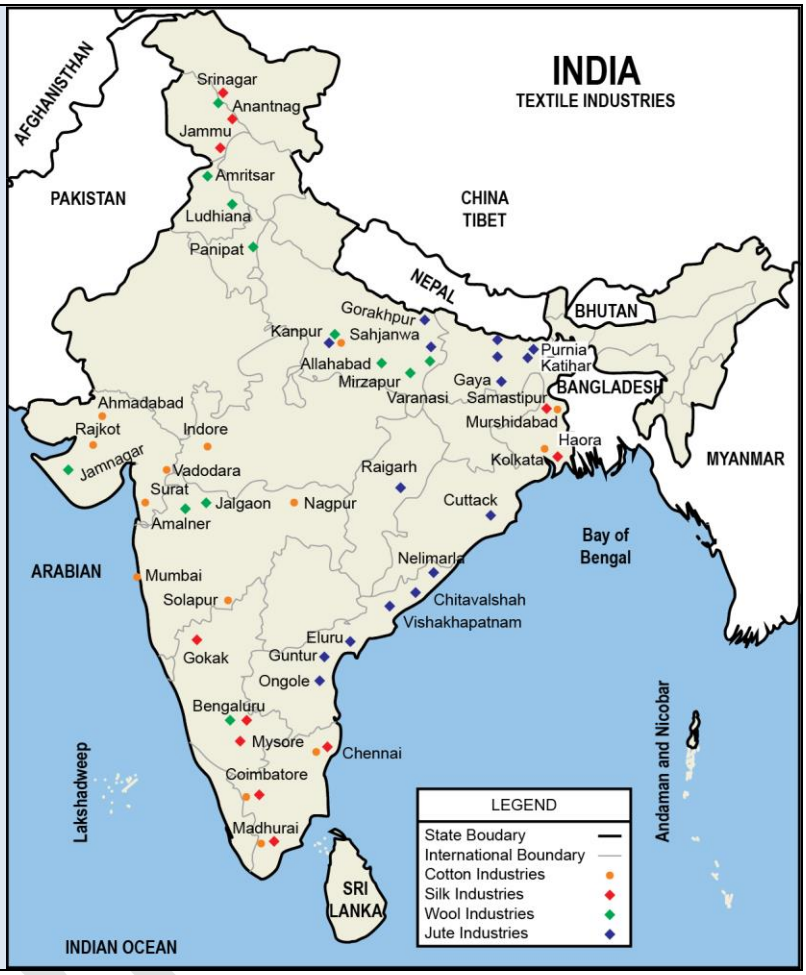
- **Budgetary outlay**: Rs. 10,683 crores
- **Scheme Duration**: 5 years period i.e. during FY 2025-26 to FY 2029-30.
- **Different set of Incentive structure based on two types of investment** in Plant, Machinery, Equipment and Civil Works (excluding land and administrative building cost) to produce products of Notified lines (MMF Fabrics, Garment) and products of Technical Textiles.
  - **Any person/ includes firm / company willing to invest minimum ₹300 Crore** will be eligible to get **15% incentive when they achieve a minimum of ₹600 Crore turnover** by manufacturing and selling the products Notified under this scheme.
  - **Any person/ includes firm / company willing to invest minimum ₹100 Crore** will be eligible to get **11% incentive when they achieve a minimum of ₹200 Crore turnover** by manufacturing and selling the products Notified under this scheme.
- Only manufacturing company registered in India will be eligible to participate under the scheme.



- **Higher priority will be given for investment in Aspirational Districts, Tier 3, Tier 4 towns, and rural areas**.

Overview of Indian textile industry

- Textile sector contributes **2.3% to Indian GDP**, 7% of the Industrial Output, 12% to the export earnings of India.
- India is the **largest producer of cotton & jute in the world**, the second largest producer of silk in the world the 6th largest producer of Technical Textiles.
- **95% of the world's hand-woven fabric** comes from India.
- India has a share of 5% of the global trade in textiles and apparel.
- It is the 2nd largest producer of MMF Fibre after China.
- It provides direct employment of over **45 million people (21 % of total employment)** and source of livelihood for over 100 million people indirectly.



Challenges faced by the textile sector in India

- **High fragmentation**: The Indian textile industry is highly fragmented and is dominated by the unorganized sector and small and medium industries.
- **Increase in input costs**: Unpredictable market conditions, weather, policies etc. have resulted in shortage in supply of raw materials and increase in their material costs.
  - Another important thereat is raising interest rates and labor wages and workers' salaries.
- **Impact of Goods and Services Tax (GST)**: GST has created distortions in the Textile and Apparel sector in India, impeding its competitiveness.
  - For instance, man-made fibres (MMF) are taxed at 18 per cent for fibre, 12 per cent for yarn and 5 per cent for fabric. This inverted tax structure makes MMF textiles costly.
- **Infrastructure bottlenecks**: Poor conditions of roads, highways, etc. creates supply chain constraints and increases lead time, inventory holding cost and inventory carrying cost.
- **Lack of scale**: While India's spinning capacity is of a global scale, the same cannot be said about weaving and apparel making.
- **Highly competitive export market**: In the global market tariff and non-tariff barriers coupled with **lack of free/preferential trade agreements** are posing a major challenge to the Indian textile Industry.
  - There is fierce competition from China, Bangladesh and Sri Lanka in the low-price garment market.
- **Environmental issues**: Textile processing is extremely chemical and water intensive and involves the use of numerous environmentally unfriendly, non-biodegradable chemicals. A significant share of textile units are not equipped to comply with environmental norms.
- **Other issues-**
  - Poor access to the latest technology and low automation.
  - Social issues like child labor and personal safety norms.

- Slackening global and domestic demand.
- Shortage of trained labor.

Steps taken by the Government for growth of Textile industry	
Infrastructure development	• **Setting up of 7 Mega Integrated Textile Region and Apparel Parks (PM MITRA) parks** to create an integrated textiles value chain.
Technology Upgradation	• **Amended Technology Fund Uprgradation Scheme (ATUFS)** to upgrade technology/machineries of textile industry.
Sector specific missions	• **National Handloom Development Programme** providing basic inputs, looms and accessories, design and development, infrastructure development, marketing of handloom products, etc. • **National Technical Textiles Mission** has been approved for creation at a total outlay of Rs.1480 Crore with a four-year implementation period from FY 2020-21 to 2023-24.
Capacity building and social security	• **SAMARTH (Scheme for Capacity Building in Textile Sector)** for skill development in the entire value chain of textiles, excluding Spinning & Weaving in the organized Sector. • **Scheme for Incubation in Apparel Manufacturing (SIAM)** to promote new entrepreneurs in apparel manufacturing. • **Scheme for Textile Industry Workers' Accommodation (STIWA)** to provide safe, adequate and conveniently located accommodation for textile and apparel industry workers in the proximity of areas of high concentration of textile and apparel industries.
Other measures	• **Scheme for Remission of Duties and Taxes on Exported Products (RoDTEP):** It will take under its ambit refund of GST taxes and import/customs duties for inputs along with VAT on fuel used in transportation, mandi tax, duty on electricity used during manufacturing. • **100% FDI (automatic route) in the textile and apparel sector** in India. • **Removal of anti-dumping duty on PTA (Purified Terephtallic Acid),** a key raw material for the manufacture of MMF fibre and yarn to boost exports in MMF sector.

Way forward

- **Utilizing upcoming opportunities in nonwovens and technical textiles:** Changing consumer trends including increasing emphasis on fitness and hygiene, rising brand consciousness, fast changing fashion trends, etc. are enhancing the demand in these sectors.
- **Infrastructure development**: Setting up mega apparel parks close to ports with `plug and play' facilities and common infrastructure for effluent treatment, etc. can help in scaling up operations.
- **Correction of inverted duty**: The 45th GST Council Meeting has proposed for correction in inverted duty structure in textiles from 1st January 2022.
- **Fast tracking Free trade agreements (FTA):** India's ongoing FTA negotiation with countries like Australia and the EU need to be fast tracked to enhance export competitiveness of Indian apparels.
- **Focus on technology up-gradation** utilising new and upcoming development in AI and automation.
- **Incentivising production of sustainable fabrics and apparels:** This can be done by promoting upscaling and reuse of existing fabrics and adoption of natural dyes.

3.7. TELECOM SECTOR

Why in news?

The Union Cabinet approved a number of structural and process reforms in the **Telecom sector.**

About Telecom sector

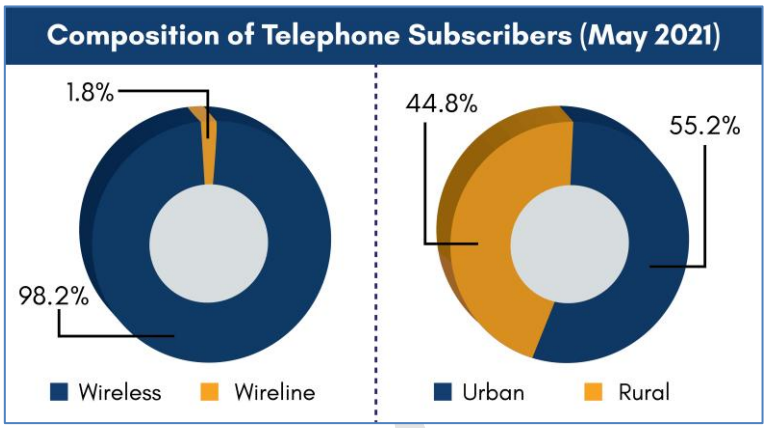
- Telecommunications, also known as telecom, is the **exchange of information** over significant distances by electronic means and refers to **all types of voice, data and video transmission**. Telecommunications systems are generally run by **telecommunications service providers**.

Evolution of Telecom Sector in India:

1851		First landlines were made operational at a place near Kolkata.
1854		Electronic telegraph made its appearance.
1881		Telephone services were formally launched.
1947		Posts, Telephone and Telegraph (PTT) body was formed by nationalization of all telecommunication companies.
1984		Entry of private sector in telecommunication equipment manufacturing.
1985		Two separate departments for the posts and the telecommunications were created.
1989		Telecom commission was setup.
1994		National Telecom Policy announced.
1997		Telecom Regulatory Authority of India (TRAI) established.
1999		New Telecom Policy
2004		Broadband policy, Intra circle merger guidelines established
2012		National Telecom Policy
2018		National Digital Communications Policy, Re-designation of the 'Telecom Commission' as the 'Digital Communications Commission'

- **Key Facts related to telecom sector in India:**
  - India is the **world's second-largest telecommunications** market. The telecom market can be **split into three segments** - wireless, wireline and internet services (Refer infographic).
  - Telecom industry in India has a **subscriber base of 1.17 billion**.
  - Telecom penetration, also known as **tele-density (**defined as the number of **telephone connections for every 100 individuals**), has increased to **88% in FY21.**
  - India has the **second-highest number of internet subscribers** globally.

- The Telecom sector is the **3rd largest sector in terms of FDI inflows**, contributing 7.1% of total FDI inflow. The sector contributes **directly to 2.2 Mn employment and indirectly to 1.8 Mn jobs**.



- The industry has **witnessed exponential growth over the last few years** primarily driven by affordable tariffs, wider availability, roll-out of Mobile Number Portability (MNP), expanding 3G and 4G coverage, evolving consumption patterns of subscribers and a conducive regulatory environment.
    - Currently, **5G Spectrum Trials are being conducted** in India to ensure proliferation of 5G technology across the country.
    - It is also estimated that 5G technology will contribute **approximately $450 billion to the Indian Economy in the period of 2023-2040.**

Growth Driver of the Telecom Sector

Robust Demand

- Tele-density of rural subscribers reached 60.44% in April 2021, from 60.26% in April 2020, indicating **potential demand growth from the rural sector.**
- Growing **young population** and **higher real income** and changing lifestyles.
- The Government of India has introduced **Digital India programme** where sectors such as healthcare, retail, etc. will be **connected through internet.**

Policy Support

- The Union Cabinet approved Rs. 12,195 crore (US$ 1.65 billion) **production-linked incentive (PLI) scheme for telecom & networking products** under the Department of Telecom.
- In December 2020, Union Cabinet approved a proposal for setting up of Public Wi-Fi Networks by Public Data Office Aggregators (PDOAs) to provide **public Wi-Fi services through Public Data Offices (PDOs).**

Increasing Investment

- In 2021-22, the Department of Telecommunications has been allocated Rs. 58,737.00 crore (US$ 8 billion) out of which **44% allocation is towards capital expenditure.**
- Under Union Budget 2021-22, the government allocated Rs. 14,200 crore (US$ 1.9 billion) for telecom infrastructure that entails completion of **optical fibre cable based network for Defence services,** rolling out broadband in 2.2 lakh panchayats and improving **mobile services in the North East.**

Challenges faced by Telecom sector

- **Debt ridden telecom sector:** Analysts estimate industry debt at **over ₹3.6 lakh crore**. Financial pressure has been attributed to various reasons like **declining ARPU** (average revenue per user), **Over the top (OTT) services**, unsustainable revenue sharing regime etc.
- **Issues related to taxation:** The definition of adjusted gross revenue (AGR) that is used to calculate the levies payable by telecom operators has been **under litigation for 14 years**. While telecom companies argued that it should comprise revenue from telecom services, the DoT's stand was that the AGR should include **all revenue earned by an operator, including that from non-core telecom operations**.
    - In 2019, Supreme court upheld the Department of Telecom (DoT)'s interpretation of "adjusted gross revenue" (AGR) which resulted in **dues of an estimated ₹1.4 lakh crore**

- **Lack of uniformity in Right of Way (RoW) rules:** The non-implementation of centrally-designated rules (notified in 2016) has led to telecom carriers and infrastructure providers having to **spend substantially more on network expansion.**
  - In some cases, companies **pay up to 1,000% more than the prescribed fee** of Rs 1,000/km.
- **Pressure on Margins Due to Stiff Competition:** With competition heating up post entry of Reliance Jio, other telecom players are feeling the heat of **substantial drop in tariff rates** both for voice and data (more significant for data subscribers).
- **Substantial investment in 5G infrastructure:** 5G rollout need to be backed up by robust and reliable infrastructure which invites **significant investments** in optical fiber cables, cellular towers, antenna, repeaters etc.
  - Being a **capital-intensive sector**, the telecom sector also needs to make huge investments for spectrum acquisition, network rollout, establishing reliable security architecture etc.
- **High Spectrum usage charges (SUC):** In countries like United States of America and Australia, the annual spectrum fee is kept at **a marginal level to cover the cost of management and regulation** of the spectrum. However, in India, the SUC charge continues in **the range of 3% to 6% of the revenue (AGR).**
- **Illegal mobile boosters**: Illegal signal boosters and repeaters are said to **cause interference with signals** from towers impacting the **overall cellular network quality and issues like call drops.**
- **Lack of Telecom Infrastructure in Semi-rural and Rural areas:** Service providers have to **incur huge initial fixed cost** to enter semi-rural and rural areas. Key reasons behind these costs are **lack of basic infrastructure** like power and roads, **resulting in delays** in rolling out the infrastructure.
  - **Lack of trained personnel** to operate and maintain the cellular infrastructure is another challenge.

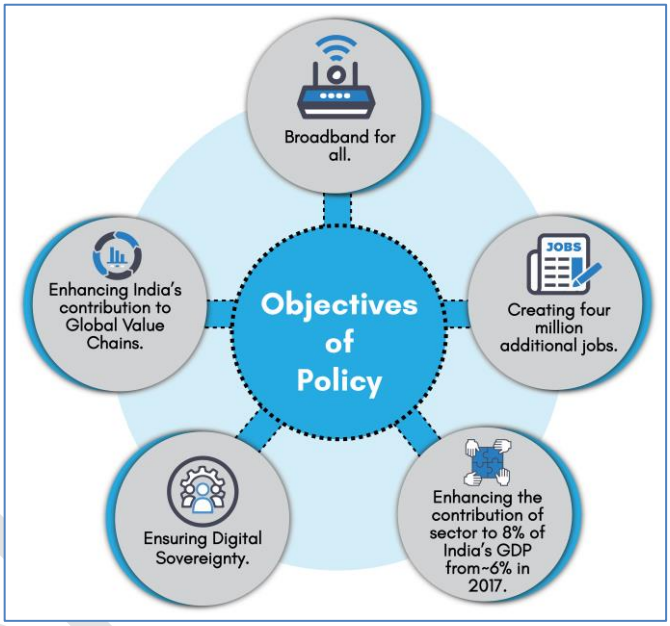
How recent reforms will help telecom sector:

Reforms	Impact
• **Four-year moratorium on AGR payments and spectrum dues** purchased in past auctions. The government can exercise the **option of converting debt into equity** at the end of the moratorium period. • Delayed payments of licence fee and spectrum usage charge will attract an **interest rate of State Bank of Inda's MCLR (**marginal cost of funds-based lending rate) **plus two per cent**, instead of MCLR plus four per cent. • **Rationalization of AGR** by excluding non-telecom revenue from the definition of AGR prospectively.	• It will **ease the immediate financial pressure** on the telcos. The moratorium will help the industry in **making debt repayments and undertaking capex**. • According to ICRA, the moratorium will yield an **annual cash flow benefit of ₹46,000 crore** for the industry. • However, to ensure a **long-term solution**, government must **bring down levies and taxes on telcos**. • The **reserve price for spectrum** also needs to be **brought down** to match market sentiment.
• The telcos would also **not have to pay any spectrum usage charge** for airwaves acquired in future auctions, could **share spectrum** without incurring any additional cost, and hold the airwaves acquired at **an auction for 30 years** instead of 20. • **Cumbersome requirement of licenses** under 1953 Customs Notification for wireless equipment has been replaced with **self-declaration.** • **Auction calendar has been fixed i.e.** spectrum auctions to be normally held in the last quarter of every financial year.	• These steps will help in **reducing procedural hassles** impeding the provision of quality services to consumers. • Going forward, government needs to ensure that the sector does not become a duopoly and **encourage more companies** to invest in customer service and new technology. • To prevent predatory pricing in the sector, telcos are demanding a**nnouncement of a floor price for telecom services**, especially data.
• The cabinet also liberalized foreign ownership rules by **allowing 100% foreign direct investment** through the automatic route with safeguards.	• Earlier, automatic investment routes were limited to 49 per cent level, and **approval from concerned authorities was required** for foreign investment beyond 49 per cent level. • 100% FDI through automatic route will help in creating **investor friendly climate**, thus encouraging investments.
How will the reforms impact the government's finances? • Since all the moratorium offerings are done with net present value protected, government will face some **revenue loss in the next four financial years** even if two of the three private players opt for it.	

- For the current financial year, the government **had estimated receipts of about Rs 54,000 crore** from spectrum usage charges, license fee levies and other levies.
  - The bulk of this, however, **will have to be forgone for four financial years** once the telcos opt for the moratorium.
- At the end of the moratorium period, the government will have option to convert the extended amount into equity. But it should be noted that if the market conditions do not improve, government may not be able to sell this equity at a decent rate in the market.

Road ahead

Robust telecom sector can become main pillar of **Digital India** to cater to the modern needs of the digital communications sector of India. As the present world has entered the era of modern technological advancements in the Telecom Sector such as 5G, IoT etc., efforts will have to be made to make the sector more '**Customer focused' and 'application driven'.** To affect the same, the vision propagated by the National Digital Communications Policy (NDCP)-2018 can be adopted.



Features of the Policy:

- Provide universal **broadband connectivity at 50 Mbps** to every citizen;
- Provide **1 Gbps connectivity to all Gram Panchayats** by 2020 and 10 Gbps by 2022;
- Ensure **connectivity to all uncovered areas**;
- Attract **investments of USD 100 billion** in the Digital Communications Sector;
- **Train one million manpower** for building New Age Skill;
- **Secure digital communications infrastructure and services**.

3.8. CIVIL AVIATION SECTOR

Why in news?

Civil Aviation Ministry announced a 100-day development plan to boost the civil aviation sector.

More on news

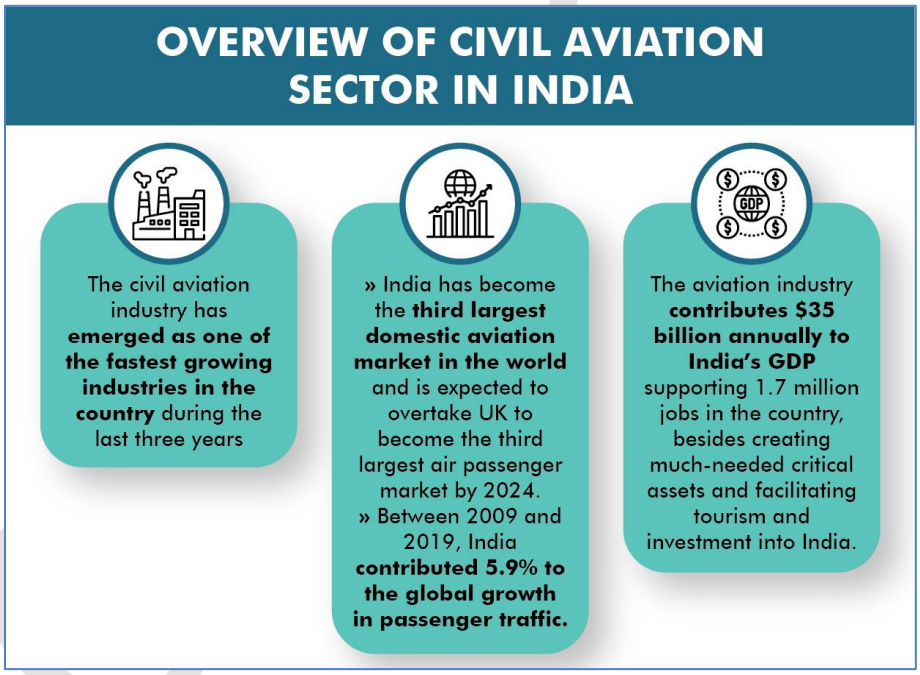
- The civil aviation sector has been adversely impacted by the coronavirus pandemic as a result of ceased flight operations and drop in the number of passengers and freight. However, the sector is slowly coming on the recovery path.
- The 100- days plan aims to give the much-needed fillip to the sector and would focus on three main areas which are infrastructure, policy targets and reforms initiative.
  - Under this, **four new airports at Agartala, Kushinagar, Jewar in Greater Noida**, and a **second terminal building at Dehradun** — will be constructed in the next 100 days. **Six heliports** in Uttarakhand and Himachal Pradesh **and commissioning of 50 new commercial routes** under the UDAN scheme too will be developed.
  - A **new policy for Maintenance, Repair and Overhaul (MRO) services** has been announced.

MRO Services saga

- Maintenance, Repair, Overhaul (MRO) in aviation is the repair, service, or inspection of an aircraft or aircraft component to ensure safety and airworthiness of all aircrafts by international standards.
- The MRO market **became a viable business in aviation because Airframe Original Equipment Manufacturers (OEMs) would mainly focus on development and production**, and not the aftermarket.
- Until recently, MRO services were taxed at 18% while the same services if done overseas attracted a tax of 5%. Additionally, no customs duties were levied on import of MRO services from overseas. This severely limited the ability of India's MROs to compete.
  - **Government has recently reduced Goods and Services Tax (GST) rate to 5% from 18% for domestic MRO services.**

- Despite labour advantages, a qualified talent pool and exponential growth in airline fleets, Indian MROs continued to be unviable and **90% of India's MRO works are done outside the country that ultimately increases the operational cost.**
- **The new policy provides for:**
  - leasing of land through open tenders and abolishing royalty charged by the AAI.
  - land allotment for entities setting up MRO facilities through open tenders and for 30 years instead of the current short term period of 3 to 5 years.
  - discussions for having military and civil convergence with respect to MRO activities.
- To push MRO activities, the **ministry has identified eight airports for attracting investments to set up MRO facilities.** These are at Begumpet, Bhopal, Chennai, Chandigarh, Delhi, Juhu, Kolkata and Tirupati.
- The aircraft **MRO services market size is expected to grow in 2021 mainly due to the companies rearranging their operations and recovering from the COVID-19 impac**t and the new policy would likely favour India in becoming a global MRO hub.

Factors behind growth of the sector



- **Policy Factors:** National Civil Aviation Policy, 2016, relaxing FDI norms and focus on regional connectivity through UDAN Scheme have played an important role in creating a favorable environment for the aviation sector by making air travel accessible and affordable. As a result,
  - out of 53 Regional Connectivity Scheme (RCS) airports, **22 airports have been operationalized in the underserved and unserved areas**
  - According to International Air Transport Association (IATA) Report, the **average domestic fares in India have fell by 70%** from their 2005 levels.
  - **India's ranking in Travel and Tourism Competitiveness Index** has improved from 52nd in 2015 to 34th in 2019.
- **Economic factors:** Increasing size of India's middle class, growth in cross-border trade, development of world class airports, declining fuel prices and capacity expansion of low-cost carriers (LCCs) have been the driving factors.

Challenges looming over the sector

- **Lack of Infrastructure:** Inadequate hangar space and unavailability of land to expand airports at their current sites, particularly in major cities, are two of the major constraints that face the sector.
  - Additionally, funding requirements for airport development under PPP models and project completion delays owing to time taken to procure governmental approvals are also a roadblock.
- **High Fuel Cost:** Fuel cost in India, **accounts for 45% of the overall operating cost** of low cost carriers which is well above the global average of 30%. Also, the prices of aviation fuel are approximately **60% higher than prices in ASEAN and the Middle East countries** because of high central and state taxes.
  - This makes the profitability of the civil aviation industry vulnerable to volatility in global oil prices.
- **Skill Shortage:** Shortage and gaps in the availability of industry-recognised skills – from airline pilots and crew to maintenance and ground handling personnel – constrains the growth of different segments of the sector.

Road Ahead

India's aviation industry is largely untapped with huge growth opportunities, considering that air transport is still expensive for majority of the country's population.

- There is a **need to complete the ongoing projects under the UDAN initiative** in a time-bound manner.
- **Formulation of long-term plans for advanced research in aviation technologies** will help in creating a manufacturing ecosystem in the country
- **Taxation and pricing structure of aviation turbine fuel (ATF) should be aligned to global benchmarks** by considering bringing under the ambit of GST.
- India can reap multiple benefits by **establishing itself as a transshipment hub in the region.**

RELATED FACTS

Entry 29, List I, VII Schedule read with Art. 246 of the Indian Constitution vests the Parliament of India with the exclusive jurisdiction to legislate in relation to 'Airports; aircraft and air navigation; provision of aerodromes; regulation and organisation of air traffic and of aerodromes.

REGULATORS IN THE SECTOR:

REGULATOR	FUNCTION
Airport Authority of India (AAI)	Regulates Construction and Management of Airports
Directorate General of Civil Aviation (DGCA)	Regulates Safety & Operations of Aircrafts
Bureau of Civil Aviation Security (BCAS)	Regulates airport and airline security standards
Airports Economic Regulates Authority (AERA)	Regulates tariffs and fees

DEVELOPMENT POLICY FRAMEWORK

PPP Policy: This has been undertaken through Public Private Partnership (PPP) in major Metro airports viz. Delhi, Mumbai, Bangalore and Hyderabad.

FDI Policy:

» 100% FDI is permissible for existing airports but beyond 74%, Foreign Investment Promotion Board (FIPB) approval is required.

» 100% FDI under automatic route is permissible for Greenfield airports.

» 49% FDI is permissible in domestic airlines under the automatic route but this cannot come from foreign airline companies.

3.9. NEWS IN SHORTS

3.9.1. CARD TOKENIZATION

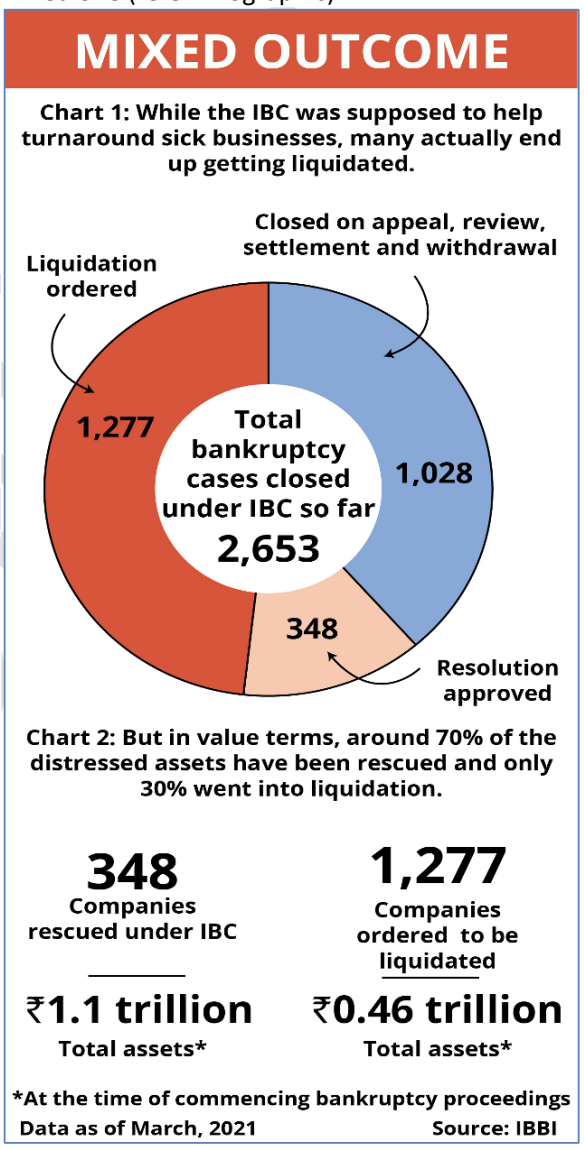
- Recently, The Reserve Bank of India (RBI) has **enhanced the guidelines on card tokenization services to improve the safety and security of the payment system.**
  - The guidelines extend the **tokenization guidelines to every device that connects with the internet**, including mobile phones, tablets, laptops, desktops, wrist watches, bands, Internet of Things devices as well as payment aggregators.
  - Card issuers have been permitted to offer card tokenization services as **Token Service Providers** (TSPs).
  - The tokenization of card data shall be done with explicit customer consent requiring **Additional Factor of Authentication (AFA)**
  - The device-based tokenization framework recommended in RBI circulars dated January 2019 and August 2021 has now further been **extended to Card-on-Fitness Tokenization (CoFT) services.**
  - For **transaction tracking and reconciliation, entities can store limited data** i.e., last four digits of actual card number and card issuer's name which should follow applicable standards.
- **Tokenization refers to replacement of card details with an alternative code called a 'token',** which is unique for a combination of card, token requestor (the entity that accepts a request from the customer for tokenization of a card and passes it on to the card network to issue a token) and the device.
  - The token is used to **perform contactless card transactions** at point-of-sale (PoS) terminals and QR code payments.
- It aims to ensure that the **consumers are least susceptible to frauds** and their **card transactions remain secure**. Since, non-cash transactions **can expose one to fraud**.
  - As merchants will not save the card details (except for source banks and card issuers such as Rupay, Visa, and Mastercard), **card details will not be leaked** since the merchant's database will include random numbers rather than card details.
- With effect from **January 1, 2022, no entity in the card transaction/payment chain, other than the card issuers and/or card networks,** shall store the actual card data.
  - Previously, entities involved in the process of card payment transactions would store card details (also known as card-on-file) on their server including e-commerce merchants which substantially **increases the risk of card data being stolen**.

3.9.2. ACCOUNT AGGREGATOR SYSTEM LAUNCHED TO BOLSTER LENDING ECOSYSTEM

- India unveiled an **Account Aggregator (AA) system - a data-sharing system** that aims to **revolutionize investing and credit.**
- An account aggregator is a financial entity, **which obtains and consolidates all the financial data of an individual, and presents the same in a manner that allows the reader to easily understand and analyse** the different financial holdings of a person.
- In 2016, under the RBI Act, 1934, RBI released the "Non-Banking Financial Company - Account Aggregator (Reserve Bank) Directions, 2016" with:
  - Account Aggregator as a special class of NBFC under **section 45-I of RBI Act**, to
    - ✓ Enable easy sharing of financial data,
    - ✓ Provide inbuilt consent framework for users etc.
- **Significance:** Firms will be able access **timely quantitative and qualitative data which can help them to assess the creditworthiness** of small businesses, recommend wealth management product for an individual, or tailor an insurance policy for a family.
  - **No other country in the world has developed such thorough data-sharing framework** that can be deployed to cover over 50 million businesses and over a billion people.

3.9.3. GOVERNMENT PROPOSES NEW CODE OF CONDUCT FOR COMMITTEE OF CREDITORS (COC) UNDER INSOLVENCY AND BANKRUPTCY CODE

- Move comes after a **Parliamentary panel flagged the "disproportionately large and unsustainable 'haircuts'** taken by the creditors over the years".
  - A haircut refers to the **lower-than-market value placed on an asset being used as collateral for a loan.**
  - The Code of conduct for COC would **promote transparent and fair working of CoC** and make them **more accountable to the resolution process** under IBC, 2016.
- A CoC is composed **of financial creditors to the Corporate Debtor (CD) or operational creditors** in the absence of unrelated financial creditors.
  - It **approves the Resolution Plan by a vote of not less than 66 %** of the voting shares for the corporate debtor and its **role is vital for a timely and successful resolution for a CD.**
- **About IBC, 2016**
  - The bankruptcy code is a **one stop solution for resolving insolvencies**. It aims to **protect the interests of small investors** and make the process of doing business less cumbersome.
  - IBC provides for a **time-bound process for resolving insolvency** in companies and among individuals.
  - The outcome of the code, however, has been a mixed one (refer infographic).

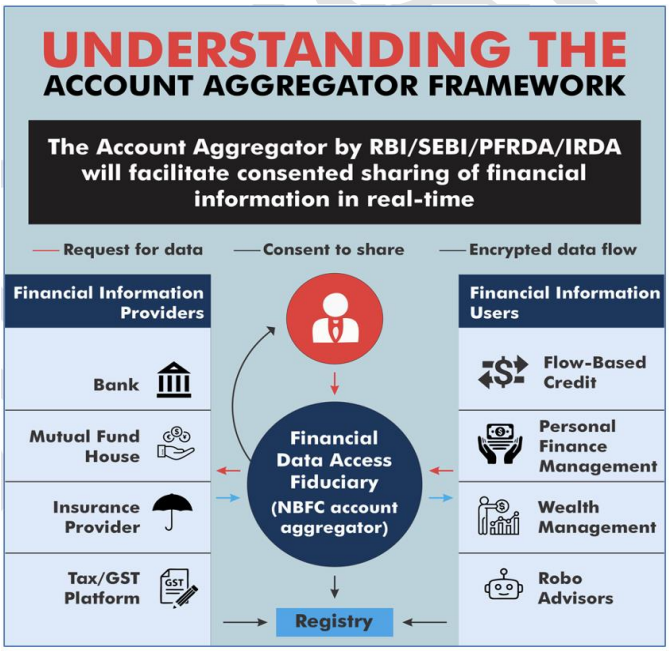


3.9.4. SEBI LAYS THE FRAMEWORK SOCIAL STOCK EXCHANGES (SSE)

- The proposal to set up SSEs **was first floated during the Union Budget in 2019.**
- SSE functions as **a regulated funding platform** to allow For-Profit Social Enterprises (FPEs) and not-for-profit organizations (NPO) with a social purpose, to raise funds.

- **Some of the most prominent SSEs are:** UK (Social Stock Exchange), Canada (Social Venture Connexion), Singapore (Impact Investment Exchange) etc.

- **Need for a SSE**
  - **Improved market access to capital** for enterprises that seek to deliver a positive change in society.
  - **Reduced burden on government** in achieving the developmental goals by leveraging private sector participation.
  - **Better project implementation** as performance of the enterprises listed on an SSE would be closely monitored.
- Securities Exchange Board of India (SEBI) **also announced framework for setting up a gold exchange** that will provide investors security in the form of electronic gold receipts (EGR).
  - EGRs will be traded, cleared and settled like other securities and **will help in efficient and transparent price discovery, investment liquidity, and assurance in the quality of gold.**
- **Framework for SSE includes**
  - SSE will work under the **regulatory ambit of SEBI as a separate segment** of the existing stock exchanges.
  - Based on **15 broad eligible social activities** approved by SEBI, NPOs engaged in those activities **may raise funds through equity, Zero Coupon Zero Principal Bonds, Mutual Funds etc.** after registering with SSE.
  - SEBI will engage with NABARD, SIDBI and stock exchanges towards instituting **a capacity-building fund with a corpus of ₹100 crore.**
  - **Social audit shall be mandated** for Social enterprises raising funds/registered on SSE.



For more information about Social Stock Exchange, kindly refer to Article 3.5 Social Stock Exchange of the Monthly Current Affairs magazine (May 2021).

3.9.5. RESERVE BANK OF INDIA (RBI) ANNOUNCED OPENING OF THE THIRD COHORT UNDER REGULATORY SANDBOX (RS)

- RS refers to **live testing of new products or services in a controlled/test regulatory environment** for which regulators may (or may not) permit certain regulatory relaxations for the limited purpose of the testing.
  - RS allows market participants to **collect evidence on the benefits and risks of new financial innovations,** while carefully monitoring and containing their risks.
  - Theme for the **Third Cohort will be MSME Lending.**
- RBI had invited applications for the **First Cohort with theme of 'Retail Payments' in 2019** and for the **Second Cohort with theme of 'Cross Border Payments' in 2020.**
  - Objective of the RS is **to foster responsible innovation in financial services, promote efficiency and bring benefit to consumers.**
- **Benefits of RS**
  - **Fosters 'learning by doing' on all sides** including regulators, financial service providers, Innovators and FinTech companies and customers.
  - **Allows testing of product's viability** without the need for a larger and more expensive roll-out.
  - FinTechs provide solutions that **can further financial inclusion** in a significant way.
  - **Better outcomes for consumers** through an increased range of products and services, reduced costs and improved access to financial services.

3.9.6. T+1 (TRADE PLUS 1 DAY) SETTLEMENT CYCLE

- **SEBI (Securities and Exchange Board of India)** has introduced an optional **T+1 settlement cycle** for the markets**.**
  - T+1 means that settlements will have to be cleared within one day of the actual transactions taking place.
  - It will come into force on **January 1, 2022**.
  - It is expected to **benefit domestic investors by increasing market liquidity** and trading turnover while reducing settlement risk and broker defaults.
  - To switch back to T+2 settlement cycle, stock exchange will have to give one-month notice to the market.

3.9.7. SPECIAL DRAWING RIGHTS (SDRS)

- The largest allocation of SDRs in history (about US$650 billion), to combat the crisis caused by the COVID-19 pandemic, **came into effect.**
- It will **boost India's forex reserves position** and provide a **cushion for import cover and strengthen the exchange rate.**
- SDRs are an **inter-national reserve asset created by the IMF in 1969 to supplement its member countries' official reserves.**
- Its **value is based on** a basket of five currencies: **the U.S. dollar, the euro, the Chinese renminbi, the Japanese yen, and the British pound sterling.**

3.9.8. MINISTRY OF FOOD PROCESSING INDUSTRIES (MOFPI) LAUNCHED THE PMFME SCHEME SEED CAPITAL MODULE

- MoFP in association with Ministry of Housing and Urban Affairs (MoHUA) launched Pradhan Mantri Formalization of Micro food processing Enterprises (PMFME) Scheme Seed Capital Module **on Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) MIS Portal.**
- Its purpose is to facilitate **seed capital assistance (**initial money required to start a new business) **to members of urban Self Help Groups (SHG)** working in the **food processing sector** in India.
    - The seed capital portal can be accessed **to avail the seed capital assistance of Rs.40,000 per SHG member under the PMFME Scheme**.
- **PMFME Scheme**
    - It is a **centrally sponsored scheme,** launched **to enhance the competitiveness of existing individual micro-enterprises** in the unorganized segment of the food processing industry **and promote formalization of the sector.**
        - ✓ It will be implemented **from 2020-21 to 2024-25**.
    - The scheme targets to directly assist 2,00,000 micro food processing units of existing micro food processing enterprises through:
        - ✓ Seed capital support of Rs.40,000 per SHG member.
        - ✓ **Credit linked subsidy for capital investment up to 35%** with a ceiling of Rs. 10 lakh.
        - ✓ Credit linked **grant support up to 35% for establishing common infrastructure**.

3.9.9. RAIL KAUSHAL VIKAS YOJANA (RKVY)

- Ministry of Railways launched RKVY, **under the aegis of Pradhan Mantri Kaushal Vikas Yojana.**
- Aim of RKVY is **to impart training skills to the youth in various trades** to bring qualitative improvement.
    - Candidates who are **10th passed and between 18-35 years shall be eligible** to apply.
- Training will be provided **to 50000 candidates over a period of three years.**
- **Training will be provided in four trades** viz. Electrician, Welder, Machinist and Fitter and will comprise of initial basic training of 100 hours.

3.9.10. DIGISAKSHAM

- **Ministry for Labour and Employment** has launched **DigiSaksham**- a digital skills programme **to enhance the employability of youth** by **imparting digital skills** that are required in an increasingly technology driven era.
    - This is a joint initiative with Microsoft India.
- **Free of cost training in digital skills** including basic skills as well as **advance computing** will be provided to more than three lakh youths in the first year.
    - Jobseekers can access the training through **National Career Service (NCS) Portal.**
    - It **gives priority to job-seekers of semi-urban areas** belonging to disadvantaged communities.

3.9.11. CAPACITY BUILDING PROGRAM FOR WOMEN IN DAIRY FARMING

- The National Commission for Women (NCW) has launched **Country-Wide Training and Capacity Building Program For Women** In Dairy Farming and Allied activities.
    - For this, the NCW is **collaborating with Agricultural Universities** Across. I
    - It would **empower rural women and make them financially independent.**
- The NCW is the **apex national level statutory** (under the NCW Act, 1990) organisation of India with the **mandate of protecting and promoting the interests of women.**

3.9.12. TRANSPORT AND MARKETING ASSISTANCE (TMA) SCHEME

- Government **enhances the scope of TMA scheme for specified agriculture products** by including **dairy products** in its purview and increasing the rates of assistance.
    - Scheme was introduced to **provide assistance for the international component of freight,** to **mitigate disadvantage** of higher freight costs faced by the Indian exporters of agriculture products.
    - It has been extended till March 31, 2022.

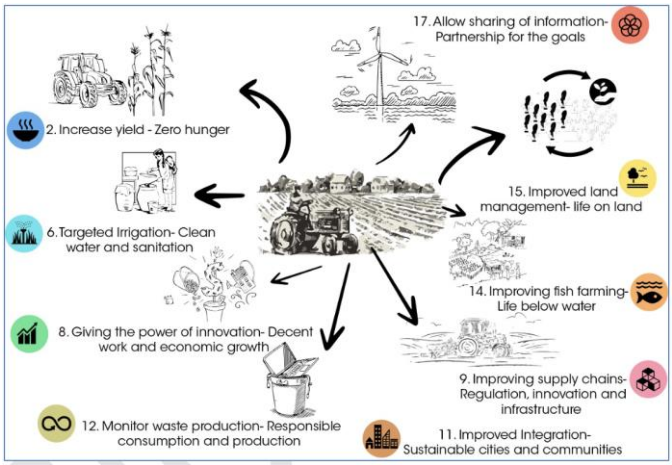
- Rates of assistance have been increased by **50 percent for exports by sea** and **100 percent for exports by air**.

3.9.13. INDIA'S FIRST EVER EURO-DENOMINATED GREEN BONDS

- The €300 million 7-year Euro Green Bond were issued by **Power Finance Corporation Ltd (PFC),** the leading non-banking finance corporation (NBFC) in power sector.
- In green bonds, **the money raised by the issuer are earmarked towards financing `green' projects like renewable energy, clean transportation etc**.
  - In 2007, green bonds were launched by development banks such as European Investment Bank and World Bank.
  - **For India, Yes Bank was the first** bank to come out with green bonds in 2015.

3.9.14. CENTRE TO RAISE FARMERS DATABASE FROM 5.5 CRORE TO 8 CRORE BY DECEMBER END

- To **link agriculture** with **digital technology, scientific research and knowledge**, a **National Farmers' Database** has been created by Ministry of Agriculture.
  - **The Database will be further expanded from 5.5 crore to 8 croreby December 2021** with help of states and **allow its linkage to state land record data (as done by Karnataka).**
  - The database is being created by taking **data from existing schemes like PM-KISAN, soil health card and PM FasalBimaYojana**.
- The database is to **serve as the core of Agri-Stack** which is a **collection of technology-based interventions in agriculture**, using federated farmers database to build innovative agri-focused solutions by leveraging emerging technologies.
  - This includes use of **sensors, artificial intelligence, robotics** and external sources like weather information, etc.
- **Other steps taken towards Digital Agriculture**
  - **IndEA Digital Ecosystem of Agriculture** (IDEA), a **National Digital Agriculture Ecosystem** to increase agricultural efficiency and productivity.
    - ✓ **It includes National Mission on Digital Agriculture** (NMDA), multi-stakeholder IDEA Advisory Council to guide NMDA, assigning a **Unique Farmer ID (UFID)** to every farmer etc.
  - **National e-governance Plan in Agriculture**.
  - Unified Farmer Service Platform.



3.9.15. GOVERNMENT ISSUES ORDERS TO SET UP DISTRICT-LEVEL POWER COMMITTEES

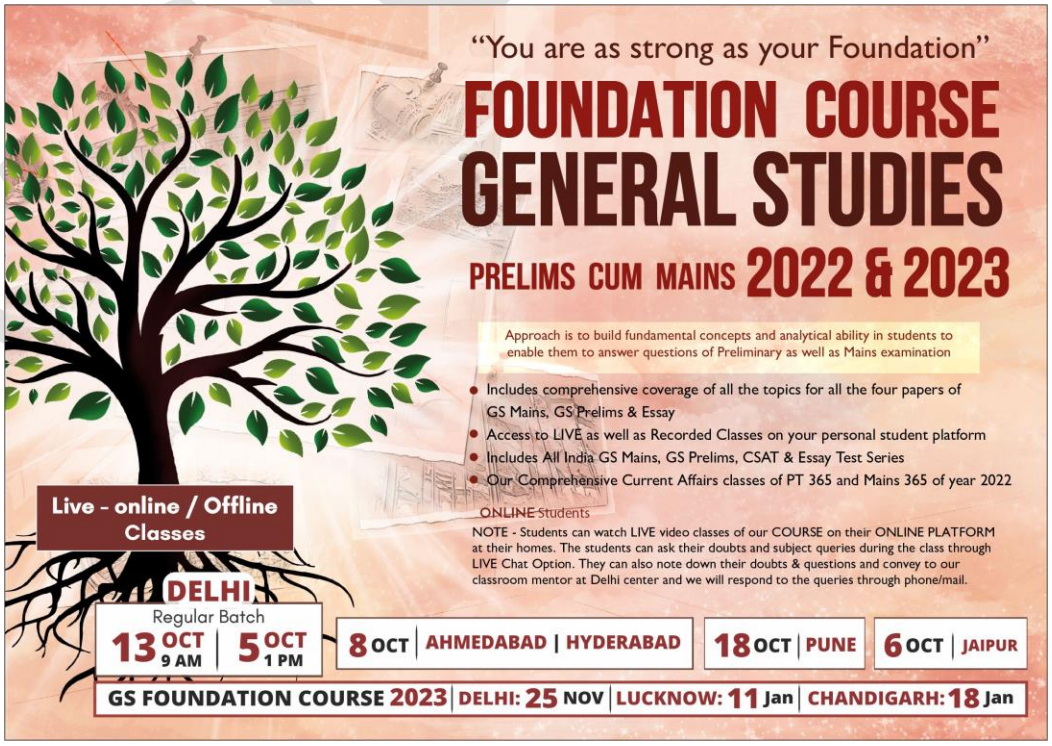
- **District-level committees (DLCs)** will be set up by **Ministry of Power (MoP)** that will **oversee all power-related schemes of the union government.**
  - Committee will **comprise members of Parliament** (MP) in district as **Chairperson**, other MPs in the district as **Co-chairpersons**, district collector as Member Secretary, among others.
  - **All the States/UTs have to notify and ensure establishment** of District Electricity Committees, under intimation to MoP.
- This is being done in order to **ensure the involvement and oversight of the people** in the process of power sector reforms, and their implementation, in the country.
- This comes in the backdrop of the **government's efforts to ensure 24X7 power that is reliable, sustainable, and affordable.**
- **Government initiatives in Power sector**
  - Deendayal Upadhyaya Gram Jyoti Yojana(DDUGJY),
  - Integrated Power Development Scheme (IPDS),
  - Pradhan Mantri Sahaj Bijli Har Ghar Yojana(SAUBHAGYA),
- Recently, the cabinet approved ₹3.03 trillion **'Revamped Distribution Sector Scheme'**- a Reforms-based and Results-linked Scheme.
  - It aims to **improve the operational efficiencies and financial sustainability of all DISCOMs**/ Power Departments **excluding Private Sector DISCOMs**. Result-linked financial assistance to DISCOMs.

3.9.16. INDIA JUMPS 2 SPOTS TO 46TH RANK IN THE GLOBAL INNOVATION INDEX (GII) 2021

- Co-published by the **World Intellectual Property Organisation (**WIPO), **Cornell University and INSEAD**, the report provides an annual ranking of innovation capabilities and performance of **131 countries and economies** around the world.
  - Its **80+ indicators** explore broad vision of innovation, including political environment, education, infrastructure and business sophistication.
  - Theme of GII 2021 is **'Tracking Innovation through the COVID-19 Crisis'.**
- **Major Highlights**
  - Switzerland topped the list, followed by Sweden, US and UK.
  - From 81 in 2015, India has improved its ranking to 46 in 2021 due to **immense knowledge capital, vibrant start-up ecosystem**, and amazing work done by public and private research organizations.
  - India ranks **second among 34 lower middle-income group** economies and first among the 10 economies in Central and Southern Asia.
- **India Innovation Index (I3)** is released by **NITI (National Institution for Transforming India) Aayog** with the Institute for Competitiveness.
  - I3 aims to **create an extensive framework** for continual evaluation of India's innovation environment and **rank states and UTs based on their scores**, **recognize opportunities and challenges,** and assist in tailoring government policies to foster innovation.
- I3 measures **innovation inputs through 'Enablers' and innovation output as 'Performance.'**
  - **Enabler parameters:** 'Human Capital', 'Investment', 'Knowledge Workers', 'Business Environment', 'Safety and Legal Environment'.
  - **Performance parameters:** 'Knowledge Output', 'Knowledge Diffusion'.

3.9.17. UNCTAD TRADE AND DEVELOPMENT REPORT 2021, RELEASED

- **Key findings**
  - After a **3.5% fall in 2020, the United Nations Conference on Trade and Development (UNCTAD) expects world output to grow 5.3% this year.**
  - UNCTAD expects **world output to grow 3.6% in 2022.**
  - **India** "suffered a contraction" of 7% in 2020 and is **expected to grow 7.2% in 2021.**
  - The report projects that **India will clock an economic growth of 6.7% in 2022**, slower than the country's expected 2021 growth rate.
  - The recovery in India is constrained by the **ongoing human and economic cost of Covid-19**, and the negative **impact of food price inflation on private consumption**.
  - **Income and wealth inequalities have widened**, and social unrest has increased in India.



4. SECURITY

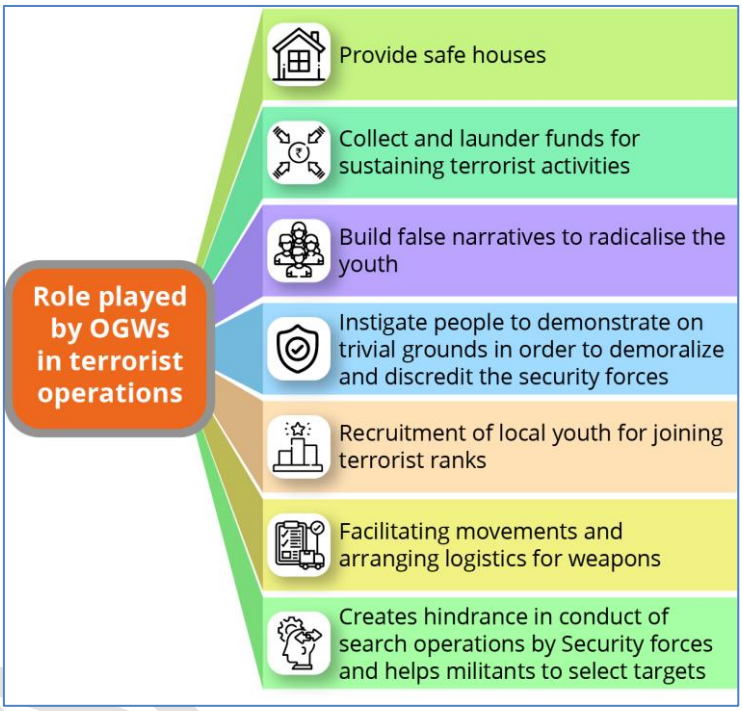
4.1. OVERGROUND WORKERS (OGWS)

Why in News?

Jammu and Kashmir (J&K) police recently arrested three overground workers (OGWs) for a grenade attack on a Central Reserve Police Forces (CRPF) camp.

Who are overground workers?

- The Jammu and Kashmir Police categorize **"anybody who supports the militants" as an OGW**.
  - A person **providing a safe house, passage, information or acting as a messenger** for suspected militants automatically is categorized as an OGW.
- OGWs are often described as **'militants without weapons'**.
- They are generally recruited by employing a strategy of **systematic entrapment** which starts out with radicalization of youth, which progresses into more serious crimes and culminates into being an OGW.
- OGWs have the potential to become future militants.
  - Terror groups like Hizb-ul-Mujahideen and Lashker-e-Toiba have a well-established network of OGWs which is sustaining militancy in Kashmir.



Issues in handling OGWs

- **Extreme steps can increase militancy**: Random booking of youth for suspected OGW activity can completely eliminates an individual's chance to come back to society and thus provide opportunity to the terrorists for indoctrination.
- **Negative perception of Government**: Government's operations towards OGWs can embed strong 'Us vs Them' narratives amongst the population and alienate them from the Indian polity.
- **Harder to track:** OGWs are also capable of carrying out small scale strikes while retaining the capability to mix rapidly with the population.

Measures to tackle OGWs

- **Need to jointly map the OGWs, terrorists and anti-national elements through a multi-agency effort** so that the intelligence picture generated is in sync with ground realities.
- **Youth engagement programmes** should be widened to include addressing their sense of alienation and the trust deficit.
  - For instance, Youth forums can be conducted as platforms where political, social and cultural issues can be freely discussed.
- **Evolve a long-term de-radicalization and counter-radicalization policy for Kashmir**: This would require detailed exploration by subject-experts, but it must be multidisciplinary in its approach, roping in religious scholars, experts in the philosophy of religion and politics, experts in cyber-jihad, psychologists, educationists, civil society members, etc.
- **Psychological and social rehabilitation as well as strategic communication** can change their mind set and bring them back into the mainstream.
- **Launching intelligence-based sting operations** over a period of time to gather proof of their damaging activities and exposing them.
- **Investing in artificial intelligence (AI) and other technologies** to discourage extremist content on social media.

Steps taken in India to deal with OGWs

- **Operation All Out** was launched in 2017 by the Indian armed forces to eliminate the militant networks, their OGW, and top militant commanders.
- **Jammu and Kashmir Public Safety Act, 1978 (PSA)** is used to book anti national elements and OGWs to prevent them from disrupting peace and security.
- **Operation Sadbhavana (Goodwill)** is a unique humane initiative undertaken by Indian Army in Jammu & Kashmir to address aspirations of people affected by terrorism with focus on improving the overall core social indices of Education, Women & Youth Empowerment, and Health care with simultaneous thrust on capacity building through implementation of community/infrastructure development projects.
- **Mission Pehal** launched in 2021: Under it, officers conduct face-to-face interactions with the Kashmiri youth to encourage the youth to express their grievances and the reasons they may have for mistrusting the Indian state; the Army officers.
- **Education scholarships and livelihood schemes** such as USTTAD, Udaan, and Nai Manzil.
- **Watan Ko Jano program** is a student exchange program, sports as well as civic action program of Central Armed Police **Forces** (CAPFs).
- **Training and employment opportunities for the youth of Jammu and Kashmir** are also provided under many schemes such as HIMAYAT and **Pradhan Mantri Kaushal Vikas Yojana** (**PMKVY**).
- **Army conducts around 100 "national integration" tours** for young Kashmiris every year, where they are introduced to history, culture, and development opportunities across India.
- **Utilization of the social media platforms** by the armed forces, alongside the local police, for limiting extremist content and narratives on social media by monitoring and reporting them to tech platforms, and countering them with genuine news.
- **Other steps by Law enforcing agencies include**-
  - enhanced interaction between police and public at various levels.
  - sharing of intelligence inputs on real time basis amongst all security forces operating in Jammu and Kashmir.
  - intensified area domination of militancy affected areas by deployment of additional Nakas and patrolling by security forces etc.
  - Tracking flow of funds to terrorist organisations by National Investigative Agency (NIA).

4.2. MILITARY LOGISTICS AGREEMENTS

Why in News?

India is all set to conclude the bilateral logistics agreement with Russia soon while the agreement with the U.K. is in the final stages of conclusion.

More on News

- With Russia, the Reciprocal Exchange of Logistics Agreement (RELOS) is likely to be signed soon.
- RELOS is meant to be a reciprocal arrangement by which the two nations can use the military logistics facilities while on visit to each other's ports, bases, and military installations.

What are Military Logistics agreements?

- These are merely administrative arrangements that would facilitate replenishment of fuel, rations, and spare parts, as well as berthing and maintenance for each other's warships, military aircraft, and troops during port visits and joint exercises, on a reciprocal basis, essentially simplifying the process of extending logistical support to one other.

Benefits of Military Logistics agreements

- **Expanding India's Military reach:** especially maritime outreach and influence in various regions that are strategically important to India. For example:
  - RELOS gives India access to Russian facilities in the Arctic region.
  - Logistics Exchange Memorandum of Agreement (LEMOA)provides India refueling facilities and access to U.S. military facilities in Djibouti, Diego Garcia, Guam, and Subic Bay.
  - Agreement with France extends reach into the southwestern Indian Ocean region.

India's military logistics agreements

- India has such agreements with Australia, Japan, US – the **Quad countries – as well as with France, Singapore, and South Korea.**
- Also, India is currently in the process of **finalizing such an agreement with U.K.** and in talks with other **partners like Vietnam.**

- **Saves time and cost:** of the lengthy bookkeeping exercises that the militaries have to otherwise do with each visit, such as when they are involved in operations like humanitarian assistance and disaster relief (HADR) or even bilateral military exercises.
- **Enhanced cooperation and greater inter-operability between nations:** by reciprocal facilitation of forces when engaged in activities such as peacekeeping operations, HADR and during joint deployment of forces under an international mandate (UN).
- **Strategic importance:** It permits a country to project power away from its borders in international waters. This extends the strategic reach and footprint of the country in far off waters and enhances its sustainability therein manifold.
- **Edge to Indian Navy:** These agreements have enhanced operational turnaround and strengthened interoperability among Indian and partner navies on the high seas.
    - In the last few years, Indian Navy benefitted from such arrangements while operating independently across Indo-Pacific to monitor the critical chokepoints bordering the Indian Ocean, ensure the safe passage of trade, providing HADR etc.

Concerns related to Military logistic agreements

- **Reorientation of Foreign policy:** Indian foreign and military policy will have to reorient itself to likes and dislikes of partner country. This can strain traditional friendships with other nations in the region.
    - For example, signing of LEMOA might strain traditional friendships with Russia.
- **Issue of jurisdiction:** For instance, under what jurisdiction will fall the illegal behaviour of partner nations troops? Issues will be compounded by the far more significant sovereignty problems seeded by foreign military personnel guarding sensitive military stores on portions of Indian air and naval bases.
- **Sovereignty issue:** For example, LEMOA criticism stretched from India joining the US camp and establishment of a US base in the country to permitting the US to launch operations from Indian soil.

Conclusion

India shied away from concluding military logistic agreements for more than a decade. But changing geopolitical situation and an assertive China has facilitated India's embrace of like-minded partners across the Indo-Pacific, including through logistics agreements.

4.3. NEWS IN SHORTS

4.3.1. THEATRE COMMANDERS WILL REPORT TO CHIEF OF DEFENCE STAFF (CDS)

- For the first time **India's CDS publicly described the Indian military's deliberations** on reorganising itself into **Integrated Theatre Commands (ITCs).**
    - ITC seeks to **integrate the capabilities of the three services** (army, air force and navy) and **optimally utilise their resources** for wars and operations.
    - The idea of Integrated Theatre commands has been **proposed by both the Kargil review committee as well as D B Shekatkar committee.**
- **The 17 single-service commands** that currently exist would be **combined into just four geographical commands**.
    - **Western theatre command**: For the **border against Pakistan**.
    - **Northern theatre command**: For **the border with China.**
    - **Maritime command:** For **Indian Ocean Region (IOR)**.
    - **Island command**: It is already functional, called the Andaman & Nicobar Command (ANC). It would project power into the eastern Indian Ocean.
    - **Air space and cyber war** would be the 5th and 6th ITCs.
- CDS also said that India is looking to raise a new **'rocket forces' for missiles** as a step ahead to tackle **emerging threats to national security.**
- **About CDS**
    - **CDS act as the principal military adviser to the defence minister** on all tri-services matters.
    - CDS is **on par with the Comptroller and Auditor General (CAG), the Chief Election Commissioner (CEC) and the Central Vigilance Commissioner (CVC)** in terms of the retirement age.

For more information about Integrated Theatre Command, kindly refer to Article 4.1 Integrated Theatre Command of the Monthly Current Affairs magazine (June 2021).

4.3.2. HELINA (HELICOPTER BASED NAG)

- HELINA has completed all the trials.
- It is a **third-generation fire and forget class anti-tank guided missile (ATGM)** system mounted on the Advanced Light Helicopter (ALH).
- It is being inducted into the **Indian Army** and its variant called **DHRUVASTRA** is being inducted into the **Indian Air Force.**
- **Features:** All weather day and night capability. It can defeat battle tanks with conventional armour as well as explosive reactive armor. A **minimum range of 500 m and a maximum range of 7 km.**

4.3.3. EXERCISES IN NEWS

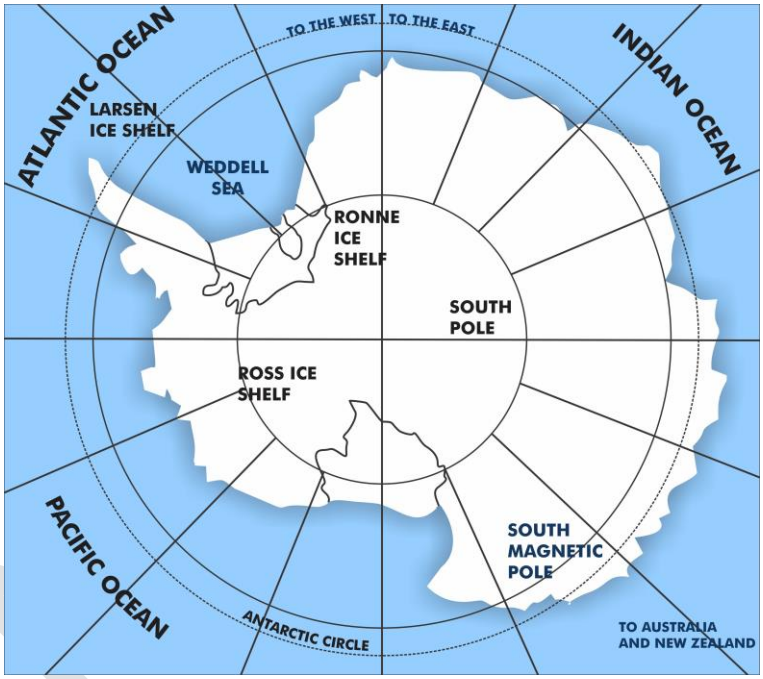
- **ZAPAD Exercise:** It is one of the **theatre level exercises of Russian armed forces** and will focus **primarily on operations against terrorists. India** is amongst one of the **participating countries.**
- **SIMBEX:** 28th edition of **Singapore-India Maritime Bilateral Exercise** was held in the **South China Sea as an 'at-sea only' exercise without any physical interactions** due to COVID 19 pandemic.
    - Initiated in 1994, SIMBEX is the **Indian Navy's longest uninterrupted bilateral maritime exercise** with any foreign navy.
- **Exercise Surya Kiran:** It is a joint Military Training Exercise **between Indian Army and Nepali Army.**
- **AUSINDEX:** It is the **Biennial maritime warfare exercises** between the **Royal Australian and the Indian navies.** It is being held this year in Australia.
- **Samudra Shakti: India and Indonesia navy** participates in the 3rd edition of Bilateral Exercise 'Samudra Shakti'.
- **SCO Exercise Peaceful Mission 2021: 6th edition of SCO (Shanghai Cooperation Organization) Exercise** Peaceful Mission 2021 started at Orenburg Region of South West Russia.
    - **The participants SCO member states,** including China, Russia, Kazakhstan, Tajikistan, Kyrgyzstan, India, Pakistan, and Uzbekistan.

5. ENVIRONMENT

5.1. PROTECTING THE ANTARCTIC ENVIRONMENT

Why in news?

Recently, India Extended support for protecting Antarctic environment and for designating East Antarctica and Weddell Sea as Marine Protected Areas (MPAs).



More on news

- India also urged the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) member countries to ensure **that India remains associated with the formulation, adaptation, and implementation mechanisms of these** Marine Protected Areas (MPAs) **in future.**
  - Designating East Antarctica and the Weddell Sea as the MPAs are **essential to regulate illegal unreported and unregulated fishing (IUUF).**
  - MPAs provides **protection for all or part of its natural resources, certain activities within an MPA are limited or prohibited** to meet specific conservation, habitat protection, ecosystem monitoring, or fisheries management objectives.
- **CCAMLR,** with an aim to conserve marine life, came into force in 1982**, as part of the Antarctic Treaty System (ATS),** which is at the heart of **Antarctic Treaty 1959.**
  - It is an international treaty to **manage Antarctic fisheries to preserve species diversity and stability of the entire Antarctic marine ecosystem.**

Marine Protected Areas (MPAs)

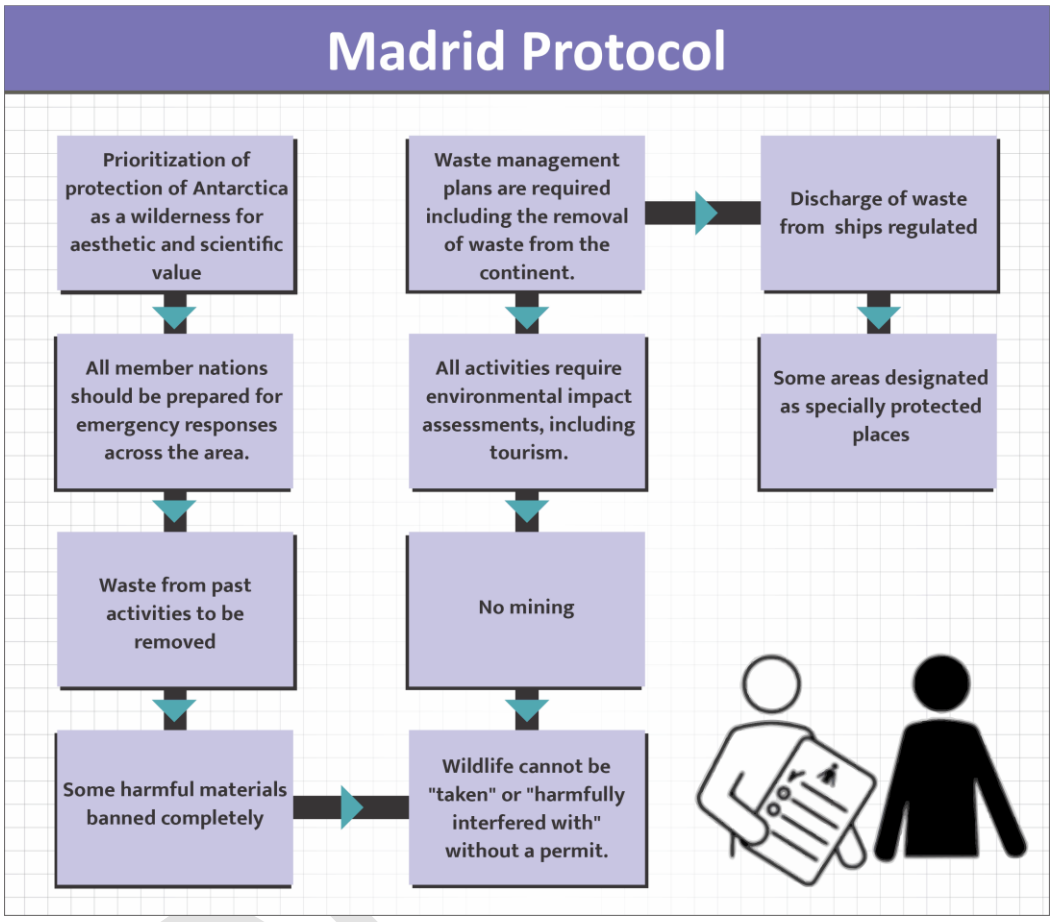
- An MPA is essentially **a space in the ocean where human activities are more strictly regulated than the surrounding waters** - similar to parks we have on land. These places are given **special protections for natural or historic marine resources by local, state, territorial, native, regional, or national authorities**.
- **MPAs and their network offer nature-based solution to support global efforts towards climate change adaptation and mitigation**.
  - As of March 2021, the **World Database on Protected Areas reported that only 7.65% of the global seas** had been covered.
  - This is far from the commitments of States made in relation to the Convention on Biological Diversity's (CBD) **Aichi Target 11 of 10% MPA coverage by 2020,** and even further from the recommendations made at the IUCN World Parks Congress 2014 that at least 30% no-take MPA coverage worldwide is needed.

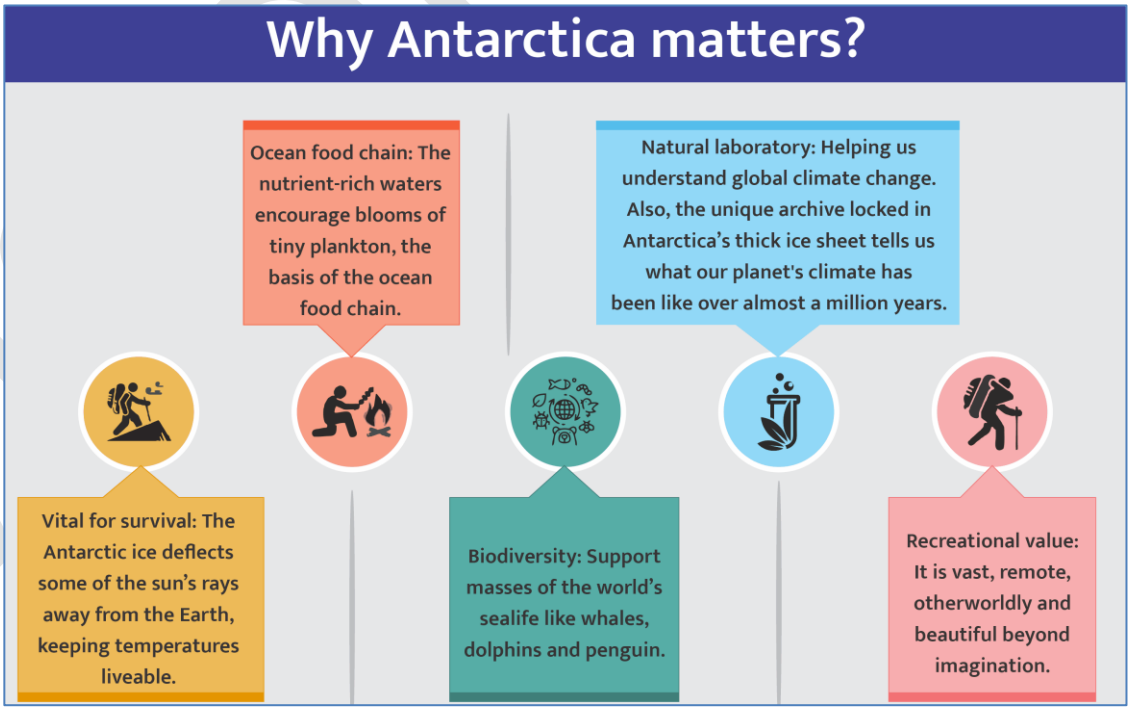
About Antarctica

- Antarctica is not a country. I**t has no government and no indigenous population**. Instead, the entire continent is set aside as a scientific preserve.
- The Antarctic Treaty was **signed i**n Washington on 1 December 1959 by the **twelve countries whose scientists had been active in and around Antarctica** during the International Geophysical Year (IGY) of 1957-58.
  - **These 12 countries are:** Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, USSR (now Russia) the UK, and the US.
  - The **total number of Parties to the Treaty is now 54 (including India).**
  - The Treaty **entered into force in 1961** and has since been acceded to by many other nations.

- It is also the **foundation of a rules-based international order for a continent** without a permanent population**.**

- The treaty is framed to ensure 'in the interests of all mankind that **Antarctica shall continue forever to be used exclusively for peaceful purposes** and shall not become the scene or object of international discord.'
  - To this end it **prohibits military activity, except in support of science;** prohibits nuclear explosions and the disposal of nuclear waste; promotes scientific research and the exchange of data; and holds all territorial claims in abeyance.
- The **Protocol on Environmental Protection to the Antarctic Treaty was signed in Madrid in 1991** and entered into force in 1998.
  - Its purpose was **to enhance protection of the Antarctic environment** and dependent and associated ecosystems.





Challenges faced by the Antarctica

- **Territorial dispute between parties:** Argentina and the UK, for instance, have overlapping claims to territory on the continent. When combined with their ongoing dispute over the nearby Falkland (Malvinas) Islands, their Antarctic relationship remains frosty.

- **Assertive China:** China is spending huge amount of money, every year, on Antarctica. There is considerable speculation as to China's interests in Antarctic resources, especially fisheries and minerals, and whether China may seek to exploit weaknesses in the treaty system to secure access to those resources.
- **Climate change:** Climate change has the potential to cause significant biophysical change to Antarctica through changing patterns of sea ice formation and destabilization of ice sheets.
- **Changing circumstances: T**ourism, rise in IUU (i.e., illegal, unreported, and unregulated) fishing, biological prospecting (commercialization of knowledge gained from research with regard to bio-organisms) etc. are gaining momentum. All these together may put threat to the fragile ecosystem of Antarctica.
- **Conflict with the provisions of other laws:** Since the conclusion of the Antarctic Treaty in 1959, international law underwent profound changes.
    - For example, under the United Nations Convention on the Law of the Sea (also known as UNCLOS), 1982 an International Seabed Authority (ISA) has been founded which is responsible for granting permits for the exploitation of mineral resources from the deep seabed. The question has therefore arisen whether the ISA could grant permits for mineral exploitation of the deep seabed in the Antarctic region, despite the Madrid Protocol, which prohibits mineral exploitation in the Antarctic.

India's endeavor in Antarctica

- India **signed Antarctic Treaty in 1983** and soon received consultative status.
- The Protocol on Environmental Protection to the Antarctic Treaty (the Environmental Protocol or **Madrid Protocol**) **entered into force for India in 1998.**
- India is also **a member of** Council of Managers of National Antarctic Programme **(COMNAP**), Scientific Committee of Antarctica Research **(SCAR)** and Commission for Conservation of Antarctic Marine Living Recourses **(CCAMLR).**
- **India's Research stations: Maitri** at Schirmacher Hills, **Bharati** at Larsemann Hills (Dakshin Gangotri was the first Indian base established in 1984).
- The Antarctic operations of India are currently funded from the **budget allocated to the Ministry of Earth Sciences** under relevant head.
- **The Indian Antarctica Bill, 2021**
    - The Bill aims at **having India's own national measures for protecting the Antarctic environment** and dependent and associated ecosystem.
    - Provides a **regulatory framework for India's Antarctic activities and protection of the Antarctic environment** as per the Antarctic Treaty, and the CCAMLR.

Way ahead

- **Effective implementation of the Treaty:** To resolve this situation, firstly, the Antarctic Treaty Members must pressure every member state to the Antarctic Treaty System (ATS) to implement the rules of the ATS in a strict manner. New, more stringent environmental protection regulations will be of no avail if they are not properly implemented.
- **New regulation based on scientific findings:** For this, scientists will have to learn how to translate scientific findings into policy-relevant information. This will be a CONDITION SINE QUA NON for a performant environmental protection system.
- **A dedicated tourism convention for the region**: This convention could serve to reaffirm the philosophic base of the Antarctic Treaty, namely international cooperation in scientific research, and in doing so combat the commercialization of the Antarctic region.
- **Behavioral change**. People need to be taught how fragile the Antarctic environment and ecosystem are. They need to understand the problems posed by cumulative impacts.

5.2. CLIMATE ACTION PLAN FOR COASTAL CITIES

Why in news?

Amid warnings of climate change leading to **extreme weather events like high-intensity floods and landslides** in the city, the Brihanmumbai Municipal Corporation (BMC) is drafting a Mumbai Climate Action Plan (MCAP) in a bid to tackle climate challenges.

What is Climate Action Plan?

- A climate action plan is a detailed and strategic framework for **measuring, planning, and reducing greenhouse gas (GHG) emissions** and related climatic impacts and **provides preventative measures to address the negative outcomes of climate change**.
    - The plan demonstrates how the city will adapt and improve its resilience to climate hazards that impact the city as well as risks that may increase in the coming years.

Need of a Climate Action Plan for Coastal Cities

- **Coastal flooding and sea level rise:** Coastal cities are exposed to **storm surges, erosion, and saltwater intrusion**. Climate change and sea level rise will likely exacerbate these hazards. Sea level rise could **erode and inundate coastal ecosystems** and **eliminate wetlands**.
- **Extreme weather events:** Data from the **India Meteorological Department (IMD)** shows that both the number and intensity of cyclones have increased in the Arabian Sea since the 1980s, threatening the densely populated coastal areas.
    - For instance, Cyclone Tauktae impacted all five states (Kerala, Karnataka, Goa, Maharashtra and Gujarat), islands and territories (Lakshadweep, etc.) on the west coast.

- **Increased food insecurity:** Climate change in coastal cities is causing **reduced crop nutrition and yields**, **fish depletion** and the **loss of plant and insect species**. (refer infographic)

- **Biological hazards**: Particularly **vector-borne and water-borne diseases**. Higher temperatures, and prolonged wet conditions which affect coastal cities disproportionately, are more favourable for the mosquitos, rodents and other animals that carry vector-borne diseases.
- **To prevent destruction of life and property:** Natural disasters and shoreline erosion are two of the main threats that coastal communities face. Such communities are particularly **vulnerable to hurricanes and tsunamis,** and as more people move to the coast, the potential of such events causing catastrophic loss of life and property damage also rises.

Government Initiatives towards Climate Action Plans

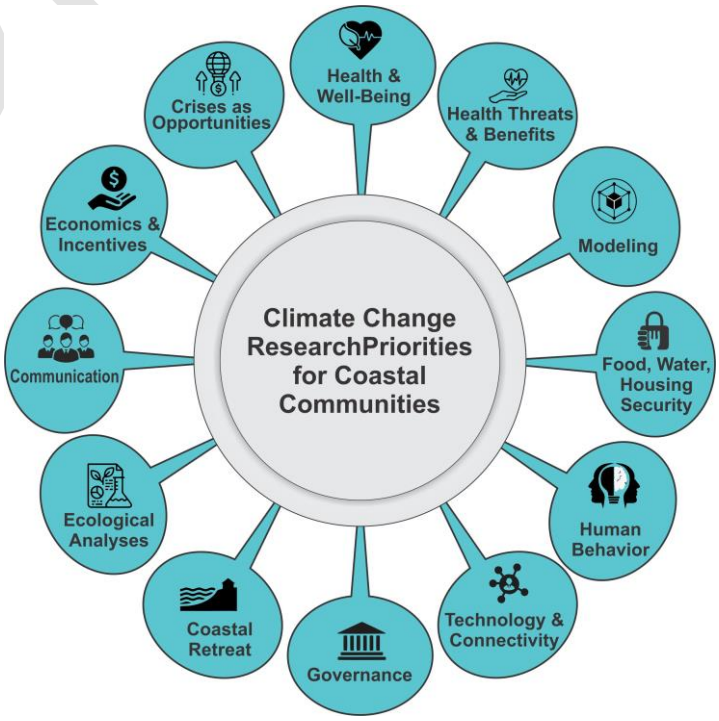
- In 2009 the Government of India directed all state governments and union territories to prepare **State Action Plans on Climate Change (SAPCC),** consistent with the strategy outlined in the National Action Plan on Climate Change (NAPCC).
  - **Odisha Climate Change Action Plan**: Odisha is one of the first states in India to prepare a comprehensive SAPCC. The **adaptation strategy** is aimed at **reducing vulnerability and achieving resilience**.
  - **Mumbai Climate Action Plan (MCAP):** It will look at climate resilience with **mitigation and adaptation strategies**.
  - **Gujarat climate change action plan**: It aims to build a **sustainable and climate-resilient future.**
- **National Centre for Sustainable Coastal Management (NCSCM):** It was established by Ministry of Environment, Forest and Climate Change (MoEF&CC) at Chennai to **promote integrated and sustainable management of the coastal and marine areas in India** for the benefit and wellbeing of the traditional coastal and island communities.
- **National Coastal Mission (NCM):** In 2019, MoEF&CC proposes to establish NCM under NAPCC that will **address the impact of climate change on coastal and marine ecosystems,** infrastructure, and communities in coastal areas through a combination of adaptation and mitigation measures. The NCM will **include all Phases of ICZM (Integrated Coastal Zone Management) Project**.
  - ICZM is a dynamic, multidisciplinary, and iterative process to promote sustainable management of coastal zones.

Despite these efforts, coastal cities remain highly vulnerable to the effects of climate change. This can be seen by the damage caused by the recent cyclones on the eastern coast of India.

What can be done to create an effective climate action plan for coastal cities?

- **Proper implementation and funding support:** Climate action plans for coastal city level should have clear **short and long term implementable action** and have necessary **financial, institutional and policy support**.
- **Guiding Principles for Coastal City Climate Action Planning:** It aims to **reduce greenhouse gas emissions** and **adopt low emission development trajectories (mitigation),** as well as adapt to the impacts of climate change (adaptation) and build local climate resilience. (refer infographic)

- **Coastal risk assessment**: The coastal data along with future climate projections should be used to **prepare an in-depth coastal risk assessment** that will inform us how we can be disaster-proof and make our coastline resilient
- **Improve access to Climate Information Services (CIS):** Given the high rates of information utilisation and sharing, CISs access should improve the ability of people to make informed decisions on how to capitalise upon or prepare for future conditions, increasing their vulnerability to climate shocks and food insecurity.
- **Building capacity:** Addressing climate change is a complex challenge that requires involvement from multiple city government departments or agencies, political support for action. To be effective, climate change action planning requires a **comprehensive and integrated cross-sectoral approach,** with actors working across administrative boundaries. (refer infographic)
- **Coastal Regulation Zone (CRZ):** To deal with issues of rising frequency and severity of the cyclones, flood etc., there is an urgent need to **follow the CRZ rules to develop and manage the coastal regions on scientific principles**, considering the current global challenge of climate change and sea-level rise.



Conclusion

The impact of climate-change on coastal cities has strong strategic, economic, and political repercussions. There is an urgent need to **integrate climate change, developmental projects and population growth in climate adaptation and mitigation policy**.

5.3. AIR POLLUTION MEASUREMENT

Why in news?

The World Health Organisation (WHO) in its first-ever update since 2005 has **tightened global air pollution standards.**

More about news

Pollutant	Averaging time	2005 AQGs	2021AQG level
$PM_{2.5}$ µg/m^3	Annual	10	5
	24-hour	25	15
Pm_{10} µg/m^3	Annual	20	15
	24-hour	50	45
O_3 µg/m^3	Annual	-	60
	Peak season	100	100
NO_2 µg/m^3	Annual	40	10
	24-hour	-	25
SO_2 µg/m^3	24-hour	20	40
CO µg/m^3	24-hour	-	4

- Since 1987, WHO has **periodically issued health-based air quality guidelines (AQG)** to assist governments and civil society to reduce human exposure to air pollution.
- The WHO air quality guidelines were **last published in 2006**: **Air quality guidelines – global update 2005.** Since then, there has been a marked increase in **evidence on the adverse health effects** of air pollution, built on advances in air pollution measurement and exposure assessment.
- The overall **objective of the updated global guidelines is to offer quantitative health-based recommendations** for air quality management, expressed as **long or short-term concentrations** for a number of key air pollutants.
- In this guideline update, recommendations on AQG levels are formulated, together with interim targets, as can be seen in the table:
- The guidelines also highlight **good practices for the management** of certain types of particulate matter (for example, black carbon/elemental carbon, ultrafine particles, and particles originating from sand and dust storms) for which there is **currently insufficient quantitative evidence** to set air quality guideline levels.
- The present guidelines are applicable to **both outdoor and indoor environments globally**. However, these guidelines **do not cover occupational settings**, owing to the specific characteristics of the relevant exposures and risk reduction policies.

DID YOU KNOW?

OpenAQ is a non-profit-making effort to maintain an **open-source database** of aggregated current and archived **air quality data gathered in real time from government agencies.**

Whilst **not legally-binding,** like all WHO guidelines, AQGs are an **evidence-informed tool** for policy-makers to guide legislation and policies, in order to **reduce levels of air pollutants** and **decrease the burden of disease** that results from exposure to air pollution worldwide.

Air pollution measurement in India and comparison with international standards

- **Air monitoring network and agencies involved**: Central Pollution Control Board (CPCB) initiated **National Ambient Air Quality Monitoring (NAAQM) programme in the year 1984** with 7 stations at Agra and Anpara. Subsequently the programme was renamed as **National Air Quality Monitoring Programme (NAMP).**
  - The network currently consists of **804 operating stations covering 344 cities/towns** in 28 states and 6 Union Territories of the country.
  - The monitoring is being carried out with the help **of Central Pollution Control Board; State Pollution Control Boards; Pollution Control Committees; National Environmental Engineering Research Institute (NEERI), Nagpur.**
  - CPCB co-ordinates with these agencies to **ensure the uniformity, consistency of air quality data and provides technical and financial support to them** for operating the monitoring stations

- **Air quality standards:** CPCB air quality standards in form of NAAQS (National Ambient Air Quality Standards) are notified for **12 parameters** (carbon monoxide (CO) nitrogen dioxide (NO2), sulphur dioxide (SO2), particulate matter (PM) of less than 2.5 microns size (PM2.5), PM of less than 10 microns size (PM10), Ozone (O3), Lead (Pb), Ammonia (NH3), Benzo(a)Pyrene (BaP), Benzene (C6H6), Arsenic (As), and Nickel (Ni)).

Pollutant	SO_2	NO_2	$PM_{2.5}$	PM_{10}	O_3		$CO(mg/m^3)$		Pb	NH_3
Averaging time (HR)	24	24	24	24	1	8	1	8	24	24
Standard	80	80	60	100	180	100	4	2	1	400

  - NAAQS doesn't meet the **WHO's existing standards (2005 guidelines)** and considerably differ from updated guidelines. For instance, NAAQS specify an **annual limit of 60 microgram per cubic metre for PM 10 and 100 for a 24-hour period which are 15 and 45 respectively in revised WHO guidelines.**

Why is it important to measure air pollution?

- **Assessing the level of pollutants:** Measurements helps in assessing the level of pollution **in relation to the ambient air quality standards.**
- **Devising effective strategies:** The monitoring of air pollutants is critical to the **development of air pollution reduction strategies**. Air pollution reduction strategies should **target the areas with the worst air pollution**, and focus on the **most polluting sources**, to be the **most efficient and effective.**
  - It also helps in **forecasting of air quality** (i.e., tracking the behavior of pollutants in air) and enables **evaluation of trade-offs involved** in alternative air pollution control strategies.
- **Enforcement of Standards:** It helps in determining the extent to which the **legislative standards and existing criteria are being adhered.** It also helps in identifying faulty standards and **inadequate monitoring programs.**
- **Impact assessment: Vigorous air pollution measurement can help analysts and other stakeholders** to understand the impact of policy changes and make suitable changes, if required.
- **To alert people:** Air pollution measurement improves the **abilities to inform the public about the hazards** of air pollution. Thus development of new and more efficient air pollution measuring devices can help in **enhancing health and safety of the public and the environment**.
- **Scientific research:** Reducing a large set of **data to a comprehendible form** gives **better insight to the researcher** while conducting a study of some environmental phenomena.

Limitations of air pollution measurement

- **Not comprehensive:** Air quality monitoring in India is not as comprehensive mainly because India is monitoring approximately 344 cities/towns out of the **total 5000 cities and towns.**
- **Uncertainty and biases:** Involvement of various **monitoring agencies, personnel and equipment** in sampling, chemical analyses and data reporting brings uncertainty and biases to the process.
- **Possible disruptions in operations:** The functioning of monitoring stations may also get affected due to **various technical and operational aspects like long power cuts** and maintenance problems causing disruption in continuous data flow and dissemination.
- **Gap in obtaining real-time data:** According to Greenpeace India, there is a **substantial gap in the availability of data** on air pollution due to the **lack of real-time air quality monitoring** stations in many cities. Many locations have **manual air quality monitoring stations** which take about three days to show the result.

Road Ahead

In the past decades the monitoring infrastructure has grown leaps and bounds but is still nascent. To make sure that the measurement framework remains effective, the standards need continuous updation, data gathering techniques must be more precise, data gathering sources have to be diversified and most importantly, more awareness has to be generated regrading importance and implications of this data.

Related News:

Shoonya campaign

- It is an initiative to **promote zero-pollution delivery vehicles** by working with consumers and industry.
  - The campaign aims to **accelerate adoption of electric vehicles (EVs) in the urban deliveries segment** and create **consumer awareness** about the benefits of zero-pollution delivery.
- It has been launched by the **NITI Aayog,** Rocky Mountain Institute (RMI), and RMI India.

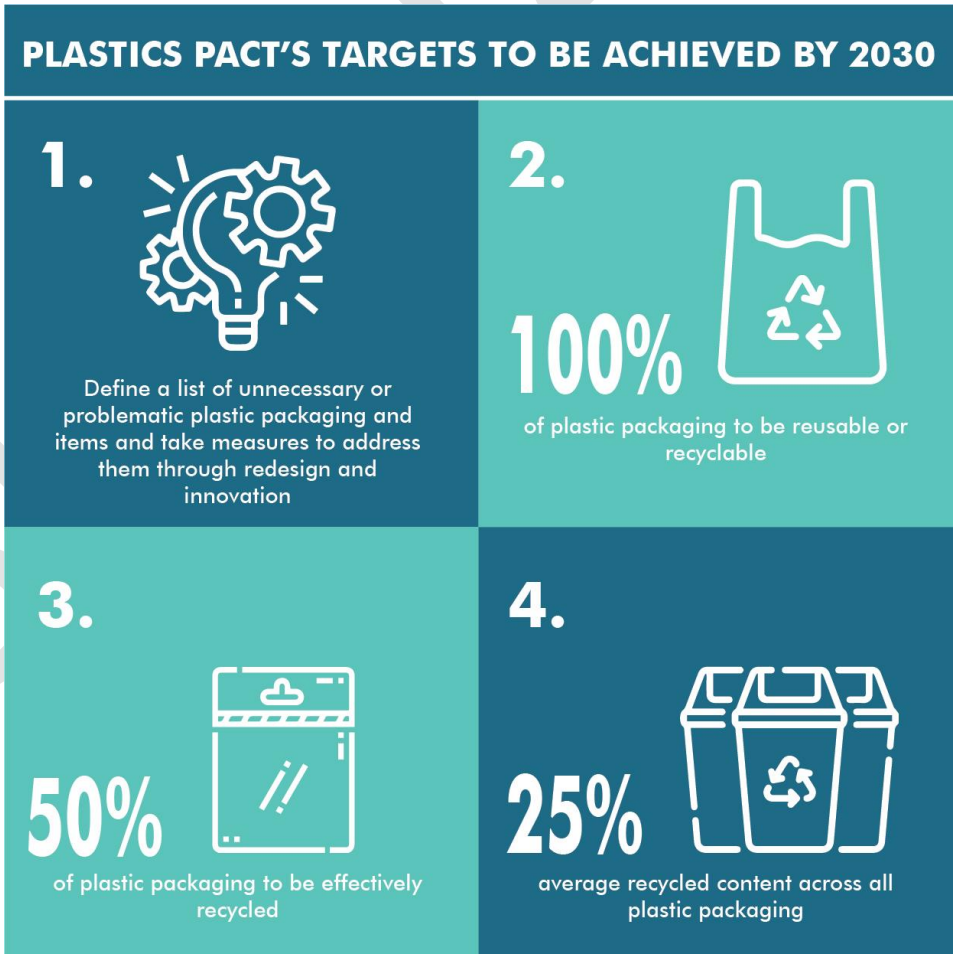
Supreme Court (SC) questions usage of Banned firecracker

- SC lashed out at firecracker manufacturers for **violating the spirit of its 2018 judgment banning toxic ingredients like barium in fireworks**
- SC, in **2018 judgement on fire crackers banned manufacture, sale and use of joined firecrackers** (series crackers or 'laris') as they caused air, noise and solid waste problems.
  - Also, SC **banned certain chemicals in composition of firecrackers** - Barium (imparts green colour), lithium (red), arsenic, antimony (for glitters), lead or mercury and Strontium Chromate.
- However, SC allowed the **manufacture and sale of only "green"** (safe water and air sprinklers that emit less sound and light) **or "improved" crackers** (avoid the use of ash as filler material).

5.4. CIRCULAR PLASTIC ECONOMY

Why in news?

India has become the first Asian country to develop a **plastics pact** for building a circular system for plastics.



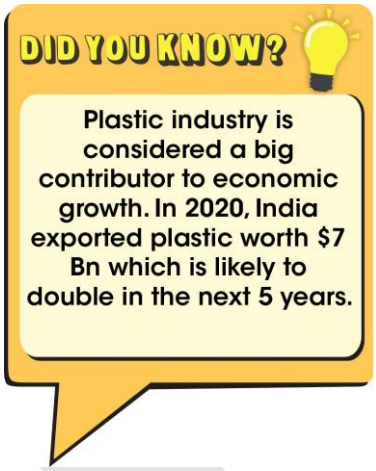
About India Plastics Pact

- The India Plastics Pact (IPP) has launched as a **collaboration between WWF India and the Confederation of Indian Industry (CII).**
- The initiative brings together all stakeholder across the whole value chain to set **time-bound target-based commitments** to transform the current linear plastics system into a circular plastics economy.
- The vision, targets and ambition of the IPP are **aligned with the circular economy principles of the Ellen MacArthur Foundation's New Plastics Economy** in which *'plastic never becomes waste'.*
  - **Plastic pact model** is currently implemented in number of countries such as UK, South Africa, Australia.
- The pact is **supported by UK Research and Innovation (UKRI) and WRAP** (Worldwide Responsible Accredited Production) in providing new technologies and endorsed by the British High Commission in India.

Significance of circular plastic economy

The circular economy considers every stage of a product's journey – before and after it reaches the customer. This approach is not only vital to stop plastic pollution, it also offers strong economic, social, and climate benefits.

Challenges in plastic recycling in India



- **Lack of awareness** leads to the mixing of all kinds of waste.
- Due to plastic density, it **occupies more space and cost double to transport.**
- **Myths and lack of recycled plastic products acceptance** in-market leads more plastic waste to landfills.
- Plastic requires **manual segregation before recycling**. There is a lack of infrastructure and government policies with regard to this.
- **Unprofitability of recycling enterprises** due to lack of assured quantity of segregated waste, technological know-how, legal compliance etc.
- **Lack of R&D investments limit technological innovation**: For instance, recycling of Multi Layered Packaging (MLPs) is expensive as separating various layers of this packaging is difficult owing to adhesive nature of various layers, while single use plastics are a low value input for plastic recyclers to produce quality outputs.
- **Enhanced complexities due to COVID:** Our improved, hyper-hygienic way of life in the fear of transmission has conveniently shifted our behavioral patterns like increased demand for plastic-packaged food and groceries, and the use of disposable utensils.

Steps taken by the government to promote circular plastic economy

- **Plastic Waste Management Rules, 2016** state that every local body has to be responsible for setting up infrastructure for segregation, collection, processing, and disposal of plastic waste.
- **Plastic Waste Management (Amendment) Rules 2018** introduced the concept of Extended Producer Responsibility (EPR) which make a manufacturer responsible for managing plastic waste after a consumer has used their product.
- Government notifies the **Plastic Waste Management Amendment Rules, 2021,** prohibiting identified single use plastic items by 2022. Thickness of plastic carry bags increased from 50 to 75 microns from September, 2021 and to 120 microns from December, 2022.
- To encourage innovation in development of alternatives to identified single use plastic items and digital solutions to plastic waste management, the **India Plastic Challenge – Hackathon 2021**, has been organized for students of Higher Educational Institutions and startups recognized under Startup India Initiative.

Way ahead for successful implementation of Circular Plastic Economy

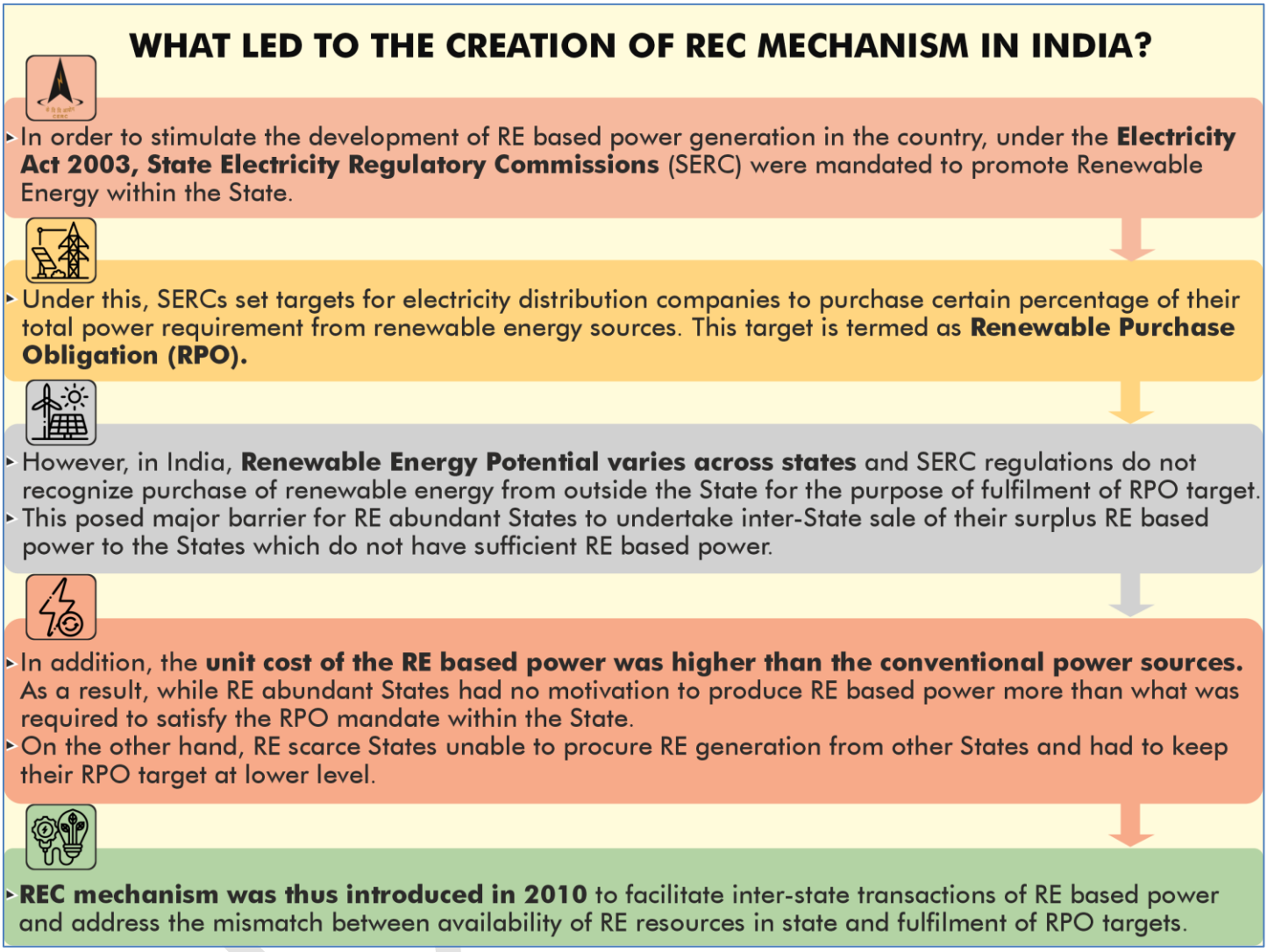
- **Sustainable alternative choices based on the principle of 4Rs** (Reduce, Reuse, Recycle, and Recover): For example, buyback schemes to put back plastics into circular economy loops, and initiatives like agriculture residues as alternate packaging, that target reduction of stubble burning as well as plastics in the environment.
- **Regulation supporting incentive structure to make biodegradable alternatives affordable** for large-scale adoption and use.
- **Strengthening the waste management practices** i.e. segregated collection and processing waste through material recovery facilities in cities.
    - Material Recovery Facilities (dry waste collection centres) have been set up by Bangalore Municipalities where recyclable plastic waste can be sold at pre- decided rates.

- **Upcycling the plastic waste:** Using non-recyclable plastics to make roads or recover energy from them, using them as alternate fuels to replace fossil fuel.
- **Design benchmark to be developed by the Bureau of Indian Standards** for quality control and creating a market for products produced from the recycled feedstock.
- **Strongly application EPR policies** in consensus with state urban development bodies.

5.5. RENEWABLE ENERGY CERTIFICATE (REC)

Why in news?

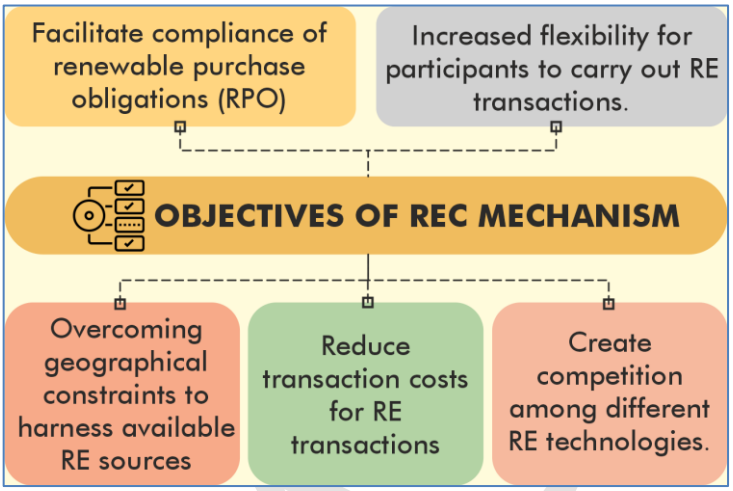
Ministry of Power redesigned Renewable Energy Certificate (REC) Mechanism to boost green economy.



About Renewable Energy Certificates (REC)

- Renewable Energy Certificate (REC) also called as **Renewable Energy Credit**, is a **market based instrument** where the owner of the REC can legally claim to have purchased renewable energy.
- **One Renewable Energy Certificate (REC) is treated as equivalent to 1 MWh.** In other words, it represents the environmental benefits associated with one Megawatt-hour of electricity generated from a renewable energy resource.
- There are **two categories of RECs**, viz.,
  - **Solar RECs:** issued to eligible entities for generation of electricity based on solar as renewable energy source
  - **Non-solar RECs:** issued to eligible entities for generation of electricity based on renewable energy sources other than solar.
- RECs are traded in power exchange within the **forbearance price and floor price determined by Central Electricity Regulatory Commission (CERC)** from time to time.
- **National Load Despatch Centre (NLDC)** is responsible for registration of Renewable Energy Generation Facilities, issuance of Renewable Energy Certificates etc.

- **The distribution companies, Open Access consumer, Captive Power Plants (CPPs)** are eligible of purchasing the REC.



Need to redesign REC mechanism

- **To align with the emerging changes in the power scenario:**
  - Maturity of technologies like solar PV etc., due to technology advancement, economies of scale and market competitiveness has resulted in a **declining trend of prices of solar and wind energy** unlike in the inception stage.
  - **Renewable Energy Management centres** (REMCs) have been commissioned for better forecasting and scheduling.
  - **Power exchanges are in place for an alternate mechanism to sell and buy RE power** through various products viz Day Ahed Market (DAM), Term Ahead Market (TAM), Green Term Ahead Market (GTAM), Real Time Market (RTM) etc., in addition to REC mechanism.
- **To promote new and high cost RE technologies** like Off-shore wind, Pumped Storage Hydro power Station, Hydrogen, etc. so as to maintain the future energy security.
- **To deal with challenges associated with REC market:**
  - **Excess supply over demand resulted in REC prices remaining close to the floor price** ranging between US$15 to $28/MWh during 2011-20.
  - **Lag in RPO compliance:** About 20 out of 31 states achieved less than 50% of their respective RPO targets in FY2020 impacting the overall REC demand.

CHANGES INTRODUCED IN THE REVAMPED REC MECHANISM ARE:

- **Validity of the REC is now perpetual** till it is sold. (Presently the validity of an REC is 3 years).
- **Removal of the floor and forbearance (maximum) prices** of REC.
- **Monitoring and surveillance mechanism** to ensure that there is no hoarding of RECs.
- **REC will be issued to the eligible RE generators for the period of the power purchase agreement (PPA).** (Existing RE projects eligible for REC would continue to get RECs for 25 years).
- **Technology multiplier** for promotion of new and high priced RE technologies.
- **RECs can be issued to obligated entities beyond their RPO targets.**
- **No REC to be issued to the beneficiary of subsidies**/concessions or waiver of any other charges.
- **Allowing traders and bilateral transactions in REC mechanism.**

Conclusion

The energy mix in India is rapidly changing from fossil fuel dominance to increasing non-fossil fuel share. With an impetus on promoting RE, Pan-India market-based REC Mechanism was introduced and has achieved success in a very short span of time.

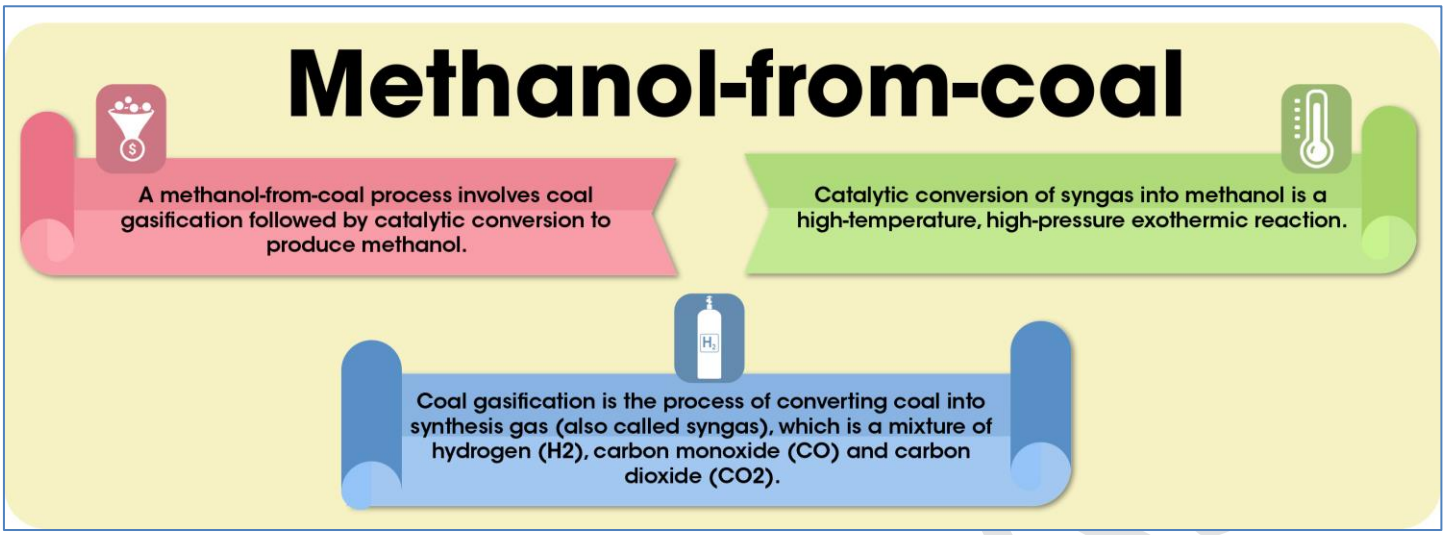
The current REC framework therefore needs to be revised periodically to meet the ever growing demand of RE market and meet the climate change obligations.

5.6. METHANOL ECONOMY

Why in News?

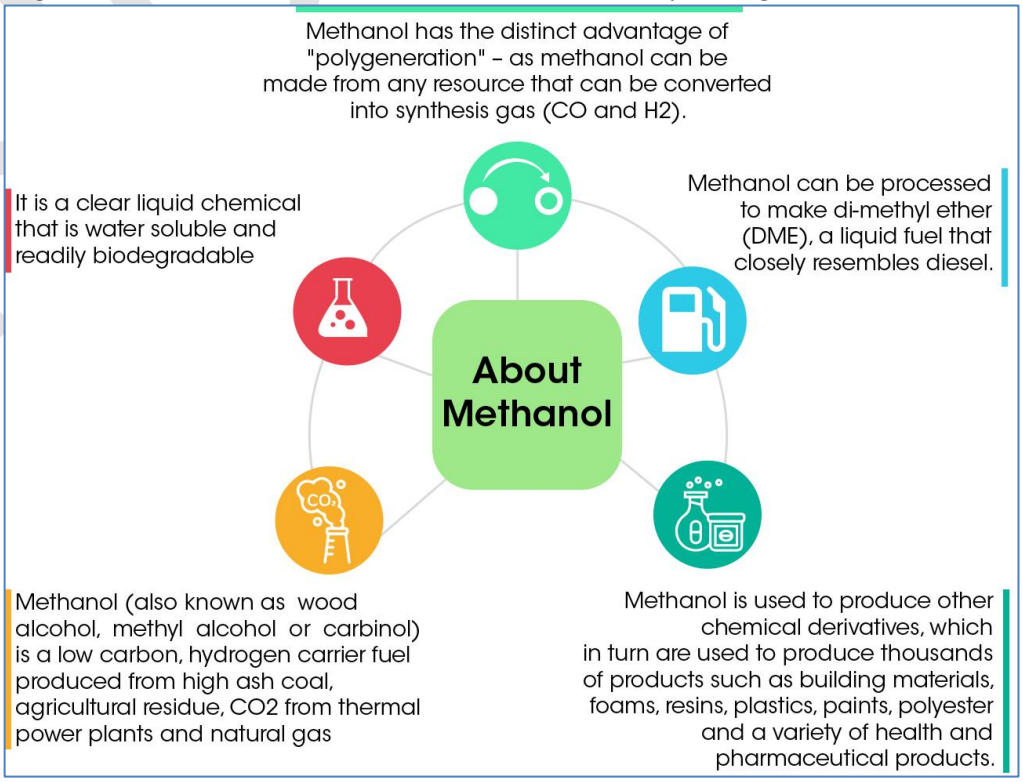
Recently, India's first Indigenously Designed High Ash Coal Gasification Based Methanol Production Plant was inaugurated at BHEL R&D Centre, Hyderabad.

About methanol Economy



Methanol Economy is **based on the concept of replacing dependence on oil and coal with methanol.** It provides **following benefits:**

- **Energy Security:** Although slightly lower in energy content than petrol and diesel, methanol can replace both these fuels in:
  - Transport sector (road, rail and marine),
  - Energy sector (comprising DG sets, boilers, process heating modules, tractors and commercial vehicles) and
  - Retail cooking (replacing LPG [partially], kerosene and wood charcoal).
  - Gaseous version of DME can blended with LPG and can be excellent substitute for diesel in large buses and trucks.
- **Reducing import dependency**
  - Methanol & DME are substantially cheaper than Petrol and Diesel and India can look to reduce its fuel bill 30% by 2030.
  - Blending of 15% methanol in gasoline can result in at least 15% reduction in the import of gasoline/crude oil.
  - Methanol blending program with Gasoline will further reduce India's fuel bill by at least 5000 Crores annually in next 3 years.
- **Cheaper and efficient Fuel**
  - India by adopting Methanol can have its own indigenous fuel at the cost of approximately 19 Rs. a litre at least 30% cheaper than any available fuel.
  - Methanol has many desirable attributes which make it an excellent spark-ignition engine fuel, including high octane number and improved efficiency.



- **Boost to Make in India**
  - By both producing fuel indigenously and associated growth in automobile sector adding engineering jobs and also investments in Methanol based industries
  - Methanol Economy will also create close to 5 million jobs through methanol production/application and distribution services.

- **Near Zero Pollution**
  - Methanol burns efficiently in all internal combustion engines, produces no particulate matter , no soot , almost nil SOx and NOx emissions.
  - Blending of 15% methanol in petrol will reduce pollution by 33% & diesel replacement by methanol will reduce pollution by more than 80%.
  - It is the best pathway for meeting India's commitment to COP 21.

Challenges to methanol economy

- Due to the **high ash percentage of Indian coal**, most internationally accessible technology will not be adequate for our demands.
- Since **India doesn't have much of the natural gas reserves**, producing methanol from imported natural gas lead to outflow of foreign exchange and sometimes uneconomical due to excessive prices of natural gas.
- Various concerns have been raised about the use of methanol in transportation fuels over the years that include **corrosivity and materials compatibility, low energy content, Fire risks and toxicity**.
- As with Ethanol, **methanol also gets less gas mileage**, so it would require more frequent fueling.
- **High costs of plunging in new technology** required for methanol production is a daunting task.

Initiatives taken in India

- **NITI Aayog's road map for Methanol Economy**
  - Substitute 10% of Crude imports by 2030, by Methanol alone.
  - 20MT of methanol annually can be produced @ Rs. 19 a litre by 2025 by using Indian High Ash coal, Stranded gas, and Biomass
- **Methanol Economy Research Programme**, by Department of Science and Technology, for production of Methanol from various sources including Indian coal and CO_2 from thermal plants, steel plants etc.
- **Bureau of Indian Standards has notified 20% DME blending with LPG**, and a notification for M-15, M-85, M-100 blends has been issued by the Ministry of Road, Transport and Highways.
- **Test standards and plans for the M-15 blend are being evolved** in consultation with the Indian Oil Corporation Limited, Automotive Research Association of India and Society of Indian Automobile Manufacturers.
- **Railway is working towards blending methanol** in the range of 5-20% through direct fuel injection in locomotives.
- In 2018, Assam Petrochemicals launched **Asia's first canister-based methanol cooking fuel programme.**

Conclusion

Growing recognition of the **threat posed by man-made climate change** has spurred government institutions, industry and science **to find clean fuels to power economic activity.**

In this context, **methanol has risen as a clean alternative to fossil fuels,** offering a clear pathway to drastically cutting emissions in power generation, overland transportation, shipping and industry

India, with 125 Billion Tonnes of proven Coal reserves and 500 million tons of Biomass generated every year & the huge quantities of Stranded & Flared gases **has a huge potential for ensuring energy security based on Methanol.**

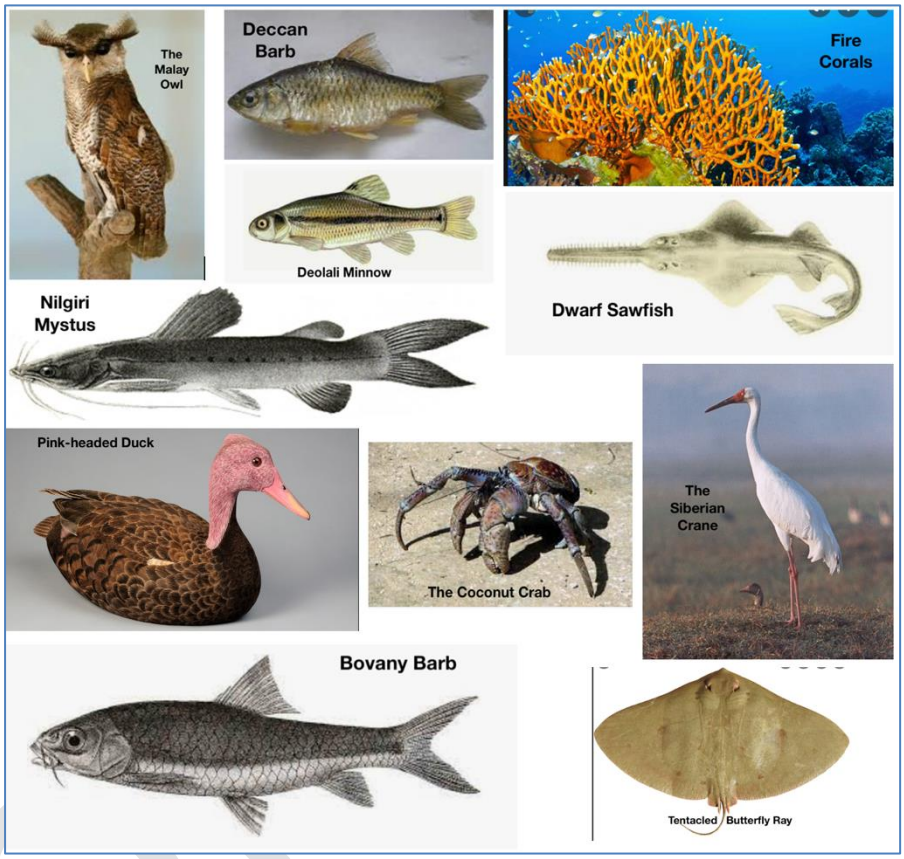
5.7. POSSIBLY EXTINCT SPECIES

Why in news?

A number of animals and plants have been **listed as 'possibly extinct'** in the latest edition of the International Union for the Conservation of Nature (IUCN)'s Red List of Threatened Species.

What does it mean by 'Possibly Extinct'?

- The term is taken as a marker to **estimate after when the presence / population** of the species has declined.
  - Species marked thus have been **last assessed in the 1900s** post which their presence and updates to their population has not been found. (Please refer to the set of definitions at the end of the article.)
- Those marked 'Extinct Post-1500' include **Green peafowl, Cheetah, Hairy-nosed Otter, Banteng, a bovid found today in southeast Asia, the Sumatran and Javan rhino and the** Osteobrama Belangeri**,** a fish species endemic to Manipur.
- **Indian Species that are possibly extinct:**
  - Tentacled butterfly ray**;** Dwarf sawfish; Fire coral**;** Coconut crab (the largest terrestrial arthropod in the world)**;**
  - **Fishes:** Bovany barb (native to the Cauvery river system) , Deolali minnow, the Deccan barb and the Nilgirimystus (all 3 are found in the Deccan)**;**
  - **Birds:** Pink-headed duck, Siberian crane, Buffy fish-owl or Malay owl.

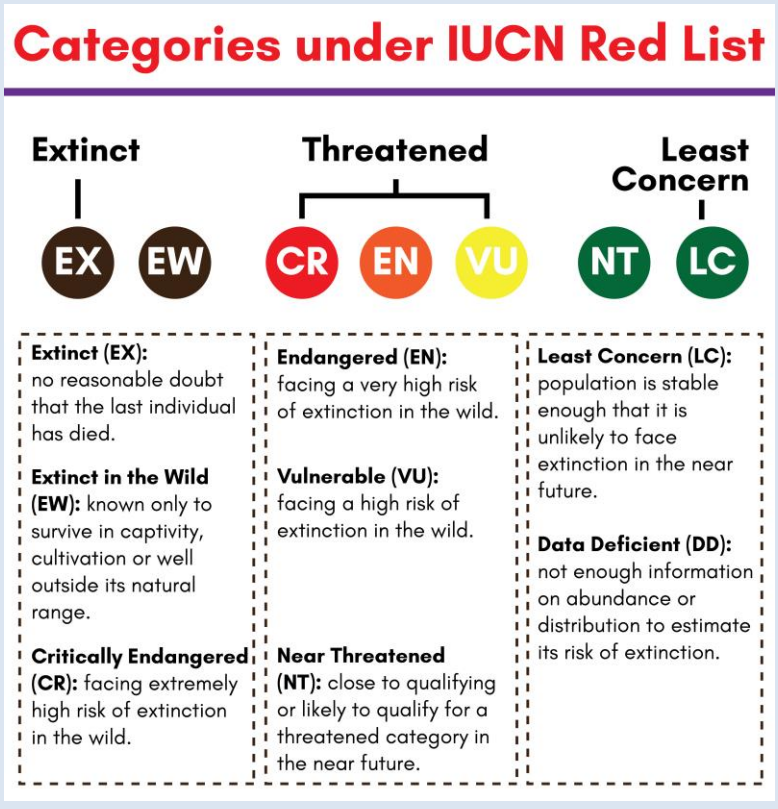


Other Key updates by IUCN

- Over 900 species of animals have become extinct.
- IUCN also officially launched its **"green status"** -- the first global standard **for assessing species recovery and measuring conservation impacts.**
- **Species whose statuses changed**
  - **Komodo dragon** (world's largest living lizard, endemic to Indonesia) has been moved from vulnerable to **endangered.**
  - **Albacore Tuna** and **Yellowfin Tuna** were moved from near threatened **to least concern**.
  - **Yeracud Day Gecko** was moved from least concern **to endangered.**
  - **Satara Gecko** was moved from vulnerable **to critically endangered**.
  - **Yellow Monitor** was moved from least concern **to endangered.**

IUCN (1948, HQ-Glands, Switzerland)

- The IUCN is the **world's oldest global environmental** organization **having more than 1400 members (both government and civil society organizations).**
- **Every four years, IUCN convenes the IUCN World Conservation Congress** to set the global conservation agenda**.**



DEFINITION FOR PRESENCE, ORIGIN AND SEASONAL DISTRIBUTION CODES

CODE	PRESENCE	DEFINITION
1	Extant	The species is known or thought very likely to occur currently in the area, which encompasses localities with current or recent (last 20-30 years) records where suitable habitat at appropriate altitudes remains. Extant ranges should be considered in the calculation of EOO. When mapping an "assisted colonisation" it is important to note that this range should be treated as Extant.
2	Probably Extant	This code value has been discontinued for reasons of ambiguity. It may exist in the spatial data but will gradually be phased out.
3	Possibly Extant	There is no record of the species in the area, but the species may possibly occur, based on the distribution of potentially suitable habitat at appropriate altitudes, although the area is beyond where the species is Extant (i.e., beyond the limits of known or likely records), and the degree of probability of the species occurring is lower (e.g., because the area is beyond a geographic barrier, or because the area represents a considerable extension beyond areas of known or probable occurrence). Identifying Possibly Extant areas is useful to flag up areas where the taxon should be searched for. Possibly Extant ranges should not be considered in the calculation of EOO.
4	Possibly Extinct	The species was formerly known or thought very likely to occur in the area (post 1500 AD), but it is most likely now extirpated from the area because habitat loss and/or other threats are thought likely to have extirpated the species, and there have been no confirmed recent records despite searches. Possibly Extinct ranges should not be considered in the calculation of EOO.
5	Extinct	The species was formerly known or thought very likely to occur in the area (post 1500 AD), but it has been confirmed that the species no longer occurs because exhaustive searches have failed to produce recent records, and the intensity and timing of threats could plausibly have extirpated the taxon. Extinct ranges should not be considered in the calculation of EOO.
6	Presence Uncertain	A record exists of the species' presence in the area, but this record requires verification or is rendered questionable owing to uncertainty over the identity or authenticity of the record, or the accuracy of the location. Presence uncertain records should not be considered in the calculation of EOO.

5.8. NEWS IN SHORTS

5.8.1. TAMIL NADU TO SET UP INDIA'S FIRST DUGONG CONSERVATION RESERVE

- Recently, the Tamil Nadu government announced **India's first conservation reserve** for Dugongs in Palk Bay.
  - They face threats of **habitat loss, entanglement in fishing nets, hunting for meat and oil** etc.
- **About Dugong**
  - Dugongs, also known as **Sea Cows**, are the only **herbivorous marine mammals** and the only member of the family **Dugongidae**, making it one of the four surviving species in the **Order Sirenia** (other is **Trichechidae**, or the manatee family).
  - Classified as **Vulnerable by IUCN** and included in **Schedule I of the Wild Life (Protection) Act, 1972** as well as **Appendix I on CITES**; they are mainly found in **shallow areas** as they survive mainly on seagrass.
  - They **live in groups** and come to the **surface to breathe** with a distinct dolphin-like tail, and have mammary glands.
  - **Lifespan** of dugongs is **70 years or more** and **female dugongs** breed **every 2.5 to 7 years** (starting from **6 to 17** years) with a gestation

period of **13 to 15 months** and a nursing period of around **18 months**.
    - Its closest relative, **Steller's Sea cow**, was hunted to extinction in the eighteenth century.
- **Conservation Efforts**
    - MoU on Conservation and Management of Dugongs and their habitats **by UNEP and Conservation of Migratory Species.**
        - ✓ India signed it in 2008 and formed a task force for the same.
    - **Dugong and Sea Grass conservation project by Global Environment Facility and UNEP** for 8 countries in the Indo-Pacific Region **excluding India**.

5.8.2. UNESCO DECLARES WORLD'S FIRST 5-COUNTRY BIOSPHERE RESERVE IN "AMAZON OF EUROPE"

- Biosphere reserve **covers 700 kilometres of the Mura, Drava and Danube (MDD) rivers and stretches across Austria, Slovenia, Croatia, Hungary and Serbia.**
    - Reserve is home to floodplain forests, gravel and sand banks, river islands, oxbows and meadows.
    - It is home to continental Europe's highest density of breeding white-tailed eagle, as well as endangered species such as the little tern, black stork, otters, beavers and sturgeons.
- **Biosphere reserves are areas of terrestrial and coastal ecosystems** promoting solutions to reconcile the conservation of biodiversity with its sustainable use.
- Biosphere Reserves **involve local communities and all interested stakeholders in planning and management.** They **integrate three main functions:**
    - Conservation of **biodiversity and cultural diversity**
    - **Economic development** that is socio-culturally and environmentally sustainable
    - **Logistic support**, underpinning development through research, monitoring, education and training
- Biosphere Reserves are **designated under intergovernmental Man and Biosphere (MAB) Programme** by the Director-General of UNESCO.
    - MAB programme aims to establish a scientific basis for **enhancing the relationship between people and their environments.**
- The **World Network of Biosphere Reserves** (WNBR) of the MAB Programme consists of a dynamic and interactive network of sites of excellence.
- WNBR includes **727 biosphere reserves in 131 countries, including 22 transboundary sites**; building international, regional, sub-regional and ecosystem-specific cooperation.
- **There are 12 UNESCO designated Biosphere reserves in India:**Nilgiri, Gulf of Mannar, Sunderban, Nanda Devi, Nokrek, Pachmarhi, Simlipal, Achanakmar-Amarkantak, Great Nicobar, Agasthyamala, Khangchendzonga, Panna.

5.8.3. HYBODONT SHARKS

- Teeth of a species of **hybodont shark of Jurassic age** (approximately, between 160 and 168 million-years-old) have been reported for the first time from Rajasthan's **Jaisalmer.**
    - **Hybodont,** an extinct group of sharks, was a **dominant group of fishes in both marine and fluvial environments** during the Triassic and early Jurassic time.
- However, It **started to decline** in marine environments **from the Middle Jurassic onwards** and finally became **extinct at the end of the Cretaceous time 65 million years ago.**

5.8.4. PRIME MINISTER (PM) DEDICATES TO THE NATION 35 CROP VARIETIES WITH SPECIAL TRAITS

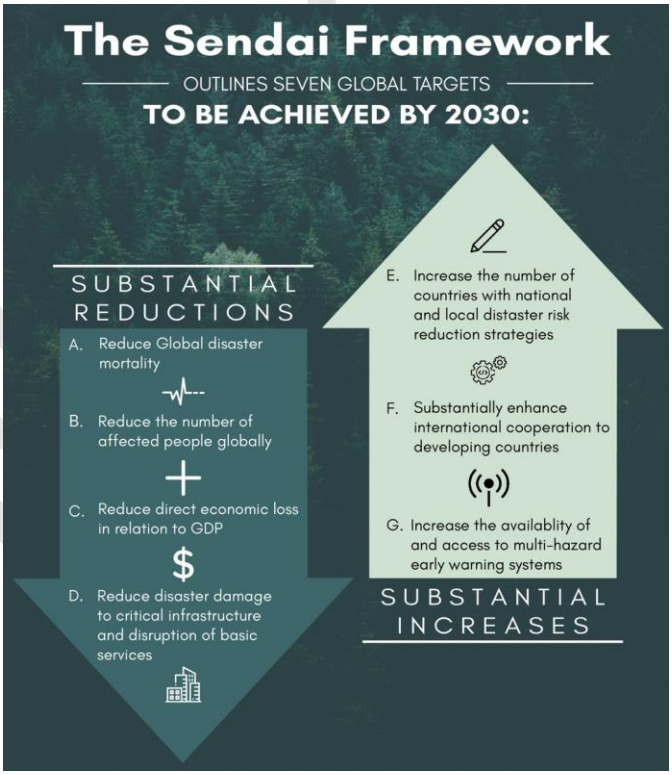
- Crop varieties have been developed by the Indian Council of Agricultural Research (ICAR) **to address the twin challenges of climate change and malnutrition.**
    - **35 varieties include**
        - ✓ **Climate resistant crops** like drought tolerant variety of chickpea, wilt and sterility mosaic resistant pigeonpea, early maturing variety of soybean, disease resistant varieties of rice etc.
        - ✓ **Crops with high nutrition content** like biofortified varieties of wheat, pearl millet, maize and chickpea etc.
- These special-trait crop varieties **will help in addressing:**

- **Climate Change risks** (like rise in attacks from new pests, new diseases) **to agriculture.**
  - ✓ According to a climate change vulnerability assessment by ICAR, **109 rural districts are 'very high-risk' districts, while 201 districts are risk districts in India.**
- **Anti-nutritional factors (ANF)** found in some crops that adversely affect human and animal health.
  - ✓ ANF is defined as those **substances generated in natural food substances** by the normal metabolism of species **which exert effects contrary to optimum nutrition.**

- On the occasion, PM also **inaugurated the campus of National Institute of Biotic Stress Management** at Raipur, Chhattisgarh.
- **Related News:** As many as **12 folk varieties of Indian rice,** examined by researchers, **can supplement the nutritional demand of important fatty acids in undernourished mothers.**
- In India, many folk varieties like Athikaraya, Dudh-sar, Kayame, Neelam samba, Srihati, Maharaji and Bhejri are known **in folk medicine to enhance milk production in lactating women.**
  - Other traditional varieties like Kelas, DudheBolta and Bhutmoori**are rich in iron and can be included in diet of mothers to treat anaemia.**

5.8.5. THE ATLAS OF MORTALITY AND ECONOMIC LOSSES FROM WEATHER, CLIMATE AND WATER EXTREMES (1970–2019)

- Released by **World Meteorological Organization (WMO)**, an **intergovernmental organization and specialized** a**gency of the United Nations** for meteorology (weather and climate), operational hydrology and related geophysical sciences.
- **Key findings:**
  - There were **more than 11,000 disaster**s attributed to weather, climate and water-related hazards, accounting for **two million deaths and $3.64 trillion in losses.**
    - ✓ Thus, over the last 50 years, **50% of all recorded disasters, 45% of related deaths and 74% of related economic losses** were due to **weather, climate and water hazards.**
  - **More than 91% of all deaths** occurred in **developing countries.**
  - **The number of disasters had risen** by a factor of five. But the number of **deaths decreased.**
    - ✓ This happened **due to early warning systems.**
  - **There were gaps in weather observations.** Only half of the 193 WMO members have multi-hazard early warning systems (**MHEWSs)**.
    - ✓ **The Sendai Framework** for Disaster Risk Reduction (2015–2030) **recognizes the significant benefits of MHEWSs** by incorporating them into one of its seven global targets (refer to the infographics).
      - Sendai Framework provides Member States with concrete actions to protect development gains from the risk of disaster.

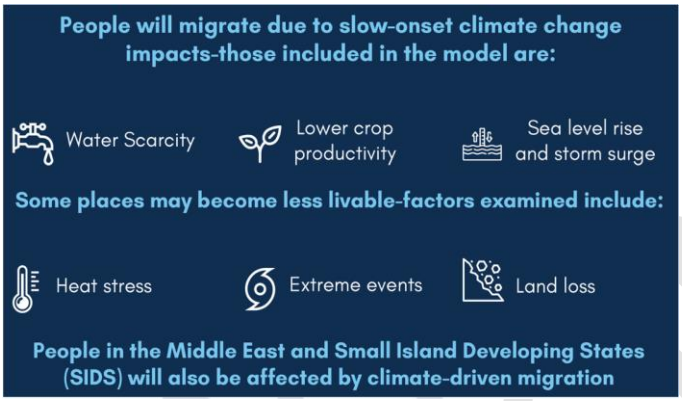


5.8.6. CLIMATE CHANGE CAN FORCE 216 MILLION PEOPLE TO MIGRATE WITHIN THEIR OWN COUNTRIES BY 2050

- Recently, the **World Bank's updated Groundswell report was released.**
- **Key findings**
  - **Climate change is a powerful driver of internal migration** because of its impacts on people's livelihoods and loss of livability in highly exposed locations.
  - **Hotspots of internal climate migration can emerge as early as 2030** and continue to spread and intensify by 2050.
  - Hotspots of such migration would intensify in **rural, urban and coastal systems.**
  - **Sub-Saharan Africa will have the largest number of internal climate refugees** by 2050.

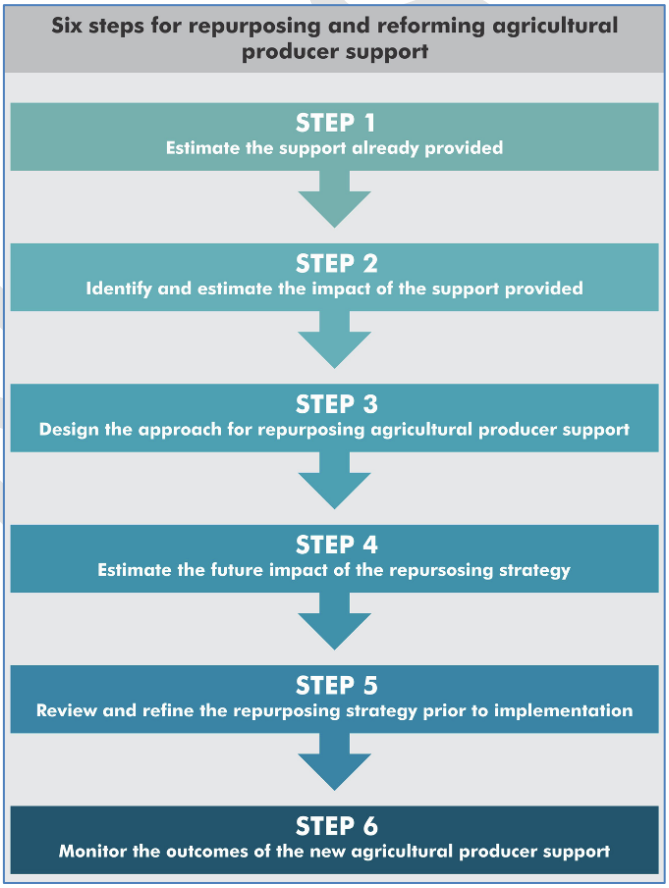
- **Immediate and concerted action** to reduce global emissions and support green, inclusive and resilient development **could reduce the scale of climate migration by as much as 80%.**

- **Recommendations**
  - **Cut global greenhouse gases** to reduce the climate pressure that drives climate migration.
  - **Integrate climate migration** into far sighted green, resilient and inclusive **development planning.**
  - **Plan for each phase of migration**-before, during and after-to ensure positive adaptation and development outcomes.
  - **Invest in understanding the drivers of climate migration** through evidence-based research, models & consultations, to inform policy response.



5.8.7. A MULTI-BILLION-DOLLAR OPPORTUNITY: REPURPOSING AGRICULTURAL SUPPORT TO TRANSFORM FOOD SYSTEM

- **Report has been published by the** Food and Agriculture Organization (FAO), UN Development Programme (UNDP) and UN Environment Programme (UNEP) on the eve of Food Systems Summit (FSS).
  - The UN FSS will take place during the UN General Assembly in New York on September 23.
  - It will seek to set the stage for global food systems transformation to achieve the Sustainable Development Goals by 2030.
- **Key highlights of the Report**
  - **Price incentives and fiscal subsidies** are forms of support that may have **significant negative implications on food systems**
  - **Emission-intensive and unhealthy commodities like sugar, beef, milk and rice receive more support** than healthier and more nutritious foods such as fruits and vegetables.
  - **Distorting support measures** are still prevalent in **high and middle-income countries**.
  - Support to **farmers in low-income countries in Sub-Saharan Africa is negligible** due to lack of financial resources.
  - The **farming sector in India has been largely penalised** over the last 20 years, due to the strong focus of Indian agricultural policy **on protecting consumers by ensuring affordable food prices**.

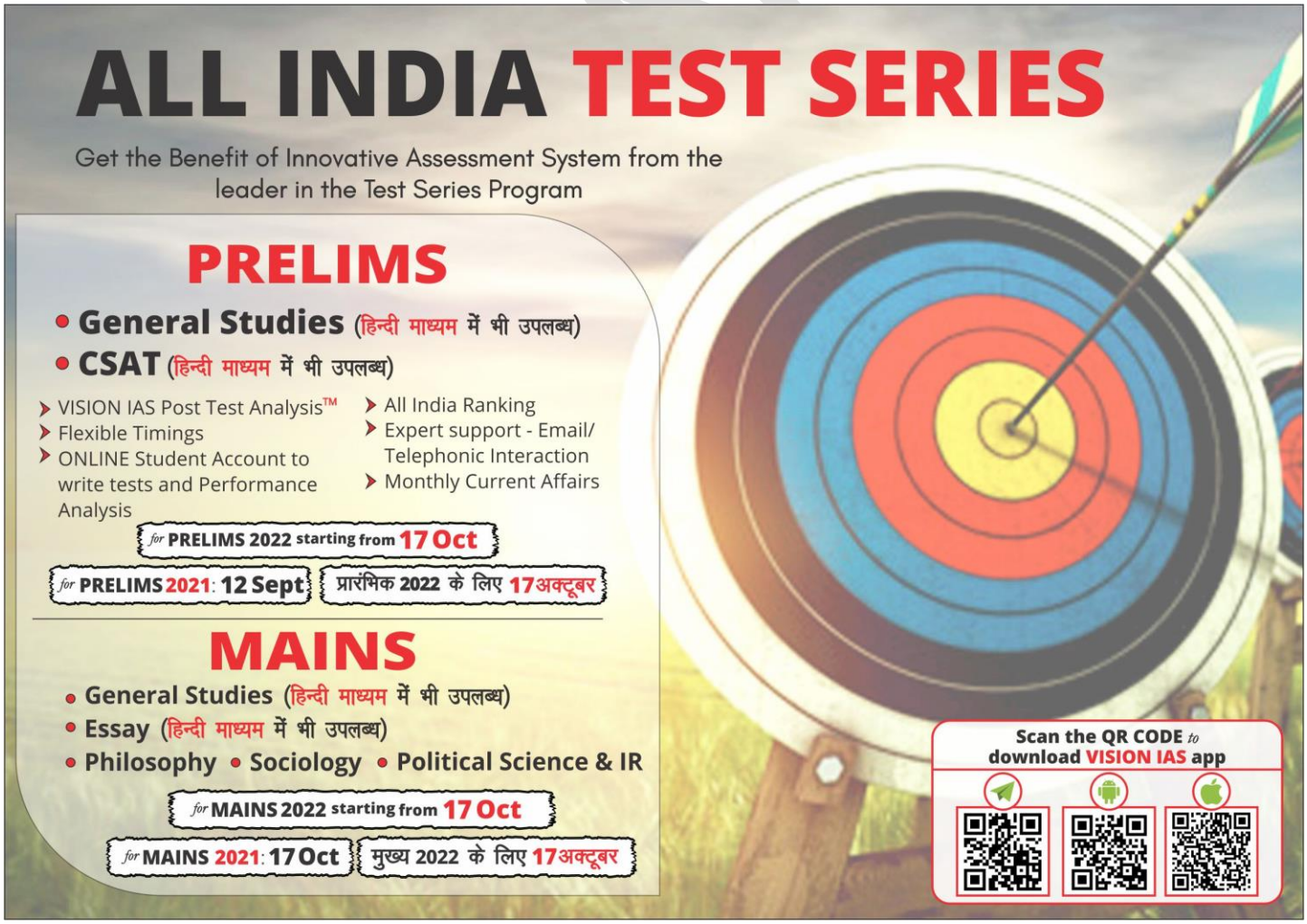


5.8.8. GREEN VOYAGE 2050 PROJECT

- Launched in May 2019, it is a **partnership project between Norway and International Maritime Organisation (IMO).**
- Aim is to **transform the shipping industry towards a lower carbon future.**
  - It is **supporting developing countries** in meeting their commitment **towards relevant climate change and energy efficiency goals**, for international shipping,
- **India has been selected as the first country** under this project for **conduct of a pilot project related to Green Shipping.**

5.8.9. CLIMATE ACTION AND FINANCE MOBILIZATION DIALOGUE (CAFMD)

- CAFMD is **one of the two main tracks** (other track is strategic clean energy partnership) **of the US-India Agenda 2030 partnership** that was announced in April 2021.
- **CAFMD will have three pillars:**
  - **Climate action pillar** to look at ways to reduce emissions in the next decade.
  - Pillar for setting out a **roadmap to achieve 450GW renewable energy (RE)** in transportation, buildings and industry.
  - Finance Pillar to collaborate on attracting finance to deploy 450 GW of RE and demonstrate at scale clean energy technologies.



6. SOCIAL ISSUES

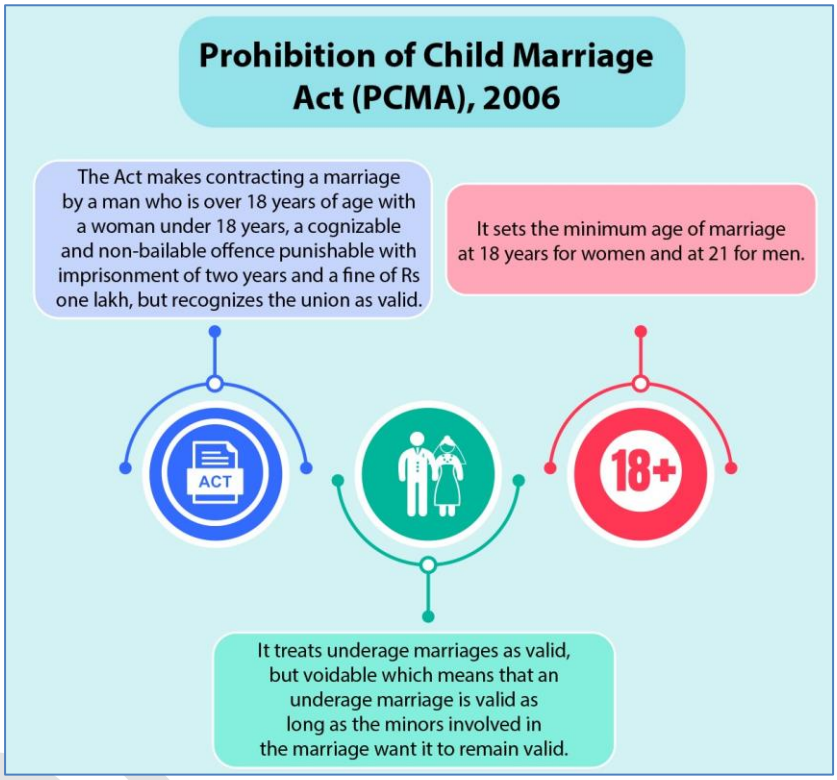
6.1. CHILD MARRIAGE

Why in news

The Odisha government has rolled out a plan to make the state completely free of child marriage by 2030.

More on news

- The Odisha government has **roped in five departments for observing "convergent action points on adolescent empowerment and ending child marriage" in line with the state strategy action plan (SSAP).** In 2019 the state had rolled out five-year SSAP **to end child marriages in the state.**
- These departments include school and mass education, skill development and technical education, Scheduled Tribe and Scheduled Caste development, minorities & backward classes welfare, higher education and law.



About child marriage

- Child marriage can be described as a **formal marriage, or an informal union entered into by an individual before attaining the prescribed eligible age.**
  - As per the Prohibition of Child Marriage Act, 2006, **the marriageable age is 21 for males and 18 for females.**
- **Severity of prevalence of child marriages in India**
  - India has the largest number of brides in the world – **one- third of the global total.**
  - **Nearly 16% adolescent girls** aged 15-19 are currently **married.**
  - The problem of child marriage is **widely spread across the country,** however, it is **most common in northern, eastern and western India like** in Jharkhand, Bihar, Rajasthan, Andhra Pradesh, West Bengal, Uttar Pradesh, among others.
  - According to the National Crime Records Bureau (NCRB) data of **2020**, a total of **785 cases were registered under the Prohibition of Child Marriage Act, 2006.**

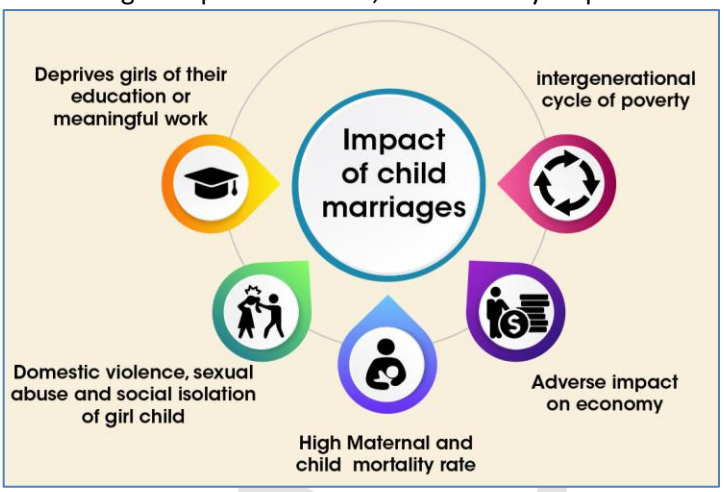
Efforts to curtail child marriages before independence

- **Ram Mohan Roy created the Bramho Samaj in 1828** that sought to break the shackles of the caste system, and the fight against Sati that saved the lives of many women. He also advocated **for property rights for women and fought child marriage.**
- **Rukhmaibai,** born in 1864**, contested her husband's claim to conjugal rights** in an iconic court case **Dadaji Vs Rukhmabai** that led to the passage of the Age of Consent Act in 1891**. In this case she was helped by Behramji Malabari**.
- **The Child Marriage Restraint Act, 1929/Sharda act** passed in the Imperial Legislative Council of India, fixed the age of marriage for girls at 14 years and boys at 18 years.

Challenges to prevent child marriages

- **Cultural:** The practice of child marriage in northern India is closely associated with pious occasions such as **Akha Teej in Rajasthan** when mass child wedding takes place in may districts however administration fails to stop these weddings due to social pressure.
- **Poverty:** In poor communities, marrying off a daughter means one less mouth to feed and often a very welcomed dowry or "bride price" paid by the groom's family. In cultures where the groom's family is paid instead, the dowry provided by the bride's family can be lower if she is young.

- **Patriarchal attitudes:** Child marriage is often seen as a defense against premarital sex, and the duty to protect the girl from sexual violence and harassment is transferred from father to husband.
    - Child marriage can be linked to **restoring or maintaining family honor**, a source of financial gain or means to settle a debt. A girl may be offered in marriage as a means of **reparation for a crime or to settle a debt among disputing families,** even when the girl was not involved in either situation
- **Skewed sex ratio:** In many states like Gujarat and Haryana sex ratio is too skewed to find a bride. As a result of this, forced marriage whereby a girl is abducted or bought by the future husband has become a norm.
- **Ineffective implementation of law:** Lack of proper age documentation, and overall lack of protection for the human rights of children along with ineffective implementation of law like PCMA, 2006 is also a major hurdle in eliminating child marriages.



Global efforts to eliminate child marriages

- **UN Sustainable Development Goals (SDG)-5:** "Achieve gender equality and empower all women and girls"
    - **Target 5.3**: "Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation".
- **Convention on the Elimination of All Forms of Discrimination against Women, 1979:** It states that "the betrothal and the marriage of a child shall have no legal effect.
- **African Union (AU) Campaign to End Child Marriage in Africa:** It calls for multisectoral coordination through: national action plans, legislative reform, programmes and investment to support access to essential services.

Rajasthan Compulsory Registration of Marriages (Amendment) Bill, 2021

- This bill, recently passed by Rajasthan assembly, amends the Rajasthan Compulsory Registration of Marriages Act, 2009 **to** provides for **mandatory registration of all marriages, including child marriages.**
- **Key features of the bill**
    - Both parties can **apply for registration of marriage** to the marriage registration officer of the place where they have been **residing for more than 30 days**.
    - Marriage between the **bridegroom and bride who has not completed 21 years and 18 years of age respectively** could be registered by parents or guardians within 30 days of marriage.
    - Registration can be done at the level of **District Marriage Registration Officer** as well as **Additional District Marriage Registration Officer** and **Block Marriage Registration Officer** to bring simplicity and transparency to the work.

Way ahead

- **Improve law enforcement mechanism**: The effective enforcement of PCMA, 2006 must be ensured with strong political and administrative will power.
- **Compulsory registration of marriages:** This is imperative as there is no law requiring registration of marriages throughout India. Thus, enforcement of such legal provision is likely to pressurize parents for delaying marriage.
    - Supreme Court in **"Seema vs. Ashwini Kumar, 2006"** had directed that **registration of all types of marriages should be made mandatory.**
- **Increasing girl's access to schooling and higher education:** Scholarships and other financial incentives may be provided to the poor families for attaining secondary and higher education to their daughters. For example, **Kanyashree Prakalpa scheme of the West Bengal** government, a Conditional Cash Transfer scheme, aims to promote secondary education among females and to stop marriage of girls before the official age of 18.
- **Ensuring safety and security of girls:** The vulnerable and poor families are the potential victims of trafficking and therefore, effective implementation of **Immoral Traffic Prevention Act 1956** along with effective implementation of **UJJAWALA scheme** is called for prevention from immoral trafficking and rehabilitation of trafficked victims which also abets child marriages.
- **Nationwide awareness campaign for prevention of child marriage:** Media campaigns (like tv serial Balika Vadhu) and India's **strong tradition of collective action and community organizing for social change** for creating an environment of delaying marriage and empowering adolescent girls.

- In this regard, the women SHGs and associations need to be encouraged to take collective action for delaying marriage and also preventing child marriage.

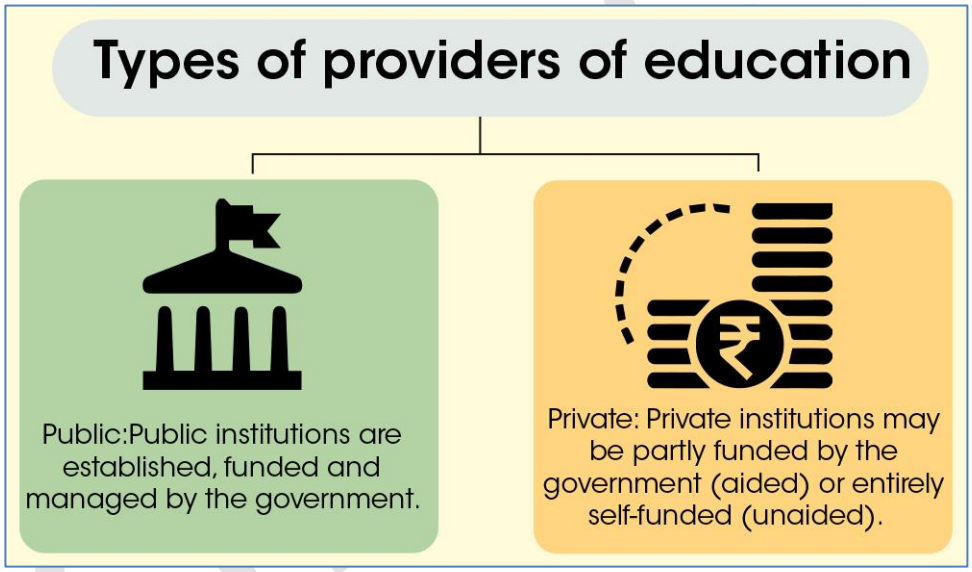
Conclusion

To end child marriages, society first need to understand the systems, norms and behaviours that drive it, and what works to end it in different contexts. Girls – in all their diversity – must be at the centre of solutions to end child marriage. Families and communities must be engaged in transforming the negative social norms that limit girls' choices.

6.2. PRIVATE SECTOR PARTICIPATION IN EDUCATION SYSTEM

Why in news?

Recently, the Prime Minister, called upon the private sector to come forward and contribute their bit in the educational sector.



Private players in Education sector

- Private providers of education often step in when the government has limited resources to provide universal access to education.
- In most markets, the private sector is characterized by a profit-motive. However, when it comes to education, the **private sector is required to operate on a not-for-profit basis.**
- Government may allow private sector in education in the two ways
  - **Private Finance Initiative (PFI):** A long-term contract, that normally refers to cases where there is significant asset ownership by the private sector.
  - **Contracting out or franchising:** A few specific asset investments by the private sector.

Need for the participation of private Sector in Indian education system

- **Retreat of Public Spending:** India spends close to 3% of its GDP on the education sector. This is less than the proposed 6% mandated in a number of policy documents.
- **Improving quality of education:** Public education institutions including various research institution suffers from poor quality of teachers, teacher absenteeism, poor infrastructure, outdated curriculum, lack of conducive governance system and research environment. This inhibits the possibility of exploring any creative solution to a problem, thereby affecting the overall quality of education. This calls for private sector participation, even within public sector institutions.
- **Growing Importance of industry academia linkage:** Collaboration between industry and academia is key to **catalyse innovation and growth in technology**.
  - As India ushers in the era of digitization, it is in the enviable position of having **a young tech-savvy population ready to apply its learnings in key fields such as AI and Big Data** to solve major challenges facing critical industries like healthcare and energy.
- **Channelizing Private Philanthropy:** Private philanthropy brings not only financial resources but also broader vision and mission to the education system. By instilling fresh thinking into higher education, private benevolent individuals can positively shape up the future of higher education.

Issues faced by Indian education sector due to participation of private sector in education system

- **Exclusionary education:** Privatization of education has made the education system exclusionary by providing wider choices to relatively affluent and rich students, but it has excluded very poor, girls and marginalized groups.
- **Commercialization of education:** The current regulatory regime also has not been able to curb the commercialization and economic exploitation of parents by many for-profit private schools, yet at the same time it has all too often inadvertently discouraged public-spirited private/philanthropic schools.
- **Inefficient regulation:** Regulation and accreditation in India are centralized with poor outreach in the federal states. Also, corrupt practices within regulatory agencies like UGC and AICTE has often been reported in the various federal states. Such things have stymied the quality of higher educational institutions.
- **Negative perception:** Bringing public and private providers together when their objectives do not have considerable overlap, and often have conflicting objectives, raises doubts about the feasibility of such an arrangement.
- **Black money:** Most private education institutions operating as a trust or society that is not for profit, enters into transactions with entities that supply services or products needed by the school and generate a significant amount of black money.
    - To do away with this malice, many experts believe that education institutions should be allowed to operate as 'for-profit' entities as long as they provide quality education at a reasonable cost.

Steps taken to promote private sector participation

- **The Right to Education (RTE) Act, 2009**, lays down norms and standards for private schools.
    - It also **requires all non-minority private schools to reserve 25% of seats in their entry-level class for marginalized children and** provide them free education till class. The legislation empowers States to enact their own rules to implement its provisions.
- **Institutes of eminence (IoE) scheme:** It has been launched in the year 2017 under which UGC has declared 10 Public and 10 Private institutions as IoEs. The objective of the scheme is to enable them to achieve rankings within top 500 in any of the world-renowned ranking frameworks.
- **New Education Policy (NEP):** Private HEIs having a philanthropic and public-spirited intent will be encouraged through a progressive regime of fees determination. The policy, among other things, also provides for:
    - **Regulation:** An effective quality self-regulation or accreditation system will be instituted for all stages of education including pre-school education - private, public, and philanthropic - to ensure compliance with essential quality standards.
    - **Curbing Commercialization of Education**. All education institutions will be held to similar standards of audit and disclosure as a 'not for profit' entity. Surpluses, if any, will be reinvested in the educational sector.
- **Foreign Direct Investment (FDI):** 100% FDI through automatic route is allowed in education sector.

Way ahead

- **Comprehensive policy:** A clear and decisive policy on investment will demonstrate state's commitment to the whole initiative, boosting private investment in state higher education institutions.
- **Regulatory environment**: An appropriate regulatory environment for the provision of education in private and public schools be established.
    - Both the private education sector and the State have a responsibility to work together to ensure that education establishments are meeting State standards, and this within a child rights framework.
    - Civil society groups, NGO coalitions and the State should work together in creating an appropriate regulatory environment for the provision of education services.
- **Establishment of a CSR Cell in schools and universities** to attract private investment for their development. Schools and universities should be encouraged to form partnerships with companies, trust funds, societies and NGOs.
- **Roping in private sector for management and administration:** The private sector is often revered for its managerial efficiencies and highly skilled administrative abilities.
    - Therefore, outsourcing of managerial and administrative works like preparation of result, events organisation, and formation and working of various committees will free the existing faculty members from these activities and give them more time and opportunities to delve in their own research.
- **Monetary and non-monetary support to students:** Scholarships and financial aid programmers can be developed whereby private sector can provide financial assistance to selected students from underprivileged backgrounds. CSR funding and private philanthropy can be a useful source of funding in these areas.

- **Conclaves and Investor Summits** are very effective ways to attract investors and introduce them to the government's vision for private initiative in the education sector of the Country.

Related News:

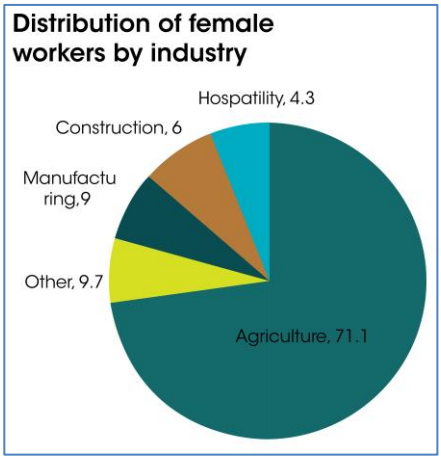
Ministry of Education forms National Steering Committee (NSC) for the Development of National Curriculum Frameworks (NCF)

- NSC **will be headed by K Kasturirangan**, who also headed the drafting committee of National Education Policy (NEP) 2020.
- **Terms of Reference of NSC include**
  - **Committee will develop four NCFs** for: School Education, Early Childhood Care and Education, Teacher Education and Adult Education.
  - All the NCFs would also **reflect upon the implications of situations such as COVID-19 Pandemic** on respective areas for future.
  - Draw **inputs from State Curriculum Frameworks (SCFs).**
- NCF serves as a **guideline for syllabus, textbooks, teaching and learning practices** in schools across the country. It attempts to **address the future requirements of school education.**
  - NCF was **last prepared in 2005** and it was revised in 1975, 1988 and 2000.
  - **State governments also follow NCF** in revising their school curriculum through participation of State Councils of Educational Research and Training (SCERT), which draw up SCFs.
- NCFs are **part of the process to implement NEP 2020.**
  - NEP 2020, which will replace the National Policy on Education-1986, **aims for Universalization of Education from pre-school to secondary level** with 100 % Gross Enrolment Ratio in school education by 2030.

6.3. FEMINIZATION OF AGRICULTURE

Why in news

The Periodic Labour Force Survey or PLFS (2019-2020) data shows a surge in female labour force participation rate in agriculture.



More in News

- There has been a **rise in workforce engaged in agriculture** to 45.6 per cent (2019-20) from 42.5 per cent (2018-19).
- Almost the **entire rise in the workforce was accommodated by agriculture.** Agriculture continues to perform the function of a sink — absorbing the workforce that cannot find remunerative employment elsewhere.
- There has been a **sharp increase in the female Labour Force Participation Rate (LFPR**) by 5.5 percentage points (from 2018-19). Much of this is **driven by** the increased LFPR of **rural women.**
- This phenomenon of increased participation by women, particularly working as agri-labourers, is referred to as the process of **feminization of the Indian Agri-workforce.**
  - With regard to employment, the term can be used to denote feminization of a particular sector or industry where there is a **disproportionate concentration of women.** For instance, in the service industry, agriculture, or the garment industry.

Factors driving the feminization in agriculture

- **Migration of men due to agrarian distress:** Men are on the move either towards urban areas or when they move Inside villages, they take up non-farm work as casual labourers in construction, brick kilns, mills, or worked as drivers, carpenters, teachers, and so on.
  - This is because non-farm works in villages earn more wages than agriculture and allied services.
- **Women have less mobility:** Due to social norms, women often remain in the villages, and therefore in agricultural work as socio-cultural patriarchal norms prevents them from joining non-agricultural works like brick kilns.
- **Women are preferred for labour intensive woks:** Women **are** thought to be docile and hardworking, and certain labor-intensive works like transplantation and winnowing are typified as women's work.

- **Women labour ensure low production cost:** Women many a time accept low-paid irregular work, are easy to hire and fire. Together, they keep production costs in check and enable capital accumulation.

Feminisation in agriculture is good	Feminisation in agriculture is bad
• **Feminisation brings women into the public sphere and allows them to socialize with various communities.** • **It does make their** labour visible **and many a time their** labour may be accounted for **(though this is not always the case).** • It **can potentially lead to building women's skills and confidence.** • It can give them an opportunity to organize, and **enhance their bargaining power.**	• Several studies indicates that feminization of agricultural have a **negative impact on agricultural output** as women face more difficulties in use of technology, credit, and market information. • According to a study, **more engagement in agriculture in peak seasons is associated with a decline in nutrients.** • Women have been **confined to traditional, low paying roles** such as winnowing, harvesting which furthers the economic disparity with their male counterpart. This clubbed with the burden of household chores, **undermine the well-being of women in agriculture.**

Challenges faced by women in agriculture sector

- **Differentiated access to productive resources and markets:** As per Agri Census 2015-16, **only 14 per cent of the operational holdings in agriculture were owned by women.** Such lack of collateral adversely impacts a woman farmer's ability to access institutional credit, subsidies like fertilizers, seeds, etc. and benefits like installments under PM-Kisan or other governmental schemes that are mostly designed for land owners.
- **Women are not recognised as farmers:** The government sees **ownership of land as necessary for one to be considered a 'farmer',** but patriarchal norms oppose inheritance to woman, leaving them unable to access benefits and rights.
  - As a result, most women in agriculture **cannot avail of government schemes meant for farmers.**
  - A 2017 report by Oxfam India showed that **women's agricultural productivity is greatly hindered by these restrictions.**
- **Small land holding:** As per Agri-census 2015-16, close to 90 per cent of women-owned landholdings fall in the category of small and marginal landholdings.
  - Due to the small landholding size, these women farmers are also not able to harness benefits of economies of scale.
- **Wage disparity:** According to the Labor Bureau data, for seven activities specific to agriculture, wages received by women were, on an average, **35.8 per cent lower** than wages received by men (for the period between 1998-2015).
- **No representation in policy making: T**hese women Agri-workers lack voice in decision-making and lack access to opportunities. Their problems are nearly unrepresented in the popular policy debates.

Steps taken to empower women in Agriculture

- **Earmarking at least 30% of the budget allocation for women beneficiaries** in all ongoing schemes/ programmes and development activities.
- **Mahila Kisan Sashaktikaran Pariyojana (MKSP),** a subcomponent of the Deendayal Antodaya Yojana-NRLM (DAY-NRLM) seeks to **improve the present status of women in Agriculture,** and to enhance the opportunities available to empower her.
- Initiating **women centric activities** to ensure benefits of various beneficiary-oriented programs/schemes reach them.
- **Focusing on women self-help group (SHG)** to connect them to micro-credit through capacity building activities and to provide information and ensuring their representation in different decision-making bodies.
- Recognizing the critical role of women in agriculture, the Ministry of Agriculture and Farmers Welfare has declared 15th October of every year as **Women Farmer's Day.**

Ways for empowering women in the field of agriculture

- **Ownership of land:** This will help them in accessing benefits under multiple agricultural schemes that are only reserved for landowners.
- **Women centric extension services:** Adapting extension services to the needs of women farmers will be beneficial. Under farm mechanization, a focus on innovating farm machines that are better suited to female use will be rewarding.
  - Extension is an informal educational process directed toward the rural population. This process **offers advice and information** to help them solve their problems.
- **Reforms in policy making:** Finding ways to increase female representation on the decision-making forums is a must. This will eventually help in bridging wage gaps and current deficit in women sensitive policy making.
- **Gender budgeting**: In 2020-21, only 5 per cent of the total budget was sensitive to gender neutral outcomes and focused specifically on women-centric schemes. This has scope to be increased.

- **Role of civil society:** Civil society can also play an important role in organizing agrarian women into collectives, educating them about their rights, enabling access to the state, and giving them sustainable livelihood training.
    - This can be seen in the work of Deccan Development Society in Telangana, or Musahar Manch and ActionAid in some districts of eastern Uttar Pradesh, for example.
- **Strengthen alternative economic opportunities** through schemes like the Mahatma Gandhi National Rural Employment Guarantee Act and National Rural Livelihood Mission to empower women in the agriculture sector.

6.4. SECONDARY HEALTH CARE IN INDIA

Why in News?

Recently, NITI Aayog released a performance assessment report "Best Practices in the Performance of District Hospitals".

More on News

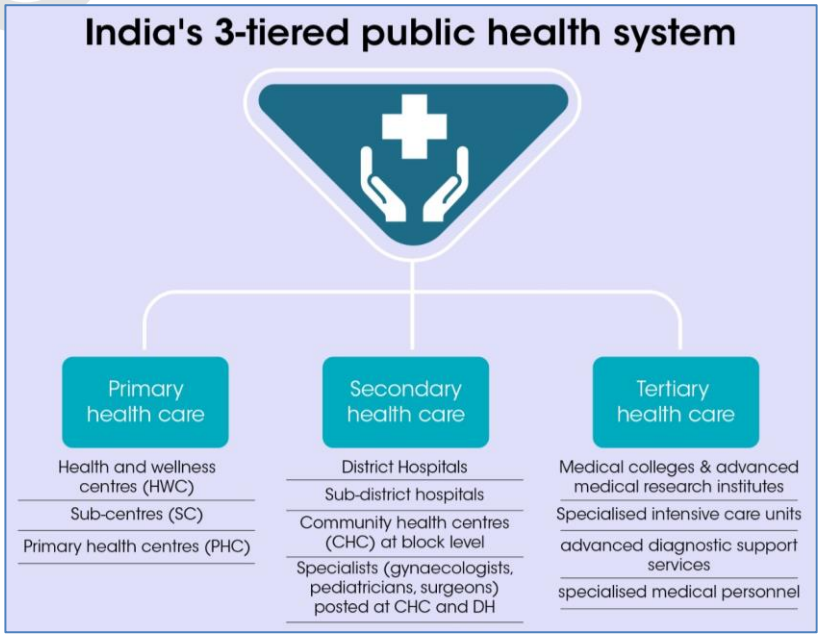
- It is the **first-ever performance assessment of district hospitals** and marks a shift in healthcare delivery system towards **data-driven governance for communities and people availing health services.**
    - Report is **released jointly by NITI Aayog, Ministry of Health and Family Welfare and WHO India.**

Key Highlights of the report

- District hospitals in India have **on an average 24 beds per 1 lakh population,** with Bihar having the lowest average of six beds and Puducherry the highest of 222.
    - Indian Public Health Standards (IPHS) 2012 guidelines **recommend district hospitals to maintain at least 22 beds per 1 lakh population** (based on 2001 census).
- A **district hospital in India has 11 support services on an average** against IPHS identified 14 support services that a district hospital is expected to maintain.
- **Only 189** (around 27%) **of the total 707 districts assessed met the doctor-to-bed ratio** of **29 doctors per 100 beds** in a hospital (based on IPHS norm).
- The **average bed occupancy rate in district hospitals in India is 57%** (IPHS guidelines recommend at least 80% bed occupancy).
- District hospitals have been **employing unique initiatives in different arenas** in order to improve their service delivery.
    - For instance, **Belgaum district hospital, Karnataka has an impressive blood bank replacement rate of 0%** (0 blood units issued on replacement).

About Secondary healthcare

- It refers to a **second tier of health system, in which patients from primary health care are referred** to specialists in higher hospitals for treatment.
    - The principal difference between primary and secondary services is in the range and specialization of the staff available.
- It is p**rovided by district or regional hospitals** that offer outpatient consultation and inpatient services including emergency care (refer infographic for its main units).
- Secondary healthcare includes a wide range of specialists, such as **psychiatrists, cardiologists, obstetricians, dermatologists, pediatricians and gynecologists.**
- It acts as a liaison **between the patient and the advanced medical care.**



- Secondary care centers also provide **technical and administrative support to primary care clinics** in their district or region.

- In some states, mobile care teams from the district hospitals provide support to the primary care centers for common neurologic problems such as epilepsy.

Draft Model Concession Agreement for Setting up Medical Colleges under the Public Private Partnership (PPP) guideline document by NITI Aayog

- It was aimed at **addressing shortage of qualifies doctors and bridge gap in medical education.**
  - Under the proposed PPP model, NITI Aayog has envisioned the **concessionaire to design, build, finance, operate and maintain the medical college and also upgrade, operate and maintain the associated district Hospital** with a minimum annual student intake of 150 MBBS seats.
- **Benefit of such an agreement**
  - It will aid Central/state government to bridge the gaps in the medical education by **augmenting their limited resources and finances.**
    - ✓ It would augment **medical seats and also rationalise the costs** of medical education.
  - It **will ensure specialized healthcare services** availability and accessibility at district level.
  - It will help in **leveraging upon private sector management efficiencies** in providing quality care at these hospitals.
- **Concerns raised against such an arrangement**
  - As concessionaire shall be allowed to charge fee from patients, it **might lead to exclusion of vulnerable sections** as district hospitals are seen as the last port of call for a majority of such patients.
  - Concessionaire **will be handed over the hospitals at an extremely low fee** with no mention of health outcomes that can be expected. This can result in accountability issues.
  - Medical education is already very expensive and out of reach of the majority of deserving candidates. The **addition of so many colleges in the private sector will lead to further exclusion of such students.**
  - There are also **concerns over private sector participation in the National Health Programmes** at district level.
  - **Without increasing and updating the government spending** on health care, rather handing over district hospitals to the private sector at throwaway prices, will only benefit the latter.

Challenges in Secondary Healthcare

- **Accessibility**: to secondary and tertiary care is a challenge, majorly for rural India. About 80 percent of doctors, 75 percent of dispensaries and 60 percent of hospitals are present in urban areas.
- **Non availability of skilled workforce:** Lack of specialists at this level especially in public hospitals force patients to go for expensive private healthcare. India currently needs an additional 6.4 million healthcare resources (overall) to serve its population.
- **Weak Primary health care (PHC) sector:** 60% of PHCs in India have only one doctor while about 5% have none. An inadequate feeder system from primary care to secondary and tertiary impacts not only the filtering of patients but also deeply impacts prevention and early detection.
- **Unmanageable patient load:** Even prior to the outbreak of the COVID-19 pandemic, healthcare facilities had been feeling the strain due to unmanageable patient-load.
- **Weak governance and accountability:** Recent health tragedies in Gorakhpur Hospital, Chhattisgarh Sterilization camps, Kolkata hospital tragedy and many others put the serious question of accountability, if any mishap occurs.
  - In all the cases, the medical doctors are either suspended or terminated without going into the root cause of problems.
- **Low healthcare spending:** Overall, India's public health expenditure (sum of central and state spending) has **remained between 1.2% to 1.6% of GDP** between 2008-09 and 2019-20.
  - This allocation is a fundamental problem that impacts infrastructure, supply of critical equipment and consumables, the number of hospitals and the retained staff of doctors, specialists, nurses and assistants.
- **Lack of pandemic handling capacity:** COVID-19 crisis has highlighted glaring gaps in India's healthcare sector. Global Health Security Index, which measures pandemic preparedness for countries ranked India a lowly 57 (lower than US (1), Brazil (22)) highlighting India's vulnerability.

Way Forward

- **Promoting preventive healthcare:** Health and Wellness Centres (HWCs) within the Ayushmaan Bharat programme could become centres of disease prevention thereby reducing pressure on secondary level.
- **Better patient management at PHCs:** There is a need to adopt technology wherever possible to streamline the operational and clinical processes for healthcare facilities in order to manage efficient patient flow.
  - Promotion to virtual care protocols and telehealth services can help in reducing the patient-load burden.

- **Improving health spending:** Government expenditure on health must urgently be scaled up, from <2% currently to at least 5%–6% of the GDP. Subsidized loans, earmarked land, single-window approvals, tax holidays, etc. can be used for improving private sector participation.
- **Improving cost effectiveness:** through user charges from people above poverty line while ensuring that people below the poverty line do have access to health services free of cost.
- **Increasing insurance coverage:** Need for government and private institutions both need to work together. Adoption of digital insurance processing solutions for faster turnaround time will also motivate adoption of health insurance.
- **Human Resource:** To address shortage of qualifies doctors and bridge gap in medical education, **NITI Aayog suggested PPP model to link new or existing private medical colleges with functional district hospital** to augment medical seats.
    - Budget 2020-21 also proposed setting up of medical colleges in existing district hospitals under PPP mode.
- **Involvement of SHGs, Panchayati Raj Institution and Strengthening of ANMs, ASHA:** Decentralized institutions like SHGs, PRIs, ASHA, re-skilled ANM workers, should be trained together to form a multi-skilled team at the village/district level.
- **Better accountability:** There is also need to inculcate ethical values of service, truthfulness, confidentiality, autonomy, informed consent and justice in healthcare professionals.
    - Apart from that even the patients' needs to be more sensitive about the position of healthcare professionals.

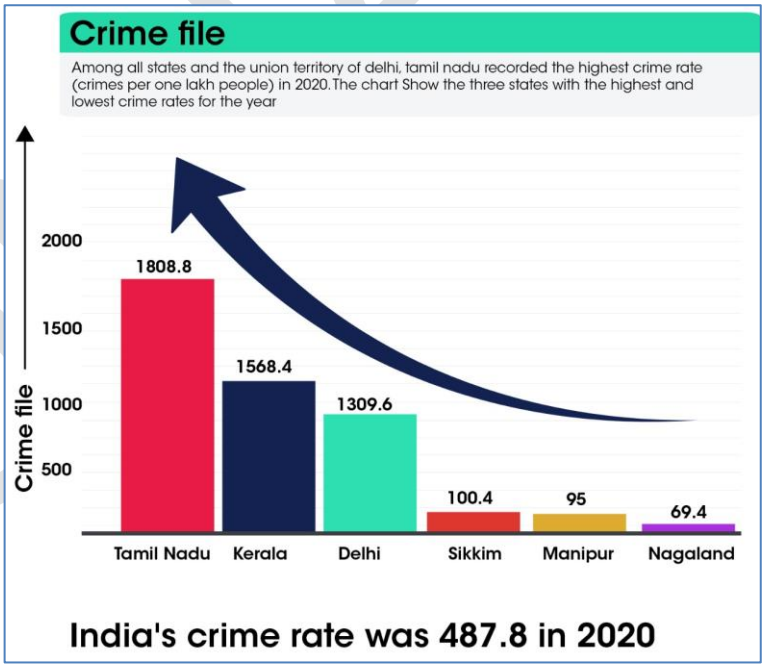
6.5. CRIME IN INDIA 2020 REPORT

Why in news?

Recently, National Crime Record Bureau's (NCRB) "Crime in India" 2020 report was released.

More in News

- This report captures **crimes registered under the Indian Penal Code (IPC) and Special and Local Laws (SLL)**
- The crime rate is calculated for per one lakh of population.



Key findings

- **Overall crime**
    - There was a **28% increase in the registration of cases in 2020** compared to 2019, primarily owing to the **violations of COVID-19 norms** across the country.
- **Decrease in traditional crimes:** Due to the pandemic and lockdown there is a drop in traditional crimes like theft, robbery, and assault on women and children in 2020.
- **Cases against women:** There was **8.30% decline in cases of crime against women.**
    - Most of the cases were related to 'cruelty by husband or his relatives' (30.0%), followed by 'assault on women with intent to outrage her modesty' (23.0%), 'kidnapping & abduction of women' (16.8%) and 'rape' (7.5%).
    - **Assam** registered **highest rate of crime** against women, **followed by Odisha and Telangana**
- **Crime against Children:** Shows a decrease of 13.2% over 2019.
    - **Cases against Juveniles also** shows a decrease of 7.8%.
- **Cases of sedition:** It declined from **93 in 2019 to 73 last year**, with Manipur reporting maximum cases.

A jump in numbers

Offences	2019	2020	% increase
Communal riots	438	857	96%
Caste riots	492	736	50%
Agrarian riots	1,579	2,188	38%
Andolan/morcha riots	1,442	1,905	33%
Promoting enmity between group	1,058	1,804	70%
Total riots (including other causes)	**45,985**	**51,606**	**12%**

Offences against the state decreased by 27% but UP only major state where they increased Source:NCRB

- **Crimes against Schedule Castes and Schedule Tribes:** Increase of crime against SC and ST were 9.4% and 9.3% respectively, over the last year.
- **Human trafficking cases** : The number of missing persons decreased by 15%.
- **Cases of Economic Offences and Cybercrime**
  - The Economic Offenses cases showed a decrease of 12% of such cases.
  - There was a decline of 27% in cases under the **Prevention of Corruption Act.**
  - **Cybercrimes recorded an 11.80% increase**.

About NCRB

- **NCRB was set-up in 1986** to function as a repository of information on crime and criminals to assist the investigators in linking crime to the perpetrators.
- It was **recommended by Tandon Committee, National Police Commission (1977-1981)** and the MHA's Task force (1985).
- NCRB is **entrusted with the responsibility for monitoring, coordinating, and implementing the Crime and Criminal Tracking Network & Systems (CCTNS) project.**
- NCRB is headquartered in New Delhi and is **part of the Ministry of Home Affairs**.
- **Its publications include:**
  - Accidental Deaths & Suicides in India
  - Prison Statistics India
  - Fingerprints in India
  - Report on missing women and children in India
- **Key Objectives of NCRB**
  - To **lead and coordinate development of IT products** and build a National Resource Centre of IT solutions for police organizations.
  - To create and maintain **secure sharable National Databases on crimes**, criminals, property and organized criminal gangs for law enforcement agencies and promote their use **for public service delivery.**
  - To obtain, compile, analyze and **publish the National Crime Statistics.**
  - To **store, coordinate and disseminate information** on inter-state and international criminals from and to respective States, national investigating agencies, courts and prosecutors in India.
  - To **provide training facilities to personnel** of the Crime Records bureau.
  - To function as the **National storehouse of fingerprint** (FP) records of convicted persons including FP records of foreign criminals.

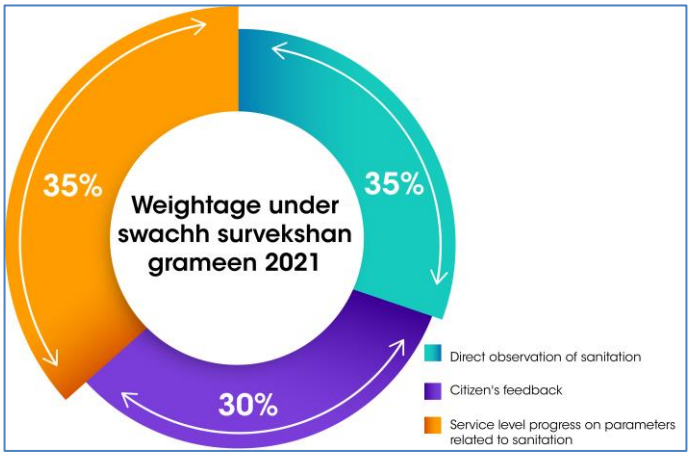
6.6. SWACHH SURVEKSHAN

Why in news?

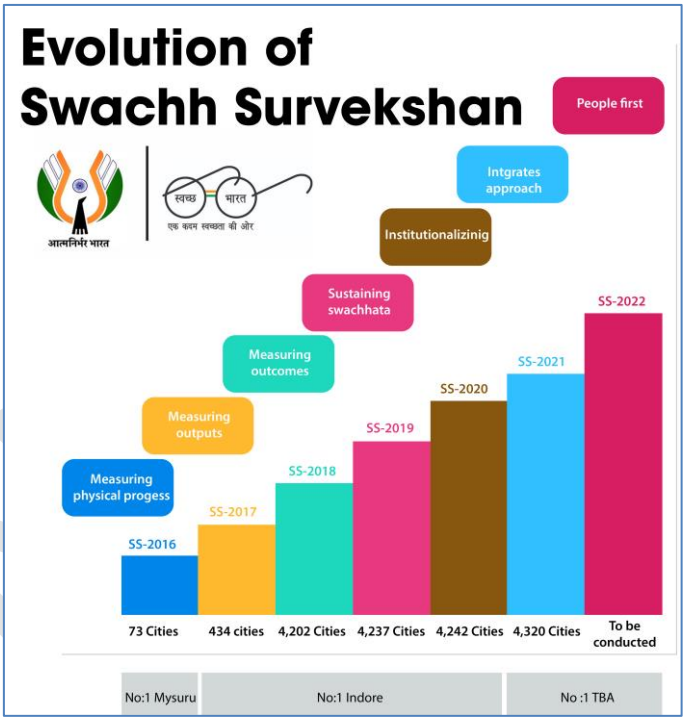
Recently, **Jal Shakti Ministry launched Swachh Survekshan Grameen 2021** under Swachh Bharat Mission (Grameen) and **Ministry of Housing and Urban Affairs launched the Swachh Survekshan 2022**

About Swachh Survekshan Grameen 2021 (SSG 2021)

- It is launched under the **Swachh Bharat Mission Phase-two as part of the 'Azadi Ka Amrit Mahotsav'**.
- It is an **annual survey of cleanliness, hygiene and sanitation** in villages across India.
- It aims to support **acceleration of ODF Plus interventions** and increase momentum for improving ODF Sustainability as well as **Solid and Liquid Waste Management (SLWM)** activities across the villages in the country.
  - SSG 2021 would include survey of Waste disposal infrastructure in the village in addition to the survey of 10 Households per village.
  - ODF-plus status aims to **ensure management of solid as well as liquid waste and is an upgradation of ODF status** in which construction of adequate toilets was required so that people did not have to defecate in the open.



- It will be conducted by a **third-party agency** will help us in bridging the gaps by identifying challenges on ground and working with all states.
  - 17,475 villages in 698 districts of the country will be covered by the Swachh Survekshan Grameen.
  - The **Department of Drinking Water and Sanitation** commissioned the 'Swachh Survekshan Grameen' in 2018 and 2019.
- **Significance:**
  - The primary objective of SSG is **not merely a ranking exercise but it has been an important vehicle for creating a Janandolan (people's movement)** and ensuring prompt action for achievement of programme elements.
  - The survey will help us in bridging the gaps by **identifying challenges on ground and working with all states.**
  - SSG also **fostered a spirit of healthy competition among villages** to improve their service delivery to citizens, towards creating cleaner villages.
  - The citizen feedback will strengthen the program further.



About Swachh Survekshan 2022

- Recently, the Ministry of Housing and Urban Affairs launched the seventh edition of Swachh Survekshan.
- SS is an annual **survey of cleanliness, hygiene and sanitation** in cities and towns across India. It was launched in 2016, as part of the Swachh Bharat Abhiyan.
- The objective of the survey is t**o encourage large scale citizen participation and create awareness amongst all sections of society** about the importance of working together towards making towns and cities a better place to live in.
- **Key features of SS 2022**
  - It is designed with **'People First'** as its driving philosophy. The **voices of young adults and senior citizens** will become deciding factor in city assessment.
  - Incorporated specific indicators that drive cities to **improve working conditions and livelihood opportunities for frontline sanitation workers.**
  - **District rankings have been introduced** for the first time.
  - Creates a level playing field for smaller cities by introducing **two population categories under 15K and between 15-25K**.

  - Scope of the survey has been expanded to **now cover 100% wards for sampling, as compared to 40% in previous years.**
  - Protect India's ancient legacy by **nudging citizens to take ownership and initiative to clean urban India's monuments and heritage spots**.
  - Technological interventions such as **digital tracking of documents, geo-tagging of sanitation and waste management** facilities, and QR code-based citizens' feedback for increased people outreach.

- It will organize a series of **citizen centric activities** under the overarching theme of **'Jan Bhagidari'**.
  - Campaigns such as **'Kachra Alag Karo'** will reinforce the practice of source segregation which is the cornerstone of effective waste management.
  - Also, **under the theme of 'Waste to Wealth', citizen-driven exhibitions will be organized across cities**.
  - It will also **recognize and felicitate citizen leaders, waste entrepreneurs, RWAs, NGOs etc. for driving Swachhata in their surroundings**.

6.7. NEWS IN SHORTS

6.7.1. MINISTRY OF EDUCATION (MOE) RELEASES INDIA RANKINGS OF HIGHER EDUCTION INSTITUTES (HEIS), 2021

- This is the **sixth consecutive edition** of India Rankings of HEIs in India by the **National Institutional Ranking Framework (NIRF).**
- NIRF has been accepted by the MoE in September 2015. This framework outlines a **methodology to rank institutions across the country**.
  - It is the first-ever effort by the government to rank HEIs in the country. Before NIRF, HEIs were usually ranked by private entities.
  - Participation in the NIRF was made **compulsory for all government-run educational institutions** in 2018.
- All education institutions are assessed on **five parameters** namely **teaching, learning and resources, research and professional practices, graduation outcomes, outreach and inclusivity, and perception**.
- NIRF lists out best institutions across **11 categories** i.e., overall national ranking, universities, engineering, college, medical, management, pharmacy, law, architecture, dental and research.

THE TOP 5

Rank	Overall	Universities	Colleges
1	IIT Madras	IISc	Miranda House, Delhi
2	IISc	JNU	SRCC, Delhi
3	IIT Bombay	BHU	Loyola College, Chennai
4	IIT Delhi	Calcutta University	St Xavier's, Kolkata
5	IIT Kanpur	Amrita Vishwa Vidyapeetham	Ramakrishna Mission Vidyamandira, Howrah

6.7.2. SAATH INITIATIVE

- **Saath was recently inaugurated by the Jammu and Kashmir Lieutenant Governor.**
  - **It is a Rural Enterprises Acceleration Programme for women** associated with Self Help Group (SHGs).
  - It will **stress on mentoring and market linkages** of products created by women associated with SHGs.
  - Also, these women would be **imparted knowledge about marketing, packaging and branding.**
- This initiative aims to impart skills and convert such **women's' businesses into Higher Order Enterprises.**

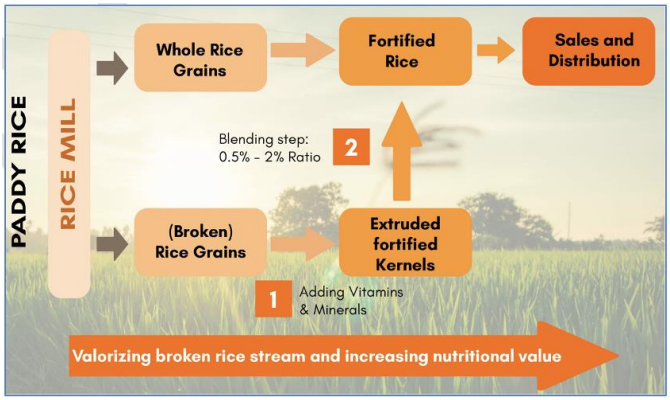
6.7.3. THE MINISTRY OF WOMEN AND CHILD DEVELOPMENT (MWCD) TO BRING RULES TO EASE INTER-COUNTRY ADOPTION

- The **Adoption Amendment Regulations 2021**, vetted by the Law Ministry, **will ensure that the Central Adoption Resource Agency (CARA)**, which regulates adoptions under the Juvenile Justice Act, **speedily grants. No-objection certificate (NOC)** to prospective parents who opt for inter-country adoption under the HAMA.
  - At present, there are **two routes for inter country adoption in India** – one through **Juvenile Justice (Care and Protection of Children) Act, 2015** which CARA regulates and other under the **Hindu Adoption and Maintenance Act (HAMA).**
  - So far, for adoptions through CARA, parents can **receive NOC for getting passports for their children** to travel overseas. But, in case of adoptions under HAMA, **parents were forced to move court to obtain NOC as there was no other mechanism.**
- Last month, the MWCD **waived the two-year mandatory period that an adoptive family would have to stay in the country** for constant monitoring by CARA and other authorities.
  - In such cases, the **Indian missions will monitor the progress and security of the adopted child,** instead of CARA and other authorities.
- **Significance:** To facilitate ease in carrying out adoptions, while at the same time ensure prevention of abuse or child trafficking.
- **CARA** is a statutory body **under MoWCD** and acts as **nodal body for adoption of Indian children both in-country and inter-country adoptions.**

- **HAMA,** established in 1956 covers Hindu, Sikhs, Buddhists and Jains.

6.7.4. CENTRE ANNOUNCES UNIFORM SPECIFICATIONS FOR FORTIFIED RICE

- The Department of Food and Public Distribution (DFPD), under the Consumer Affairs Ministry **had issued uniform specifications for fortified rice kernels (FRK) for Grade A and common rice for procurement** of fortified rice stocks, wherein 1% of FRK should be blended with normal rice.
    - Fortified rice is to be **distributed under** various government schemes including **public distribution system and midday meals in schools by 2024.**
- **Significance**
    - To address **high levels of malnutrition among women and children.**
    - To **supplement the diet of the poor.**
- Fortification as the practice of **deliberately increasing the content of an essential micronutrient** to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health.
    - **Bio-fortification is the process of conventionally breeding food crops** that are rich in micronutrients, such as vitamin A, zinc, and iron.
- According to the FSSAI norms, 1 kg **fortified rice shall contain iron** (28mg-42.5mg), **folic acid** (75-125 microgram) and **Vitamin B-12** (0.75-1.25 microgram).
    - In addition, rice may also be fortified with **micronutrients such as zinc**, **Vitamin A**, **Vitamin B1**, **Vitamin B2**, **Vitamin B3** and **Vitamin B6**.



7. SCIENCE AND TECHNOLOGY

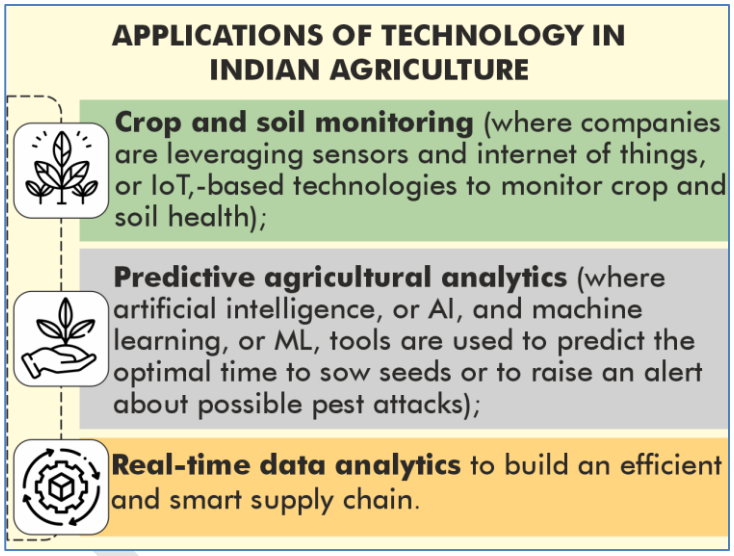
7.1. USE OF TECHNOLOGY IN AGRICULTURE

Why in news?

It is being reported that use of drones and satellite imaging could be made mandatory for insurers to keep a check on fraudulent and false insurance claims.

More on News

- Centre and the Insurance Regulatory and Development Authority of India (IRDAI) are in discussions **to adopt artificial intelligence and big data** to identify manipulation of processes and reduce delays in settlement of claims.
- It is being pushed **to diagnose processes that are being manipulated,** leading to fraudulent claims in agricultural as well as industrial insurance.



Drivers of Agricultural technology growth in India

- **Increasing population, increasing average income and globalization effects** in India will increase demand for quantity, quality and nutritious food, and variety of food.
- **To build an agriculture and food system that is efficient, environmentally sustainable,** equitable, and able to link farms with consumers.
- India is the **third-largest nation in terms of funding received and start-ups in the agritech space**.
    - Agritech is projected to grow to a $30-$35 billion market by 2025, with e-sales of produce, inputs and digitally enabled logistics as key segments.

VISION

MODERN TECHNOLOGY IN AGRICULTURE

Agricultural Drone: By using the correct sensors, drones can provide farmers with realtime information regarding crops, soil deterioration, dry regions, fungal infections, etc. Also, drones can be used for spraying purposes.

Satellite images to keep an eye on crops without being present on the farm.

Artificial Intelligence to reach solutions based data that indicates weather conditions, type of harvest a crop would need, and the type of soil most suitable, etc.

Soil and Water sensors: can detect moisture and nitrogen levels.

Mini-chromosomal Technology: Mini-chromosome is tiny structures within a cell that may be used to provide a plant with dozens or even hundreds of new traits. Using this, agricultural geneticists can add dozens and perhaps even hundreds of traits to a plant.

RFID Technology: Can be used for traceability of particular crops and to provide information that can be associated with farming yields.

Smart Phones: With this a farmer can control his irrigation systems from a phone or computer instead of driving to each field.

Vertical Farming: Provides farmers with a wonderful possibility to increase crop yields while overcoming the problems related to a limited land area. Furthermore, it can reduce the environmental impact due to the shortening of distance traveled in the supply chains.

Internet of Things (IoT): can be used to monitor soil moisture, water meters, rainfall, weather stations, Irrigation pumps, and cattle biometrics and access the information from smart phones.

Robotics: could positively impact the production of food, in particular high value crops that require intensive labor.

Advantage of using technology in agriculture

- **Better crop varieties:** Use of biotechnology and breeding will help in developing eco-friendly and disease resistant, climate resilient, more nutritious and tastier crop varieties.

- **Improving productivity:** Use of satellites, IoT, drones for better collection of data regarding soil health, crop area and yield can make agriculture be more profitable, easy and environmentally friendly and can also make cost for insurers less with better estimations.
- **Environmental sustainability:** Precision farming systems improve environmental sustainability as the natural resources are being continuously monitored, and actions are taken accordingly, before nutrition depletion or drought takes place.
- **Lower cost of production:** Farm mechanization can help in 20-30 per cent savings in time, 20- 30 per cent reduction in manual labour and 10- 15 per cent overall increase in farm productivity.
- **Improving water use efficiency:** Compared with conventional flood or furrow irrigation, modern methods of irrigation like drip and sprinkler irrigation can reduce the volume of water applied to fields by up to 70 percent.
- **Reduce farmer's effort:** Use of GPS technology, drones, robots etc controlled by smart phones etc can make life of farmers easy with good results. These advanced devices will make agriculture be more profitable, easy and environmentally friendly.
- **Improved decision making** through the acquisition and leveraging of granular data about their fields and animals in combination with timely, accurate, and location-specific weather and agronomic data.
- **Climate/ weather prediction:** Drones, remote sensors, and satellites gather 24/7 data on weather patterns in and around the fields, providing farmers with vital information on temperature, rainfall, soil, humidity, etc.

Initiatives taken in India for promotion of technology in agriculture sector

- **Government's free app, Kisan Suvidha,** provides farmers information on current weather, market price, dealer info, plant protection, and more.
- **ISRO's Geo-platform, Bhuvan,** which provides valuable data on the plantation, pest surveillance and weather.
- **Indian Council of Agricultural Research (ICAR) has established a network of Krishi Vigyan Kendras (KVKs)** in the country mandated with Technology Assessment and Demonstration for its Application and Capacity Development (TADA-CD).
  - KVKs organize demonstrations, training programs and skill development programs for the benefit of farmers and farm women, rural youth and in-service extension personnel.
- **e-sagu:** It provide expert suggestions to the farmers. With the use of the internet and audio-visual communication facility, the advice is provided to the farmers regularly regarding the various techniques to increase farm productivity.

Challenges in adopting technology in Agriculture

- **High transaction cost:** Because of small-scale farm structures, poor public infrastructure, and insufficient human capital investments, there are higher transaction costs of providing relevant technological advice and services.
- **Reluctance from Farmers:** It is not easy to convince farmers to invest in tech solutions without overwhelming evidence of an adequate return.
- **Lack of Research & Development (R&D):** Public sector R&D in the country is showing a fatigue and suffering from resource constraint, disciplinary fragmentations, and lack of drive and inspiration.
  - Private sector investment in agri R&D is also low due to nature of IPR regime in the country.
- **Digital divide:** Small and marginal farmers may lack the skills and knowledge to reap the benefits of digital applications. Consequently, the benefits might accrue disproportionately to farmers positioned to take advantage of such opportunities.
- **Unskilled labour:** Digital technologies increase the demand for skilled labor while decreasing it for unskilled labor, so they can exacerbate and perpetuate labor market inequalities and further widen the gender gap in rural areas.

Way forward

- **Strengthen access to foundational data and promote data sharing** by digitizing existing public agriculture records and data on soil quality, weather conditions and pest and disease surveillance.
- **Review regulations that may constrain the adoption of technologies** such as the use of internet of things, drones, and global positioning systems to collect data for precision agriculture.
- **Support digital entrepreneurship ecosystems** which are a key driver behind the increased supply of digital solutions in the agriculture. Adopting e-agriculture strategies, ag-tech start-up policies, regulatory sandboxes to test new technologies are some steps that can be taken.

- **Technology transfer needs effective interactive groups** like Self Help Groups and Farmers Clubs which should become tools of disseminating information about various government sponsored schemes.
- Technologies that are developed and promoted must result not only in increased productivity level but also **ensure that the quality of natural resource base is preserved** and enhanced.
- **Innovative financial arrangements and micro-loans** might be required to increase adoption, which is currently absent.

7.2. COAL BASED HYDROGEN

Why in news?

Recently, the **Ministry of Coal** constituted a **Task Force and Expert Committee** to prepare the roadmap for Coal based Hydrogen production.

More on news

The **broad terms of reference of Task Force** and the **Expert Committee** include:

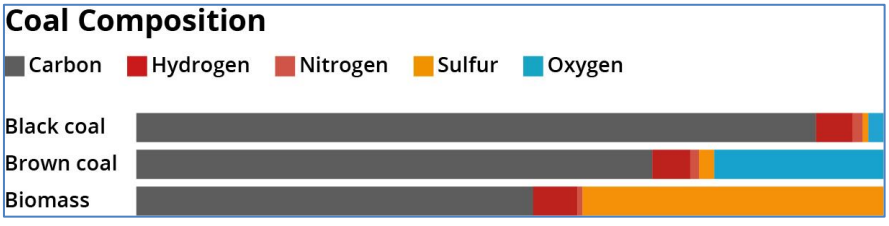
- **Identifying the experts and roles:** Identification of role to be played by each stakeholder Ministry and also the associated experts for co-opting them as members.
- **Monitoring of activities** towards achieving coal-based Hydrogen production and usage.
- Coordinate with **Coal Gasification Mission, NITI Aayog** and other **national/international technology institutions** in hydrogen.
- **Prepare a road map for coal-based Hydrogen production and usage** including economic viability, environmental sustainability and policy enablers required.

Global status of Hydrogen

- At present, the current global demand for hydrogen is **70 million metric tons**, most of which is being produced from fossil fuels– **76% from natural gas** and **23% from coal** and **remaining from the electrolysis of water**.
  - This results in CO2 emissions of around 830Mt/year out of which only 130Mt/year is being captured and used in the fertilizer industry.
- Much of the hydrogen produced is used for **oil refining, ammonia, methanol production, steel production**.

What is Coal based Hydrogen?

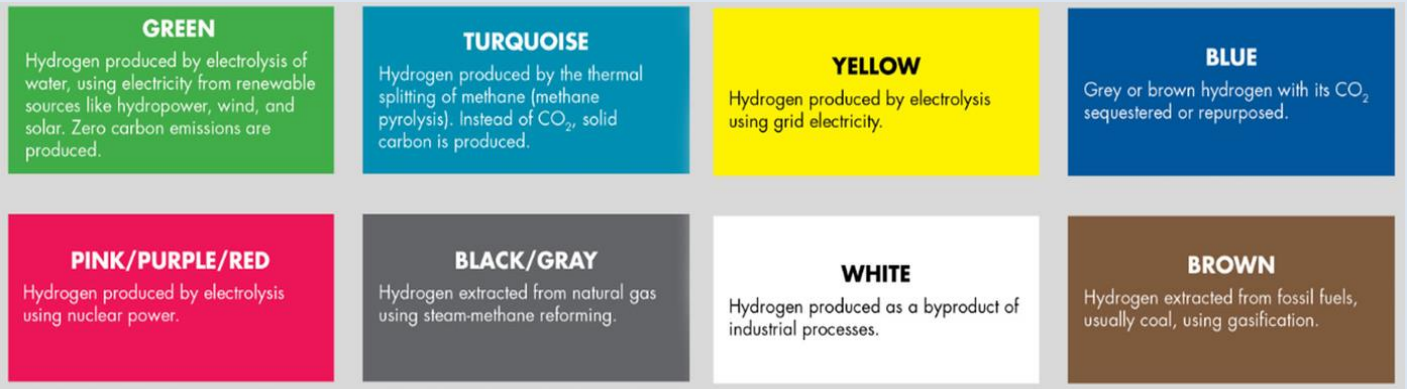
- Hydrogen is considered a secondary source of energy, commonly referred to as an energy carrier. It can be stored physically as a gas or liquid.
- Coal is a **mixture of two components** i.e., **Carbon-based matter** (the decayed remains of prehistoric vegetation), and **Mineral matter** (which comes from the ground from which the coal is dug).
  - The **carbon-based matter** is composed of five main elements i.e., **carbon, hydrogen, oxygen, nitrogen, and sulfur. (Refer infographic)**



- Coal is one of the important sources of **hydrogen making (Brown Hydrogen)** apart from **Natural Gas (Grey hydrogen)** and **renewable energy (Green Hydrogen) through electrolysis**. In case of renewable energy (Green Hydrogen) surplus solar power is used to electrolyze water into hydrogen and oxygen.
- The **global emphasis is on substituting liquid fuels with hydrogen** (as fuel in vehicles), storage of surplus renewable power as hydrogen (as power cannot be stored at a cost effective price), and cutting down emission.

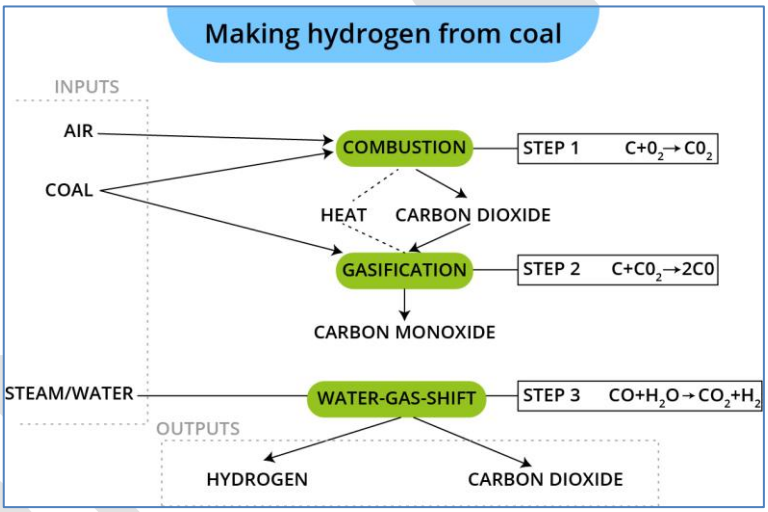
VISION IAS

Types of hydrogen:



How is Coal based Oxygen produced?

The **partial oxidation process** is used to **produce hydrogen from coal**, which means some air is added to the coal, which generates carbon dioxide gas through traditional combustion. **(refer infographic for the process of coal based hydrogen)**



- The **partial oxidation also makes its own gasification agent**, carbon dioxide.
- Carbon dioxide reacts with the rest of the carbon in the coal to form carbon monoxide (this is the **endothermic gasification reaction**, which needs heat input).
- Carbon monoxide in the gas stream is now further reacted with steam, generating hydrogen and carbon dioxide.

How does the picture look for India in this sector?

- In India, Hydrogen demand could **increase 5-fold by 2050**, with use in industry being the major driver.
- In industry, **steel and ammonia will drive growth in hydrogen demand**, followed by refineries and methanol.
- By 2030, costs of hydrogen from renewables will fall more than 50% and will start to compete with hydrogen produced from fossil fuels.
- **Almost 100% of Hydrogen produced in India is through Natural Gas** (Grey Hydrogen).

In this context, pursuing Coal based hydrogen could enable following for India-

Benefits of Coal Based Hydrogen	Challenges of Coal Based Hydrogen
• Since India has the world's fourth-largest coal reserves, **Cost of Hydrogen produced from coal can be cheaper and less sensitive to production** through electrolysis and Natural Gas respectively. • Effective way to **develop clean energy**.	• As current technology hydrogen is made primarily from fossil fuel reformation, this would lead to a **higher rate of carbon dioxide emissions**. • Coal has not been encouraged elsewhere because of the fear that while extracting hydrogen via coal (from the moisture embedded in coal) there may be carbon emission. • Safety and storage problem. • **Issue of building much-needed infrastructure** and developing consumer markets (that is, hydrogen fuel cell vehicles) for a truly clean future fuel.

Road Ahead

The clean hydrogen has the potential to be traded as a new commodity. A lot of work will be required to lay down standards for large-scale use of hydrogen besides framing safety regulations. **India should be proactive in developing and deploying hydrogen technologies,** to indigenize manufacturing and maximize domestic benefits, and introduce penalty on carbon dioxide emission.

7.3. NEWS IN SHORTS

7.3.1. SPACE PROGRAMMES IN NEWS

- **Inspiration4:** It is the first orbital trip where **none of the people aboard is a professional astronaut.**
  - The crew **used a Dragon capsule provided by SpaceX** rocket company.
  - Apart from fundraising for charity, the **mission aims to study the biological effects of deep space on the astronauts' bodies.**
- **NASA's Lucy mission:** It will be the **first space mission to study Jupiter's Trojan asteroids** to gain new insights into the solar system's formation 4.5 billion years ago.
  - Trojan asteroids associated with Jupiter **are thought to be remnants of the primordial material** that formed the outer planets.
  - Trojans **orbit the Sun in two loose groups,** with one group leading ahead of Jupiter in its path, the other trailing behind.

7.3.2. BLUE STRAGGLER

- Indian researchers have carried out the first-ever comprehensive analysis of blue stragglers.
- Blue stragglers are **bigger and bluer star formed when one star eats up another.**
  - These stars are primarily present in the **older and massive star clusters.**
  - More than 54% of blue stragglers are formed through **mass transfer from a close binary companion star**, 30% are likely formed through **collisions of 2 stars**, and 10-16% are formed through **interactions of more than 2 stars.**

7.3.3. HAVANA SYNDROME

- A **US intelligence officer reported symptoms of Havana syndrome** while he was in India earlier this month.
- Havana Syndrome refers to **a set of mental health symptoms that typically involves hearing certain sounds without any outside noise being present**, nausea, vertigo and headaches, memory loss and issues with balance.
  - It was **first reported by officials based in the U.S. embassy in Cuba** in 2016.
- A US National Academy of Sciences panel found that the **most plausible theory is that "directed, pulsed radio frequency energy" causes the syndrome.**

7.3.4. NATIONAL ACTION PLAN FOR DOG MEDIATED RABIES ELIMINATION (NAPRE) LAUNCHED

- Prepared by National Centre for Disease Control, NAPRE targets **to end rabies by 2030 through One health Approach.**
  - Earlier, a National Rabies Control Program was launched during 12th Five-year Plan
- Rabies is a **vaccine-preventable, zoonotic, viral disease.** Once clinical symptoms appear, **rabies is virtually 100% fatal.**
  - In up to 99% of cases, **domestic dogs are responsible for rabies virus transmission to humans.**
  - Rabies is present on all continents, **except Antarctica.**

7.3.5. UNITED IN SCIENCE 2021 REPORT RELEASED

- Report is a **multi-organization compilation** (World Meteorological Organization; United Nations Environment Programme etc.) **of the latest climate science information** and gives a unified assessment of the state of Earth system.
- **Key highlights of the report**
  - **Concentrations of the major greenhouse gases** – carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2 O) **continued to increase in 2020** and the first half of 2021.
  - **CO2 emissions have largely bounced back t**o pre-pandemic levels.
  - An excess of **103 billion potential work hours were lost globally in 2019,** compared to 2000 due to heat-related mortality and work impairment, caused by rising temperatures.
  - **Average global temperature** for the past five years (2017–2021) **was among the highest on record.**
  - **Global mean sea levels rose 20 cm** from 1900 to 2018.
- **Recommendations**
  - Increasing number of countries have committed to net-zero emission goals and about **63% of global emissions are now covered by such goals.**
  - **COVID-19 recovery efforts should be aligned with national climate change** and air quality strategies to reduce risks from compounding and cascading climate hazards, and gain health co-benefits.

7.3.6. MINISTRY OF HEALTH AND FAMILY WELFARE RELEASES 3RD STATE FOOD SAFETY INDEX (SFSI)

- The index was prepared by the Food Safety and Standards Authority of India (FSSAI) **to galvanize States to work towards ensuring safe food for citizens.**
- The index **measures the performance** of States across five parameters of food safety:
  - **Human Resources** like number of Food Safety Officers and Institutional Data (20% weightage);
  - **Compliance** (30%);
  - **Food Testing- Infrastructure and Surveillance** (20%);
  - **Training and Capacity Building** of regulatory staff and laboratory personnel (10%);
  - **Consumer Empowerment** (20%).
- **Initiatives of FSSAI to ensure safety of food**
  - Clean street food hub programme.
  - Digital platform called **Food Safety Compliance System** (FOSCOS).
  - **FSS** (Safe Food and Healthy Diets for School Children) Regulations, 2019 to **ensure wholesome food to school children.**
  - Not allowing food items high in fat, salt and sugar to be sold and advertised within school premises.
  - **Limiting industrial TFA** to not more than 3% in all fats and oils by January 2021 and not more than 2% by January 2022.
  - Food Safety and Standards (Labelling and Display) Regulations, 2020, **prescribing the labelling requirements of pre-packaged foods.**
- **Top states/UT on SFSI Index under its 3 Categories**
  - **Large States:** Gujarat
  - **Small States:** Goa
  - **Union Territories:** Jammu and Kashmir

7.3.7. GOVERNMENT LAUNCHES AYUSHMAN BHARAT DIGITAL MISSION (ABDM)

- ABDM aims to create a **seamless online platform that will enable interoperability within the digital health ecosystem.**
  - Currently, ABDM is being implemented in a pilot phase in six union territories.
- **Key features**
  - **Digital Health ID** for every citizen that will work as their health account, to which personal health records can be linked and viewed through mobile application.
    - ✓ The mission will **enable access and exchange of longitudinal health records (LHR) of citizens with their consent.**
      - LHR is an **electronic medical record of patient health information** generated by one or more encounters in any care delivery setting.
  - **Healthcare Professionals Registry (HPR) and Healthcare Facilities Registries (HFR)** that act as repository of all healthcare providers **across modern and traditional systems of medicine.**
  - **ABDM Sandbox**, will act as **a framework for technology and product testing.**
- **Significance**
  - **Increase ease of living along with simplifying procedures** in hospitals.
  - **Using reliable data provides cost effective and faster treatment** and save patients.
  - **Benefit the poor and middle class**, specifically in finding the right doctor and a hospital.
  - **Ease of doing business for doctors**, hospitals and healthcare service providers.
- **Use of technology for digital health solutions**
  - **ArogyaSetu app** to prevent the spread of corona infection, create awareness, to understand the whole situation and the surrounding areas.
  - **Co-WIN** for administration of free vaccines to all like record creation, certificate download etc.
  - **e-Sanjeevani**, a telemedicine facility providing over 1.25 crore remote consultations.
- **Related News:** Arogya Manthan 3.0 launched to celebrate 3 Years of Ayushman Bharat Yojana.

VISION IAS

8. CULTURE

8.1. ANCIENT TEMPLE OF GUPTA PERIOD

Why in News?

The Archaeological Survey of India (ASI) has found **remains of an ancient temple dating back to the Gupta Period, 5th Century CE in Bilsarh village of Uttar Pradesh's Etah.**

More in News

- Bilsarh has been protected since 1928 and was known as an important Gupta period site.
- Key finding include **two decorative pillars** close to one another, with human figurines and stairs that led to temple engraved **with 'shankhalipi' inscriptions saying, 'Sri Mahendraditya', the title of Kumaragupta I of Gupta dynasty.**
    - The discovery becomes significant since **only two other structural temples from the Gupta age** have been found so far — **Dashavatara Temple (Deogarh) and Bhitargaon Temple (Kanpur Dehat).**
    - The Etah pillars are well-sculpted**, better than the earlier examples in which only the lower sections were carved**. The decorative pillars and staircase are a bit more advanced than the earlier ones.

Kumargupta I

- Kumaragupta I was the **son of Chandragupta II and grandson of the Great Samudragupta of Gupta dynasty**.
- He succeeded Chandragupta II and reigned for 40 years (from c.415 to 455 CE).
- He adopted the title of **Shakraditya** and **Mahendraditya**.
- During his reign **Nalanda University was established.**
- During his reign the Gupta dynasty saw **revolt by Puushyamitra tribe and the invasion of the Huna begin.**
- Kumargupta I successfully defended his kingdom against Huna invasion.

About Gupta period temple architecture

- The Guptas were **the first to build structural temples**, distinctly different from the ancient rock-cut temples.
    - The Gupta Dynasty ruled the North Central India between **the 4th and 6th centuries CE** and is considered **a golden age for arts**.
    - The Dynasty was founded by **Chandragupta I who acceded to the throne in 320 CE**.
- **Key features of Gupta period temple architecture**
    - The **Gupta style was influenced by Kusana, Mathura, and Gandhara** and borrowed the common features of **T-shaped doorways, decorated door jambs, sculpted panels with high-relief figures, and laurel-wreath and acanthus motifs.**
    - These temples were **constructed using sandstone, granite, and brick**.
    - In Gupta architecture, the **square was considered the most perfect form and temples were designed to be appreciated from all sides** so that each carries decorative architectural features.
    - **From the 6th century CE, Gupta temples were built on a platform (*jagati*)** and a good example is the Dashavatara temple at Deogarh in Madhya Pradesh.
    - Gupta temples were **dedicated to a large number of Hindu gods rather than a single deity.**
        - ✓ The doorway to the square sanctuary tower of the **Dashavatara temple is a fine example** and carries **sculpture of Vishnu, Brahma, Indra, Ganga, and Yamuna, as well as attendants and mithuna couples**.

About Shankhalipi script or Shell script

- It is a term used by scholars to describe **ornate spiral characters assumed to be Brahmi derivatives that look like conch shells or shankhas**.
- They are found in inscriptions across north-central India and between **the 4th and 8th centuries**.
- Both Shankhalipi and Brahmi are stylised scripts used primarily for names and signatures.
- The inscriptions consist of a **small number of characters, suggesting that the shell inscriptions are names or auspicious symbols or a combination of the two**.
- The script was **discovered in 1836 in Uttarakhand in Barahat by English scholar James Prinsep**.
    - He was the **founding father of journal of the Asiatic Society of Bengal**.
- Prominent sites with shell inscriptions include the **Mundeshwari Temple in Bihar, the Udayagiri Caves in Madhya Pradesh, Mansar in Maharashtra and some of the cave sites of Gujarat and Maharashtra**.
    - They have also been reported in **Java and Borneo**.

The Gupta temples were of five main types:

1. **Square building with flat roof shallow pillared porch;** as Kankali Devi temple at Tigawa and the Vishnu Varaha temples at Eran. The nucleus of a temple – the sanctum or cella (garbhagriha) – with a single entrance and apporch (Mandapa) appears for the first time here.

2. An elaboration of the first type with the **addition of an ambulatory (paradakshina) around the sanctum** sometimes a second storey; examples the Shiva temple at Bhumara (M.P.) and the lad-khan at Aihole.
   - Another noteworthy example is Pārbati temple at Nachnakuthara (M.P.).

3. **The square temple with a low and squat tower** (shikhara) above; pillared approach, a high Nachnakuthara platform at the base.
   - This temple is in the **panchayatana style of architecture where the main shrine is built on a rectangular plinth with four smaller subsidiary shrines** at the four corners (making it a total number of five shrines, hence the name, panchayatana).
   - Notable examples are the **Dasavatara temple (Deogarh) and the brick temple at Bhitargaon Kanpur.**
   - The most unique achievement of this stage was "Curvilinear tower" i.e. "Shikhara". "Nagara Style" temple making is said to be the success of third stage of temple making.

4. **Rectangular temple with an apsidal back and barrel-vaulted roof** above such as the Kapoteswara temple at Cezarla(Krishna district).

5. **Circular temples with shallow rectangular projection at the four cardinal faces.**
   - The only monument exemplifying the style is the Maniyar Math shrine at Rajgir, Bihar.

8.2. NEWS IN SHORTS

8.2.1. THAPORUNAI RIVER (THAMIRABARANI) CIVILIZATION IN TAMIL NADU DATING BACK 3,200 YEARS (1155 BC)

- **A carbon dating analysis** of rice with soil, found in a **burial urn at Sivakalai** in Thoothukudi district of Tamil Nadu (TN) has yielded the date of 1155 BC.
  - This is the **oldest civilization perhaps, older than the Vaigai civilization** which is believed to be 2,600 years old.
- More archaeological **excavations would be carried** out in other States and countries **in search of Tamil roots**.
  - **States to be covered:** The **ancient port of Muziris**, now known as Pattanam, in Kerala **to establish the ancientness and culture of the Chera empire** along with **Vengi** in Andhra Pradesh, **Thalaikadu** in Karnatakaand **Palur** in Odisha.
  - **Countries to be covered**
    - ✓ **Egypt (**at Quseir al-Qadim and Pernica Anekke) **and Oman** (at **Khor Rori). Potsherds bearing Tamil scripts have been found** in these countries.
    - ✓ **Southeast Asian countries**, such as Indonesia, Thailand, Malaysia and Vietnam, **where King Rajendra Chola had established supremacy.**
- **Significance:** Findings could lead to evidence that **there was a city civilization in south India as long back as 3,200 years ago, the later part of the Indus Valley Civilization.**
- Vaigai Civilization' **is an indigenous, well developed self-sustaining urban culture** with an industry and script, indicating that the people of that era were highly literate.
  - The findings have also **invited comparisons with the Indus Valley Civilization** as several experts points to the **similarities in urban planning between the Indus Valley and Vaigai Civilization**.

8.2.2. PARYUSHAN AND DAS LAKSHAN

- U.S. President extended Paryushan and Das Lakshan wishes to Jain community.
  - These are **festivals for celebrating the qualities and essence of the Soul.**
  - They are marked by **strict observance of the ten cardinal virtues**: Forgiveness, Charity, Simplicity, Contentment, Truthfulness, Self-restraint, Fasting, Detachment, Humility and Continence.
- **Paryushan:** An annual 8-10 days period of fasting and meditation for Jain worshippers observed by Shwetamabar Jains.
- **Das Lakshan:** A 10-day festival that takes place after Paryushana and observed by Digambar Jains.

8.2.3. NATIONAL MISSION ON CULTURAL MAPPING (NMCM)

- Having made little progress since its launch in 2017, **NMCM has now been handed over to Indira Gandhi National Centre for the Arts** (IGNCA).
  - IGNCA will soon start cultural mapping in 75 villages.
- NMCM was set up **to compile data of artists, art forms & geo location** with inputs from Central Ministries, State Governments & art and culture bodies.
- **Three important objectives of NMCM are:** National Cultural Awareness Abhiyan, Nationwide Artist Talent Hunt/Scouting Programme, National Cultural Workplace.

8.2.4. GI TAG TO JUDIMA RICE WINE

- Judima, a **home-made rice wine of Assam's Dimasa tribe** has become the first traditional brew in all of northeast to bag a geographical indication (GI) tag.
  - A GI tag is awarded to products **associated with a specific geographical origin.**
- To produce Judima, Dimasa tribe **uses a glutinous rice called Bora** (indigenous to the region) **and bark of a plant called Thembra** (Acacia pennata) collected from forests surrounding the region.
- **Some other registered GI tagged products from Assam:** Muga Silk, Joha Rice, Tezpur Litchi

8.2.5. MEENAKARI

- Prime Minister has gifted 'Meenakari' chess set to US Vice President.
- **About Meenakari**
  - It is the **process of painting and coloring the surfaces of metals and ceramics through enameling.**
  - It usually involves intricate designs and is applied as a decorative feature to **serving dishes, containers, vases, frames, display ornaments and jewelry**.
  - It was **introduced to India by the Mughals**. **Raja Man Singh of Mewar is regarded as the patron** of the meenakari art in 16th century Jaipur.

9. ETHICS

9.1. MEDIA ETHICS: EXAMINING THE FOUNDATION OF THE FOURTH PILLAR OF DEMOCRACY

Introduction

Recently, the Chief Justice of India N.V. Ramana said- "certain sections of the media communalized everything, and this would ultimately result in giving the country a bad name." The statement brings light to the ethical issues prevalent in the profession of media and indirectly ignites a question- "If the prevalent times are unethical, what is ethical then and how do we reach there?"

What is media ethics and why is it important?

In the context of the media, "Ethics" may be described as **self-restraint** to be practiced by the journalists voluntarily, to **preserve and promote the trust of the people** and to **maintain their own credibility** and not betray the faith and confidence of the people.

To uphold this idea of media ethics, all people involved in media have to adhere to the following principles in some form or the other-

- **Seek Truth and Report It:** It is the moral responsibility of the media entity to find out the truth as far as possible and report it in an accurate, fair and courageous manner.
  - For example, while reporting a crime, it is important to understand both sides of the story and report the same without bias or prejudice.
- **Minimize Harm:** It implies treating sources, subjects, colleagues and members of the public as human beings deserving of respect.
  - A direct corollary of minimizing harm is to protect the privacy of the people involved and adhering to the general standards of taste and decency.
- **Act Independently:** Actions of a journalist cannot be based on fear or favour. They not only have to be independent but should also be perceived as independent to maintain credibility.
  - This translates to refusing gifts, favours, fees, free travel and special treatment, and avoiding political and other outside activities that may compromise integrity or impartiality.
- **Be Accountable and Transparent:** This involves explaining or indicating ethical choices or processes to audiences, responding quickly to questions on accuracy and clarity and exposing any prevalent unethical practice in a media organization.
  - This implies that media organizations are open to criticism and scrutiny and at the same time take responsibility for their actions.

The ability of journalists to adhere to these ethical norms depends heavily on a constellation of often competing interests and forces they cannot control, including government interference, economic realities and technical limitations. This leads to circumstances where these non-adherence to these principles creates ethical issues.

What are the ethical issues prevailing in the context of media in India?

- **Sensationalization of stories:** Sensationalism is when news sources prioritize exciting or shocking stories at the expense of accuracy. This takes place in the form of misleading or excitable headlines or clickbait in the digital domain.
- **Commercialization of media:** It has not only increased the tendencies of sensationalization of news and yellow journalism, but has created an associated ill of paid news.
  - In a recent seminar the former Chief Election Commissioner (EC), SY Quraishi, revealed that the EC had identified 371 cases of paid news in the lead-up to the state elections.
- **Use of insensitive or hateful language:** The use of discriminatory or hateful language is antithetical to the idea of minimizing harm while reporting. Also, the use of insensitive language could harm the people involved and normalize the use of such language in public parlance.
  - A corollary of use of inappropriate language is the poor quality of debate and discussion that it generates.
- **Irresponsible reporting:** There have been several cases of irresponsible reporting where the reportage has interfered with court proceedings or delicate security situations. For example, the same was seen in the reporting of '26/11 terror attack', which to leakage to sensitive information.
- **Violating Right to privacy:** This includes extraction of personal information not available in the public domain without consent, using covert surveillance techniques such as phone hacking and thus creating a story at the expense of rights of the people involved.
  - Violation of the Right to Privacy in combination with the ills of sensationalization, misleading language and irresponsible reporting could create a situation of media trials.
- **Media-politician-corporate nexus:** The Radia tapes, conversations recorded by revenue authorities between corporate lobbyist Niira Radia and a number of senior journalists and leading politicians, highlight the prevalent nexus. This raises questions on media's integrity, its accountability towards people and transparency.

Apart from these issues, the **emergence of Digital Media** has also elicited some ethical issues. This includes faster spreading of rumors, fake news, and creation of an environment of post-truth. These issues become all the more difficult with the prevalence of anonymity in this form of media.

Ethics of digital media: The era of influencers

The internet encourages new forms of **journalism that are interactive, immediate and "always on".** Anybody who has the reach and ability to share content indirectly becomes a part of the media. This includes online journalism, blogging, digital photojournalism, citizen journalism and social media.

In this context, digital influencers are in a unique position to shape public opinion. When influencers with the network of their massive followers **convey content on socially significant matters**, they **greatly shape the conversations ordinary people** eventually carry out.

In the age of social media which is fractured by disinformation and hate, the **influencers provide people with islands of trust and relatability.** As guardians of this trust, the influencers have the change lives but at the same time, they have the responsibility to safeguard collective good in their actions.

How these issues impact the society in which they prevail?

With the advent '24x7 news' and prevalence of an array of news sources across the board, the media is omnipresent in nature. Thus, media plays a significant role in shaping the opinion of people and how they perceive the world around them. The omnipresent nature of media also discourages critical thinking by continuous bombardment of opiniated content.

The level of influence and prevalent ethical issues impact society in following ways-

- **Creating a misinformed society:** Issues like fake news, sensationalization of news and the distrust that the populace starts associating with the media results in creation of a misinformed citizen and thus a misinformed society.
  - When the primary sources of media provide a misinformed picture, it creates a scenario where there is depravation of significant information among the citizens.

- **Encouraging the attitude of indifference:** When the news reported by reputed sources of media gets frequently corrected, it degrades their credibility. This results in development of a general attitude of indifference towards reported events on part of the citizen.
- **Crowding out the real issues:** Increasing tendencies of commercialization of media leads to prioritization of entertaining news over real issues. This creates a scenario where a general citizen remains oblivious to many socially significant issues.
    - Crowding out real issues sidelines the developments in key areas like national growth, position in Human Development Index (HDI) etc.
- **Propagating fear and anxiety:** Overhyping the reported content and cherry-picking of stories projects a twisted image of reality. This creates an atmosphere of fear and results more anxious and defensive behavior from citizens.
    - This behavior of the collective media was brazenly showcased during the distressed COVID times with actions like 'reporting of live footage from crematorium.'
- **Encourage the idea of 'otherization':** Any discriminatory reports or language used by the media creates divisions within the society. This propagates the ideology of 'otherization' leading to divisions on the basis of religion, caste, ethnicity or region.
    - The propagation of 'otherization' is all the more significant on impressionable minds such as of children. It hinders the development of ideas like national fraternity or a brotherhood based on humanity.

The deep-seated impact that media has on citizens amplifies the ethical issues in media. But at the same time, if these issues are appropriately addressed, this amplified impact could be tilted in a positive direction.

What can be done to strengthen the role of ethics in media?

There have been several reports and recommendations (including UK's Leveson Report) to address this question. The essence of which can be conveyed through following ideas-

- **Independent Self-regulatory body:** This states the idea of an internal mechanism such as 'letters to the editor', internal Ombudsman, Media Council of peers and Media Watch Groups which focus the wrongs committed by the media persons, journalists or the management.
    - The Leveson report suggests that the same can be provided a legislative backing.
- **Creating discourse on ethics in digital media:** Media ethics needs to be rethought and reinvented for the media of today. Creating awareness regarding responsibilities of persons acting as sources of digital media and at the same time, sensitization of consumers on how to effectively use digital media.
- **User driven financial model:** The current advertisement based model encourages financial engagement between media houses and potential investors like corporates and political fraternity. This model can be shifted to a user driven model where the user will finance the media house in lieu of the information and service that they get.
- **Using technology to our advantage:** Advent of technologies such as Artificial Intelligence and Blockchain could revolutionize the currently used processes. For example, a combination of the two can be used to verify real-time the authenticity of a given news item.
- **Creating space for innovation in media:** As the mediums have become diverse and occupations have become fluid, several new-age journalistic areas could be encouraged like photojournalism, entrepreneurial not-for-profit journalism etc.
- **Encouraging a central role for the civil society:** The advent of digital media has effectively led to 'democratization' of media. This demands that civil society plays an integral role in regulation, supervision and also creation of media content.

"The sole aim of journalism should be service. The newspaper press is a great power; but just as unchained torrent of water submerges the whole countryside and devastates crops, even so an uncontrolled pen serves but to destroy. If the control is from without, it proves more poisonous than want of control. It can be profitable only when exercised from within". - ***Mahatma Gandhi***

10. GOVERNMENT SCHEMES IN NEWS

10.1. NATIONAL SCHEME FOR PM POSHAN SHAKTI NIRMAN

Why in news?

The existing Mid-Day Meal scheme, which provides hot meals to students, will be renamed as the **National Scheme for PM Poshan Shakti Nirman or PM POSHAN scheme**

Objective	Salient Features

• **Ensure holistic nutrition for students** of government and government-aided schools across India.
  ○ Under the previous scheme, the focus was on providing a meal to students but now, under PM POSHAN, the focus is to ensure the nutritional aspects as well.
• To **tackle malnutrition and provide cooked meal** to children.
	• PM POSHAN, a **Centrally Sponsored Scheme**, has been launched for a **period of five years, from 2021-22 to 2025-26,** with a budget of Rs 1,30,794.90 crore.
	  ○ The **Centre bears the entire cost of food grains and their transportation,** management, monitoring and evaluation under the scheme, components such as cooking costs, payments to cooks and workers are split in a 60:40 ratio with states.
	• **Coverage**
	  ○ It will **benefit 11.80 crore children studying in 11.20 lakh schools across the country**.
	  ○ Under the scheme, **midday meals have been extended to children of Balvatika in addition to children studying in classes 1 to 8 in government and government-aided schools** in the country.
	  ✓ Around, 24 lakh more children in pre-primary classes, currently covered under the ICDS, will also be brought in.
	  ▪ Last year, the government had **opened pre-schools called Balvatikas attached to Angandwadis**.
	  ✓ The extension of mid-day meals to pre-primary students, who are to be incorporated into the formal education system, was a key recommendation of the National Education Policy 2020
	• **Vocal for Local for Atmanirbhar Bharat**
	  ○ To support **Vocal4Local** and fulfill the objectives of the Atmanirbhar Bharat initiative, PM POSHAN will **involve Farmer Producer Organizations (FPO) and Women Self Help Groups** in the implementation of the scheme.
	• **Social Audit**
	  ○ **Social audits will be made mandatory for each school in every district** to oversee and check implementation of the scheme.
	  ○ It would **engage university and college students to monitor implementation of the scheme through field visits**.
	• **Supplementary Nutrition**
	  ○ The focus is to ensure the nutritional aspects as well. **States or districts having high prevalence of anemia can include any supplementary item**.
	  ○ Similarly, if states want to **include their local vegetable or any other nutritional food** or anything else such as milk or fruit, they can do so with the Centre's approval. However, it should fall within the allocated budget.
	• **Nutritional Garden**
	  ○ It will **promote the development of nutrition gardens in schools**.
	  ○ The harvest of these **gardens will be used to provide additional micro-nutrients** to students.
	  ○ Schools will also be encouraged to organize cooking competitions to promote ethnic cuisine and innovative menus based on locally available ingredients and vegetables.
	• **Tithi Bhojan**
	  ○ It has also included **the concept of 'Tithi Bhojan' wherein students from private schools will be encouraged to share their meals with children from marginalized sections at least once in a month on a voluntary basis**.
	  ○ States will also be asked to **organize community programmes in which people provide special food to children**.

10.2. PRADHAN MANTRI UJJWALA YOJANA

Why in news?

Recently, government announced that under Pradhan Mantri Ujjwala Yojana, migrant workers can avail a free cooking gas connection on the basis of a self-declaration without any need for documents like address proof.

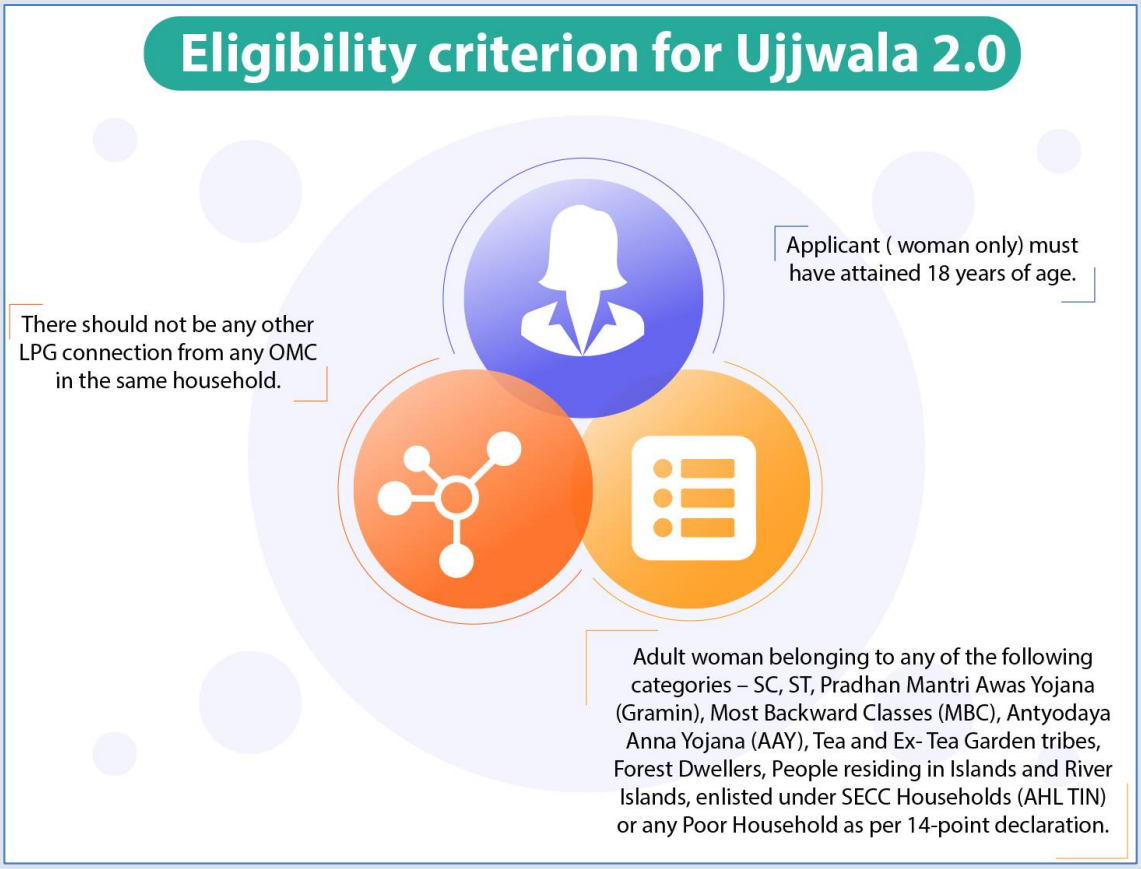
<table>
<tr><th>Objectives</th><th>Salient Features</th></tr>
<tr>
<td>

Launched in 2016 to provide free LPG connections to women from BPL households (scope extended now to cover all the poor households of the country).
To provide clean fuel to women.
To prevent health related issues among the millions of rural populations due to use of fossil fuel.
To promote women empowerment.

</td>
<td>

It is under Ministry of Petroleum and Natural Gas.
Earlier, the target under the scheme was to release 8 Crore LPG Connections to the deprived households by March 2020.

Under the Union Budget for FY 21-22, provision for release of additional 1 Crore LPG connections under the PMUY scheme has been made.



Ujjwala 2.0 will provide first refill and stove free of cost to the beneficiaries.
PMUY connection can be released in the name of adult female member of the Poor household only, subject to the condition that no LPG connection exists in the name of any family member of the household.
In this phase, special facility has been given to migrant families.

In case a family member with her wife moved to other town where he is employed, PMUY connection can be released at new place of migration subject to the KYC meeting the eligibility criteria of UJJWALA 2.0.
The connection will be released in the name of the female adult member only.

The women applicant should have a saving bank account in any nationalized bank across the country to receive subsidy amount.
It is mandatory to collect Aadhar for all adult family members as per the age in ration card.
Applicant can choose between 14.2 kg single cylinder or 5 kg Single Cylinder or 5 Kg Double cylinder connection.

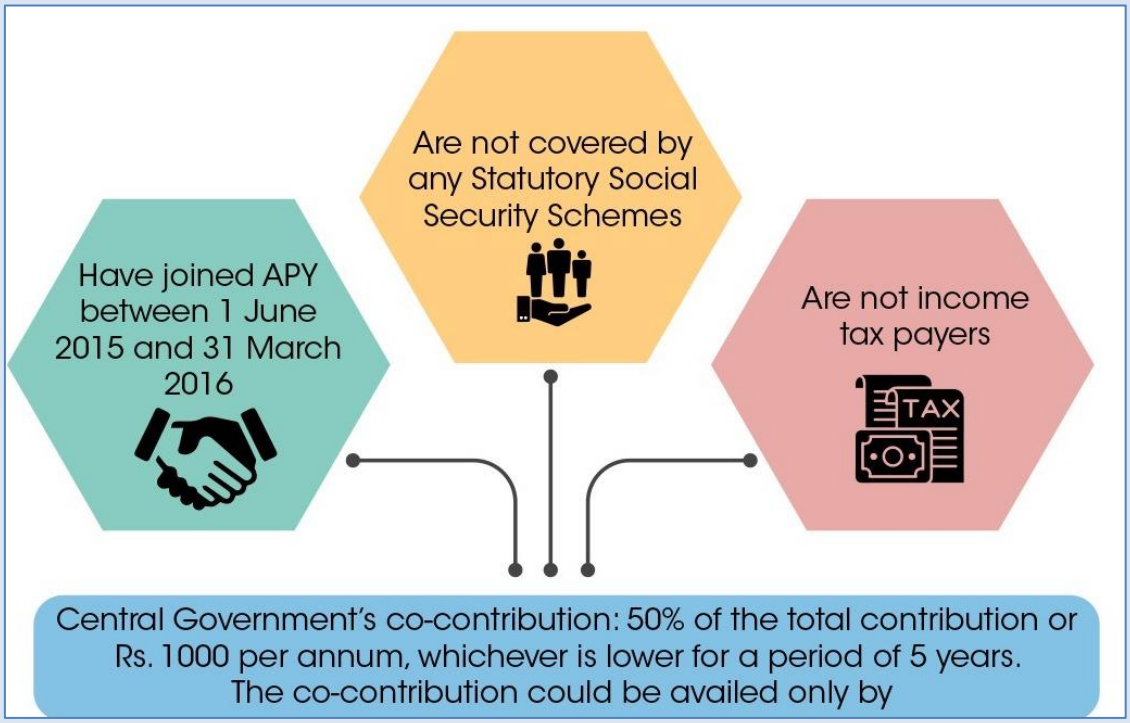
</td>
</tr>
</table>

10.3. ATAL PENSION YOJANA

Why in news?

According to annual report of the National Pension Systems Trust (NPS Trust), out of 4.2 crore National Pension System (NPS) subscribers, over **66% or 2.8 crore opted for the Atal Pension Yojana at the end of 2020-21.**

Objective	Salient Features

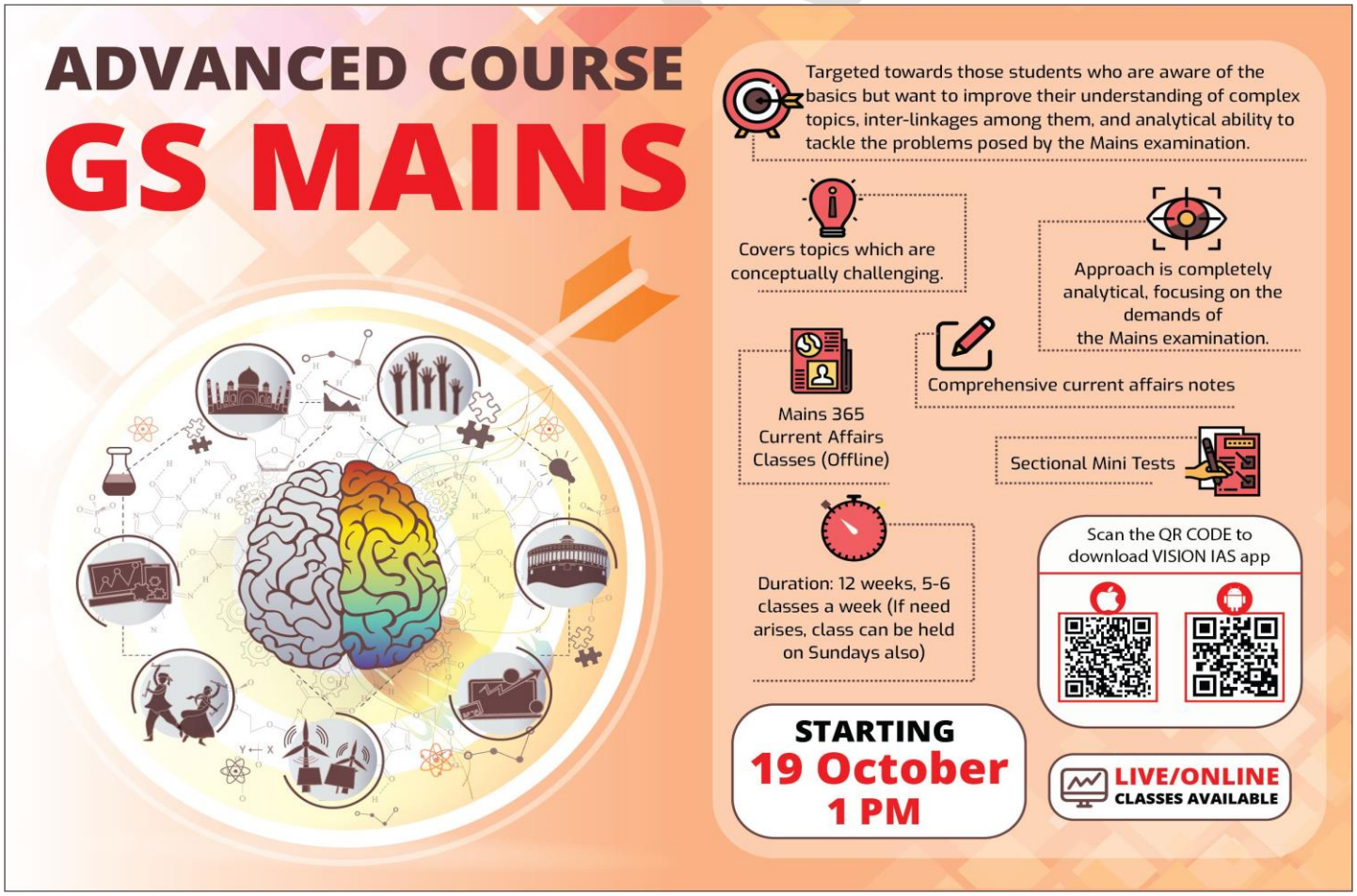
• The subscribers would receive the **fixed minimum pension at the age of 60 years,** depending on their contributions.	• It is administered by **Pension Fund Regulatory and Development Authority through National Pension System (NPS)**.
	• **Any Citizen of India can join APY scheme**. The following are the eligibility criteria,
	  ○ The age of the **subscriber should be between 18 - 40 years**.
	  ○ He / She **should have a savings bank account**.
	• The **minimum period of contribution** by any subscriber under APY is 20 **years.**
	• Subscribers can make **contributions to APY on monthly/ quarterly / half-yearly basis.**
	  ○ The contribution levels would vary and would be low if subscriber joins early and increase if it joins late.
	  ○ **In case of premature death of subscriber** (death before 60 years of age), **spouse of the subscriber can continue contribution to APY account** of the subscriber, for the remaining vesting period, till the original subscriber would have attained the age of 60 years.
	 
	
	• Subscribers would receive the guaranteed minimum monthly pension of **Rs. 1000 or Rs. 2000 or Rs. 3000 or Rs. 4000 or Rs. 5000 at the age of 60 years**.
	  ○ The same pension is **payable to Spouse after death of Subscriber.**
	  ○ Return of indicative pension wealth to nominees after death of spouse.
	• **Contributions to the Atal Pension Yojana (APY) are eligible for tax benefits similar to the National Pension System (NPS).**
	  ○ The tax benefits include the additional deduction of Rs 50,000 under section 80CCD (1).

10.4. PRODUCTION LINKED INCENTIVE (PLI) SCHEME FOR AUTO, DRONE INDUSTRIES

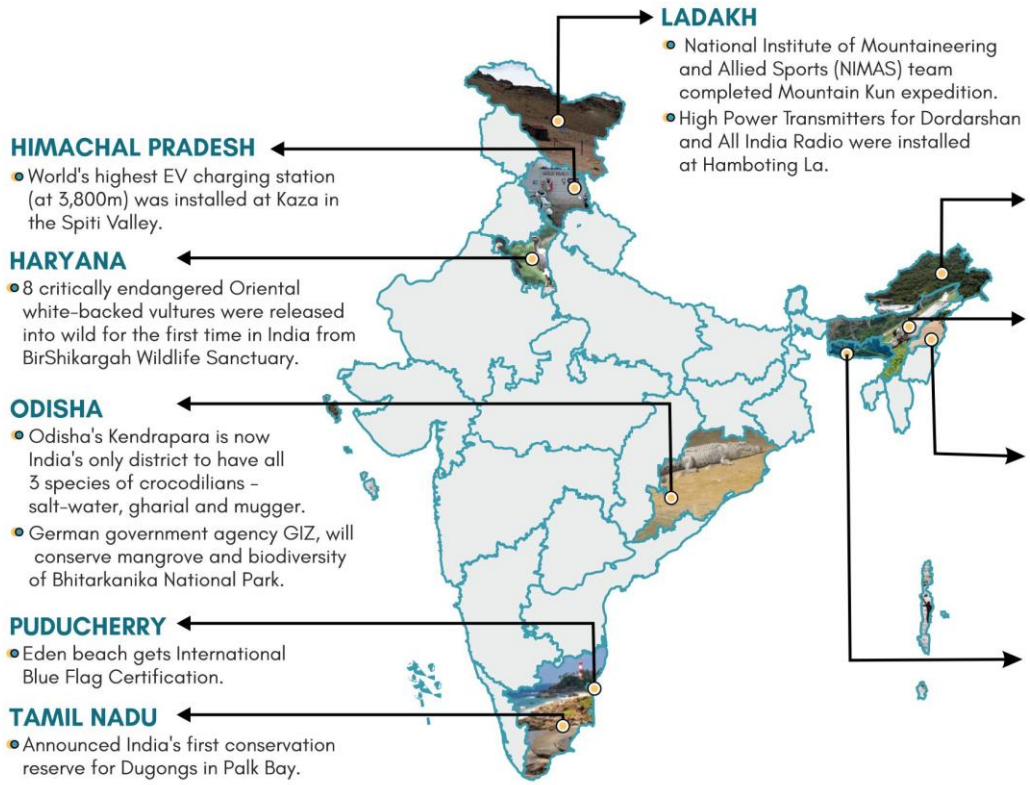
Why in news?

Cabinet recently approved Rs. 26,058 crore production linked incentive (PLI) scheme for auto, drone industries.

Specification	PLI for Auto industries	PLI for Drone industries
Duration	• 5 years	• **3 years**
Objective	• **Overcoming the cost disabilities** to the industry for the manufacture of **advanced automotive technology products in India.**	• Addressing the **strategic, tactical and operational uses** of this revolutionary technology.
Eligible participants	• **Existing** automotive companies as well as new investors **who are currently not in automobile or auto component** manufacturing business.	• The minimum value addition norm is at 40% of net sales with eligibility as: ○ **MSME and Startups:** Annual sales turnover of **₹ 2 crore** (for drones) and **₹ 50 lakh** (for drone components) ○ **Non-MSME companies:** Annual sales turnover of **₹ 4 crore** (for drones) and **₹ 1 crore** (for drone components)
Other features	• **Two components** ○ **Champion OEM Incentive Scheme** ('applicable on Battery Electric Vehicles and Hydrogen Fuel Cell Vehicles of all segments) ○ **Component Champion Incentive Scheme** (Advanced Automotive Technology components of vehicles, Completely Knocked Down (CKD) etc.).	• The **list of eligible components may be expanded** by the Government. • **Developers of drone-related IT products are also covered** for the incentive.



Places in News: India



LADAKH
- National Institute of Mountaineering and Allied Sports (NIMAS) team completed Mountain Kun expedition.
- High Power Transmitters for Dordarshan and All India Radio were installed at Hamboting La.

HIMACHAL PRADESH
- World's highest EV charging station (at 3,800m) was installed at Kaza in the Spiti Valley.

HARYANA
- 8 critically endangered Oriental white-backed vultures were released into wild for the first time in India from BirShikargah Wildlife Sanctuary.

ODISHA
- Odisha's Kendrapara is now India's only district to have all 3 species of crocodilians – salt-water, gharial and mugger.
- German government agency GIZ, will conserve mangrove and biodiversity of Bhitarkanika National Park.

PUDUCHERRY
- Eden beach gets International Blue Flag Certification.

TAMIL NADU
- Announced India's first conservation reserve for Dugongs in Palk Bay.
- Kovalam beach gets International Blue Flag Certification.

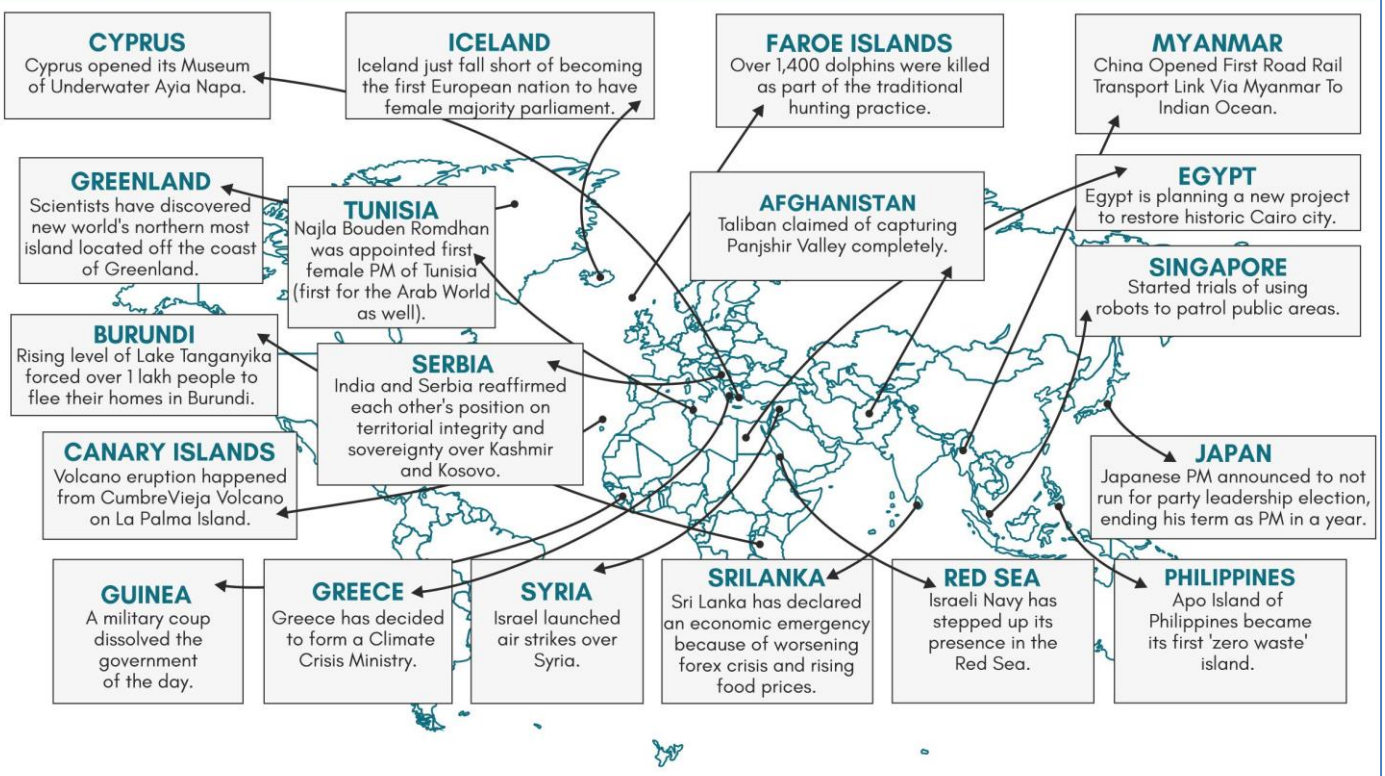
ARUNACHAL PRADESH
- Development of Parshuram Kund was sanctioned under PRASHAD Scheme.

ASSAM
- Assam removes Rajiv Gandhi name from Orang National Park.
- A tripartite agreement among was signed to end Karbi Anglong unrest.

NAGALAND
- River Bhogdoi faces encroachments and waste discharge from tea estates.
- Government enters into Ceasefire Agreement with National Socialist Council of Nagaland (K) Group.

MEGHALAYA
- Meghalaya's Kongthong village, also known as the 'Whistling village', nominated for the World Tourism Organization's "Best Tourism Villages" award

Places in News: World



CYPRUS
Cyprus opened its Museum of Underwater Ayia Napa.

ICELAND
Iceland just fall short of becoming the first European nation to have female majority parliament.

FAROE ISLANDS
Over 1,400 dolphins were killed as part of the traditional hunting practice.

MYANMAR
China Opened First Road Rail Transport Link Via Myanmar To Indian Ocean.

GREENLAND
Scientists have discovered new world's northern most island located off the coast of Greenland.

TUNISIA
Najla Bouden Romdhan was appointed first female PM of Tunisia (first for the Arab World as well).

AFGHANISTAN
Taliban claimed of capturing Panjshir Valley completely.

EGYPT
Egypt is planning a new project to restore historic Cairo city.

SINGAPORE
Started trials of using robots to patrol public areas.

BURUNDI
Rising level of Lake Tanganyika forced over 1 lakh people to flee their homes in Burundi.

SERBIA
India and Serbia reaffirmed each other's position on territorial integrity and sovereignty over Kashmir and Kosovo.

CANARY ISLANDS
Volcano eruption happened from CumbreVieja Volcano on La Palma Island.

JAPAN
Japanese PM announced to not run for party leadership election, ending his term as PM in a year.

GUINEA
A military coup dissolved the government of the day.

GREECE
Greece has decided to form a Climate Crisis Ministry.

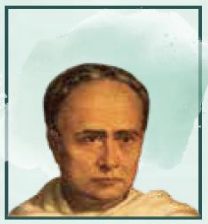
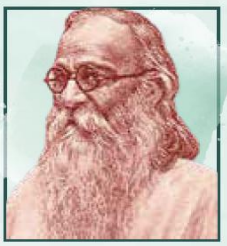
SYRIA
Israel launched air strikes over Syria.

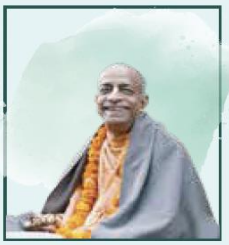
SRILANKA
Sri Lanka has declared an economic emergency because of worsening forex crisis and rising food prices.

RED SEA
Israeli Navy has stepped up its presence in the Red Sea.

PHILIPPINES
Apo Island of Philippines became its first 'zero waste' island.

Personalities in News

Personality	About	Ethical Values exhibited by the personality
Jaidev	➤ Ministry of Culture has launched the book **"Gita Govinda: Jaydeva's Divine Odyssey"** along with an exhibition on "Gita Govinda". ➤ He was 12th century Indian author of the Sanskrit poem 'Gita Govinda' and the **sole devotee to Lord Sri Krishna or Lord Jagannath of Puri Dham, Orissa.** ➤ **Gita Govinda** describes the touching **love story of Krishna** (incarnation of the Hindu God Vishnu) and the shepherd girl Radha. ➤ It is considered an important text in Bhakti movement of Hinduism.	➤ **Devotion** ➤ He was a gifted poet who evoked the divine while describing the story of lord Krishna, a key act of devotion in the Hindu tradition.
Florence Nightingale	➤ The **Indian Nursing Council**, a statutory body under the Ministry of Health and Family Welfare, **grants the Florence Nightingale Award to recognise the contribution of health-care workers.** ➤ Florence Nightingale known as **"The Lady With the Lamp,"** was a British nurse, social reformer and statistician best known as the founder of modern nursing. ➤ **International Nurses Day is celebrated** around the world every May 12, **the anniversary of Florence Nightingale's birth.**	➤ **Philanthropy and Compassion** ➤ From a very young age, Florence Nightingale was active in philanthropy, ministering to the ill and poor people in the village neighbouring her family's estate ➤ She tirelessly devoted her life to preventing disease and ensuring safe and compassionate treatment for the poor and the suffering.
 Ishwar Chandra Vidyasagar	➤ He was an **educator and social reformer** and is considered as one of the **pillars of Bengal renaissance.** ➤ He initiated the concept of **widow remarriage,** raised concern for the **abolition of child-marriage and polygamy** and also worked towards **education of lower caste students** ➤ He was associated with publications like **'Tattwa bodhi Patrika', 'Somprakash', 'Sarba shubhankari Patrika' and 'Hindu Patriot'.** ➤ His works include **Barno-Porichoy** (Introduction to the letter), **Betaal Panchavinsati, Banglarltihaas, Jivan charita, Shakuntala,** Mahabharata, Seetar Vanavas, Ratnopariksha etc.	➤ **Vision and Social reform** ➤ He was far ahead of his time and made it his life's mission to break the caste barrier in education in colonial Bengal, fight child marriage, and challenge the deep stigma surrounding widows. ➤ Vidyasagar, along with other reformers, opened many schools for women across Bengal. He used his own income to open 35 schools and was able to enrol 1,300 students.
Madam Bhikaji Cama	➤ Indian political activist and advocate for women's rights – she mobilized public opinion against British rule in India, especially among expatriate Indians. ➤ Had the unique distinction of **unfurling the first version of the Indian national flag,** a tricolour of green, saffron, and red stripes, at **International Socialist Congress held at Stuttgart, Germany, in 1907.** ➤ She helped **Lala Har Dayal launch his revolutionary paper Bande Mataram.** ➤ Influenced by Christabel Pankhurst and the Suffragette movement, Bhikhaiji Cama was vehement in her support for gender equality.	➤ **Patriotic and Indomitable spirit** ➤ Bhikaji was a nationalist at heart and believed that the Britishers had ruthlessly exploited India for their own profit. ➤ Unshaken by the difficulties thrown by British government, she continued to maintain active contacts with Indian, Irish, and Egyptian revolutionaries as well as with French Socialists and Russian leadership for the cause of freedom struggle.
 Dr.Bhagwan Das	➤ He was an Indian **Theosophist.** ➤ In 1921, he was sentenced to **one-year imprisonment by the British for association with the Non-Cooperative Movement.** ➤ He was the **founder of the Kashi Vidyapeeth.** ➤ Kashi Vidya Peeth is the first Indian University founded by Indians. ➤ In 1955, he was awarded the Bharat Ratna, India's highest civilian award for his achievements in literature and education.	➤ **Nationalist and Progressive** ➤ Das was a very active supporter of Indian nationalism and freedom from British rule. ➤ He believed in power of education in bringing social progress and founded one of the first Universities in the country.

Personality	About	Ethical Values exhibited by the personality
 Subramania Bharati	➤ He was a pioneer of modern Tamil poetry, **fondly called Mahakavi** (great poet). ➤ **Raja of Ettayapuram, impressed with his poetry, had given him the title of** 'Bharati' which means the one blessed by Goddess Saraswati. ➤ He had **proficiency in 14 languages** including three foreign languages. ➤ He used his writings to **imbibe feelings of national pride** among Indian citizens. ➤ He **raised concern against child marriage, stood for reforming Brahminism and religion.** He was also in solidarity with Dalits and Muslims. ➤ His motto was "Ariveluthellivu" – clarity of mind.	➤ **Genius and Egalitarian** ➤ He was a literary genius and wrote about every complex social, political, or philosophical issue that existed then. ➤ His writings reveal a visionary poet deeply preoccupied with the realisation of a just and joyful human society. He rejected British colonialism as an affront to human dignity; but he was equally critical of the oppressive conventions of his own society.
 Madan Lal Dhingra	➤ Madan Lal Dhingra's martyrdom day observed at the Town Hall in Amritsar. On this day, in 1909, he was **executed at the age of 26 in London for assassinating a British official Sir William Hutt Curzon Wyllie.** He had gone to **attain higher education in England.** ➤ He was **pained over the partition of Bengal in 1905** and came in contact with other revolutionaries like Vinayak Damodar Savarkar, Shyam ji Krishna Varma.	➤ **Patriotism and Courage** ➤ He continued the trend of sacrificing one's life for the cause of nationhood. ➤ At the very young age, he decided to make British government hear by assassinating a British official. During trial, he did not defend himself.
 Acharya Vinoba Bhave	➤ He is remembered as a great scholar-saint. He was a 20th-century **Gandhian thinker who advocated for non-violence and human rights.** ➤ He was inspired by Mahatma Gandhi's speech at the Benaras College during the freedom struggle. ➤ He is best known for the **Bhoodan Movement or 'Bloodless Revolution', a voluntary land reform movement at the Pochampally village, in Telangana.** ➤ **Publications:** Geeta Pravachane; Teesri Shakti; Swarajya Shastra; Bhoodan Ganga; Moved by Love. ➤ Vinoba Bhabe was the **first international figure to receive the Ramon Magsaysay Award in 1958. He was awarded Bharat Ratna posthumously in 1983.**	➤ **Communitarianism and Social equality** ➤ To preserve the solidarity of village communities, he envisioned and started the land donation movement called Bhoodan. The movement attracted admiration from all over the world and was commended for being the only experiment of his kind to incite voluntary social justice. ➤ Vinoba Bhave worked tirelessly towards eradicating social evils like inequality. He dedicated his life to serve the poor and the downtrodden, and stood up for their rights.
 **Srila Bhaktivedanta Swami Prabhupada**	➤ A **special commemorative Rs. 125 coin** will be released by the Indian Prime Minister on the occasion of the **125th birth anniversary.** ➤ In 1959, he took a vow of renunciation (sannyasa) and started writing commentaries on **Vaishnava scriptures.** ➤ He became **prominent communicator of Gaudiya Vaishnava (school of Hinduism)** theology to India and especially to the West through his leadership of ISKCON, founded in 1966. ➤ ISKCON (International Society for Krishna Consciousness) is commonly known as the **"Hare Krishna movement".** ➤ The focus of Gaudiya Vaishnavism is the **devotional worship (bhakti yoga)** of Radha and Krishna.	➤ **Spiritualism and devotion** ➤ By establishing international centres for spiritual training, he brought teachings of story of Lord Krishna to other corners of the world. ➤ As an author he wrote over 70 volumes on the tradition of Krishna devotion, which ishighly respected by scholars for depth and clarity.
 Bhagat Singh	➤ He was a revolutionary leader who **believed in socialist, secular and democratic India.**He was inspired by the Bolshevik Revolution. ➤ In 1924, he **became a member of Hindustan Republican Association (HRA).** Later Bhagat Singh renamed HRA to Hindustan Socialist Republic Association (HSRA). ➤ In 1926,he **started a youth organization called Naujawan Bharat Sabha.** ➤ He, along with Batukeshwar Dutt, **threw bombs in Central legislative assembly.** ➤ He, along with Rajguru and Sukhdev ,was **sentenced to death for Lahore conspiracy Case.** ➤ He also wrote an essay **Why I am an Atheist.**	➤ **Patriotism, Courage and Socialism** ➤ Being a freedom fighter, he stood for **patriotic values and socialism.** ➤ He furthered the goals of freedom movement by his **revolutionary thinking and courageous acts.** He was arrested and given death penalty by Britishers for his revolutionary zeal to oppose them.

Personality	About	Ethical Values exhibited by the personality
Ramdhari Singh Dinkar	➤ One of the **most significant modern Hindi poets.** ➤ **Hailed as a Rashtrakavi** (**"national poet"**) on account of his inspiring patriotic compositions in the days before Indian independence. ➤ His works are **mostly of Veer Rasa, or the ' brave mode'** ➤ He used to **call himself a "Bad Gandhian"** because he supported the feelings of indignation and revenge among the youth. ➤ **Elected three times to the Rajya Sabha** and was also a **Padma Bhushan awardee.**	➤ **Nationalism and Humanism** ➤ As a poet, most of his work extolls the virtues of bravery and patriotism. They were widely read and appreciated by political and social leaders for their essence. ➤ As a humanist poet, he always chose to write on social realities and resultant pain of the dominated section of people.
Pandit Deendayal Upadhyay	➤ Born in Uttar Pradesh, he was a **Rashtriya Swayam sevak Sangh thinker and co-founder of the Bharatiya Jana Sangh.** ➤ He conceived the **political philosophy ' Integral Humanism',** which advocates the simultaneous and integrated program of the body, mind and intellect and soul of each human being. ➤ In the 1940s, he started the **monthly ' Rashtra Dharma'** publication. He also started a **weekly magazine 'Panchjanya' and a daily 'Swadesh'.** ➤ **Books:** He authored Samrat Chandragupta, Jagatguru Sankaracharya, Akhand Bharat Kyon? Rashtra Chintan, etc.	➤ **Integral Humanism and Social reform** ➤ He is best remembered for his principle of "integral humanism", which has been defined as "a classless, casteless and conflict-free social order". It talks about the integration of indigenous "Indian culture" with the social, political and economic fabric of the nation. ➤ He believed in the idea of democracy and as a volunteer worked for social upliftment of suppressed class of people.
Manorama Mohapatra	➤ She was an **eminent litterateur, social worker and former editor of 'Odia daily'.** She was the **face of women empowerment in Odisha.** ➤ She won the **Sahitya Academy Award in 1984**, Soviet Nehru Award in 1988, Critic Circle of India Award in 1990, Iswar Chandra VidyasagarSamman in 1991 and Rupambara Award in 1994. ➤ **Books:** Juar Jeiunthi Uthe (a collection of revolutionary poems on women empowerment), 'Ardhanareeswara', 'Baidehi Visarjita', 'SanghatirSamhita', 'Shakti Rupena Sansthita', etc.	➤ **Public interest and Women emancipation** ➤ As an outstanding public speaker, her immense knowledge and tremendous unbelievable memory power made her a magnet which draws people to her. She inspires love among people and awe among peers. ➤ She was a prolific writer and through her work she remained at the forefront of highlighting the women issues in the society.

Copyright © by Vision IAS
All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Vision IAS.

VISIONIAS
INSPIRING INNOVATION

Stay in touch with Your Preparation

FOLLOW US ON SOCIAL MEDIA

/c/VisionIASdelhi

/VisionIAS_UPSC

/vision_ias

/Vision_IAS

/visionias.upsc

10 IN TOP 10 SELECTIONS IN CSE 2020

from various programs of Vision Ias

1 AIR

SHUBHAM KUMAR
(GS FOUNDATION BATCH CLASSROOM STUDENT)

2 AIR

JAGRATI AWASTHI
(ALL INDIA TEST SERIES)

3 AIR

ANKITA JAIN
(ALL INDIA TEST SERIES)

4 AIR

YASH JALUKA
(ABHYAAS TEST SERIES)

5 AIR

MAMTA YADAV
(ALL INDIA TEST SERIES)

6 AIR

MEERA K
(ALL INDIA TEST SERIES)

7 AIR

PRAVEEN KUMAR
(ALL INDIA TEST SERIES, ESSAY TEST, ABHYAAS, PDP)

8 AIR

JIVANI KARTIK NAGJIBHAI
(GS FOUNDATION BATCH CLASSROOM STUDENT)

9 AIR

APALA MISHRA
(ABHYAAS TEST SERIES)

10 AIR

SATYAM GANDHI
(ALL INDIA TEST SERIES, EASSY TEST)

YOU CAN BE NEXT

HEAD OFFICE Apsara Arcade, 1/8-B, 1st Floor,
Near Gate 6, Karol Bagh Metro Station
+91 8468022022, +91 9019066066

Mukherjee Nagar Centre
635, Opp. Signature View Apartments,
Banda Bahadur Marg, Mukherjee Nagar

DELHI

JAIPUR 9001949244 | HYDERABAD 9000104133 | PUNE 8007500096 | AHMEDABAD 9909447040 | LUCKNOW 8468022022 | CHANDIGARH 8468022022 | GUWAHATI 8468022022

/c/VisionIASdelhi /vision_ias /visionias_upsc /VisionIAS_UPSC