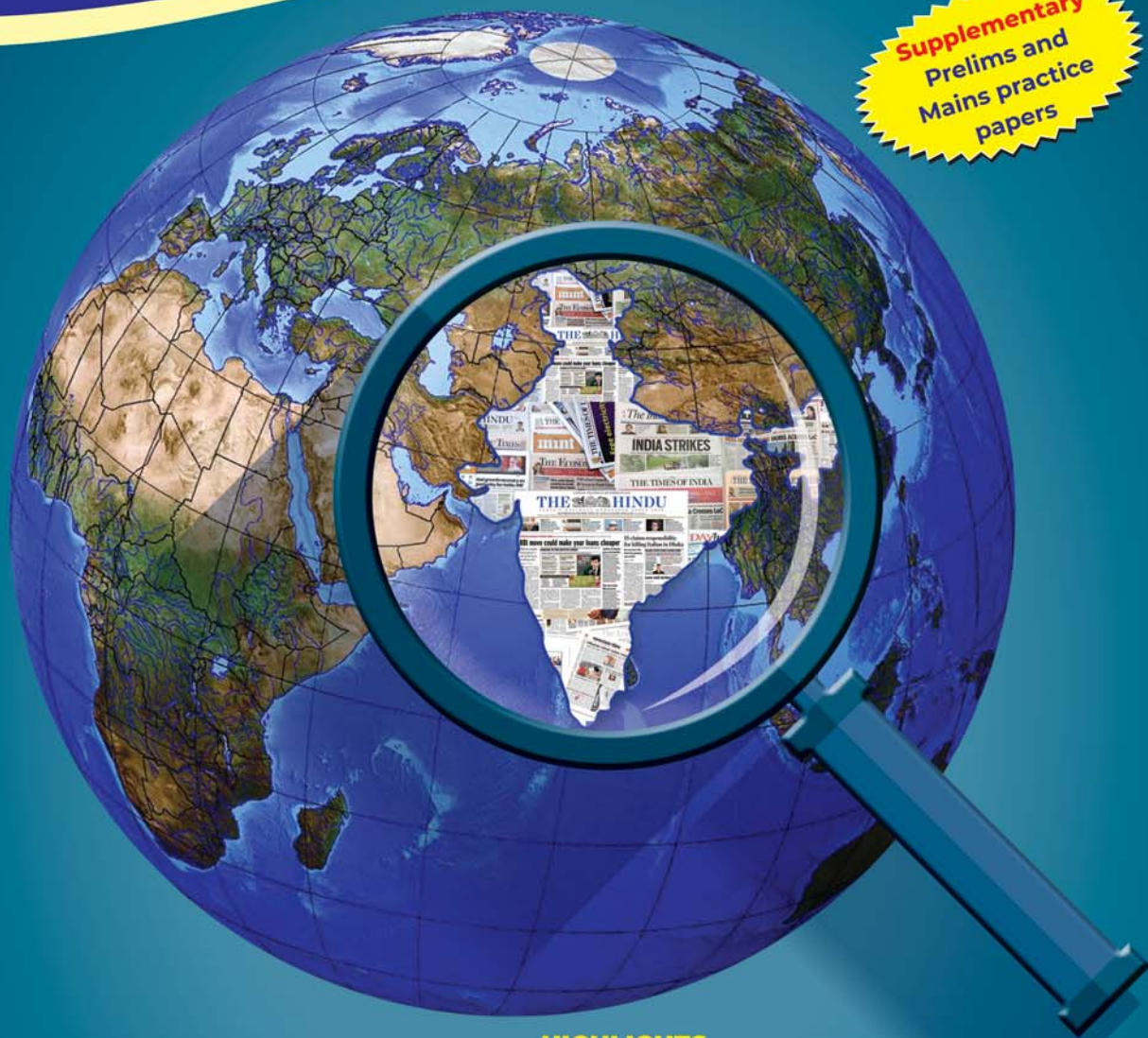


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Dear Students,

As part of my academic career I have had the good fortune of meeting some of the most amazing and highly motivated students. Of Course they had different aspirations in life. Some of them wanted to be Civil Servants and some wanted to be Mathematicians just to name a few vocations (there are many more). But what all of them had in common was their quest for knowledge. But as times change and young blood flows in, a plethora of changes took place in the learning ecosystem too. In this time and age of the digital uprising a new generation is taking over the reigns from the present, namely "The Millennials".



Srikanth Vinnakota
Editor-in-Chief

Now coming to "The Millennials". They are a different brand altogether. Apart from their "out-of-the-box" career choices what seems interesting to me is the breath of fresh air they bring into all the conventional employment. I am truly inspired by their grit and determination in learning something new altogether like picking up a new language or playing an instrument or staying updated on day to day events happening somewhere else in the world. Also I believe that this attitude is needed these days because finding formal employment through regular means is getting difficult day by day because of the kind of competition that is there for such jobs. In that case having the knowledge of diverse topics would be "the feather in the hat" if not more to be able to not just secure employment for self but to be able to give employment to others as well. The aim of our magazine 'Samiksha' is to equip the reader with this kind of information which is diverse, authentic and useful not only in the present day but also for the future.

Our publishing team which is a dynamic amalgamation of young and the experienced, puts together all the important happening of a month for you. The information is collected from authentic sources and the views expressed are carefully curated keeping in view the realities of our day and age. We pay utmost attention to the fact that our reader can be a college going student or a Civil Services Aspirant or for the matter of fact any other person who is just curious. We try our best to give a comprehensive 360 Degree view of the given topic and cover it in all dimensions possible. We deem it as our privilege to be able to serve the young of our society. In the words of Desiderius Erasmus; "The main hope of a nation lies in the proper education of its youth."

I take your leave and wish you happy reading.

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National Agricultural Education Policy

The first National Agricultural Education Policy is set to bring academic credit banks and degree programmes with multiple entry and exit options to the 74 universities focussed on crop sciences, fisheries, veterinary and dairy training and research.

- ★ The process for formulating the **National Agricultural Education Policy** was started about two months ago, after the release of the **National Education Policy (NEP) 2020**.
- ★ Earlier, the Prime Minister had pitched for **taking farm education to middle school level**, saying necessary reforms have been made in this regard in the NEP 2020.

Key Points

- ★ **Agricultural Education Policy to be Aligned with NEP 2020:**

Academic Credit Banks:

- ★ These may be a service provider available to a desirable student community. It may

facilitate the **integration of the campuses and distributed learning systems**, by creating **student mobility within the inter and intra university system**.

- ★ It may help in seamlessly **integrating skills and experiences into a credit based formal system** by providing a credit recognition mechanism.
- ★ It will **digitally store academic credits** earned from recognised **Higher Education**

Institutions (HEIs) and allow for credit redemption in order to be awarded a certificate, diploma or degree.

Experiential Education:

- ★ In India, agricultural education is already ahead of its time, and already aligned with the NEP. The NEP wants a **shift to four-year undergraduate degrees**, and agricultural degrees are already four-year programmes.

NATIONAL EDUCATION POLICY 2020

<p>Universalization of Education from pre-school to secondary level with 100% GER in school education by 2030</p>		
 <p>GER in higher education to be raised to 50% by 2035; 3.5 crore seats to be added in higher education</p>	<p>NEP 2020 will bring 2 crore out of school children back into the main stream</p>	<p>New 5+3+3+4 school curriculum with 12 years of schooling and 3 years of Anganwadi/Pre-schooling</p>
<p>No rigid separation between academic streams, extracurricular, vocational streams in schools</p>	<p>Vocational Education to start from Class 6 with Internships</p>	<p>Teaching upto at least Grade 5 to be in mother tongue/regional language</p>

Learning plan

A look at the key features of the new education policy:

■ R.V.S. PRASAD



- Public spending on education by States, Centre to be raised to 6% of GDP
- Ministry of Human Resource Development to be renamed Ministry of Education
- Separate technology unit to develop digital education resources



SCHOOL EDUCATION

- Universalisation from age 3 to Class 10 by 2030
- Mission to ensure literacy and numeracy skills by 2025
- Mother tongue as medium of instruction till Class 5 wherever possible
- New curriculum to include 21st century skills like coding and vocational integration from Class 6
- Board exams to be easier, redesigned



HIGHER EDUCATION

- New umbrella regulator for all higher education except medical, legal courses
- Flexible, holistic, multi-disciplinary UG degrees of 3-4 years' duration
- 1 to 2 year PG programmes, no M.Phil
- College affiliation system to be phased out in 15 years

- ★ The NEP mentions experiential education, which has been already mandated in agricultural education since 2016.
- ★ Experiential education is a teaching philosophy that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities.
- ★ The Student READY (Rural Entrepreneurship Awareness Development Yojana) programme requires all students to undertake a six-month internship, usually in their fourth year, to gain hands-on training, rural awareness, industry experience, research expertise and entrepreneurship skills.

- ★ One major challenge is to ensure that experiential learning is made available to all students if the multiple entry-exit system gets implemented.
- ★ The option of multiple entry and exit provides students with the opportunity to earn a diploma or an advanced diploma, while they are given the choice to re-enter as and when they are able to resume their studies and earn a full college degree.

Issues:

Challenge of Multidisciplinarity:

- ★ Agricultural universities have been modelled on the land grant pattern, with a focus on research and extension, and deep community connections, driven by the philosophy that farmers need holistic solutions to their problems.

- ★ However, in recent years, several domain specific universities in horticulture, veterinary science and fisheries sciences have come up. Incorporating humanities and social sciences into these settings could be a big challenge.

Related to the ICAR:

- ★ Though agricultural education is a State subject, the Indian Council of Agricultural Research (ICAR - Ministry of Agriculture and Farmers Welfare) is responsible for the quality of education across the country, and expects to continue in a standards-setting role under the new system of higher education regulation proposed by the NEP.
- ★ However, it is not clear whether it will continue in its accreditation and grant making roles under the new regime.

Pakistan's Provincial Status to Gilgit-Baltistan



India has strongly rejected Pakistan's move to grant provisional provincial status to Gilgit - Baltistan.

- Gilgit-Baltistan is one of the disputed territories of India.

Key Points

▪ Gilgit-Baltistan:

- ★ It is a chunk of high-altitude territory located on the north western corner of the **Union Territory of Ladakh**.
- ★ It is located strategically as it **borders Pakistan, Afghanistan and China**.
- ★ The region was a **part of the erstwhile princely state of Jammu and Kashmir**, but has been under Pakistan's control since 4th November, 1947, following the invasion of Kashmir by tribal militias and the Pakistan army.
- ★ Maharaja Hari Singh, the last Dogra ruler of J&K, had signed the Instrument of Accession with India on 26th October 1947.
- ★ **India moved to the United Nations Security Council to**

raise the issue of Pakistan's invasion on 1st January 1948.

- ★ The **UN Security Council passed a resolution** calling for Pakistan to withdraw from all of Jammu and Kashmir and then India had to reduce its forces to the minimum level following which a plebiscite would be held to ascertain people's wishes.
- ★ However, no withdrawal was ever carried out and it remains a point of contention between two countries.

Background:

- ★ Recently, **Saudi Arabia**, a key ally of Pakistan, had **removed Pakistan-occupied-Kashmir and Gilgit-Baltistan from the Pakistan map on its new banknote** after India asked it to take "urgent corrective steps" about the "gross misrepresentation".
- ★ On the first anniversary of the revocation of Jammu and Kashmir's special status, the **Pakistan government had released a new "political map"** which included Jammu and Kashmir, Ladakh and parts

of western Gujarat as part of its territory.

- ★ Describing it as "political absurdity" and a "ridiculous assertion", India said it "confirms the reality of Pakistan's obsession with territorial aggrandisement supported by cross-border terrorism".
- ★ The Gilgit-Baltistan region is at the centre of USD 65 billion China Pakistan Economic Corridor Infrastructure development plan.

India's Stand:

- ★ India claims that the entire Jammu and Kashmir and Ladakh including Gilgit-Baltistan is an **integral part of India** by the virtue of legal, complete and irrevocable accession of Jammu and Kashmir to the union of India in 1947.
- ★ Pakistan's move to name Gilgit-Baltistan as its fifth province is meant to "camouflage its illegal occupation" of the area but it cannot "hide the grave human rights violations, exploitation and denial of freedom" to the people for over seven decades.



Armenia Azerbaijan Peace Deal

Recently, Russia has brokered a new peace deal between Armenia and Azerbaijan. Both countries have been in a military conflict over the disputed region of Nagorno-Karabakh in the South Caucasus.

Key Points

▪ Nagorno-Karabakh Region:

- ★ The region extends across western Asia and Eastern Europe.
- ★ It has been part of Azerbaijan territory since the Soviet era and is being internationally recognised so but most of the region is controlled by Armenian separatists who have declared it a republic called the "Nagorno-Karabakh Autonomous Oblast".
- ★ While the Armenian government does not recognise Nagorno-Karabakh as independent, it supports the region politically and militarily.

Conflict and Ceasefire:

- ★ When the Soviet Union began to collapse (with the end of the Cold War) in the late 1980s, Armenia's regional parliament voted for the region's transfer to Armenia but the Soviet authorities turned down the demand.
- ★ Clashes and the violence lasted till 1994, when Russia brokered a ceasefire, by which time ethnic Armenians had taken control of the region.
- ★ In 2016, the region saw a Four-Day War before Russia mediated peace.
- ★ The Organisation for Security and Co-operation in Europe (OSCE) Minsk Group, chaired by France, Russia and the USA, has also tried to get the two countries to reach a peace agreement for several years.
- OSCE is the world's largest

security-oriented intergovernmental organisation. Its mandate includes issues such as arms control, promotion of human rights, freedom of the press, and fair elections.

- ★ OSCE Minsk Group was created in 1992 by the Conference on Security and Cooperation in Europe (CSCE) to encourage a peaceful, negotiated resolution to the conflict between Azerbaijan and Armenia over Nagorno-Karabakh.
- ★ In October 2020, both countries agreed to a Russia brokered ceasefire agreement, however, it also proved to be unsuccessful.

Reason for the Conflict:

- ★ Decades-old Ethnic tensions have a crucial role in the dispute. While the Azeris claim that the disputed region was under their control in known history, Armenians



maintain that Karabakh was a part of the Armenian kingdom.

- ★ Currently, the disputed region consists of a majority Armenian Christian population, even though it is internationally recognised as a part of Muslim-majority Azerbaijan.

New Peace Deal:

- ★ Both sides will now maintain positions in the areas that they currently hold, which will mean a significant gain for Azerbaijan as it has reclaimed over 15-20% of its lost territory during the recent conflict.
- ★ All military operations are suspended and Russian peacekeepers will be deployed for a period of five years, along the line of contact in Nagorno-

Karabakh and along the Lachin corridor which links the Karabakh capital, Stepanakert, to Armenia.

- ★ Refugees and internally displaced persons will return to the region and the adjacent territories and the two sides will also exchange prisoners of wars and bodies.
- ★ A new corridor will be opened from Nakhchivan to Azerbaijan, which will be under Russian control.
- ★ Reactions: Armenian people are against the deal and have protested while Azerbaijan is pleased with the deal and considered it of "historic importance".

Russia's Role:

- ★ Russia has always taken a balanced position on the matter

and has traditionally good relations with both countries. It supplies arms to both countries.

- ★ Russia has a military base in Armenia and both are members of the Moscow-led Collective Security Treaty Organisation.
- ★ The treaty envisages Russia's military support if Armenia is attacked. However, it does not include Nagorno-Karabakh or the other Azerbaijani regions around it seized by Armenian forces.
- ★ At the same time, Russia also has strong ties to Azerbaijan, which is being openly backed by Turkey, a North Atlantic Treaty Organisation (NATO) member.



RBI's Internal Working Group Recommendations

Recently, an Internal Working Group (IWG) of the Reserve Bank of India (RBI) has recommended the guarded entry of corporates into the banking space, conversion of big Non-Banking Financial Companies (NBFCs) into banks, hike in promoters' stake and also a hike in minimum capital for new banks, among others.

- ★ The IWG, headed by PK Mohanty, was constituted by the RBI in June 2020, to review the extant ownership guidelines and corporate structure for private sector banks in India.

Key Points

Entry of Corporates into Banking Space:

- ★ Large corporates and industrial houses may be allowed as promoters of banks only after necessary amendments to the Banking Regulation Act, 1949.

- ★ A promoter is an **individual or organization that helps raise money for some type of investment activity.**
- ★ This is to **prevent connected lending** and **exposures** between the banks and other financial and non-financial group entities.
- ★ **Connected lending** is modeled as a situation in which the bank's controlling owner extends loans of inferior quality at lower interest rates to himself or his connected parties.
- ★ **Credit exposure** is a measurement of the maximum potential loss to a lender if the borrower defaults on payment.
- ★ The RBI has been **against** allowing corporate houses to set up or run commercial banks due to their poor track record on governance and credit disbursement.
- ★ Corporate houses **routinely delay payments** to banks and the **system has no in-built**

incentives or disincentives for orderly debtor behaviour.

Conversion of NBFCs into Banks:

- ★ Well-run large NBFCs, with an asset size of Rs. 50,000 crore and above, including those which are owned by a corporate house, may be considered for conversion into banks **subject to completion of 10 years of operations and meeting due diligence criteria** and compliance with additional conditions specified in this regard.

Hike in Promoters' Stake:

- ★ The cap on promoters' stake in the long run (15 years) may be raised from the current level of 15% to 26% of the paid-up voting equity share capital of the bank.
- ★ On **non-promoter shareholding**, the panel has suggested a **uniform cap of 15% of the**

paid-up voting equity share capital of the bank for all types of shareholders.

Hike in Minimum Capital for New Banks:

★ The minimum initial capital requirement for licensing new banks **should be enhanced from Rs. 500 crore to Rs. 1,000 crore for universal banks** and from Rs. 200 crore to Rs. 300 crore for small finance banks.

★ **Universal Banks combine the three main services of banking viz. wholesale banking, retail banking, and investment banking under one roof. For example, Deutsche Bank, Bank of America, HSBC, etc.**

Payments Banks' Conversion into Small Finance Bank:

★ For **payments banks** intending to convert to a **Small Finance Bank (SFB)**, a **track record of 3 years of experience** as payments bank may be considered as sufficient.

★ **Payments banks** (Airtel Payments Bank, India Post Payments Bank, etc.) are like any other banks, but operating on a smaller or restricted scale.

★ **Small Finance Banks** are the financial institutions which provide financial services to the unserved and unbanked region of the country.

Harmonisation and Uniformity in Different Licensing Guidelines:

★ The RBI should take steps to ensure **harmonisation and uniformity** in different

licensing guidelines, to the extent possible.

★ Whenever new licensing guidelines are issued, **if new rules are more relaxed, the benefit should be given to existing banks**, and if new rules are tougher, legacy banks should also conform to new tighter regulations, but a **non-disruptive transition path** may be provided to affected banks.

Non Operative Financial Holding Company:

★ NOFHC should continue to be the preferred structure for all new licenses to be issued for universal banks. However, it should be **mandatory only in cases** where the individual promoters, promoting entities and converting entities have other group entities.

★ NOFHC is a **financial institution through which promoter/promoter groups will be permitted to set up a new bank.**

★ Entities or groups in the private sector, public sector and NBFCs

can set up these wholly-owned NOFHCs.

Way Forward

- The recent failures on internal and external controls like in the case of **PNB leading to an alarming fraud**, the failures of bank and NBFCs like **Lakshmi Vilas Bank, Yes Bank**, etc. where all stakeholders lost money and credibility have given rise to the need of new regulations with a very high degree of supervisory mechanism and corporate governance which has strong Information Technology (IT) and **Artificial Intelligence (AI)** enabled platform.
- Where a corporate house is a promoter, strict regulations on the use of funds held with the bank and monitoring of related party transactions will be essential. Fit and proper criterion needs to be foolproof and the common citizens should become the beneficiaries in the process.

Promoter cap: Cap for promoters may be raised to 26% and for non-promoters to 15% at central bank's discretion

NBFCs: Non-banking financial firms with an asset size of ₹50,000 cr or more can aspire for a banking license

SFBs: Time-frame for payments banks to convert to a small finance bank to be three years from five years

► Provision for SFBs and payment banks to list within six years

Bank licensing: Capital level for licensing new universal banks may be doubled to ₹1,000 cr; raised to ₹300 cr for SFBs from ₹200 cr

BIG BANK REFORMS



ILLUSTRATION: AJAY MOHANTY

NOFHC: Non-operative financial holding company must for promoters, promoting entities, converting entities with other group entities

► NBFCs wanting to convert into universal banks with interests across financial services will have to set up NOFHCs

► Banks licensed before 2013 may move to an NOFHC structure. Have to shift within 5 years of attaining tax-neutral status

► Banks under NOFHC structure may be allowed to exit from it if they do not have other group entities in their fold



Time for a 'Sponge Cities' Mission in India

Recently, torrential rains that took place in Hyderabad have caused massive urban floods. In many Indian cities, the urban floods have become a frequent phenomenon in recent years.

As the incidence of climate variability and extreme weather events increases, urban flooding becomes more and more common. While the untimely heavy rains can be attributed to climate variability, the urban flooding is largely due to an unplanned urbanisation.

Urban Flood: Man-Made Disaster

Overburdened drainage, unregulated construction, no regard to the natural topography and hydro-geomorphology all make urban floods a man-made disaster.

- ★ **Inadequate Drainage Infrastructure:** Cities like Hyderabad, Mumbai rely on a century-

old drainage system, covering only a small part of the core city.

- ★ In the last 20 years, the Indian cities have grown manifold with its original built-up area.
- ★ As the city grew beyond its original limits, not much was done to address the absence of adequate drainage systems.

Terrain Alteration:

Lasting irreversible damage has been done to the city by property builders, property owners, and public agencies by flattening terrain and altering natural drainage routes.

- ★ **Reducing Seepage:** Indian cities are becoming increasingly impervious to water, not just because of increasing built up but also because of the nature of materials used (hard, non-porous construction material

that makes the soil impervious).

- ★ **Lax Implementation:** Even with provisions of rainwater harvesting, sustainable urban drainage systems, etc, in regulatory mechanisms like the **Environmental Impact Assessment (EIA)**, adoption at user end as well as enforcement agencies remains weak.

Encroaching Natural Spaces:

The number of wetlands has reduced to 123 in 2018 from 644 in 1956.

- ★ Green cover is only 9 per cent, which ideally should have been at least 33 per cent.

Way Forward

- **Need For Holistic Engagement:** Urban floods of this scale cannot be contained by the municipal authorities

alone. Floods cannot be managed without concerted and focused investments of energy and resources.

- ★ The Metropolitan Development Authorities, **National Disaster Management Authority**, State revenue and irrigation departments along with municipal corporations should be involved in such work together.
- ★ Such investments can only be done in a mission mode organisation with active participation of civil society organisations at the metropolitan scale.

Developing Sponge Cities:

The idea of a sponge city is to make cities more permeable so as to hold and use the water which falls upon it.

- ★ Sponge cities absorb the rain water, which is then naturally filtered by the soil and allowed to reach urban aquifers.
- ★ This allows for the extraction of water from the ground through urban or peri-urban wells.
- ★ This water can be treated easily and used for city water supply.

Wetland Policy:

There is a need to start paying attention to the management of wetlands by involving local communities.

- ★ Without doubt, terrain alteration needs to be strictly regulated and a ban on any further alteration of terrain needs to be introduced.
- ★ To improve the city's capacity to absorb water, new porous materials and technologies



must be encouraged or mandated across scales.

- ★ Examples of these technologies are bioswales and retention systems, permeable material for roads and pavement, drainage systems which allow storm water to trickle into the ground, green roofs and harvesting systems in buildings.

Drainage Planning:

Watershed management and emergency drainage plan should be clearly enunciated in policy and law.

- ★ Urban watersheds are micro ecological drainage systems, shaped by contours of terrain.
- ★ Detailed documentation of these must be held by agencies which are not bound by municipal jurisdictions; instead, there is a need to consider natural boundaries such as watersheds instead of governance boundaries like electoral wards for shaping a drainage plan.

Water Sensitive Urban Design:

These methods take into consideration the topography, types of surfaces (permeable or impervious), natural drainage and leave

very less impact on the environment.

- ★ Vulnerability analyses and risk assessments should form part and parcel of city master plans.
- ★ In a changing climate, the drainage infrastructure (especially storm water drainage) has to be built considering the new 'normals'.
- ★ Tools such as predictive precipitation modelling can help do that and are also able to link it with the adaptive capacity of urban land use.

Convergent Approach:

These can all be delivered effectively through an urban mission along the lines of the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), National Heritage City Development and Augmentation Yojana (HRIDAY) and Smart Cities Mission.

Conclusion

Urban Flood management will not just help control recurring floods but also respond to other fault lines, provide for water security, more green spaces, and will make the city resilient and sustainable.

Hydrogen Enriched Compressed Natural Gas (HCNG)



Ministry of Road Transport and Highways (MoRTH) has allowed use of H-CNG (18% mix of hydrogen) in CNG engines. Nearly 16 years after Delhi's entire bus fleet started to run on CNG to reduce air pollution, authorities are now pitching for an even cleaner alternative, hydrogen-CNG (H-CNG). As a pilot project, 50 CNG buses of the existing 5,521 fleet of state-run buses and will be retrofitted with HCNG instead.

- ★ The Bureau of Indian Standards (BIS) has also developed specifications (IS 17314:2019) of Hydrogen enriched Compressed Natural Gas (H-

CNG) for automotive purposes, as a fuel.

- ★ MoRTH says the notification for amendments to the Central Motor Vehicles Rules 1989, for inclusion of H-CNG as an automotive fuel has been published by the Ministry. The draft rules in this respect were made available to the public in July, which received no objections and while suggestions were received from the public in this respect.
- ★ Researchers claim HCNG has the ability to reduce carbon monoxide (CO), methane, and hydrocarbon (THC) emissions

compared to regular CNG being used whether as automotive fuel or in other applications.

- ★ As minor tweaks will be needed to accommodate the fuel in CNG pipelines, the Indian government will run a pilot project soon as well while modifying a small amount of the existing infrastructure initially to understand its viability before rolling it out.

CNG & H-CNG

- ★ CNG is compressed natural gas. With natural gas mainly composed of methane, CNG emits less air pollutants — carbon

dioxide, carbon monoxide, nitrogen oxides and particulate matter — than petrol or diesel.

- ★ H-CNG is a blend of hydrogen and CNG, the ideal hydrogen concentration being 18%. Compared to conventional CNG.
- ★ Use of H-CNG can reduce emission of carbon monoxide up to 70%, besides enabling up to 5% savings in fuel, tests by the Automotive Research Association of India and Indian Oil Corporation Ltd (IOCL) have found. $\frac{3}{4}$ H-CNG has not yet gained worldwide currency.
- ★ Trials have been held in countries such as the US, Canada, Brazil and South Korea.

Implementation

- ★ Performance of these buses will be analysed every week by IOCL (Indian Oil Corporation Limited) and the International Centre for Automotive Technology (ICAT)
- ★ Preliminary assessment by IOCL has revealed that the cost escalation for shifting to HCNG buses will be about 72 paise per kilometre, which it hopes would break-even once the technology is used on a large scale.
- ★ IOCL's research & development wing has developed a technology that does away with the need for physical blending. Its 'Compact Reforming Process' directly produces a hydrogen CNG mixture from natural gas,

HCNG is hydrogen-enriched compressed natural gas (CNG). In Delhi, instead of physically blending hydrogen with CNG, hydrogen-spiked CNG will be produced using compact reforming process patented by Indian Oil Corporation



➤ It is cleaner and more economical; power output of HCNG engine is also better than CNG ones

4-tonne-per-day production plant will come up at DTC's Rajghat-1 bus depot by December

50
CLUSTER BUSES WILL RUN ON HCNG

₹40cr cost of HCNG plant

6-month pilot project will start in January

BENEFITS OF HCNG

4%
more fuel economy than CNG



70% more reduction in carbon monoxide emissions compared to CNG

4%
more fuel economy than CNG

using a single step. The cost of production is significantly lower than physical blending, the EPCA report says.

Limiting the Tests

- ★ Delhi's public transport includes autos, which too run on CNG, but researchers believe that these are not yet ready for a switch.
- ★ Cars and autos would not be able to use H-CNG with the prevailing technology, mainly because hydrogen is "highly volatile" and the possibility of a rise in combustion temperature.

- ★ In its report to the Supreme Court, the EPCA (Environment Pollution Prevention and Control Authority) has estimated that to fuel Delhi's 5,500 buses, about 400 tonnes H-CNG would be needed per day. Setting up four fuel-dispensing facilities would cost Rs 330 crore, which can be funded from the Environment Compensation Charge (ECC) fund made up of cess on commercial vehicles entering Delhi, it said. For consumers who pay Rs 42 per kg for CNG, the cost of H-CNG would not be more than Rs 43 per kg.



Northeast Border Dispute

While India is trying to solve the border dispute with China in the northeast, the northeastern states are stuck in their disputes. Border disputes are increasing in states like Assam, Nagaland, Mizoram, Meghalaya.

Northeast India, covering an area of 2,62,179 sq km overall, is one of the most turbulent regions in India. The region suffers from problems like separatism, insurgency due to which some disputes occur among these states. At present, where India is trying to resolve an international border dispute with China, inner border disputes in these states are posing serious challenges. For the internal security of the country and the development of the people of the North-East, it is essential to end these disputes and move on the path of development.

Recent boundary dispute: -

- ★ Recently the border dispute with Mizoram and Meghalaya

with Assam has increased. Recently, the controversy arose over Assam traders being barred from entering Meghalaya due to Corona. A few days before this, there were border disputes in Assam and Mizoram.

Border disputes: At a glance

- ★ Assam and Mizoram share a 164 km border. About 509 sq

km of the border area is disputed between them.

- ★ Assam and Meghalaya share a border of about 885 km. There are 12 disputed areas between them.
- ★ Assam and Arunachal Pradesh share a border of about 800 km. There have also been many violent clashes between them over the border dispute. It was extremely violent in 1992.



- ★ There has also been a boundary dispute between Assam and Nagaland, which share about 512 km of border. Several people have died in violent clashes between 1979 and 1985.

Reasons for border disputes

Reorganization of states:

- ★ All other states were part of Assam from the British period and separated from Assam after independence. That is why all these states have a border dispute with Assam.

Short-sightedness in border reorganization: -

- ★ Although the Central Government of India reorganized the border from time to time, meeting various separatist demands, it lacked short-sightedness. The government could not resolve the issues of tribal areas at the time of border formation. These boundaries still do not coincide with tribal areas and identities, causing repeated territorial disputes in the region and disturbing peace here.

Identity crisis: -

- ★ In the northeast, Negrito, Australoid, Mediterranean, Mongoloid, Nordic, and Brachycephal ethnic groups are found. There is a diversity of art and culture in them. Thus, the main reason for separatism and border dispute is to preserve identity, such as the demand for Greater Naglim is about the inclusion of Naga-dominated areas in Nagaland.

Separatist movement:-

- ★ The separatist movement is intensely present in these

areas. This promotes border disputes.

Lack of development:

- ★ There is a lack of developmental projects in these areas and this region is still not completely successful in connecting with the mainstream of society. Poverty and illiteracy prevail in these areas. In such a situation, protectionist concepts make them controversial.

International intervention: -

- ★ The region is surrounded by countries like China, Myanmar, Bangladesh. Some elements of these countries try to bring instability by increasing disputes in the northeastern region of India.

Why does the Northeast need to Settle Disputes?

- ★ The maximum area of the Northeast is surrounded by countries like China, Myanmar, Bangladesh, from which India has a dispute. India is connected to the northeast by the Siliguri corridor, a very narrow area. Thus, North East including Siliguri is a very strategic region for India. Therefore peace is very important here.
- ★ The people of the Northeast are extremely isolated and backward from pre-independence. After independence, disputes need to be resolved to reduce the trust deficit of the people there, to develop and establish peace there.
- ★ It is essential to achieve the true essence of fraternity described in the Constitution of India.
- ★ Peace in the North-East will save India's resources which can be used for international border management and welfare projects.

Who can solve border disputes of states ?

According to Article 3 of the Constitution of India, the Parliament of India has the power to change the name and boundaries of states. It exhibits an inclination towards the center of Indian federalism. In the past, many times Parliament has made border changes in the Northeast intending to establish peace in the Northeast.

Some of the efforts of Parliament and government are as follows:

- ✓ Nagaland was formed in 1963 to solve the Naga movement.
- ✓ Separate Arunachal Pradesh was formed.
- ✓ Manipur was given a separate statehood status in 1972.
- ✓ In 1971, Meghalaya was given the status of a separate state.
- ✓ Separate arrangements have been made for administration in tribal areas.

Conclusions: -

- ★ India is currently trying to resolve border disputes with China. In such a situation, these inner state disputes are causing double crises. Keeping in mind the strategic importance of the Northeast and the welfare of the citizens there, other problems including border disputes must be resolved there. For this, Parliament must try to resolve the dispute by establishing contact with the states there. Seeking international dimensions with administrative convenience, resolving disputes is the need of the hour.

Uniform Civil Code (UCC)

Article 44 of the Indian Constitution states that “the State shall endeavour to secure for the citizens a uniform civil code (UCC) throughout the territory of India.” The desirability of a uniform civil code is consistent with human rights and the principles of equality, fairness and justice.

After the revocation of Article 370, the central family law Acts were extended to Jammu and Kashmir. Although, this is another step towards implementing UCC throughout India, still a long distance is to be covered in this pursuit.

What is UCC?

- The Uniform Civil Code (UCC) calls for the formulation of one law for India, which would be applicable to all religious communities in matters such as marriage, divorce, inheritance, adoption.
- The code comes under Article 44 of the Constitution, which lays down that the state shall endeavour to secure a Uniform Civil Code for the citizens throughout the territory of India.

Background of Uniform Civil Code

- The origin of the UCC dates back to colonial India when the British government submitted its report in 1835 stressing the need for uniformity in the codification of Indian law relating to crimes, evidence, and contracts, specifically recommending that personal laws of Hindus and Muslims be kept outside such codification.
- Increase in legislation dealing with personal issues in the far end of the British rule forced

the government to form the B N Rau Committee to codify Hindu law in 1941.

- Based on these recommendations, a bill was then adopted in 1956 as the Hindu Succession Act to amend and codify the law relating to intestate or unwilled succession, among Hindus, Buddhists, Jains, and Sikhs.
- ★ However, there were separate personal laws for muslim, christian and Parsis.
- In order to bring uniformity, the courts have often said in their judgements that the government should move towards a uniform civil code.
- ★ The judgement in the Shah Bano case is well known, but the courts have made the same point in several other major judgements.
- By arguing that practices such as triple talaq and polygamy impact adversely on the right of women to a life of dignity, the Centre has raised the question whether constitutional protection given to religious practices should extend even to those that are not in compliance with fundamental rights.

UCC and Implications

- **Protection to Vulnerable Section of Society:** The UCC aims to provide protection to vulnerable sections as envisaged by Ambedkar including women and religious minorities, while also promoting nationalistic fervour through unity.
- **Simplification of Laws:** The code will simplify the complex laws around marriage ceremonies, inheritance, succession, adoptions making them one for all. The same civil law

will then be applicable to all citizens irrespective of their faith.

- ★ When enacted the code will work to simplify laws that are segregated at present on the basis of religious beliefs like the Hindu code bill, Sharia law, and others.
- **Adhering to Ideal of Secularism:** Secularism is the objective enshrined in the Preamble, a secular republic needs a common law for all citizens rather than differentiated rules based on religious practices.
- **Gender Justice:** India has separate sets of personal laws for each religion governing marriages, divorce, succession, adoption and maintenance.
- ★ However, the rights of women are usually limited under religious law, be it Hindu or Muslim. The practice of triple talaq is a classic example.
- ★ If a uniform civil code is enacted, all personal laws will cease to exist. It will do away with gender biases in Muslim law, Hindu law and Christian law that have been often challenged by women on the ground that they violate the right to equality.

Challenges to UCC

- **Exceptions in Central Family Laws:** The preliminary sections in all central family law Acts enacted by Parliament since Independence declare that they will apply to “the whole of India except the state of Jammu and Kashmir.”
- ★ A Second exception was added in 1968 in all these Acts, pronouncing that “nothing herein contained shall apply to the Renoncants in the Union Territory of Pondicherry.”

- ★ A third exception, none of these Acts applies in Goa, Daman and Diu.
- ★ A fourth exception, relating to the north-eastern states of Nagaland and Mizoram, emanates from Articles 371A and 371G of the Constitution, decreeing that no parliamentary legislation will replace the customary law and religion-based system for its administration.
- **Communal Politics:** The demand for a uniform civil code has been framed in the context of communal politics. A large section of society sees it as majoritarianism under the garb of social reform.
- **Constitutional Hurdle:** Article 25 of Indian constitution, that seeks to preserve the freedom to practise and propagate any religion gets into conflict with the concepts of equality enshrined under Article 14 of Indian Constitution.

Way Forward

- **Collaborative Approach:** The government and society will have to work hard to build trust, but more importantly, make common cause with social reformers rather than religious conservatives.
- **Brick by Brick Approach:** Rather than an omnibus approach, the government could bring separate aspects such as marriage, adoption, succession and maintenance into a uniform civil code in stages.
- **Gender-Sensitive Approach:** The government would also do well to complement the overdue move towards a uniform civil code with a comprehensive review of several other laws in

the context of gender justice.

- **Pan-India Approach:** Bringing Jammu and Kashmir into the country's mainstream of family laws is an exercise that needs to be undertaken also for Goa, Daman and Diu, Puducherry, Nagaland and Mizoram.

Conclusion

The citizens' fundamental rights to equality before law and equal protection of the laws guaranteed by the Constitution call for a similar action in respect of these territories as well. So does the provision of Article 44 enjoining the state to make endeavours to secure for the citizens a uniform civil code throughout the territory of India.

Offset Dilution in Defence, a Flawed Policy Turn

Recently, the government diluted the "offset" policy in defence procurement. This Policy decision was taken with a view to reduce cost of defense deals and also in response to a Comptroller and Auditor General (CAG) report on the same issue.

Henceforth, the offset clause will not be applicable to bilateral deals and deals with a single (monopoly) seller. However, as the major defense deals of India are taken under the above mentioned route, this would virtually mean the scrapping of the defence offset policy.

Due to this, many experts contend that the move is a setback for augmenting domestic capabilities or for realising the goal of Atmanirbhar Bharat. Therefore, the government should rethink its defense offset policy to leverage

the associated benefits emanating from it.

Offset Policy

- **Why Needed:** Developing country buyers often lack an industrial base and research and development (R&D) facilities. However, large buyers such as India seek to exercise their "buying power" to secure defense deals, not just the lowest price.
- ★ They also try to acquire the technology to upgrade domestic production and build R&D capabilities.
- ★ The offset clause is the instrument for securing these goals.
- **What is Offset:** The offset is an obligation by an international player to boost India's domestic defence industry if India is buying defence equipment from it.
- ★ Since defence contracts are costly, the government wants part of that money either to benefit the Indian industry, or to allow the country to gain in terms of technology.
- **Key Objectives:** The key objective of the Defence Offset Policy is to leverage capital acquisitions to develop Indian defence industry by:
 - ★ Fostering development of internationally competitive enterprises.
 - ★ Augmenting capacity for Research, Design and Development related to defence products and services.
 - ★ Encouraging development of synergistic sectors like civil aerospace, and internal security".

Case Study: Benefits of Offset Policy

- Offset policy was initiated in 2005, under which for contracts valued at ₹ 300 crore or

more, 30% of it will result in offsets, implemented through Indian offset partners.

- The 2005 policy helped promote a vibrant aerospace cluster, **mostly micro, small and medium enterprises (MSMEs)** around Bengaluru.
- ★ By 2014, exports increased to \$6.7 billion from a paltry \$62.5 million in 2005, according to the United Nations Comtrade Database.
- ★ The offset clause enabled India to join the league of the world's top 10 aerospace exporters; the only country without a major domestic aerospace firm.

Issue with New Policy

- **CAG Report:** According to the recent CAG report, between 2007 and 2018, the government reportedly signed 46 offset contracts worth ₹ 66,427 crore of investments.
- ★ However, the realised investments were merely 8%, or worth ₹ 5,457 crore.
- ★ It also noted that there is not a single case where the foreign vendor had transferred high technology to the Indian industry.
- **New Policy:** In a response to CAG report, the government has decided not to have an offset clause in procurement of defence equipment if the deal is done through inter-government agreement (IGA), government-to-government or an ab initio single vendor.
- **Misplaced Rationale:** The government held that the offset load extra cost in the contract to balance the costs, and doing away with the offsets can bring down the costs in such contracts.
- ★ However, the higher (upfront)

cost of the agreement due to the offset clause would pay for itself by: reducing costs in the long term by indigenisation of production and the potential technology spill-overs for domestic industry.

- **Impact of New Policy:** As most defence deals are bilateral, or a single supplier deal (given the monopoly over the technology).
- ★ The dilution means practically giving up the offset clause.
- ★ This would impact India's prospects for boosting defence production and technological self-reliance.
- ★ Further, India has voluntarily given up a powerful instrument of bargaining to acquire scarce advanced technology.

Way Forward

- **Review & Proper Implementation of Offset Clause:** The offset policy can succeed, if it is designed and executed correctly, as a parallel episode in the aerospace industry demonstrates.
- ★ Despite the heft of Hindustan Aeronautics Limited, India is a lightweight in global civilian aircraft manufacturing, as the public sector giant mostly devotes itself to defence production.
- ★ The much-touted **National Civil Aircraft Development (NCAD) project** — to come up with an indigenously designed Regional Transport Aircraft (RTA) — has remained a non-starter from day one.
- ★ Thus, apart from reviewing the current offset policy, there is a need to establish a formal mechanism for implementation of the defence offset policy.
- **Better Regulation & Facilitation:** While evidence

suggests that domestic industry can absorb offsets, what India needs is an effective body to handle offsets, liberal FDI and licensing policies, and a better banking provision.

- **Need for Clear Roadmap:** Also there is a need for a clear roadmap for transfer of technology through offsets, keeping in view India's long-term military industrial objectives.

Conclusion

India needs to re-conceive or re-imagine the offset clause in defence contracts with stricter enforcement of the deals, in national interest, and in order to aim for 'Atma Nirbhar Bharat Abhiyan', or a self-reliant India.

Strategic Importance of Myanmar

Recently, India's Army Chief Manoj Vikram Naravane and Foreign Secretary Harsh Vardhan Shingla made an official visit to Myanmar. There is a common link between the challenges we face in Ladakh and the developments across our borders with Myanmar. While we are confronting direct Chinese aggression in Ladakh, the challenges in Myanmar arise from Chinese policies designed to use Myanmar soil to promote separatist violence in our north-eastern States.

China sponsored insurgency

- ★ Virtually every **armed insurgent group in our North-East** has links with armed insurgent groups in north-western Myanmar, notably the **Kachin Independence Army**, which also operates across Myanmar's borders with China's bordering province of

Yunnan.

- ★ China's relations with Myanmar are quite unique. Given existing sanctions by both the US and its European Allies, especially after the Rohingya refugee crisis, **Myanmar has become heavily dependent on China.**
- ★ **The Myanmar-China border has become the epicentre of local armed separatist groups** operating on Myanmar soil, and Indian groups, ranging from ULFA in Assam to the NSCN (IM) in Nagaland. Members of these Indian groups enter China's Yunnan after crossing the border into Myanmar's Kachin Province. They are welcomed, armed, trained and even financed in the Yunnan Province before crossing back to India.
- ★ There are 26 indigenous armed separatist groups in Myanmar including the powerful 12,000-15,000-strong Kachin Independence Army, which operates along Myanmar's borders with both India and China, and the 20,000-25,000-strong United State Army, deployed along the China-Myanmar border.
- ★ These groups are **armed and used as leverage by China to interfere in and influence Myanmar's internal affairs.** China even has an Ambassador to liaise with armed groups operating along and across the China-Myanmar border. China influences these armed groups, which are presently participating in a conference organised by the Myanmar Government for drafting a new Constitution for the country.
- ★ **China is determined to dominate Myanmar's internal politics** by direct contacts with and

support for some of its armed, separatist groups. Beijing also uses such leverage and its political support to obtain contracts for infrastructure and other projects involving construction of ports, dams, roads, bridges and for the mining of precious stones, minerals and metals across Myanmar.

Protests from Myanmar

- ★ While Myanmar is compelled to tolerate and live with Chinese interference, **there have been recent instances when Myanmar has reacted strongly to Chinese transgressions.**
- ★ **Sittwe is ideally located for trans-shipment of goods to and from Kolkata.** The Sittwe Port has been built with Indian assistance. Myanmar has made no secret of its concerns about China's long-standing links with separatist groups in its north-eastern States.
- ★ During a recent visit to Russia, Myanmar's Senior General Min Aung Hlaing made a pointed reference in a Russian state-run TV interview, to a "*strong force*" backing the Arakan Army. His spokesman clarified that the weapons used by the Arakan Army were made in China.

India's interests in Myanmar

- ★ Strategically, India has established its presence across the shores of Myanmar, in the Bay of Bengal, as a result of **participation of ONGC in successful offshore oil exploration projects.**
- ★ It also has a **presence in Sittwe Port** that it has built on the Bay of Bengal, principally for transportation of goods from Mizoram and other north-eastern States, across the Bay of

Bengal, to Kolkata. This is particularly important as, in the meantime, China is keen to invest \$7.2 billion on building the Bay of Bengal Port of Kyaukphyu, together with oil and gas pipelines, linking the Port to its Yunnan Province. The Kyaukphyu port is located not far from the Sittwe Port built by India.

Providing alternatives to Myanmar

- ★ There are naturally concerns in Myanmar of facing a "*debt trap*" situation on the Kyaukphyu port project, akin to that faced by Sri Lanka on the Hambantota Port, built by China.
- ★ Moreover, we would be well-advised in **joining with our partners in the Quad** on issues ranging from dealing with Rohingya refugees to projects involving large investments, if we are to seriously challenge Chinese ambitions in Myanmar.
- ★ Ideally, the issue of Rohingya refugees, which is raising tensions between Myanmar and Bangladesh, would be best resolved by **an inclusive effort involving Myanmar's affected regional neighbours and major external powers like Japan and the US.**

Way forward

- ★ Myanmar lies on the crossroads between India and Bangladesh, on the one hand, and ASEAN countries, on the other. It is on the crossroads of South and South-East Asia. **It has to be an integral part of any strategy the Quad adopts to balance Chinese power in South and South-East Asia.**
- ★ The Quad will have to pay due

attention to the problems and challenges that Myanmar faces from China while dealing with the challenges posed by a growingly aggressive and assertive China.

- ★ Moreover, **India's private sector will have to be incentivised to carefully study the opportunities available** and map out a strategy to enhance its presence in Myanmar. India has, however, done well by establishing training institutions in information technology and agricultural research in Myanmar.
- ★ **Military cooperation with Myanmar** is set to expand with the supply of a Kilo-Class submarine and torpedoes, with discussions reportedly under way for the supply of 105 mm artillery guns, radars and sonars.

Issues Related to French Model of Secularism

The latest crisis in France which emanated from the killing of a middle-school history teacher and followed up killings in French city of Nice has once again brought France's unique model of secularism into spotlight.

French *laïcité*, or secularism is better understood as a project of social cohesion and a key component of French citizenship. It encompasses not simply the formal separation of Church and State, but also the removal of religious values from the public space and their replacement with secular values such as liberty, equality, and fraternity.

This has caused social tension in French society and pushes the country to re-articulate its liberal

values in a way that lessens its internal tensions. In this pursuit France can derive inspiration from Indian model of secularism.

Evolution of French Secularism

- The French model of secularism was developed during the French Revolution in 1905, when a French law separated the church and the state, thus marking the beginnings of French secularism (*laïcité*) in modern times.
- *Laïcité* derives from the French term for laity—non-clergy or lay people.
- Broadly, the idea refers to the freedom of citizens and of public institutions from the influence of organized religion.
- The new Act defined three essential principles: Freedom of conscience, equality in law for spiritual and religious belief, and neutrality of political power.
- This secular outlook was strengthened by another constitutional right — the right to freedom of expression.
- ★ In pursuance of this, French school teachers today are thus actively encouraged to foster a fearless spirit of inquiry, regardless of religion or any other hindrance.
- This French secular tradition was further fortified in the face of new challenges posed by immigration, largely from former French colonies.
- ★ In 2004, another law was promulgated, banning schoolchildren from wearing any overt signs or clothes that would betray their religious affiliation.
- ★ This was an effort to create a unique school space, where everyone would look equal and “religiously anonymous” — no

crosses, no headscarves or burqas, no turbans, no Jewish kippahs (skullcaps).

Challenges Related to French Model of Secularism

- **Changed Demographics:** In early 20th-century France—a fairly homogeneous, Christian nation. French model of secularism was a straightforward attempt to protect the government from the sway of the Catholic Church.
- ★ However, modern France is a more heterogeneous and multi-religious society. Thus, the current model of French secularism is getting into conflict with rights of minorities.
- **Against Freedom of Religion:** Critics of *laïcité* argue that it is a disguised form of anti-clericalism and infringement on individual right to religious expression, and that, instead of promoting freedom of thought and freedom of religion, it prevents the believer from observing his or her religion.
- **Undermining Civil Liberties:** *Laïcité* is also criticized for increasing police powers that could endanger respect for civil liberties.
- **Prompting Radicalization:** *Laïcité* is unintelligible and even shocking to religious minorities, who view it as an injunction to abandon their religion.
- ★ Instead of enhancing social harmony, it may actually be exacerbating religious and racial tensions.

Inspiration that France Can Draw From Indian Secularism

French integration model, which is enshrined in the country's Constitution appears to be not in

synergy with the emergence of multiculturalism. In this context, France can imbibe the philosophy of Indian Secularism. Following are philosophical underpinning of Indian model of Secularism:

- **Sarva Dharma Sambhava:** Indian philosophy of secularism is related to “Sarva Dharma Sambhava” (literally it means that the destination of the paths followed by all religions is the same, though the paths themselves may be different) which means equal respect to all religions.
- **Positive secularism:** This concept, embraced and promoted by personalities like Vivekananda and Mahatma Gandhi is called ‘Positive secularism’ that reflects the dominant ethos of Indian culture.
- **Religious Plurality:** Indian secularism is not an end in itself but a means to address religious plurality and sought to achieve peaceful coexistence of different religions.
- **Protection of Minority Rights:** Indian Secularism deals not only with the religious freedom of individuals but also with the religious freedom of minority communities.

Conclusion

In a pluralistic society, the best approach to nurture secularism is to expand religious freedom rather than strictly practicing state neutrality. Thus, it is incumbent on French society to ensure value-education that makes the younger generation understand and appreciate not only its own religious traditions but also those of the other religions in the country.

Draft Data Centre Policy 2020

Recently, the Ministry of Electronics & Information Technology (MeitY) has released the Draft Data Centre Policy, which aims to simplify clearances for setting up data centres in the country.

Key Points

- **Vision of the Draft Data Centre Policy:**
- ★ Making **India a Global Data Centre hub**,
- ★ **Promote investment** in the sector,
- ★ Propel **digital economy** growth,
- ★ Enable provisioning of trusted hosting infrastructure to fulfil the growing demand of the country and facilitate state of the art **service delivery to citizens**.

Terms Defined:

- ★ **Data Centre:** It is a dedicated secure space within a building/centralized location where computing and networking equipment is concentrated for the purpose of collecting, storing, processing, distributing or allowing access to large amounts of data.
- ★ **Data Centre Parks:** These are specialized secure Data Zone, strategically located with the most conducive non-IT and IT infrastructure, and regulatory environment for housing mix of small scale/large scale clusters of Data Centres to serve the high needs of compute, storage, networking and provision of a wide range of data-related services.

Provisions:

- ★ Providing **Infrastructure Status to the Data Centre Sector**, at

par with other sectors like Railways, Roadways, and Power.

- ★ The status will help the sector **avail long-term credit from domestic and international lenders** at easier terms and will give a boost to the investments.
- ★ **Demarcation of specific zones** with necessary infrastructure such as roads, running water and electricity to set up data centre parks.
- ★ A **single-window, time-bound clearance system** for all the approvals required to set up a data-centre park.
- ★ **Formulation of Data Centre Incentivization Scheme (DCIS)** which will specify the intended beneficiaries, applicability criteria and fiscal and non-fiscal incentives for the sector.
- ★ Setting-up at least four **Data Centre Economic Zones (DCEZ)** in the country, as a Central Sector Scheme - DCEZ Scheme. DCEZs would create an ecosystem of Hyperscale Data Centres, Cloud Service Providers, IT companies, R&D units and other allied industries.
- ★ In order to address the issues around the high consumption of power, data centre parks would be encouraged to **set up their own power generation units**, and use **renewable energy**.
- ★ Data centres will be declared as an **Essential Service** under “**The Essential Services Maintenance Act, 1968 (ESMA)**” which means that there would be a continuity of services even during times of calamities or crisis.
- ★ **Strengthening the Atmanirbhar Bharat initiative** by identifying possible opportunities

of manufacturing of data centre equipment (IT as well as non-IT) in the country.

- ★ The Policy also identifies possible areas of participation by micro, small, and medium enterprises and start-ups.
- ★ Collaboration with the **Ministry of Skills Development and Entrepreneurship (MSDE)** and leading academic institutes to impart large scale training to workforce on Data Centre, Digital and Cloud technologies, and facilitate sector linkages for such trained workforce.
- ★ An **Inter-Ministerial Empowered Committee (IMEC)** would be set up under the Chairmanship of Secretary, MeitY, with participation from various Central Ministries and State Governments.
- ★ It shall be the **key decision-making body** to facilitate the implementation of various measures as defined under this policy framework, enabling ease of doing business in the sector.
- ★ An independent **Data Centre Industry Council (DCIC)** is proposed to be set up, which would act as an interface between the sector and the Government.

Need for a Data Centre Policy

- The need to set up data centre infrastructure in India comes against the backdrop of **data localization norms under the proposed personal data protection legislation** and for **"protection of the digital sovereignty of the country in an increasingly connected world"**.
- ★ Launch of **National Digital Health Mission (NDHM)** and **Global Partnership on**

Artificial Intelligence (GPAI), which involve use of data.

- The **size of the digital economy** in India is estimated to grow from USD 200 billion in 2017-18 to USD 1 trillion by 2025.
- ★ India has witnessed **an exponential growth in digital-commerce, digital entertainment and use of social media.**
- ★ India's **mobile data consumption is already the highest in the world** and is constantly increasing.
- India also offers **advantages** of having a favourable geographical location on the world map, availability of economic resources, established global connectivity through submarine cables, easy and cost-effective access power and readily available skilled manpower, enabling the nation to become a **global Data Centre hub.**
- There are **known impediments to the growth of data centre sector** such as lack of infrastructure or Industry status of the Data Centres, complex clearance processes, time consuming approvals, high cost of power, lack of published standards, absence of specialised building norms for building the Data Centres, submarine cable network connectivity limited to few states and high cost of capital and operational expenditure etc.
- Further, the data centre industry has been **largely concentrated in top 4 cities**, with Mumbai, Delhi, Bengaluru and Chennai accounting for 60% of total sites.

Way Forward

- The data centre expansion will be supported by growth in data

volumes to support high growth in e-commerce, increase in usage of social media, greater preference for over the top (OTT) platforms, the government's impetus to the **Digital India initiative** and rapid digitalisation of services across industries (**Industry 4.0** and **5G**).

- Currently, there is no large-scale foreign investment in data centres in the country. India could essentially become a data centre hub for global enterprises, if the government has a clear cut policy around it.

Judgements should be made easier to comprehend



A lawyer has recently filed a PIL in Supreme Court (Subhash Vijayran versus Union of India). He wants the legislature and the executive to use plain English in drafting laws, Bar Council to introduce plain English in law curricula and Supreme Court to only allow concise and precise pleadings.

What is the argument?

He begins the synopsis to the writ petition in the following way. "The writing of most Lawyers is:

- wordy,
- unclear,
- pompous and
- dull.

We use eight words to say what can be said in two. We use arcane

phrases to express commonplace ideas". Reacting to the plea, the Supreme Court has asked the ministry of law and justice and the Bar Council to respond.

In a judgement from the Supreme Court (Subramanian Swamy versus Union of India), the court had ruled that "This batch of writ petitions preferred under Article 32 of the Constitution of India expositis cavil in its quintessential conceptuality and percipient discord between the venerated and exalted right of freedom of speech and expression of an individual, exploring manifold and multi-layered, limitless, unbounded and unfettered spectrums, and the controls, restrictions and constrictions, under the assumed power of "reasonableness" ingrained in the statutory provisions relating to criminal law to revive and uphold one's reputation".

What could be the way forward?

One could learn from the George Orwell's 1946 essay, Politics and the English Language, which was primarily directed against the Soviet Union. George Orwell set out six principles. "

- ✓ Never use a metaphor, simile or other figure of speech which you are used to seeing in print.
- ✓ Never use a long word where a short one will do.
- ✓ If it is possible to cut a word out, always cut it out.
- ✓ Never use the passive where you can use the active.
- ✓ Never use a foreign phrase, a scientific word or a jargon word if you can think of an everyday English equivalent.
- ✓ Break any of these rules

sooner than say anything barbarous". Copy editors routinely use these principles, but not judiciary.

Svamitva Scheme : Property Card for Rural Households

Recently, Prime Minister Narendra Modi has launched the physical distribution of property cards under the 'SVAMITVA' ((Survey of Villages and Mapping with Improvised Technology in Village Areas) scheme via video conferencing, and asserted that it is a "historic move" set to transform rural India.

- ★ SVAMITVA scheme is meant to create a record of land ownership in rural areas using modern technology.
- ★ The scheme is piloted by the Panchayati Raj ministry and has been launched on April 24 2020, the Panchayati Raj Diwas. Currently, the scheme is launched in six states - Haryana, Karnataka, Madhya Pradesh, Maharashtra, Uttar Pradesh and Uttarakhand.
- ★ The need for this scheme was felt since several villagers in the rural areas do not have papers proving ownership of their land. In most states, survey and measurement of the populated areas in the villages has not been done for the purpose of attestation/verification of properties.
- ★ It is also aimed to fill the above gap to provide ownership rights to people in the villages. It is expected to go a long way in settling property rights in rural hinterlands and likely to become a tool for empowerment and entitlement, reducing

social strife on account of discord over properties.

- ★ The residential land in villages will be measured using drones to create a non-disputable record. It is the latest technology for surveying and measuring of land.
- ★ The scheme will be carried out in close coordination with the Central Panchayati Raj ministry, Survey of India, Panchayati Raj departments and Revenue departments of various states.
- ★ Drones will draw a digital map of every property falling within the geographical limits of a village and demarcate the boundaries of every revenue area.
- ★ Property card for every property in the village will be prepared by states using accurate measurements delivered by drone-mapping. These cards will be given to property owners and will be recognised by the land revenue records department. j The delivery of property rights through an official document will enable villagers to access bank finance using their property as collateral.
- ★ The property records for a village will also be maintained at the Panchayat level, allowing for the collection of associated taxes from the owners. The money generated from these local taxes will be used to build rural infrastructure and facilities.
- ★ Freeing the residential properties including land of title disputes and the creation of an official record is likely to result in appreciation in the market value of the properties.
- ★ The accurate property records can be used for facilitating tax

collection, new building and structure plan, issuing of permits and for thwarting attempts at property grabbing.

- ★ Property card will clear the way to buy and sell property without any dispute for the villagers. After getting the property card, easy access to loans from banks on their houses would be ensured.
- ★ The new technology like using drones in mapping and survey, accurate land records of every village can be created. Due to accurate land records, development related work in the village will also be easier which would be another benefit of these property cards.

Benefits

- ★ Ownership of land and house plays a big role in the development of the country. When there is a record of property, citizens gain confidence and new avenues of investment open. Loan is easily available from the bank on record of property, employment and self-employment avenues open.
- ★ SVAMITVA Scheme will help in strengthening the Panchayati Raj system.
- ★ It will make village management easier for our gram panchayats, in a systematic way like municipalities and municipal corporations.

Bringing Technology to Grassroot Administration

- ★ This Pandemic has thrown at us new challenges and problems which we have never imagined, but it also taught us a very good lesson with a strong message. It has taught us that we have to be self-reliant and self-sufficient. It has taught us that

we should not look for solutions outside the country.

- ★ Every village has to be self-sufficient enough to provide for its basic needs. Similarly every district has to be self-sufficient at its level, every state has to be self-reliant at its level and the whole country has to be self-reliant at its level.
- ★ In the last five years nearly 1.25 Lakh Panchayats have been connected through broadband from a mere 100 before. Similarly, the number of Common Service Centres had crossed 3 Lakhs.
- ★ Since mobile phones are being manufactured in India, the cost of smartphones has become cheaper and the low cost smartphones have reached every village and this would further strengthen the digital infrastructure at village level.
- ★ The progress of Panchayats will ensure the development of the nation and democracy.

Way Forward

- ★ Pandemic has thrown the economy and lives out of gear. Everyone globally and locally has responded to the pandemic in their own ways. Panchayati Raj administration in India is linked to the masses and works at the grass-root level. Linking them with technology and providing smart solutions will help not just in the time of pandemic but also in the long-term.
- ★ Land records are crucial to the lives of rural folk. Many a times there are disputes over the ownership, title, measurement etc. Digitisation of such records and settling the disputes, frees up people from time-wasting court cases and administrative hassles

New Farm Laws and Farmers' Future in India

Indian democracy has been at full play in reaction to the new farm laws. While the government hailed it as a historic decision. The Opposition parties described the passing of these farm laws as “a dark day for farmers” and a “sell out to corporate sharks”.

However, both sides of the political spectrum want farmers' incomes to increase. The Opposition parties want to ensure that through higher and more effective minimum support prices (MSP), while the government is offering greater choices to farmers through markets, without demolishing the existing MSP system.

MSP regime was the creation of the era of scarcity in the mid-1960s. Indian agriculture has, since then, turned the corner from scarcity to surplus. The policy instruments of dealing with shortages are different from those dealing with surpluses.

India has abundant availability of wheat and rice, more than what is being consumed at home at current price and income levels. For the last 5-7 years, our public stocks are overflowing above buffer stock norms, giving a “problem of plenty”, and our exports have been record high.

In a surplus economy, unless we allow a greater role for markets and make agriculture demand-driven, the MSP route can spell financial disaster. This transition is about changing the pricing mix — how much of it should be state-supported and how much market-driven. The new laws are trying to increase the relative role of mar-

kets without dismantling the MSP system.

Changing Focus of MSP

- ★ A perusal of the MSP dominated system of rice and wheat shows that the stocks with the government are way above the buffer stock norms. The economic cost of procured rice comes to about Rs 37/kg and that of wheat is around Rs 27/kg. The cost to company (CTC) of departmental labour of the Food Corporation of India is six to eight times higher than contract labour in the market. No wonder, market prices of rice and wheat are much lower than the economic cost incurred by the FCI.
- ★ In Bihar's rural areas, for example, one can easily get rice in the retail market at Rs 23-25/kg. The bottom line is that grain stocks with the FCI cannot be exported without a subsidy, which invites World Trade Organisation's (WTO) objections.
- ★ The real bill of food subsidy is going through the roof but that is not reflected in the Central budget as the FCI is asked to borrow more and more. The FCI's burden is touching Rs 3 lakh crore. We are simply postponing a financial crisis in the food management system.
- ★ Need of hour is to firstly shift to pulses and oil-seeds, so that their production can be encouraged and protein rich sources can be made affordable.
- ★ Secondly wheat and rice are getting rotten up in FCI's godowns which can't be brought to market, as they will pull down the market prices and farmer's won't be able to sell their produce. Thus, we

have shortage in markets despite bumper crops year after year. MSP in wheat and rice are not just a financial disaster, but also food wastage.

Shanta Kumar Committee

- ★ Government had set up a sixmember committee in 2014 to suggest restructuring or unbundling of FCI to improve its financial management and operational efficiency in procurement, storage and distribution of food grains. The committee chairperson, Shanta Kumar, had submitted the report to Prime Minister Narendra Modi on January 2015.
- ★ It recommends a relook at coverage of 67 percent of population under the existing Food Security Act. It recommends restricting food security benefit to 40 per cent of the population. The reason is that government neither has that much funds to cover all the people nor it actually does, so keeping the percentage to realistic level is recommended.
- ★ It also seeks to link subsidised price of cereals to MSP price. The amount of grains entitlement per person should be increased to 7 kg from existing 5 kg under National Food Security Act.
- ★ The committee recommended gradual introduction of cash transfers in the public distribution system.
- ★ The committee has also recommended abolishing levy rice. The Union government has already taken steps to do away with procurement of levy rice from rice mills. Under levy rice policy, government buys certain percentage of rice (varies

from 25 to 75 per cent in states) from the mills compulsorily, which is called levy rice. Mills are allowed to sell only the remainder in the open market.

- ★ The committee has recommended full deregulation of fertiliser sector and calls for providing cash fertiliser subsidy of Rs 7,000 per hectare to farmers.
- ★ The committee has recommended revisiting MSP policy. It says the government should focus on MSP of pulses and oilseed. This recommendation comes in the backdrop of skewed MSP policy, which concentrates only on wheat and rice. Rest of the 21 commodities, other than wheat and rice, get neglected. It observed:
 - ✓ Only 6 per cent farmers get MSP.
 - ✓ Around 40-50 per cent leakages in PDS.
 - ✓ Between 40-50 per cent beneficiaries do not get it grains they are entitled to.
- ★ **How much foodgrains does FCI procure?**
 - ✓ Total wheat procured: 12 per cent of total production
 - ✓ Total paddy procured: 2 per cent of total production
- ★ The committee has recommended that FCI should involve itself in fullfledged grains procurement only in those states which are poor in procurement which are Eastern Uttar Pradesh, Bihar, West Bengal and Assam.
- ★ In the case of those states which are performing well, like Haryana, Punjab, Andhra Pradesh, Chhattisgarh, Madhya Pradesh and Odisha, the states should do the procurement, the panel has said.

Farm Bills

- ★ The Farmers Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020 allows farmers to sell their produce outside APMC mandis to whoever, even the end customer, offers a higher price.
- ★ The second one — The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Bill, 2020 — allows farmers to enter into a contract farming agreement the buyer for procurement of crops at preapproved prices.
- ★ The Essential Commodities (Amendment) Bill which declassifies items like onions, cereals, pulses, potatoes, edible oilseeds and oils as essential items in normal circumstances.
- ★ Farmers are upset with the three farm bills because none of them mentions anything about MSP. Other, concern is related to the fear that there will be dominance of corporates and private sector in agriculture sector if the sector is deregulated by the government or allows private participation.

Way Forward

- ★ Currently, no system is perfect, be it the one based on MSP or that led by the markets. But the MSP system is much more costly and inefficient, while the market-led system will be more sustainable provided we can “get the markets right”.
- ★ The pricing system has its limits in raising farmers’ incomes. More sustainable solutions lie in augmenting productivity, diversifying to high-value crops and building supply chains welloiled by industrial processing capabilities.

Female Leadership during COVID-19

A detailed recent study by researchers in the United States reports that States which have female governors had fewer COVID-19 related deaths, perhaps partly because female governors acted more decisively by issuing earlier stay-at-home orders.

- ★ Countries with women leaders at the helm seem to have handled the coronavirus pandemic significantly better than their male counterparts, shows a study published in the Centre for Economic Policy Research and the World Economic Forum.
- ★ A study published in the Centre for Economic Policy Research and the World Economic Forum, analysed 194 countries hit by COVID-19. However, since only 19 countries had women leaders, the researchers used a “nearest neighbour” method based on socio-demographic and economic factors, pairing Germany, New Zealand and Bangladesh with maleled Britain, Ireland and Pakistan.
- ★ According to Johns Hopkins University’s Covid-19 tracker, as of August 20, Germany has more than 9,000 coronavirus deaths, while the UK has more than 41,000; New Zealand has 22 Covid-19 deaths, while Ireland has more than 1,700, and Bangladesh has reported 3,500 fatalities as compared to Pakistan’s more than 6,000.

India’s Performance

- ★ Importantly, female leaders bring something quite different to the table. In particular, they perform significantly better

than men in implementing policies that promote the interests of women.

- ★ This was demonstrated in another study conducted by Nobel Laureate Esther Duflo and co-author Raghavendra Chattopadhyay, who used the system of mandated reservations of pradhans in gram panchayats to test the effectiveness of female leadership.
- ★ Their study was made possible by the 1993 amendment of the Indian Constitution, which mandated that all States had to reserve onethird of all positions of pradhan for women. Since villages chosen for the mandated reservations were randomly selected, subsequent differences in investment decisions made by gram panchayats could be attributed to the differences in gender of the pradhans.
- ★ Chattopadhyay and Duflo concluded that pradhans invested more in rural infrastructure that served better the needs of their own gender. For instance, women pradhans were more likely to invest in providing easy access to drinking water since the collection of drinking water is primarily, if not solely, the responsibility of women.
- ★ In addition to the instrumental importance of promoting more space for women in public policy, this is also an important goal from the perspective of gender equality. The right to vote is arguably the most important dimension of participation in public life. Women in Political Leadership
- ★ The underrepresentation of women in Indian legislatures is even more striking. For

instance, the 2019 election sent the largest number of women to the Lok Sabha. Despite this, women constitute just over 14% of the total strength of the Lok Sabha.

- ★ This gives us the dismal rank of 143 out of 192 countries for which data are reported by the InterParliamentary Union. Tiny Rwanda comes out on top with a staggering 60% of seats in its lower house occupied by women.
- ★ We have had and have charismatic female leaders like Indira Gandhi, Jayalalitha, Mayawati, Sushma Swaraj and Mamata Banerjee among several others. Interestingly, a glaring example of gender stereotyping was the labelling of Indira Gandhi as the “only man in the cabinet”.
- ★ The female representation in the current National Democratic Alliance (NDA) government at the Centre is probably not very far from the typical gender composition in Indian central and State governments. Female members make up only about 10% of the total ministerial strength. The underrepresentation of female Ministers in India is also reflected in the fact that Ms. Banerjee is currently the only female Chief Minister

Corporate Hollow and Women

- ★ The 2018 list of top 100 CEOs of the world has one woman. A similar list for India has four women. Both lists have a dismal range of 1% to 4% women. In 2017, 25% of the Indian labour force was women and this figure nearly doubles in USA, Canada, Japan and EU. The situation is grim at a global level.
- ★ Even if they are present in the workforce largely in some nations and to a smaller extent in others like India, they seem to be missing to the point of not being there at all at the top level. According to IMF, a mere addition of the missing Indian women to the workforce would make the world’s biggest democracy richer by 27%.
- ★ It is true that supervisors play a significant role in encouraging their team members to grow and aspire for bigger roles. The idea here is not to make a person a leader but to make them believe in the possibility and that they are equally likely to be appointed a leader than the next man. Men enjoy legitimate power owing to their position and therefore knowledge power because of their experience in that position and sometimes even referent power- the ability to convey a sense of acceptance or approval, which means they are able to influence both men and women who admire or respect them.
- ★ While most young women join the work place aspiring to grow to the top roles, they lose their confidence as they grow up the ladder because they do not get the opportunity of socializing with leadership.
- ★ It is a vicious cycle. Women tend to feel that the workplace is unfair to them and they are not promoted due to their gender so while they tend to work harder they fight less for a raise or a promotion or a change of title and therefore are not represented when the recommendations go to the board.

Women’s Bill

- ★ Women’s Reservation Bill is a pending bill in the Parliament of India which proposes to amend the Constitution of India to reserve 33 percent seats in the lower house of the parliament, Lok Sabha, and in all state legislative assemblies for women.
- ★ The Women’s Reservation Bill was initially introduced in the parliament on September 12, 1996. ; As per the bill, the seats will be reserved on a rotational basis. The seats would be determined by a draw of lots in such a way that a seat would only be reserved once in every three consecutive general elections.
- ★ The original idea for this bill originated from a constitutional amendment which was passed back in 1993.
- ★ The constitutional amendment stated that a random one third of village council leader, or Sarpanch, positions in the gram panchayat should be reserved for women.
- ★ The Women’s Reservation Bill was launched as a long-term plan to extend this reservation to Lok Sabha and state legislative assemblies. The people who opposed this bill considered this as preferential treatment towards women of India.
- ★ Currently, the bill is still pending in the Lower House of Parliament, which is Lok Sabha. The bill will only be passed if the ruling government supports the bill with full force, as they have the majority in Lok Sabha.
- ★ The 73rd Constitutional Amendment have created space for women in political participation and decision mak-

ing at the grass root level by providing that 1/3rd of the seats are reserved in all over the country.

Declining Participation in Economy

- ★ Four out of five women are not working in India. Only Yemen, Iraq, Jordan, Syria, Algeria, Iran, and the West Bank and Gaza have lower female labour force participation (FLFP) rate than India.
- ★ In 1990, India's FLFP was 30.3 percent. By 2019, it had declined to 20.5 percent, according to the World Bank. While the men's labour force participation rate slightly decreased over time, too, it is four times that of women at 76.08 percent in 2019.
- ★ According to a 2019 report by Google and Bain & Company, women were already the worst hit by India's unemployment crisis. While the overall Indian unemployment rate was at 7 percent before India's March lockdown, it was already as high as 18 percent for women. A preliminary study found that Indian women have already lost more jobs than men during the COVID-19 pandemic.

Way Forward

- ★ Gender perspectives bring not just diversity but also dynamics to the process of decision making. India has been a victim to social misogyny for a long time. A 2016 survey in the Economic and Political Weekly finds that around 40-60 percent of women and men in rural and urban parts of India believe that married women whose husbands earn a good living should not work outside the home.

- ★ In order to have women as leaders, it is important to hire women in leadership positions and nurture their talent like other male workers.
- ★ Despite policies and guidelines, it is important to have a major ideological shift amongst the masses.
- ★ In India, it is necessary to get rid of inherent biases and perceptions about the effectiveness of women in roles of authority. Patriarchal mindset and glass ceiling effect can be seen all across the corporate, political and social spectrum.

A Recipe to tear down Trade Unions

Labour law 'reform' has been on the table since 1991 as every government's favourite solution for economic growth. Yet, there was no consensus between governments, political parties, workers and their trade unions, and employers, on what this meant.

- ★ Trade unions first emerged in the 19th century as **self-managed organisation of workers** in the face of extreme exploitation. They provided, and continue to provide, a collective voice to working people against employers' exploitative, unfair and often illegal practices.
- ★ It is through trade unions that workers have been able to win better wages, fairer employment conditions, and safe and secure workplaces.

Trade Union Act

- ★ In India, workers won the legal right to form trade unions under the colonial rule in 1926, when the Trade Union Act (TUA) was adopted.

- ★ The law provided a mechanism for the **registration of trade unions**, from which they derived their rights, and a framework governing their functioning.
- ★ The TUA also **bound workers' actions within a legal framework** by providing for deregistration if a trade union "contravened any provisions of the Act".
- ★ The TUA gave workers the right, through their registered trade union, to take steps to press their claims, and where necessary, as in the case of a malevolent employer, agitate for their claims and advance them before the government and the judiciary.
- ★ It also provided members (workers) and elected officers of a union a degree of immunity, including against the law on criminal conspiracy. Importantly, **the law recognised that actions based on collective decisions by workers were legal and did not constitute criminal conspiracy.**

Repealing of Trade Unions Act

- ★ The so-called "simplifying" of labour laws, repealing the TUA, the Industrial Disputes Act, 1947 and the Industrial Employment (Standing Orders) Act, 1946, and creating the Industrial Relations Code (IRC), has a very sinister outcome for workers' right to association.
- ★ The code enormously **widens the grounds under which a trade union may be deregistered**. Under the TUA, deregistration was limited to the internal functioning of a union — in case a union violated the financial rules set down under the law or its own constitution. The

Standing Orders Act and the Industrial Disputes Act were concerned with conditions of employment and settlement of disputes respectively. They had nothing to do with the internal functioning, and, therefore, with the existence of a trade union.

- ★ Under the new IRC, a trade union can be deregistered for **contravention of unspecified provisions of the code**. It simply says that **deregistration would follow in case of “contravention by the Trade Union of the provisions of this Code”**. The possibility of deregistering a trade union in this unspecified manner **shifts the balance completely in favour of employers, who continue to enjoy protection under the Companies Act**. This violates the principles of equality before the law and of natural justice.

What happens when a trade union is deregistered?

- ★ When a trade union is deregistered, it can no longer represent its members (the workers) before the dispute resolution machinery or in court. And, the moment a trade union loses its registration, any collective decision taken by its members and elected officers can be treated as illegal.
- ★ It also means that the trade union's members and elected officers lose their immunity from prosecution for criminal conspiracy for collective decisions and actions, which is exactly what the TUA protected them against.
- ★ The new code appears to be designed to deter collective action by workers' unions, and

make them fearful of getting trapped in the cross hairs of the new, supposedly “simplified” code.

Impact

- ★ With the threat of deregistration ever-present, workers and their unions will be pushed to create extra-legal formations like ‘struggle committees’ and ‘workers’ fronts, such as existed before the TUA, in order to advance their demands against unreasonable employers.
- ★ This would have two outcomes: first, it will push employment dispute resolution outside the legal framework, which, in turn, will lead to the second, even more damaging outcome, which is criminalising working class dissent, since workers' agitations will have to take place through extra-legal formations.

Conclusion

The freewheeling provision for trade union deregistration in the IRC, apart from being an attack on a century-old universal right is, very importantly, also the withdrawal of an absolute right. Once a trade union is deregistered or is effectively silenced by a constant and amorphous threat of deregistration, workers effectively lose their fundamental right to freedom of association. Therefore, undermining trade unions, as the new code does, bodes ill for democratic rights in this country.

Andhra Pradesh's Capital Conundrums

Andhra Pradesh is witnessing a ‘Game of Thrones’-like gritty politics involving capital cities. Chief Minister Y.S. Jaganmohan Reddy's

government proposed a three-capital plan in the previous session of the Assembly. As per the Andhra Pradesh Decentralisation and Inclusive Development of All Regions Bill, 2020, the State will have Visakhapatnam, Amaravati and Kurnool respectively as the executive, legislative and judicial capitals of the State. The proposal is set to replace the ambitious plan of the previous government of building Amaravati as a world-class greenfield capital city. The proposed three-capital plan claims to produce decentralised growth, but will it achieve the goal?

Why is Andhra Pradesh mulling a ‘three-capital’ plan?

- ★ The K.C. Sivaramakrishnan (KCS) Committee that made recommendations was constituted in the aftermath of a **bifurcation driven by an agitation legitimised and politicised by regional imbalances in development**. The Terms of Reference (ToR) for the committee explicitly stress the **overall development of backward regions in the State**. They refer to the existing uneven development: **the backward north-coastal Andhra and Rayalaseema districts** compared to the central coastal districts.
- ★ The ToR also stress **least disturbance to agricultural lands**. Decentralised development has thus become a fait accompli for the committee to recommend, especially in the backdrop of the coruscating sub-nationalism that was running high at the time.
- ★ While the government's formula of three capitals — calling them judicial, legislative and executive capitals — appears to

be an imported idea, perhaps inspired by the South African example, the KCS committee stressed **distributed development through decentralised governance**. The essence of the 'distributed development' concept was to make deliberate efforts to spatially deconcentrate executive power, driven by region-specific economic activities.

- ★ Further, the panel recommended developing the **Visakhapatnam region as a high-tech zone**. In a similar manner, it recommends developing the 'Rayalaseema Arc', building on the Hyderabad-Kurnool-Anantpur-Bengaluru highway, and the 'Kalahasti Spine', using the potential of Nadikudi-Kalahasti railway line.

What could be the challenges with the 'three-capital' plan?

- ★ There may be other reasons for the functionally organised, multiple-capital plan. But the key principle of 'distributed development' must not be lost in executing it. The following points may help in ensuring that.
- ★ First, the multi-capital plan is beset with difficult challenges for the government's functioning. **Running legislative business with most of the secretariat located 400 km away can lead to logistic nightmares and inefficiencies**, especially in the absence of efficient infrastructure. Andhra Pradesh can learn from Maharashtra's experience of running Winter Sessions in Nagpur, aimed essentially at placating regional sentiments. Thus, the success of distributed development depends on a well-developed

infrastructural network linking the growth centres.

- ★ Second, **infrastructure development within cities** — the proposed growth centres — is critical. The KCS committee stressed this extensively. Visakhapatnam, as the executive capital, will experience much stress. The basis cannot be just the availability of land and built-up area, but also the ability to cope with such an intense development. Visakhapatnam, in spite of its excellent and natural advantages, is woefully lacking in its infrastructure. It could not even deliver a functional Bus Rapid Transit system, even with the availability of resources.
- ★ Third, it is **necessary to be conscious of the dynamics set off by these plans, with weak institutions to regulate growth**. Unbridled real estate interests can co-opt local State institutions and sabotage **environmental interests**. The KCS committee warns about the environmental impact of such intensification and densification in cities, with a special reference to Visakhapatnam. The ongoing processes of preparing the Master Plan and Strategic Plan for the Visakhapatnam Metropolitan Region are an opportunity to address these challenges.
- ★ Finally, **the Andhra Pradesh Decentralisation and Inclusive Development of All Regions Bill, 2020 is thin in details** but offers hope in its broad contours of pursuing inclusive development through Zonal Planning and Development Boards. Chief Minister

Jaganmohan Reddy now stands at a crossroads: he can either leave the State mired in the alleged "capitalising politics", or work towards a vibrant and well-governed Andhra Pradesh by pursuing the true spirit of "distributed development", irrespective of how the functionalised multiple-capital plan plays out.

Step Up for TB 2020 Report

The "Step Up for TB 2020" report by the Stop TB Partnership and Médecins Sans Frontières/Doctors Without Borders (MSF) has highlighted India's conservative approach regarding the new medicines for Drug Resistant TB, putting lives of patients including children in danger.

- The current **Pandemic** has further aggravated the sufferings of TB patients in the country in terms of disease **diagnosis, surveillance and treatment**.

About Tuberculosis (TB)

- **Tuberculosis** is caused by bacteria (**Mycobacterium tuberculosis**) that most often affect the **lungs**.
- **Transmission:** TB is spread from person to person through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the air.
- **Symptoms:** Cough with sputum and blood at times, chest pains, weakness, weight loss, fever and night sweats.
- **Treatment:** TB is treatable and curable disease. It is treated with a standard 6 month course of 4 antimicrobial drugs that are provided with informa-

tion, supervision and support to the patient by a health worker or trained volunteer.

- **Multidrug-resistant tuberculosis (MDR-TB)** is a form of TB caused by bacteria that do not respond to isoniazid and rifampicin, the 2 most powerful, first-line anti-TB drugs. MDR-TB is treatable and curable by using second-line drugs.
- **Extensively drug-resistant TB (XDR-TB)** is a more serious form of MDR-TB caused by bacteria that do not respond to the most effective second-line anti-TB drugs, often leaving patients without any further treatment options.
- Tuberculosis (TB) remains the **world's deadliest infectious disease**, killing more than **1.4 million people in 2019**, despite being curable.

Key Points

- **About the Report:**
- ★ The report presents data on **37 high-burden countries, including India** (representing 77% of the global estimated TB incident cases), assessing the extent to which **national policies align with international best practices** based on **World Health Organisation (WHO)** guidelines and the latest scientific research.
- ★ This is the **4th edition** of this report, which focuses on countries' policies and practices related to **4 key areas of national TB programmes (NTPs)**:
- ★ Diagnosis,
- ★ Treatment (including models of care),
- ★ Prevention, and
- ★ Medicines procurement policies.

Findings:

- ★ There are barriers to policy adoption and implementation across the surveyed countries.
- ★ The critical medical innovations are reaching very few people who urgently need them.
- ★ The report emphasised that **oral treatment regimens** for people with drug-resistant TB (DR-TB) must be prioritised over older, toxic drugs that have to be injected and cause serious side effects.
- ★ Nearly **1 in 3 people** with TB disease is **still not diagnosed and notified**.
- ★ Almost **2 in 3 countries** surveyed still do not include in their policies **urinary TB lipoarabinomannan (TB LAM) testing** for people living with HIV.
- ★ TB LAM is the only rapid point-of-care TB test available, and there is more than enough evidence of its benefits as a life-saving point-of-care test.

India Specific Findings:

- ★ India was criticised for not scaling up the new Disease Resistant (DR)-TB drugs **Bedaquiline and Delamanid**, needed even more during **Covid-19**.
- ★ **Pretomanid** is the third new drug developed for the treatment.
- ★ Until March 2020, less than **10% of India's MDR-TB patients** who were eligible for Bedaquiline had received it. This is alarming, since **India is home to a quarter of the world's DR-TB patients**.
- ★ India has the highest TB burden in the world. In 2018, **2.15 million TB cases were reported**, which is 16% more than in 2017.

India's Initiative to Fight TB:

- ★ **National Tuberculosis Elimination Programme:** To align with the ambitious goal, the programme has been renamed from the Revised National Tuberculosis Control Programme (RNTCP) to **National Tuberculosis Elimination Programme (NTEP)**.
- ★ **Eliminating TB by 2025:** India is committed to **eliminating tuberculosis from the country by 2025**, five years ahead of the global target by the **World Health Organisation (WHO)** i.e. 2030.
- ★ **The Nikshay Ecosystem:** It is the National TB information system which is a one-stop solution to manage information of patients and monitor program activity and performance throughout the country.
- ★ **Nikshay Poshan Yojana (NPY):** This scheme is aimed at providing financial support to TB patients for their nutrition.
- ★ **TB Harega Desh Jeetega Campaign: Launched In September 2019** it is showcasing the highest level of commitment for the elimination of TB.

The Saksham Project:

- ★ It is a project of the Tata Institute of Social Sciences (TISS) that has been providing psycho-social counselling to DR-TB patients.
- ★ The Government of India has partnered with the **Global Fund** to launch **JEET (Joint Effort for Elimination of TB)**, a private sector engagement program operating across the country.

Global Efforts:

- ★ The World Health Organization (WHO) has launched a joint ini-

tiative **"Find. Treat. All. #EndTB"** with the Global Fund and Stop TB Partnership.

- ★ The WHO End TB Strategy outlines global impact targets to **reduce TB deaths by 90%, to cut new cases by 80%** between the years **2015 and 2030**, and to ensure that no family is burdened with catastrophic costs due to TB.
- ★ It aims to accelerate the TB response and ensure access to care, in line with WHO's overall drive towards **Universal Health Coverage**.
- WHO also releases the **Global Tuberculosis Report**.

Way Forward

- Despite the **notable successes** achieved by the different programmes, robust efforts are needed to improve the early and **accurate diagnosis** followed by a prompt appropriate treatment which is vital for ending TB.
- India must collaborate with global efforts which are being done to eliminate the TB along with the **paradigm shift in the control measure**.

Supreme Court on Curbing Fake News

Recently, the Supreme Court has asked the Centre to provide information on the existing legal mechanisms to deal with complaints about the content on television channels.

- Further it has asked the Centre to create an authority to check **fake news** and bigotry on air.

Key Points

Background:

- ★ The court was hearing a **Public Interest Litigation (PIL)** filed by various organisations who

objected to the reporting by certain television news channels and news portals on the **Tablighi Jamaat** event held in **March 2020**.

- ★ The religious gathering **emerged as one of the early hot spots of Covid-19** in the national capital.
- ★ The **petitions sought a direction from the court to stop the dissemination of fake news and to identify and take strict action** against sections of the media that **communalised** the incident.
- ★ In **October 2020**, the bench asked the Centre to file a response on steps taken to ensure fake news is not circulated through online and electronic media platforms.
- ★ The government, through the Ministry, **filed an affidavit in November and cited its advisories**, which maintained that **media coverage of the case predominantly struck a balanced and neutral perspective**.
- ★ It held that as a matter of journalistic policy, any section of the media may highlight different events, issues and happenings across the world as per their choice and it was for the viewer to choose from the varied opinions offered by the different media outlets.
- ★ The court **rejected the affidavit as inadequate** and asked if the regulatory provisions of the **Cable TV Network (Regulation) Act of 1995**, meant for cable networks, would apply to TV broadcasts as well.

Fake News:

- ★ Fake news is **news, stories or hoaxes created to deliberately**

misinform or deceive readers.

- ★ Usually, these stories are created **to either influence people's views, push a political agenda or cause confusion** and can often be a profitable business for online publishers.
- ★ Fake news **affects free speech and informed choices of the subjects** of the country, leading to the hijacking of democracy.

Controlling Mechanism:

- **Rebuttal:** It is a **form of fact-checking** wherein the fake news is debunked by pointing out errors like mismatch, malicious editing and misattribution.
- ★ **Public Education: Educating the end-users to be more discerning consumers** of news by informing them of verification tools so that they can ascertain the accuracy of a news item before sharing it.

Laws and Regulation to Curb Fake News in India:

- ★ There is **no specific law against fake news** in India. Free publication of news flows from **Article 19** of the Constitution guaranteeing **Freedom of Speech**.
- ★ **Press Council of India:** It is a regulatory body which can warn, admonish or censure the **newspaper, the news agency, the editor or the journalist** or disapprove the conduct of the editor or the journalist if it finds that a newspaper or a news agency has violated journalistic ethics.
- ★ **News Broadcasters Association:** It represents the private television news and current affairs broadcasters. The **self-regulatory body** probes com-

plaints against electronic media.

★ **Indian Broadcast Foundation:** It looks into the complaints against contents aired by channels.

★ **Broadcasting Content Complaint Council:** It admits complaints against TV broadcasters for objectionable TV content and fake news.

★ **Indian Penal Code: Section 153** (wantonly giving provocation with intent to cause riot) and **Section 295** (injuring or defiling a place of worship with intent to insult the religion of any class) can be invoked to guard against fake news.

★ **Information Technology Act 2000:** According to the **Section 66** of the act, if any person, dishonestly or fraudulently, does any act referred to in **Section 43** (damage to computer, computer system), shall be punishable with imprisonment for a term which may extend to three years or with fine which may extend to five lakh rupees or with both.

★ **Civil or Criminal Case for Defamation:** It is another resort against fake news for individuals and groups hurt by the fake news. **IPC Section 499** (defamation) and **Section 500** (whoever defames another shall be punished with simple imprisonment for a term which may extend to two years, or with fine, or with both) provide for a defamation suit.

Way Forward

- Fake news has existed since the dawn of the printing press but in the age of the internet and social media, it has found a tremendous application. Manipulation of algorithms of

social media and search engines is a global trend now.

- Misinformation and disinformation spread in the media is becoming a serious social challenge. It is leading to the poisonous atmosphere on the web and causing riots and lynchings on the road.
- Countering content manipulation and fake news to restore faith in social media without undermining internet and media freedom will require public education, strengthening of regulations and effort of tech companies to make suitable algorithms for news curation.
- Any future legislation should take the whole picture into account and not blame the media and go for knee-jerk reactions; in this age of new media anyone can create and circulate new for undisclosed benefits.

Nudge – A Desirable Public Policy Tool

This is a classic example of businesses using behavioural foibles to upsell products to customers. There is now a school of thought that the understanding of human behaviour can be used by policymakers to nudge citizens to act in a way that is good for them or for the country at large.

The Economic Survey of 2018-19 had an entire chapter devoted to leveraging the behavioural economics concept of 'Nudge' in public policy. 'Nudge Units' now exist in many countries including Germany, the UK and Japan to help make policies that use this theory.

What is 'nudge' in public policy?

- ★ The 'Nudge' theory is predicated on the assumption that **the**

decisions we make in everyday life are not completely rational and influenced by behavioural biases. The supporters of this theory think that **the way to make people make the right choice is to identify the psychological factors that lead to those choices and use behavioural interventions or 'nudges' to lead to better decision-making.**

- ★ The theory was popularised by **Richard Thaler and Cass Sunstein** in the book, *Nudge: Improving Decisions about Health, Wealth and Happiness*. They define it as "*any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives.*"
- ★ The key here is that **the citizens are not forced into any option** and that they have the entire array of choices open to them. Small tweaks are done to **gently push them towards a more desirable alternative.**

Influencing public decisions

There are many ways in which individuals can be made to act in a way that is good for themselves and the society.

- ★ The first is **plain campaigning**, where the citizens are free to choose any option.
- ★ The second is **'nudge'**, where behavioural economic inputs are used to make one choice appear better than others.
- ★ The third is **giving economic incentives** to lead to one particular choice.

And the fourth is setting up laws to prohibit certain choices.

A combination of nudge, incentives and mandate has been used

by the policymakers so far in India. Swachh Bharat Mission, GiveItUp campaign for gas cylinder subsidy, and Beti Bachao Beti Padhao are some of the campaigns where nudge has been used successfully in recent years. But simply using 'nudge' does not always give the desired result, so it is combined with incentives (income tax breaks for 80C investments) and, at times, prohibitive laws (alcohol ban in some States).

Recent examples

- ★ A combination of 'nudge' with incentives is seen in recent rounds of Covid-related stimulus too. The most obvious example is the **LTC cash voucher scheme**. The LTC money spent on domestic travel is tax-exempt if some conditions are fulfilled. But since most did not travel during the pandemic, this tax benefit could not be claimed. The Centre has said that instead of one LTC amount, Central Government employees will be given tax benefit on the leave encashment amount, and the travel fare, if the taxpayer purchases goods and services worth three times the travel fare and one time the leave encashment. The goods and services should attract GST of 12 per cent or more, should be bought from a GST registered vendor and paid through digital mode.
- ★ So here the Centre is **using the loss-aversion bias — the taxpayer loses the tax benefit** if he has not travelled during the pandemic — **to nudge people to buy goods thus spurring demand**, giving revenue to the government and **nudging people towards digital payments**.

The taxpayer, of course, has the option of not buying the goods or services and foregoing the tax break, if he so wish.

Way forward

The government could use the insights it has on public behaviour to implement policies that may not be in the best interest of citizens. The government should ensure that such practices do not creep into public policies' use of 'nudges.' It can be avoided by –

- ★ The government **being transparent about its intent** and **informing the people** about the way in which their choices are being shaped. This should be done even though it may make the implementation less effective; and
- ★ **persuading citizens through rational means** (with campaigns, awareness drives, etc) should be the preferred course of action as only such methods respect the freedom of the individual.

National Commission for Minorities

Recently, it has been highlighted that the seven-member National Commission for Minorities (NCM) has only one member left after the retirement of its vice-chairperson while the other 5 posts have been vacant since May 2020.

Key Points

- ★ The **Ministry for Minority Affairs** clarified that the process is underway and there has been a delay in filling the vacancies because of the **Covid-19 pandemic**.
- ★ However, it is **not the first time that vacancies have not been filled** in the NCM. In 2017, all seven posts remained empty

for over two months.

- In **2004**, the **standing committee on social justice and empowerment**, headed by **Sumitra Mahajan**, made specific recommendations to strengthen the NCM, highlighting its **insufficient investigative powers**.
- ★ However, these recommendations were **never implemented** by the then government. The reports tabled by the NCM are **hardly taken up or debated** irrespective of the government in power.
- **Section 13 of the National Commission for Minorities (NCM) Act, 1992** mandates that the **annual report**, together with the memorandum of action taken on the recommendations contained therein, as well as the reasons for non-acceptance of the recommendations, if any, be **tabled before Parliament annually**.
- ★ These **reports have not been tabled** in Parliament since **2010**.

National Commission for Minorities

Genesis:

- ★ In **1978**, setting up of the **Minorities Commission (MC)** was envisaged in the Ministry of Home Affairs Resolution.
- ★ In **1984**, the MC was detached from the Ministry of Home Affairs and placed under the newly created Ministry of Welfare, which excluded linguistic minorities from the Commission's jurisdiction in 1988.
- ★ In **1992**, with the enactment of the **NCM Act, 1992**, the MC became a statutory body and was renamed as the NCM.

- ★ In 1993, the first **Statutory National Commission** was set up and **five religious communities** viz the Muslims, Christians, Sikhs, Buddhists and Zoroastrians (Parsis) were notified as minority communities.
- ★ In 2014, Jains were also notified as a minority community.

Composition:

- ★ NCM consists of a **Chairperson, a Vice-Chairperson and five members** and all of them shall be from amongst the minority communities.
- ★ Total of 7 persons to be nominated by the Central Government should be from amongst **persons of eminence, ability and integrity**. The Ministry for Minority Affairs recommends the names to the Prime Minister's Office.
- ★ **Tenure:** Each Member holds office for a **period of three years** from the date of assumption of office.

Functions:

- ★ **Evaluation of the progress of the development** of minorities under the Union and States.
- ★ **Monitoring of the working of the safeguards** for minorities provided in the Constitution and in laws enacted by Parliament and the state legislatures.
- ★ It ensures that the **Prime Minister's 15-point programme** is implemented and the programmes for minority communities are actually functioning.
- ★ **Making recommendations for the effective implementation of safeguards** for the protection of the interests of minorities by the central or state governments.

- ★ **Looking into specific complaints** regarding deprivation of rights and safeguards of minorities and taking up such matters with the appropriate authorities.

- ★ Aggrieved persons belonging to the minority communities may approach the concerned State Minorities Commissions for redressal of their grievances.
- ★ **Getting studies to be undertaken into the problems arising** out of any discrimination against minorities and recommending measures for their removal.
- ★ It **investigates matters of communal conflict and riots**. For example, the 2011 **Bharatpur communal riots**, as well as the 2012 **Bodo-Muslim clashes in Assam**, were investigated by the commission and their findings were submitted to the government.
- ★ It observes the **Minorities Rights Day** every year on **18th December** which marks the adoption of the "Declaration on the Rights of Persons belonging to National or Ethnic, Religious and Linguistic Minorities" by the **United Nations** in 1992.
- ★ The declaration states that **countries shall protect the existence of the national or ethnic, cultural, religious and linguistic identity of minorities** within their respective territories and encourage conditions for the promotion of that identity.

National Nutrition Mission

Recently, the NITI Aayog has released "Accelerating Progress On Nutrition In India: What Will It

Take", the third progress report on the National Nutrition Mission or the Poshan Abhiyaan.

Key Points

National Nutrition Mission:

- ★ **Launched in 2018**, it is the Government of India's **flagship programme** to improve nutritional outcomes for children, pregnant women and lactating mothers.
- ★ It is backed by a **National Nutrition Strategy** prepared by the NITI Aayog with the goal of attaining "*Kuposhan Mukh Bharat*" or **malnutrition-free India**, by 2022.

Aims:

- ★ To reduce **stunting, undernutrition, anemia** (among young children, women and adolescent girls) and **low birth weight by 2%, 2%, 3% and 2% per annum respectively**.
- ★ To address the problem of **malnutrition** in a mission-mode.
- ★ **50% of the total budget** comes from the **World Bank** or other multilateral development banks and the rest of the **50% is through Centre's budgetary support**.
- ★ The Centre's budgetary support is further divided into **60:40 between the Centre and the States, 90:10 for the north-eastern region and the Himalayan States and 100% for the Union Territories (UTs)** without legislature.

Prevalence:

- ★ More than a third of children under five suffer from stunting and wasting and 40% of children between one and four are anaemic.
- ★ Over 50% of pregnant and non-pregnant women were found to

be anaemic, according to the **National Family Health Survey-4** released in 2016.

About the Report:

- ★ The **third progress report (October 2019-April 2020)** takes stock of the **roll-out status on the ground and implementation challenges** encountered at various levels through large scale datasets.
- ★ These datasets are the **NFHS-4 and Comprehensive National Nutrition Survey (CNNS)**.
- ★ The **initial Reports I and II**, focused majorly on the **mission's preparedness and implementation** by States and UTs, respectively.
- ★ The **review report was drafted in March 2020 and does not factor worsening poverty and hunger levels since then**, which are expected to have gone down further due to the **Covid-19**.

Concerns Highlighted:

- ★ On stunting, **India's targets are conservative as compared to the global target** defined by the **World Health Assembly (WHA)**, which is a prevalence rate of 5% of stunting as opposed to India's goal of reducing stunting levels to 13.3% by 2022.
- ★ The **target of reducing prevalence levels of anaemia among pregnant women** from 50.3% in 2016 to 34.4% in 2022 and **among adolescent girls** from 52.9% in 2016 to 39.66%, is also considered to be **conservative as compared to the WHA's target of halving prevalence levels**.
- ★ In the wake of the **pandemic**, experts warn that **deepening poverty and hunger** may

delay achieving the goals defined under the Mission.

Suggestions:

On Stunting:

- ★ To improve complementary feeding using both behaviour change interventions and complementary food supplements in the **Integrated Child Development Services (ICDS)**.
- ★ To work towards investments in girls and women (education during childhood, reducing early marriage and early pregnancy, improving care during and after pregnancy) along with other social determinants.
- ★ To improve water, sanitation, handwashing with soap and hygienic disposal of children's stools with other effective interventions.

On Wasting:

- To include interventions that go beyond the treatment of **severe acute malnutrition (SAM)** and also address moderate wasting, have the potential to achieve larger declines in wasting.
- ★ To scale-up to reach facility-based treatment of SAM to all those needing in-patient care.
- ★ To urgently release a full strategy for prevention and integrated management of wasting nationally.

On Anaemia:

- ★ To scale-up scenario that focuses only on health sector interventions which will achieve modest improvements in anaemia among women of reproductive age.

Way Forward

- As the **National Nutrition Mission** continues to play an

National Nutrition Mission

Build on initiatives of States, encourage local innovations

Involve panchayats & communities, reward & recognise malnutrition free panchayats

Life Cycle approach; focus on pregnant & lactating mothers, children under 3 years and adolescent girls

Converge district implementation plans from 2015 – Health, ICDS, Swachh Bharat, Matritva Sahyog Yojana, Scheme for Adolescent Girls

Begin implementation with joint village contact programme

Address under-nutrition through multi-sectoral approach

Integrate nutrition in health monitoring & tracking systems

important role in India's endeavour against malnutrition, India needs to now **accelerate actions on multiple fronts**. The projections are optimistic, and will need to be **re-adjusted for the Covid-19 disruptions** to health and nutrition services.

- There is a need to quickly graduate to a **POSHAN-plus strategy** which apart from **continued strengthening the four pillars of the mission** (Technology, Convergence, Behavioral change and Capacity building), also requires a renewed focus on other social determinants in addition to addressing the governance **challenges of the National Health Mission (NHM) and ICDS** delivery mechanisms.

Anti Defection Law in North East Mizoram

Anti defection is a blow to political probity and a healthy political culture in the country.



Usually north india has been witnessing this kind of distortive and manipulative politics but recently north east indian state Mizoram gave a new example.

Recently, Mizoram Speaker Lalrinliana Sailo disqualified

Leader of the Opposition, Lalduhoma, as a member of the State Assembly under the anti-defection law. The veteran politician had contested the 2018 assembly polls as an independent and won from the Serchhip constituency and allegedly later defected to the Zoram People's Movement (ZPM).

It is mention worthy here that In September, 12 MLAs of the ruling Mizo National Front (MNF) had submitted petitions to Speaker Sailo, demanding disqualification of Mr Lalduhoma. His subsequent conduct and activities attracted disqualification in terms of Para 2(2) of the Tenth Schedule to the Constitution of India.

Anti defection laws in india :

- ★ The anti-defection law was passed in 1985 through the 52nd Amendment to the Constitution. The law that was contained in the 10th Schedule of the Constitution came into effect on March 1, 1985.
- ★ There are two grounds on which a member of a legislature can be disqualified.
- ★ One, if the member voluntarily gives up the membership of the party, he shall be disqualified. Voluntarily giving up the membership is not the same as resigning from a party. Even without resigning, a legislator can be disqualified if by his conduct the Speaker/Chairman of the concerned House draws a reasonable inference that the member has voluntarily given up the membership of his party.
- ★ Second, if a legislator votes in the House against the direction of his party and his action is not condoned by his party, he can be disqualified. These are

the two grounds on which a legislator can be disqualified from being a member of the House.

- ★ However, there is an exception that was provided in the law to protect the legislators from disqualification. The 10th Schedule says that if there is a merger between two political parties and two-thirds of the members of a legislature party agree to the merger, they will not be disqualified.

Disqualification on Ground of Defection not to apply in case of Merger:

A member of a House shall not be disqualified, where his original political party merges with another political party and he claims that he and any other members of his original political party—

- a. have become members of such other political party or, as the case may be, of a new political party formed by such merger; or
- b. have not accepted the merger and opted to function as a separate group.

The 2003 Amendment :

- ★ The last step in the legislative journey of the anti-defection law came in 2003. A Constitution Amendment Bill was introduced in Parliament by the then government to address some of the issues with the law. A committee headed by Pranab Mukherjee examined the Bill.
- ★ The committee observed that the provision of split has been grossly misused to engineer multiple divisions in the party, as a result of which the evil of defection has not been checked in the right earnest. Further it is also observed that the lure of

office of profit plays dominant part in the political horse-trading resulting in spate of defections and counter defections.”

- ★ The one-third split provision which offered protection to defectors was deleted from the law on the committee's recommendation. The 2003 Amendment also incorporated the 1967 advice of the Y B Chavan committee in limiting the size of the Council of Ministers, and preventing defecting legislators from joining the Council of Ministers until their re-election. However, as events in the years and decades since have demonstrated, these amendments have had only limited impact.

Role of Speaker :

- ★ The Anti-Defection law is clear that the question of disqualification or otherwise under the Tenth Schedule is to be decided by the Speaker.
- ★ The Courts have only the power of judicial review and any a priori intervention is ruled out.
- ★ It is an established precedent that the Speaker as the Head of Legislature and being a constitutional authority is not amenable to the jurisdiction of the Courts.
- ★ However, this applies in respect of the conduct of legislative business where the Speaker is supreme and final authority. However, in areas wherein the Speaker is expected to function as a quasi-judicial authority under the Tenth Schedule, it would definitely invite judicial review and the Office of the Speaker cannot claim any special privilege.

Judicial Review of Anti-Defection Law

- ★ The scope of this anti-defection law was examined in detail in *Kihoto Hollohan v Zachillhu*, a case that also analyzed various other aspects of this legislation also. Here, the court, speaking about the necessity of an anti-defection legislation, said, "The object is to curb the evil of political defections motivated by lure of office or other similar considerations which endanger the foundations of our democracy."
- ★ The decision of the Speaker was not immune from judicial scrutiny. The Court claimed that a dispute regarding the disqualification of a Member of Parliament was not to be treated as a matter of privilege but one which is not legislative but judicial in nature.
- ★ The remedy proposed to disqualify the members of either House of Parliament or of the State Legislature who is found to have defected from continuing as a Member of the House.
- ★ The Supreme Court has said that when the party issues a whip, it must be for a very important legislative measure or a trust vote on which the government's survival is at stake.

A Strike for the Constitution

On 26 Nov 1949, the Constituent Assembly submitted the draft constitution. Decades later, Ambedkar's fears seem to be coming true. The Constitution is under threat from the very same institutions — the legislature, executive and judiciary—that are expected to safeguard it.

CONCERNS REGARDING THE CONSTITUTION:

- ★ Institutions of governance are flattering the constitution in a calculated manner and in flagrant violation of equity and justice, which are control to the majesty of the rule of the law.
- ★ The way legislation that negate the essence of the Constitution is introduced and passed, while ignoring deliberation, proves the mala fide intent of the government.
- ★ Parliament is blatantly undermined and bypassed. If Parliament becomes redundant, democracy will be in peril. The passage of the anti-farmer farm bills and anti-worker labour code is an example of how undemocratically legislation is pushed through.
- ★ It is tragic that the institutions of governance are flattening the Constitution in a calculated manner and in flagrant violation of equity and justice, which are central to the majesty of the rule of law. It was demonstrated in the most unfortunate way, when none other than the Chief Justice of the Supreme Court (SC) observed on two occasions.

PROVISIONS TO SAFEGUARD THE CONSTITUTION

- ★ Article 32- This article gives right to the individuals to move to Supreme Court to seek justice when they feel that their right has been unduly deprived. So this provision saves the fundamental right of Constitution, which is for citizens.
- ★ Article 226 - This article empowers the High Court to issue, to any person or authority, including the government, directions, orders or writs, including writs in the nature of

habeas corpus, *mandamus*, *prohibition*, *quo warranto*, *certiorari* or any of them. This article is another way for the safety of Constitution's provisions.

- ★ Basic structure- This doctrine is a common law legal doctrine that the Constitution of a sovereign state has certain characteristics that cannot be erased by its legislature. This provision was first introduced in 1973 in *Kesavananda Bharti v State of Kerala case*.

PREVIOUS SC DECISIONS AND CONSTITUTION SAFETY:

- ★ In the matter of migrant workers, SC initially observed that issue concerning migrant labourers fell within the domain of public policy and hence there was hardly any scope for judicial intervention.
- ★ In *Hathras case*, a young Dalit woman was raped and assaulted by the people belonging to high castes. But in this case, position of Supreme Court cannot be described as guard of the people and the Constitution.
- ★ Apart from the above examples, many decisions of the Supreme Court have also propagated peace in society. The *Ayodhya dispute* decision by the SC brought about harmony among religious groups.

Conclusion:

Against this backdrop of many events the workers and peasant—the urban and rural working people in formal and informal sector—are staging a nation-wide strike. Today trade unions and organizations of peasants are raising not only economic demands and rights but also to protect the tenets of the Indian Constitution which Ambedkar also wished to uphold.

INTERNATIONAL RELATIONS

Libyan Crisis

Recently a historic ceasefire has been announced in Libya between NATO-based forces and Libyan rebel groups.

The Libyan crisis that arose after the dictatorial rule is expected to end. With the intervention of the UN, the ceasefire is established and a peace agreement between the NATO-based army and militia group is seen there. If this agreement is successful, it will undoubtedly play an important role in the development of Libya.

Libyan crisis at a glance

- ★ Libya, which was under colonial rule until 1951, was taken over by military officer Muammar Gaddafi in 1969. Muammar Gaddafi ruled there for nearly 42 years.
- ★ In 2011, a mass movement against the Gaddafi regime arose and a situation of civil war erupted in Libya, causing Western countries to hand over Libya through NATO forces and Gaddafi had to withdraw from power. Gaddafi was also killed by the rebel group. Situation not being controlled after Gaddafi's death, the United Nations intervened there, and in 2012 an internationally recognized government was formed in Tripoli through elections.
- ★ There was to be re-election in 2014 but the government extended its tenure by postponing the election.



Subsequently, Khalifa Haftar formed a Libyan National Army (LNA) and formed a parallel government.

- ★ After this arrangement, the situation in Libya became extremely critical. On the one hand, there is a rule in the eastern part of Libya with the help of Tobruk based parliament, while the international government of the United Nations governs the western part of Libya from Tripoli.
- ★ International aided government has failed to provide stability in Libya and there is increase in kidnapping, crime, lack of facilities like petrol, etc. There is a state of anarchy.
- ★ Although the conflict stopped in June 2020, Khalifa Haftar did not accept the full ceasefire. The ceasefire was announced on 24 October 2020 on the occasion of United Nations Day.

- ★ Both sides involved in the Libyan civil war have international support. While Turkey, Italy, Qatar, NATO members support the Tripoli-based government, and Russia, Egypt, United Arab Emirates recognize the Khalifa Haftar.

About Libya

- ★ It is a country located in North Africa. It borders the Mediterranean Sea to the north, Egypt to the east, Sudan to the northeast, Chad and Niger to the south, and Algeria and Tunisia to the west.
- ★ It is an oil-rich country which is mostly covered from desert.
- ★ The capital and largest city of Libya is Tripoli.
- ★ Islam is the highest followed religion here.

Key points of the ceasefire

- ★ Negotiations took place between 5 +5 (5 pertaining to NATO, 5 pertaining to LNA) in

the arbitration of the United Nations. Rules of the ceasefire are also made by the UN.

The rules are

- ★ All foreign troops will be withdrawn from Libya in 90 days under the ceasefire.
- ★ If a ceasefire is violated, a joint military operation will be carried out in unified command.
- ★ A joint police room will be established which will control the places vacated by the troops.
- ★ Joint military team of 5 + 5 has approved land and air transportation which connects the western and eastern parts of Libya.

UNO in Libya

- ★ After the death of Gaddafi, the United Nations intervened in the situation.
- ★ The United Nations attempts to resolve issues like oil revenue distribution, armed groups, government formation between the two powers.
- ★ The United Nations Mission has asked to re-launch a political dialogue forum in Libya.
- ★ The United Nations assisted as many as 50,000 refugees here.
- ★ The United Nations also played an important role in the recent ceasefire agreement.

Conclusion

- ★ In the absence of foreign powers to solve the problem, Western and Eastern governments have to put their sides only in the arbitration of the United Nations. Peacekeeping is extremely important in Libya. This will bring stability to the global oil market. At the same time, it is also necessary to protect the human rights of Libyan citizens.

Gulf Cooperation Council

Recently, India had a virtual meeting with the Gulf Cooperation Council (GCC), a leading regional organisation comprising almost all Arab countries.

Key Points

- **Indian Workers Want to Return to Arab Countries:** India has asked the members of the GCC to facilitate the return of Indians who want to resume work with the relaxing of Covid-19-related restrictions. This can happen through sustainable **travel bubble arrangements**.
- ★ **More than eight million Indians** live and work in **West Asia**, with a **majority of them within the region covered by the GCC**, which includes **Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE**.
- o **'Transport Bubbles' or 'Air Travel Arrangements'** are **temporary arrangements** between two countries aimed at restarting commercial passenger services when regular international flights are suspended as a result of the Covid-19 pandemic. They are **reciprocal in nature**, meaning airlines from both countries enjoy similar benefits.
- **Cooperation:** Both sides affirmed their commitment to **reform multilateral institutions** to reflect the realities of the 21st century and work together to **address contemporary challenges** such as the Covid-19 pandemic, climate change, sustainable development and terrorism.

- ★ The GCC welcomed **India's inclusion in the United Nations Security Council (UNSC) as a non-permanent member** from January 2021.

- ★ **India** assured continuing the **flow of food, medicines and essential items** to the Gulf region. Supply chains from India to the Gulf were not disrupted despite the lockdowns during the pandemic.

Gulf Cooperation Council

- GCC was **established by an agreement** concluded in 1981 among **Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE** in view of their special relations, geographic proximity, similar political systems based on Islamic beliefs, joint destiny and common objectives.
- The **structure** of the GCC consists of the Supreme Council (the highest authority), the Ministerial Council and the Secretariat General. The **Secretariat** is located in **Riyadh, Saudi Arabia**.
- It is a **political, economic, social, and regional organisation** according to its charter.

India's Relations with the GCC

- **Political:** The governments of the GCC members are **India-friendly and Indian-friendly**.
- ★ The Prime Minister of India has received the **'Order of Zayed'**, the highest civilian order of the UAE and the **'King Hamad Order of the Renaissance'**, the third-highest civilian order of Bahrain.
- ★ In the recent past, Saudi Arabia and the UAE have **not adopted hostile posture** to India's domestic developments such as **removing the special status**

for Jammu & Kashmir under Article 370.

- **Economic:** The GCC states are among **India's key suppliers of energy**, and **annual remittances** from Indians in these countries are worth an estimated USD 4.8 billion.
- ★ The **United Arab Emirates (UAE)** and **Saudi Arabia** are **India's third and fourth-largest trading partners** respectively and the **total bilateral trade** of the GCC countries with India for the year **2018-19** stood at USD 121.34 billion.
- ★ UAE also features in the **top 10 sources of FDI inflows** into India.

Security:

- ★ Both India and the GCC are members of the **Financial Action Task Force (FATF)**.
- ★ Apart from the participation of Saudi Arabia, Oman, Kuwait, and others in **India's mega multilateral Milan Exercise**, India also has **bilateral exercises** with most of them.
- ★ **India and Oman hold annual bilateral exercises** across all three wings of the armed forces (Army Exercise '**Al Najah**', Air Force Exercise '**Eastern Bridge**', Naval Exercise '**Naseem al Bahr**'). Further, Oman has provided the Indian Navy access to the **Port of Duqm SEZ** which is one of Indian Ocean's largest deep-sea ports.
- ★ India has a bilateral **naval (In-UAE BILAT)** as well as an **air force exercise (Desert Eagle-II)** with the UAE.

Way Forward

- The Gulf region has historical, political, economic, strategic

and cultural significance for India. **India-GCC Free Trade Agreement (FTA)** can provide a boost to the relations.

- Presently, the **GCC region is volatile**, thus, India needs to safeguard its large economic, political and demographic stakes in the region.

Election system is broken in USA

The general election in the United States is too close to call. This has often been the case in the past two decades, ever since the 2000 presidential election was decided when Democratic candidate Al Gore conceded with just 537 votes in between him and George W Bush in Florida.

- ★ There is every reason to believe that, with multiple different voting rules in different states, different rates of counting, and legal challenges being prepared by all sides, getting a firm result in this election will take a long while.

Broken System

- ★ In the 2018 midterm elections, it took a week for all the results to be in — a week during which the Democratic swing turned into a Democratic landslide. Such a change is even more possible this year, given the specifics of voting during the pandemic.
- ★ Thus, it is too soon to determine the eventual national margin in the presidential race; even California, the US' largest state, is about two-thirds through its counting. It does appear that opinion polls in some of the battleground states, such as Wisconsin, were clearly off the mark.

- ★ Whoever wins, the distribution of the popular vote so far is not on the lines the polls had predicted (an 8 percentage point gap). The pollsters have some introspection, and some explaining, to do.
- ★ The chances are that, as they have in six of the last seven presidential elections, the Democratic party will have won more votes than the Republicans, in this case by a decent-sized margin. Even so, who will sit in the White House from January 2021 is still undecided. The fact is that the United States' electoral and power-transference system is broken.
- ★ Few other democracies have demonstrated this consistent breakdown between voters' preferences and the assignment of power. In the current election, even the notion of a straightforward transfer of power is being doubted.

What is the cause of inefficient election process in the US?

- ★ The essential problem remains that elections in the US are **excessively decentralised in terms of their rules**. In the pivotal state of Pennsylvania for example, some counties are counting their mailed-in ballots alongside their regular votes; and others have said they will not even start counting those till the day after election day.
- ★ In 2000, the election of the most powerful official in the world depended upon Miami counters holding up individual ballots to their eyes and trying to determine if they were punched all the way through or not; this year it might depend upon Philadelphia counters try-

ing to determine whether the date stamps on a few hundred ballot envelopes are legible or not. This is no way to hold an election.

- ★ America's claim to leadership of the democratic world can hardly hold up, given its **elections are unreliable indicators of the political will, are in danger of being ignored by unelected judges and incumbents, and are so slow, complex, and inefficient.**

Conclusion

The election has also shown how deeply divided America has become, and how much identity politics is taking over. In part this is a consequence of increasing inequality, though it is strange that the wealthiest and some of the poorest whites are both Republican. Also, the country is becoming multi-racial. In just four years, the share of white voters has dropped from 71 per cent to 65 per cent. This too is adding to the divisiveness.

India-UAE Meet on Investments

Recently, the eighth meeting of the India-UAE High-Level Joint Task Force on Investments has been virtually hosted by India in the wake of the ongoing pandemic.

Key Points

- ★ The **Joint Task Force was created in 2012** as a crucial forum for further **deepening the economic ties** between the UAE and India.
- ★ The mechanism has assumed greater importance as the two countries signed the **Comprehensive Strategic Partnership (CSP) Agreement** in

January 2017 and the Joint Task Force is an integral component of it.

- ★ The focus areas underlined in the CSP were **economy with emphasis on a two-way flow of investments, counter-terror cooperation and defence ties.**
- ★ India has signed CSPs with the **UK, Indonesia, Vietnam and Australia.**
 - At the meeting, both sides reviewed the existing **UAE Plus** and the **Fast Track Mechanism created in 2018.**
- ★ **UAE Plus** is a special and dedicated desk constituted under **Invest India** with Arabic speaking officials to help facilitate investments.
- ★ The **Fast Track Mechanism** aims to **resolve any challenges experienced by UAE investors** in India.

Scope of Improvement:

- ★ Explore ways to **facilitate investments** in key Indian and UAE sectors with potential for economic growth, and to maintain their dialogue and further build on the considerable achievements of the Joint Task Force.
- ★ **Encourage investment and cooperation** in areas of mutual interest with the purpose to stimulate economic activities in the post-Covid-19 times.
- ★ **Address specific barriers** to trade, like **anti-dumping duties**, tariffs and regulatory restrictions between the two countries with an aim to further **strengthen the trade and economic ties and to coordinate efforts and promote mutual cooperation.**
- ★ Continue the work between respective **civil aviation authorities to ensure speedy**

normalisation of air transport operations for their mutual benefit.

- ★ **Development and operation of UAE-based funds** to invest in India, in the light of the **Foreign Portfolio Investor Regulations 2019** by the **Securities and Exchange Board of India (SEBI).**
- ★ India agreed to look into these issues with the objective of facilitating further direct investments of UAE-based funds and seeking mutually beneficial solutions in that regard.
- ★ **Focus on opportunities for cooperation and potential investments in key sectors** in India including the **healthcare and pharmaceutical industry, mobility and logistics, food and agriculture, energy and utilities** and others.

India-UAE Relations

- India and the United Arab Emirates (UAE) enjoy strong bonds of friendship based on age-old cultural, religious and economic ties between the two nations.
- The relationship **flourished after** the accession of H.H. Sheikh Zayed Bin Sultan Al Nahyan as the Ruler of Abu Dhabi in **1966** and subsequently with the **creation of the UAE Federation in 1971.**

Political Relations:

- ★ In **August 2019**, UAE awarded **ZAYED Medal**, their highest civilian award, to the **Prime Minister of India** for consolidating the long-standing friendship and joint strategic cooperation between the two nations.

- ★ Indian Prime Minister's visit to the UAE in **August 2015** marked the beginning of a new and **comprehensive and strategic partnership**.
- ★ The Crown Prince of Abu Dhabi visited India in **February 2016** and had **wide-ranging discussions on bilateral, regional and multilateral issues of mutual interest**.

Commercial Relations:

- ★ India-UAE trade was around **USD 59 billion making UAE, India's third-largest trading partner** for the year **2019-20** after China and the USA.
- ★ The UAE is the **second-largest export destination of India** with an amount of over **USD 29 billion for the year 2019-20**.
- ★ For the UAE, **India is the second-largest trading partner** for the year **2019** with an amount of around **USD 41.43 billion** for non-oil trade.
- ★ **India's Major Exports:** Food items, Machinery, Gems and Jewellery, Textiles, Engineering and Machinery Products, Chemicals, etc.
- ★ **India's Major Import:** Crude Oil, Petroleum and Petroleum Products, Precious Metals, Minerals, Chemicals, Wood and Wood Products.

Cultural Relations:

- ★ The two nations **share historical ties and have maintained regular cultural exchanges** both at official and popular levels.
- ★ They signed a **Cultural Agreement in 1975** and the embassies continue to organise various cultural activities on their own as well as by collabo-

rating with other cultural organisations.

Indian Community:

- ★ The UAE is **home to the Indian expatriate community of more than 2.6 million**, the largest expatriate community in the UAE, which has played a **major role in the economic development of the UAE**.
- ★ Recently, India has asked the members of the **Gulf Cooperation Council (GCC)** which also includes UAE, to facilitate the return of Indians who want to resume work with the relaxing of Covid-19-related restrictions.

Recent Developmental Events in the UAE

- In March 2019, the **46th session of the Council of Foreign Ministers of the Organisation of Islamic Cooperation (OIC)**, was held in Abu Dhabi where India was invited as a guest of honour.
- ★ The UAE hosted the event and had **strongly defended the decision to invite India** despite Pakistan's strong objection and threat to boycott the event.
- In **February 2020**, the UAE issued an operating licence for the **Arab world's first nuclear power plant**, paving the way for it to start production in 2020.
- **UAE Mars Mission:** In July 2020, the UAE launched a **Mars probe named Amal (Hope)** from Japan, marking the **Arab world's first inter-planetary mission**.
- In **September 2020**, the UAE signed the **Abraham Accord** with Israel and Bahrain, which is the **first Arab-Israeli peace deal in 26 years**.

How India can take the lead in reviving tourism in South Asia

According to the World Travel & Tourism Council (WTTC), the travel and tourism sector accounted for 10.3% of global GDP and 330 million jobs in 2019. The sector has seen high growth in the last decade, which can be largely attributed to factors such as rising disposable incomes, the emergence of low-cost carriers, etc.

While the Covid-19 pandemic has affected all sectors of the economy, the travel and tourism (T&T) sector is among those expected to suffer the most prolonged impact.

However, the pandemic provides an opportunity for India to take the lead in promoting regional tourism in South Asia. Further, there is immense potential in the travel and tourism sector, which can be harnessed to contribute to the region's economic recovery.

Challenges for Regional Tourism

- **Disruption Caused by Covid-19:** Tourism as an industry is built around mobility and the enabling mechanisms of consumption that are mostly intangible. The challenge posed to these factors by the Covid-19 pandemic is unparalleled in many ways.
- ★ According to the World Bank estimates, South Asia's T&T sector has lost more than 10 million jobs and is further expected to incur losses of over \$50 billion in GDP.
- ★ This makes the countries most economically dependent on tourism, such as Bhutan, Maldives, and Sri Lanka, particularly vulnerable.

- ★ Further, post-pandemic, inter-regional mobility will remain limited due to reduced air connectivity, high costs, and a lack of willingness to travel long distances.
- **Informal Tourism Sector:** Nearly three-fourths of the tourism sector in the South Asian region are in the informal sector.
- ★ It is majorly dominated by bed & breakfast facilities, guest houses and other small-scale units.
- **Geo-Political Tensions:** Hostile political conditions in India's neighbourhood, especially between India & Pakistan, discourages development of a South Asian regional circuit.

Opportunities for the Regional Tourism

- **High Tourism Potential:** Over the last two decades, South Asia has emerged as an attractive tourist destination due to its natural and cultural diversity, and price competitiveness.
- ★ The region is home to tourism-based economies such as Bhutan, Maldives, Nepal, and Sri Lanka that attract high spending per traveller.
- ★ In 2019, the World Economic Forum's Travel and Tourism Competitiveness Index (TTCI) ranked South Asia as "the most improved region since 2017."
- ★ In South Asia, tourism was one of the fastest-growing sectors in the last decade, with double-digit growth leading to a contribution of \$234 billion or 6.6% of the region's Gross Domestic Product (GDP) in 2019.
- **Crisis Presents An Opportunity:** Recently, the COVID-19 pandemic has presented unforeseen challenges to global

tourism. With geography gaining significance and the importance of shorter distances becoming more pronounced, regional tourism is likely to grow.

- ★ Such a push would also contribute locally through employment and revenue generation from foreign exchange earnings.
- **Niche Tourism:** There is an opportunity that can be explored to bring back the international traveler to the niche segment of South Asian Countries, Adventure Tourism circuit with Nepal, Bhutan and Sri Lanka
- ★ For example: India's medical, spiritual and Ayurveda tourism, Adventure Tourism circuit with Nepal, Bhutan and Sri Lanka.
- **Opportunity for India:** In the last decade, India has witnessed an increase in the share of South Asian tourist arrivals. Additionally, tourist spill-overs from India to the rest of the region contribute significantly to the regional tourism economy.
- ★ India, in particular, should leverage geographic proximity and the wide range of cultural similarities with its neighbours such as the regional Buddhist trail and pilgrimage, etc.

Way Forward

Several steps can be taken to ensure a seamless flow of tourists in India and its neighbourhood:

- **E-visa Facility:** Technical modernisation, upgradation and other improvements are needed in the Indian visa application and delivery system for South Asian nationals.
- ★ Currently, only China and Sri Lanka are eligible for an Indian e-visa.

- ★ Considering the rising share of tourists from the neighbourhood in India, the e-visa facility should be extended to other countries in the region.

- **Investing in Digitisation in the Tourism Industry:** Due to the Covid-19 pandemic, there is an increasing focus on digitisation of various services to revive the tourism sector.

- ★ Contact-less transfers, hotel check-ins, site-visits etc. will be crucial for revival of the industry.
- ★ This requires participation from both public and private sector stakeholders and significant investment in digitisation to enhance secure travel and ensure revenue from foreign exchange.
- **Inter-Ministerial Coordination to Enhance Infrastructural Connectivity:** The Ministry of Tourism should actively work with other ministries such as the Ministry of Civil Aviation and Ministry of Home Affairs to undertake infrastructure-related connectivity initiatives.
- ★ For example by further expanding the UDAN Scheme to neighbouring countries and supporting digital immigration services at the Integrated Check Posts.
- ★ Apart from this, the government must play a role in facilitating tourism infrastructural development supported by multilaterals such as the Asian Development Bank, World Bank, Japan International Cooperation Agency, etc.
- **Tourism Promotion Through Regional Initiatives:** India must take the lead in promoting intra-regional tourism through the South Asian Association for Regional

Cooperation (SAARC), Bay of Bengal Initiative for Multi-sectoral, Technical and Economic Cooperation (BIMSTEC) or the Bangladesh, Bhutan, India and Nepal initiative (BBIN).

- ★ Following the example of the Association of Southeast Asian Nations (ASEAN), India could host regional tourism summits and facilitate inter-regional cooperation among tour operators, for example with the Federation of ASEAN Travel Associations (FATA).
- ★ India should also work and cooperate bilaterally with other South Asian countries on joint tourism promotion and advertising campaigns, towards establishing the tourism industry as a regional value chain.
- **Promoting Religious Tourism Circuits:** The historical and cultural linkages between South Asian nations offer the potential to develop religious tourism circuits within the region.
- ★ There has been an interest towards developing a Buddhist circuit between India and Nepal, and a Ramayana circuit between India, Nepal and Sri Lanka.
- ★ India's regional governments will have to play a vital role in targeted outreach initiatives to promote their religious heritage to specific countries.

Conclusion

- India has been the preferred short-haul destination for tourists from its neighbourhood. Tourists visit India not only for leisure and medical reasons, but also use the country for transit to other regions.
- However, there is an urgent need to address the significant

challenges towards promoting free and open intra-regional tourism such as visa-openness, gaps in cross-border infrastructure, etc.

The forgotten fact of China-occupied Kashmir

Following the abrogation of Article 370 and reorganisation of the Indian State of Jammu and Kashmir (J&K), a China-Pakistan tandem has emerged to internationalise the issue, including in the UN Security Council. China's support for Pakistan is motivated by a desire to perpetuate its own territorial grab in the trans-Karakoram Shaksgam Tract of Kashmir.

The doublespeak of China

- ★ China treats the J&K issue as a “*bilateral dispute left over from history*” to be resolved between India and Pakistan. It has turned a blind eye to the constitutional shenanigans by which Pakistan's so-called federal Ministry of Kashmir Affairs and Gilgit-Baltistan has acquired complete sway over Pakistan Occupied Kashmir (PoK).
- ★ **It ignores Pakistan's agenda of integrating Gilgit-Baltistan** as its fifth province. Yet, China has the temerity to question the establishment of the Union Territory of Ladakh and to term it a ‘unilateral’ attempt to change “the status quo in the Kashmir region”.
- ★ **The Shaksgam valley in the trans-Karakoram tract**, part of PoK, was handed over on a platter by a supine Pakistan to China through an illegal border agreement on March 2, 1963. However, the continuing Chinese occupation of

Kashmir's territory does not find adequate mention in the contemporary discourse surrounding this issue.

- ★ China occupies 5,180 square kilometres in the Shaksgam Valley in addition to approximately 38,000 square kilometres in Aksai Chin. China and Pakistan have colluded to obfuscate these facts, even as they brazenly promote the China-Pakistan Economic Corridor (CPEC) which runs through parts of Indian territory under their respective occupation.

Historical background

- ★ Historically, China played an insidious role in **changing the frontiers of Jammu and Kashmir through fictitious claims and unscrupulous alliances** with local chieftains. China exploited the ‘Great Game’ between British India and Russia in the late 19th century. It pitched territorial claims far beyond the traditional frontiers of Xinjiang. It gradually crept into **areas in the Taghdumbash Pamirs and the Karakorams**, well south of its frontier **along the Kun Lun mountains**.
- ★ While the British and the Russians were busy creating buffer zones along the frontiers of Xinjiang and Tibet, China was systematically stepping into the void. By the 1890s, China had started asserting its **presence in the valleys between the Kun Lun and the main Karakoram range**.
- ★ The British eroded the traditional frontiers of the Maharaja of Kashmir in the region around Shahidullah and also

those of his vassal, the Mir of Hunza. **After the Mir's defeat in 1869** at the hands of the joint forces of the Maharaja and the British, **the Chinese tried to co-opt him in their scheme while giving him refuge.**

- ★ Till then, the **Mir's authority**, ranging in the Taghdumbash Pamirs till Dafdar and eastward in Raskam, had **never been contested by the Chinese.** The Chinese had **started the practice of exchanging annual presents with the Mir of Hunza** in recognition of his authority over the unruly nomadic tribes that inhabited these valleys. The tradition of exchanging gifts with the Mir of Hunza was exploited to **stake a retrospective claim to Hunza as a tributary of the Qing empire since 1762 AD.** This chicanery is contradicted by China's own historical accounts and maps of the 18th and the 19th centuries which show the **south-western frontiers of China extending barely up to the Kun Lun range.**
- ★ By 1891, the Chinese had quietly moved south of the Kun Lun range to consolidate their presence at **Shahidullah**, which earlier marked the **furthest outpost of the princely state of J&K.** They then moved further south to Suget, and thereafter, showed up at the Karakoram pass. In 1936, the Mir of Hunza was asked by the British to abandon his rights in the **Taghdumbash Pamirs** as well as in the **Raskam valley**, but the **Shaksgam valley to the south-west of Raskam and the Aghil range remained with the Mir of Hunza.** This remained

the traditional frontier of British India until independence, inherited by India following J&K's accession in 1947.

The surrender of Pakistan

- ★ It is this border that was blatantly compromised by Pakistan in its so-called agreement with China on March 2, 1963. By giving in to China's expansionist designs and spurious claims to a boundary along the Karakoram range, Pakistan not only compromised India's traditional frontier along the Kun Lun range to the north-west of the Karakoram Pass, but also enabled China to extrapolate a claim line eastwards along the Karakoram range in Ladakh.
- ★ This collusion **allowed China to claim the whole of Aksai Chin** in which it had no historical presence. After the Partition of the Indian subcontinent, from 1953, Chinese troops actively started transgressing the frontier in eastern Hunza. In October 1959, they rustled some livestock from the area, prompting an angry response from Pakistan that it was determined to defend its frontiers.
- ★ However, President Ayub Khan, spotting an opportunity in the rapidly deteriorating India-China ties in the late 1950s, decided, instead, to pander to the Chinese. Pakistan deliberately chose to downgrade the historical claims of the Mir of Hunza and eventually signed away the Shaksgam valley to China in 1963.

China - a third party to dispute?

- ★ The provisional nature of the territorial settlement between China and Pakistan is evident

in **Article 6 of the 1963 agreement**, which clearly states that *"the two Parties have agreed that after the settlement of the Kashmir dispute between Pakistan and India, the sovereign authority concerned will reopen negotiations with the Government of the People's Republic of China, on the boundary as described in Article Two of the present Agreement, so as to sign a formal Boundary Treaty to replace the present agreement"*.

- ★ In effect, this agreement has established China as a party to the dispute. It has a vested interest in legitimising its illegitimate gains in the trans-Karakoram tract.

The anniversary of the Instrument of Accession, on October 26, is a reminder of China's illegal territorial occupation.

Impact of US Election Results on India

Joseph Robinette Biden Jr. has defeated Donald Trump to become the 46th US President.

- Biden's **running mate Kamala Devi Harris** has become the first woman and first Indian- and African- American **Vice President** of the country. Biden and Harris will be **sworn into office on 20th January 2021.**
- The **US has a Presidential System**, whereas **India has the Parliamentary System of Government.**
- There are **several ways** in which the **US economy**, its health and the **policy choices of its government affect India.** Both the countries recently had **2+2 dialogue.**

Key Points

- **Economic Relations:** Under Biden administration, India's trade with the US could recover from the dip since 2017-18.
- ★ **Trade Surplus:** A recent analysis by experts of CARE Ratings (a credit rating agency) shows that over the past 20 years, **India has always had a trade surplus** (exports exceeding imports) **with the US**.
- ★ The trade surplus has widened from USD 5.2 billion in 2001-02 to USD 17.3 billion in 2019-20. Trade surplus had **peaked at USD 21.2 billion in 2017-18** and has moderated to some extent.
- ★ In 2019-20, India **exported** goods worth **USD 53 billion** to the US - that's roughly 17% of all Indian exports that year and **imported** goods worth USD 35.7 billion in return - that's roughly 7.5% of all Indian imports.
- ★ **Trade in Services:** India accounts for **nearly 5% of USA's services imports** from the World.

Investment:

- ★ The **US is the fifth-biggest source for Foreign Direct Investment** (FDI - investment in the physical assets inside India) **into India**. Only Mauritius, Singapore, Netherlands, and Japan have invested more FDI since 2000.
- ★ The US also accounts for **one-third of all Foreign Portfolio Investments** (that is, investment in financial assets) into India.
- **H1-B Visa Issue:** How a US President looks at the H1-B visa issue, affects the prospects of Indian youth far more than the

youth of any other country.

- ★ Under President Trump, who severely **curtailed the visa regime**, owing to his policy of "**America First**", India had suffered the most.
- ★ H-1B visa is a **non-immigrant visa** that allows American companies to employ foreign workers in speciality occupations that require theoretical or technical expertise.
- **US' Generalized System of Preference:** India's exclusion from the **US' Generalized System of Preference (GSP)** could come up for reconsideration under Biden.
- ★ In 2019, President Donald Trump had **terminated India's designation as a beneficiary developing nation under the GSP trade programme** after determining that it has not assured the US that it will provide "equitable and reasonable access" to its markets.
- ★ **India was the largest beneficiary of the programme in 2017** with USD 5.7 billion in imports to the US given duty-free status.
- ★ GSP is designed to promote economic development by allowing duty-free entry for thousands of products from designated beneficiary countries.
- **Other Issues:** Other points of contention between India and US - such as the tricky issue of **data localisation** or **capping prices of medicines and medical devices** - have a chance of getting towards a resolution.
- ★ Further, under the Trump administration, the **US sanctions on Iran severely limited India's sourcing of cheap crude oil**.

- ★ On **China**, it is more likely that a **Biden administration will help India against China**, instead of clubbing the two together.
- **Paris Climate Accord:** Biden has promised to **rejoin the Paris Climate Accord**, and this may help countries such as India in dealing with the massive challenges - both technical and financial - on this front.
- **Civil Liberties and Democratic Rights in India:**
- ★ Although some US Congressmen and women had raised red flags on the human rights situation following the revoking of J&K's special status under **Article 370** and passage of the **Citizenship (Amendment) Act** alongside the proposed nationwide **National Register of Citizens (NRC)**, the Trump administration had not taken any actions beyond making some perfunctory statements.
- ★ According to the Biden campaign's policy paper, **Biden** has been "**disappointed** by the measures that the Government of India has taken with the implementation and aftermath of the National Register of Citizens (NRC) in Assam and the passage of the Citizenship (Amendment) Act into law".

Way Forward

- India should be prepared to hold its own in tough conversations on sensitive issues. A Biden presidency may see a **renewed push towards a rules-based trading system** across the world - instead of outright ad-hocism as was the case under Trump - as well as a move away from the protectionist approach that

has been getting strong across the world.

- ★ Combined with the control of Covid infections and the economic recovery, the US could yet again provide a growth impulse to the global economy that countries such as India need to boost their exports and grow.

US Federal Election Commission

In the presidential election in the United States, the Election Commission, is singularly missing. There has not been even a single order or intervention passed by the American counterpart of the Election Commission of India (ECI), the Federal Election Commission of the United States of America.

Vision behind ECI

- ★ In India, our constitutional fathers had debated in the Constituent Assembly itself the necessity of imbuing the ECI with enormous power. So vast are the powers accorded to the ECI during the election process that even the higher judiciary does not interfere during the course of the election process.

A comparison between India and the United States

- ★ For a start, the Federal Election Commission has a **much narrower mandate than its Indian equivalent**. Moreover, the Federal Election Commission was **established comparatively recently** — it **'opened its doors'** in 1975, with the special mandate to regulate campaign finance issues.
- ★ As a watchdog, it is meant to disclose campaign finance information, to enforce the law

regarding campaign contributions, and oversee public funding of the presidential election. But, so far, there have not been any report on such oversight either.

Why the US Federal Election Commission performs so badly?

- ★ The Federal Election Commission is **led by six Commissioners**. The six posts of Commissioner are supposed to be **equally shared by Democrats and Republicans**, and too have to be confirmed by the Senate. But at the time of this most critical presidential election, there are vacancies.
- ★ In fact the Commission has **hardly been able to function in the last year because of resignations**, with the result that barring a brief two months, from May to July this year, the Commission has effectively **passed no orders at all since August 2019, because it has lacked a quorum** — for which at least four members are needed. As a result, several hundred matters lie pending before the Federal Election Commission for want of members.
- ★ During the course of this election, **the President has not mentioned even once about appealing to the Federal Election Commission**, but only to the U.S. Supreme Court. In sharp contrast, our Constitution's fathers decided to limit the role of the judiciary in India to the post-election period, when election petitions may be filed. The founding fathers were clear that if election-related petitions were entertained during the course

of the election process, it would impede the process and delay election results interminably. These delays and the acrimony, so adroitly avoided in India during the election process, is precisely what we are seeing now in the U.S..

Conclusion

In sharp contrast to the American elections, and ever since our first election in 1951-2 and every single election since, our political parties, losers and winners alike, have invariably accepted the results declared by the Election Commission of India, with the result that the baton has passed on in a graceful and smooth manner.

India - Maldives Relations

Recently, India and the Maldives have signed four Memorandums of Understanding (MoUs).

Key Points

Four MoUs:

- ★ Two MoUs for High Impact Community Development Projects.
- ★ An MoU on Cooperation in Sports and Youth Affairs.
- ★ An MoU for a USD 100 million grant to fund the **Greater Male Connectivity Project (GMCP)** which is the largest ever such infrastructure project undertaken in the Maldives.
- ★ GMCP is a financial package by India, consisting of a grant of USD 100 million and a new line of credit of USD 400 million.
- ★ This will be the largest civilian infrastructure project in the Maldives, connecting **Malé** (the capital) with **three neighbouring islands** viz. Villingili,

Gulhifalhu (where a port is being built under Indian **line of credit**) and Thilafushi (new industrial zone) by the **construction of a bridge-and-causeway link**.

- ★ This will **boost economic activity, generate employment and promote holistic urban development** in the Malé region.

Other Recent Initiatives:

- ★ In **April 2020**, India supplied 6.2 tonnes of essential medicines to the Maldives, under **Operation Sanjeevani** to tackle the **pandemic**.
- ★ In **May 2020**, India under **Mission Sagar**, supplied food items and medical assistance teams to the countries in the southern Indian Ocean including the Maldives.
- ★ Indian Government assures that the **Maldives will be among the first countries to receive Covid-19 vaccines** as soon as one is developed in India.
- ★ In **August 2020**, the **bilateral Air Travel Bubble** was established which connects five Indian cities with Male through 13 weekly flights leading to a steep increase in the number of tourists.
- ★ Creating a travel bubble **involves reconnecting countries or states which have shown a good level of success in containing the Covid-19 domestically**.
- ★ Such a bubble would **allow the members of the group to restart trade ties** with each other and **open travel and tourism**.
- ★ In **October 2020**, both governments inked a deal for a **USD 400 million line of credit** from the **Export-Import Bank of**

India (Exim Bank), **premier export finance institution** of India.

- The soft loans to the Maldives have funded connectivity, water, sewerage projects, Addu Development Project, an international cricket stadium, Gulhifalhu port, etc.

Significance:

- ★ The MoUs are **symbolic of India-Maldives' strong development partnership** which is multi-faceted and designed to meet the specific requirements of the government and people.
- ★ The Maldives enjoys a special and central place in India's **Neighbourhood First policy** and itself has a **foreign policy of India First**.
- ★ India is supportive of **Maldivian Foreign Minister's candidature** for the **Presidency of the 76th session of the United Nations General Assembly in 2021**.
- ★ Both nations have consistently supported each other in multi-lateral fora such as the UN, the **Commonwealth**, the **Non-Aligned Movement (NAM)** and the **South Asian Association for Regional Cooperation (SAARC)**.
- ★ Amid India's growing concern over **China's increasing influence** in the **Indian Ocean Region (IOR)**, the ties with the Maldives are of crucial importance.
- ★ The **current Maldivian President** is being criticised by the opposition for having an **"India-tilt"**. The Former President was dislodged from office in 2018 and was widely perceived as a close ally of China.

INDIA and ASEAN to Expand Trade Despite RCEP Walkout

India and ASEAN countries said they would explore ways to increase trade between them despite India's exit from the 15-nation Regional Comprehensive Economic Partnership (RCEP) agreement.

The RCEP free trade agreement, which India walked out from in 2019, is expected to be signed on November 15th, between China, Australia, South Korea, Japan, and ten Association of South East Asian (ASEAN) Nations.

India's Stance on the RCEP

- ★ PM Modi had told the RCEP summit that India was walking out of the Free Trade Agreement after negotiations for more than six years, as it did not address India's concerns about being flooded by goods from China, trade deficits and need to protect its agricultural and dairy sectors. The remainder of the RCEP countries then continued with the talks minus India, and have decided to sign the FTA, which will encompass about 30% of global trade, on Sunday. However, they are expected to leave in a clause allowing India to rejoin at a later date.
- ★ Experts have warned that once the FTA is adopted, trade between RCEP nations will assume primacy, which could affect trade ties with other countries including India.

Other Highlights

- ★ PM Modi also highlighted India's **"Indo-Pacific policy"** as an area of convergence for ASEAN and India.

- ★ All countries stressed the importance of a rules-based order in the region including through upholding adherence to international law, especially the UNCLOS.
- ★ There is ample closeness between India's "Indo Pacific Oceans Initiative" and ASEAN's "Outlook on Indo Pacific".

Regional Comprehensive Economic Partnership RCEP

- ★ The Regional Comprehensive Economic Partnership (RCEP) is a mega-regional economic agreement being negotiated since 2012, between ASEAN and Free Trade Agreement (FTA) member partners.
- ★ RCEP is a proposed Free Trade Agreement between the ten member states of the ASEAN (Association of Southeast Asian Nations) – namely Cambodia, Indonesia, Brunei, Laos, Malaysia, Vietnam, the Philippines, Myanmar, Singapore, Thailand and the FTA's six partners – China, South Korea, Australia, Japan, India, and New Zealand.
- ★ The objective of launching RCEP negotiations is to achieve a modern, comprehensive, high-quality and mutually beneficial economic partnership agreement that will cover trade in goods, trade in services, investment, economic and technical cooperation, intellectual property, competition, electronic commerce, dispute settlement and other issues.
- ★ RCEP has the potential to deliver significant opportunities for businesses in the East Asia region, given the fact that the 16 RCEP participating countries account for almost half of the world's population; contribute

about 30 per cent of global GDP and over a quarter of world exports.

- ★ RCEP will provide a framework aimed at lowering trade barriers and securing improved market access for goods and services for businesses in the region.
- ★ It aims to cover the trade in goods and services, investment, economic and technical cooperation, intellectual property and dispute resolution.

Association of Southeast Asian Nations (ASEAN)

The Association of Southeast Asian Nations (ASEAN) is a regional intergovernmental organization comprising Ten Countries in Southeast Asia.

Members of ASEAN

1. Indonesia
2. Malaysia
3. Philippines
4. Singapore
5. Thailand
6. Brunei
7. Vietnam
8. Laos
9. Myanmar
10. Cambodia

ASEAN's Objectives:

- ★ To promote intergovernmental cooperation and facilitates economic, political, security, military, educational, and sociocultural integration among its members and other countries in Asia.
- ★ To maintain close and beneficial cooperation with existing international and regional organisations.
- ★ To promote regional peace and stability through abiding respect for justice and the rule of law and adherence to the principles of the United Nations Charter.

- ★ To accelerate economic growth, social progress and cultural development for a prosperous and peaceful community of Southeast Asian Nations.

A major partner of Shanghai Cooperation Organisation, ASEAN maintains a global network of alliances and dialogue partners and is considered by many as the central union for cooperation in Asia-Pacific.

- ★ The motto of ASEAN is "One Vision, One Identity, One Community".
- ★ ASEAN is headquartered in Jakarta, Indonesia.
- ★ 8th August is observed as ASEAN Day.
- ★ In 1967 ASEAN was established with the signing of the ASEAN Declaration (Bangkok Declaration) by its founding fathers: Indonesia, Malaysia, Philippines, Singapore and Thailand.
- ★ Chairmanship of ASEAN rotates annually, based on the alphabetical order of the English names of Member States.
- ★ ASEAN is the 3rd largest market in the world – larger than EU and North American markets.
- ★ ASEAN Plus Three
- ★ ASEAN Plus Three is a forum that functions as a coordinator of co-operation between the ASEAN and the three East Asian nations of China, South Korea, and Japan.

Regional Comprehensive Economic Partnership

Recently, the Regional Comprehensive Economic Partnership (RCEP) has come into existence on the sidelines of the 37th ASEAN Summit.

- It has laid down the **path for restarting discussion** that had failed to admit India earlier and said “new” developments would be taken into consideration if India re-applies.

Key Points

Regional Comprehensive Economic Partnership:

- ★ It consists of 10 Association of Southeast Asian Nations (ASEAN) members, as well as South Korea, China, Japan, Australia and New Zealand.
- It excludes the USA, which withdrew from the **Trans-Pacific Partnership (TPP)** in 2017.
- ★ **Negotiations over the RCEP deal began in 2012. India was also part of the negotiations but it pulled out in 2019** over concerns that **lower tariffs could hurt local producers.**
- ★ Members of the RCEP make up nearly a **third of the world's population** and account for **29% of global gross domestic product (GDP).**
- ★ The China-backed group will emerge as the largest free trade agreement (FTA) in the world surpassing both the US-Mexico-Canada Agreement and the European Union (EU).
- ★ It is **expected to eliminate a range of tariffs on imports within 20 years** and also includes provisions on **intellectual property**, telecommunications, financial services, **e-commerce** and professional services.
- ★ Under RCEP, **parts from any member nation would be treated equally**, which might give companies in RCEP countries an **incentive to look with-**



in the trade region for suppliers.

- Businesses with global supply chains might face tariffs even within an FTA because their products contain components that are made elsewhere.
- ★ The deal could **increase global national income by USD 186 billion annually by 2030** and add 0.2% to the economy of its member states.
- However, some analysts think the deal is **likely to benefit China, Japan and South Korea more** than other member states.
- ★ However, it could be **some time before any country sees the benefits**, because **six Asean nations and three other nations have to ratify** it before it takes effect.
- Ratification will likely be **tricky** in national parliaments, owing to both **anti-trade and anti-China sentiments** among the countries.

Significance for China:

- ★ The beginning of RCEP is a major development that will **help China and trade in the Asia-Pacific region in the post-Covid-19 scenario.**

- ★ It will give **China access to Japanese and South Korean markets** in a big way, as the three countries have not yet agreed on their FTA.
- ★ While China already has a number of bilateral trade agreements, this is the first time it has signed up to a **regional multilateral trade pact.**

India's Stand:

- ★ While addressing the ASEAN Summit, India **highlighted the necessity for peace and stability in the region** but maintained silence regarding RCEP as it is **not very welcoming** of the China-backed grouping in the light of the **ongoing military tension in eastern Ladakh along the Line of Actual Control (LAC).**
- ★ In the meantime, India **held Malabar Exercise with Japan and the USA for the Quadrilateral Security Dialogue (QUAD)** which was interpreted as an anti-China move.
- However, these moves **did not influence Japanese and Australian plans** regarding RCEP.
- ★ India **ended negotiation** on RCEP over terms that were **per-**

ceived to be against its interests.

- ★ One of the major concerns for India was **inadequate protection against surges in imports** as its industry had fears that signing RCEP would allow cheaper products from China to flood the market in India.
- ★ The **extended power to China** could lead to **actions and incidents eroding trust in the maritime region** disrespecting the territorial integrity and sovereignty.
- For example, the ongoing tensions at LAC and **Chinese activities in Pakistan-occupied Kashmir**.

RCEP on India's Membership:

- ★ India, as an original negotiating participant of the RCEP, has the **option of joining the agreement without having to wait 18 months** as stipulated for new members in the terms of the pact.
- ★ RCEP signatory states plan to commence negotiations with India once it **submits a request of its intention to join the pact "in writing"**, and it may participate in meetings as an observer prior to its accession.

Way Forward

- The mega trade bloc is a landmark trade initiative which is expected to boost commerce among the member-countries spread across the Asia-Pacific region.
- India needs to keep its interests on the table as the road to further expansion of its exports to RCEP member nations is very much still open, given that India already has trade and investment agreements with 12 of them.

- Utilising existing agreements better while proactively exploring new opportunities in other geographies will diversify both Indian markets as well as an export basket.

UAE Issues Golden Card Visa

Recently, the United Arab Emirates (UAE) has approved the issuance of a 10-year golden card visa for more professionals, including PhD holders, physicians, engineers as well as graduates from certain universities.

- **Golden Visa is citizenship by investment or residency by investment program.** It is **directed to wealthy foreign nationals** who want to acquire residency in a certain country by investing a substantial amount of money or by purchasing a property.

Key Points

UAE's Golden Card Visa:

- ★ It grants **10-year residency** to these visa holders and their families.

Eligibility:

- All holders of doctorate degrees, medical doctors and computer, electronics, programming, electrical and biotechnology engineers.
- ★ Those with specialised degrees in **artificial intelligence (AI), big data and epidemiology**, as well as **high school students** living in the UAE who rank top in the country and students from certain universities with a **Grade Point Average (GPA) of 3.8 or higher**.
- ★ The changes will take place from **1st December 2020**.

Background:

- ★ Foreigners in the UAE usually have **renewable visas valid for only a few years tied to their employment**.
- ★ In **May 2019**, the UAE **started granting 5 and 10-year renewable visas** to certain foreign investors, entrepreneurs, chief executives, scientists and outstanding students, under the **Golden Card scheme**.
- The scheme offers unprecedented benefits to the cardholders and their families while creating an attractive environment for business and growth.
- ★ It attracts greater foreign investment and stimulates the local economy, making it more efficient and attractive for investors.
- ★ It also increases the UAE's competitiveness and reaffirms the country's position as a global incubator.
- ★ The government in the past couple of years has made its **visa policy more flexible, offering longer residencies** for certain types of investors, students and professionals.

Reasons Behind the Move:

- ★ The UAE's economy has been hit hard by the **Covid-19 pandemic** and **low oil prices, prompting many expatriates to leave**. The move **intends to bring them back** now and keep the "talented people and great minds" in the Gulf country and **help in nation-building**.
- ★ It will **attract talented professionals from various fields** of expertise and further **encourage innovation, creativity and applied research**, adding to the appeal of a career in the UAE for the world's brightest minds.

- **Significance for India:**
- ★ It would attract more **Indian professionals and businessmen** to the Gulf nation and **strengthen the India-UAE Relations.**
- ★ The **Indian expatriate community is reportedly the largest ethnic community in the UAE,** constituting roughly **about 30%** of the country's population, which has played a major **role in the economic development** of the UAE.
- ★ It will also **facilitate the return of Indians who want to resume work** after the **relaxation of Covid-19-related restrictions,** for which **India had requested the members of the Gulf Cooperation Council (GCC)** in early November 2020.

Shifting Sands for Asian Economies

Discussions on the post-pandemic global economy have often predicted that China's appeal as a business destination would fade, losing favour as the global manufacturing hub. Arguments have been made that production would be dispersed to other appealing locations mostly in Asia, and even to those outside. It was expected that this relocation of production would benefit emerging labour-abundant economies. The reality, however, is more nuanced.

Some labour-intensive industries, such as textiles and apparels, have been moving to Bangladesh and Sri Lanka as labour costs in China are increasing. But trends in other industries show that businesses have mostly remained in China.

Why firms remain bullish on China?

There are three reasons for firms to remain in China and pursue this strategy –

- ★ First, starting an enterprise and maintaining operations in China are much easier than elsewhere.
- ★ Second, Chinese firms are nimble and fast, which is evident from the quick recovery of Chinese manufacturing after the lockdown.
- ★ Third, many global companies have spent decades building supply chains in China. Hence, getting out would mean moving the entire ecosystem, which involves time and expenditure.

Arrival of RCEP

- ★ A new 'Asian Drama' is likely to unfold with the formal launch of the Regional Comprehensive Economic Partnership (RCEP).
- ★ Asia's growth would hinge on the role of trade and investment flows into these economies, and this would again be the centrepiece of global growth, as the 15 member countries account for nearly 30% of the global GDP. This largest free trade agreement in the world includes provision to cover the entire gamut of trade and commerce.

Challenges posed by RCEP

- ★ The RCEP and the 'China +1 strategy' is likely to impact investment flows into Vietnam, India, Bangladesh and Indonesia, which have emerged as key investment destinations.

India faces three challenges in this race.

- ★ First is the **task of increasing domestic public investments,**

which have a central role in economic activity, for both demand and supply sides. According to the International Monetary Fund, "increasing public investment by 1% of GDP could boost GDP by 2.7%, private investment by 10%, and employment by 1.2%, if investments are of high quality and if existing public and private debt burdens do not weaken the response of the private sector."

- ★ This seems to be the opportune time to bolster public investments as interest rates are low globally and savings are available. Private investments would continue to be depressed, due to the uncertainty on the future economic outlook, which underscores the need to undertake high-quality public investments.
- ★ Second, India needs a **major overhaul in her trade policy,** as in the pre-COVID-19 era, world trade had been rattled by tendencies of rising economic nationalism and unilateralism leading to the return of protectionist policies. A revamped trade policy needs to take into cognisance the possibility of two effects of the RCEP: the 'Walmart effect' and a 'switching effect'.
- ★ The first would sustain demand for basic products and help in keeping employee productivity at an optimum level, but may also reduce wages and competition due to sourcing from multiple vendors at competitive rates.
- ★ Switching effects would be an outcome of developed economies scouting for new sources to fulfil import demands, which requires firms

to be nimble and competitive. The challenge is to make exporting activity more attractive for all firms in the economy.

- ★ Third is to **increase women's participation in the labour force**. While India's GDP has grown by around 6% to 7% per year on an average in the recent years, educational levels of women have risen, and fertility rates have fallen, women's labour force participation rate has fallen from 42.7% in 2004-05 to 23.3% in 2017-18. This means that three out of four Indian women are neither working nor seeking paid work.
- ★ Globally, India ranks among the bottom ten countries in terms of women's workforce participation. When Bangladesh's GDP grew at an average rate of 5.5% during 1991 and 2017, women's participation in the labour force increased from 24% to 36%.
- ★ India could gain hugely if barriers to women's participation in the workforce are removed, for which the manufacturing sector should create labour-intensive jobs that rural and semi-urban women are qualified for.

Conclusion

- ★ India's approach to the changed scenario needs to be well-calibrated. The intensity of competition is evident from the fact that after India passed three labour code Bills on September 23, Indonesian Parliament on October 5 passed a legislation that slashes regulations contained in more than 70 separate existing laws, to open up the country to more foreign investment.
- ★ Bangladesh on its part plans to

start negotiations with a dozen countries, including the U.S. and Canada, for signing preferential trade agreements. Thus, the stage is set for a new 'Asian Drama'. What will be India's role in it? Well, it will not be on the basis of past accolades, for sure.

APEC Virtual Meet

Recently, a virtual meeting of the 21-member Asia-Pacific Economic Cooperation (APEC) forum was held.

- The meeting was **hosted by Malaysia**. **New Zealand** will also **host next year's APEC meetings** virtually due to the pandemic.

Key Points

- With **growth in the Asia-Pacific region expected to decline by 2.7%** this year, from a 3.6% growth in 2019, APEC's focus was on accelerating economic recovery and developing an affordable vaccine.
- **Focus Areas:** Trade and investment, Digital Economy and Technology, Structural Reform, Economic and Technical Cooperation and Thematic and institutional matters.
- ★ APEC leaders adopted the **Putrajaya Vision 2040**, a new 20-year growth vision to **replace the Bogor Goals** named after the Indonesian town where leaders agreed in 1994 to free and open trade and investment.
- ★ Recognised the **importance of a free, open, fair, non-discriminatory, transparent and predictable trade and investment environment** to drive econom-

ic recovery at such a challenging time (Covid-19).

- ★ Discussed the **Free Trade Area of the Asia-Pacific (FTAAP) agenda** and the **APEC Internet and Digital Economy Roadmap (AIDER)**.
- **China has become the main driving force** behind the grouping after the **United States began withdrawing from multilateral bodies** during Trump's presidency.
- ★ But Trump made the surprise decision to take part in this year's event, after **not participating at APEC since 2017**.

China's Stand:

- ★ It vowed to keep its "super-sized" economy open for business and warned against protectionism as the world battles the Covid-19 pandemic. It needs to be noted that Trump's "America First" policy has alienated trading partners.
- ★ After the signing of the world's largest trade pact '**Regional Comprehensive Economic Partnership (RCEP)**', China is trying to set the agenda for global commerce.
- ★ Although China is promoting openness in trade, its own actions go against it, for example:
- ★ Australian exports of beef, wine and barley to China, their biggest market, have been restricted.

Asia-Pacific Economic Cooperation

- **Established:** 1989
- **Members:** 21
- **India is not a Member.**
- **Member Nations:** Australia, Brunei, Canada, Chile, China,

Hong Kong, Indonesia, Japan, South Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, Vietnam and the United States.

- Its 21 member economies are home to around **2.8 billion** people and represented approximately **59% of world GDP** and **49% of world trade** in 2015.

India and APEC

- India had requested membership in APEC, and received initial support from the United States, Japan, Australia and Papua New Guinea. Officials have decided **not to allow India to join as India does not border the Pacific Ocean, which all current members do.**
- India was invited to be an **observer for the first time in November 2011.**

Reasons for India to join APEC:

- ★ India will be more integrated with the global economy since APEC economies constitute an important trading bloc in the world.
- ★ It will help India bargain and negotiate a better deal with the countries of the Asia-Pacific region.
- **Expected Benefits to APEC:**
- ★ In India, APEC will find an **alternate market** for labour, consumers and investments, and an additional counterweight to help check unilateral economic ambitions in the region.
- ★ It will also help APEC embrace **some notion of 'Indo-Pacific'** and give it a renewed purpose in a renewed 21st century.

UK's EV push: India should take note and tie up with British partners

Recently, the United Kingdom (UK) has decided to ban the sale of new petrol and diesel cars by 2030. Also, as part of its green agenda, the UK strives to establish the enabling infrastructure for electric vehicles (EVs).

Such a big move that could have a ripple effect on the green movement around the world. In India, the government is also keen on replacing fossil fuel-driven vehicles with EVs. In 2017 began by setting an ambitious target of 100% electric cars by 2030.

However, due to resistance from the automotive industry and fears of job losses forced the government to lower the target. Thus, without government supporting investment in EV infrastructure upfront and passing the buck to the automotive industry and consumers, it would be difficult to bring transformation in the mobility sector.

India's Necessity for EVs

- **Controlling Pollution:** According to the International Council for Clean Transportation (ICCT), an estimated 74,000 premature deaths were attributable to air pollution from transportation tailpipe emissions in India in 2015.
- ★ Also, many top polluted cities in the world are from India. For example, New Delhi.
- **Mitigating Climate Change:** In December 2019, in the **Climate Risk Index 2020** released by the environment think tank, Germanwatch, India's rank has

worsened from the 14th spot in 2017 to 5th in 2018 in the global vulnerability ladder.

- ★ This makes it all the more reason for India to make electric cars and vehicles a priority in the fight against the reliance on fossil fuels.
- **Sustainable Energy Options:** Shifting towards EVs will help India to reduce oil dependency while solving the challenge of energy scarcity and moving towards renewable and clean sources of energy.

Associated Challenges

- **Lack of Battery Cell Manufacturing:** There is a complete absence of primary battery cell manufacturing in India which poses the risk of increasing trade deficit.
- ★ At the moment, most manufacturers rely on batteries imported from Japan, China, Korea and Europe.
- **Building Charging Infrastructure:** Another big challenge is the development of charging infrastructure which will need to be combined with existing refuelling stations and at alternative locations closer to homes.
- **Limited Grid Capacity:** According to a Niti Aayog report, India's EVs market needs a minimum of 10 GW of cells by 2022, which would need to be expanded to about 50 GW by 2025.
- ★ However, currently, India is able to add only 20 GW every year to its grid for all of our other increasing energy needs. Thus, the fulfilment of the requirement of 10GW additional capacity only for EVs would be a huge task.
- **Local Issues:** Bringing trans-

portation decisions closer to the people is understandable and necessary. Transport challenges such as congestion, affordability, infrastructure and transit systems availability are localized issues, impede the standardization of EVs.

- ★ Also, it will be a challenge to create a competitive advantage in electric vehicle manufacturing, or even a market for them, given that India does not have the infrastructure or deep pockets like China (world's current leader in electric mobility).

Current Policy of Indian Government

- **FAME Scheme:** The Indian government has created momentum through its **Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles** schemes that encourage, and in some segments mandates the adoption of electric vehicles (EV), with a goal of reaching 30% EV penetration by 2030.
- ★ If these aims are realised by 2030, they will generate an estimated saving of up to 474 Millions of tonnes of oil equivalent (Mtoe) and 846 million tonnes of net CO₂ emissions over their lifetime.
- **Fiscal Incentives:** Various fiscal demand incentives have been put in place to spur the production and consumption of EVs and charging infrastructure - such as income tax rebates, exemption from customs duties, etc.

Way Forward

- **Increasing R&D in EVs:** The Indian market needs encouragement for indigenous technologies that are suited for

India from both strategic and economic standpoint.

- ★ Since investment in local research and development is necessary to bring prices down, it makes sense to leverage local universities and existing industrial hubs.
- ★ India should work with countries like the UK and synergise EV development.
 - **Sensitising Public:** Breaking away the old norms and establishing a new consumer behaviour is always a challenge. Thus, a lot of sensitisation and education is needed, in order to bust several myths and promote EVs within the Indian market.
 - **Viable Electricity Pricing:** Given current electricity prices, home charging may also be an issue if the generation is from thermal power plants run on coal.
- ★ Thus, a shift in the electricity generation landscape as a whole is what is required to facilitate the growth of electric cars.
- ★ In this context, India is on track to become one of the largest solar and energy storage markets by 2025.
- ★ A combination of solar-powered grid solutions that are organised with a general improvement in grid resilience will ensure adequate charging infrastructure for EV's being a green option.
- **Creating the Closed-Loop Mobility Ecosystem:** Subsidizing manufacturing for an electric supplychain will certainly improve the EV development in India.
- ★ Along with charging infrastructure, the establishment of a

robust supply chain will also be needed.

- ★ Further, recycling stations for batteries will need to recover the metals from batteries used in electrification to create the closed-loop required for the shift to electric cars to be an environmentally-sound decision.

Conclusion

Operationalizing mass transition to electric mobility for a country of 1.3 billion people is not an easy feat. Thus, a strong common vision, an objective framework for comparing state policies and a platform for public-private collaboration are needed.

India-China on Brahmaputra River Projects

The construction of several dams along the Brahmaputra river (known as Yarlung in China) on the Chinese side has become a repeated cause of concern for India.

- As **India and China** continue to grow demographically as well as economically amid increased consumption among its citizenry, **both nations face water constraints** and in a race to develop new projects in order to overcome them.

Key Points

Brahmaputra:

- ★ It originates under the name of **Siang or Dihang**, from the **Chemayungdung glacier of the Kailash range near the Mansarovar lake**. It enters India west of Sadiya town in Arunachal Pradesh.

- ★ **Tributaries:** Dibang, Lohit, Siang, Burhi Dihing, Tista, and Dhansari.
- ★ It is a **perennial river** and has **several peculiar characteristics** due to its geography and prevailing climatic conditions.
- ★ It is **flooded twice annually**. One flood is caused by the **melting of the Himalayan snow** in summer and the other due to the **monsoon flows**.
- ★ The **frequency** of these floods have increased and are devastating due to climate change and its impact on high and low flows.
- ★ These **pose a concern for the population and food security** in the lower riparian states of India and Bangladesh.
- ★ The river is in itself **dynamic** as frequent landslides and geological activity force it to **change course** very often.

Chinese Perspective:

- ★ China is home to close to **20% of the world's population** and has **only 7% of its water resources**, which also faces severe pollution caused by rapid industrialisation.
- ★ China's **southern regions** are **water-rich** in comparison to the **water-stressed northern part** and to solve that, it **plans to link the major rivers** in these regions through canals, aqueducts and other linking projects to ensure water security.
- ★ For that, China has been **blocking rivers like the Mekong and its tributaries**, affecting Southeast Asian countries like Thailand, Vietnam, Laos and Cambodia.
- ★ China, being an **upper riparian state in Asia**, sees these proj-

ects as a continuation of its **historic tributary system**.

- ★ The **smaller states have no means of effectively resisting** or even have **significant leverage** in negotiations.
- ★ In the **Himalayas**, there are **multiple operational dams** in the **Yarlung Tsangpo basin** with more dams commissioned and under construction.

Indian Perspective:

- ★ India has **17% of the world's population** and **4% of water**.
- ★ It is **severely water-stressed** and in summer, a vast majority of urban areas face water shortage.
- ★ A majority of India's population reside in the **Gangetic plains which enjoy water throughout the year** but the **southern and western regions** experience **harsh and dry summer** and the **rainfall is scarce and erratic** in the eastern coast.
- ★ An **ambitious north-south river-linking project** has been proposed in India as well. However, it has come under criticism for **potentially disturbing fragile ecosystems**.

Concerns Raised:

- ★ **Degradation of the Basin:**
- ★ Massive amounts of silt carried by the river would get blocked by dams leading to a **fall in the quality of soil** and **eventual reduction in agricultural productivity**.

Threats to Flora and Fauna:

- ★ Brahmaputra basin is **one of the world's most ecologically sensitive zones** and is identified as **one of the world's 34 biological hotspots**.
- ★ This region has several species of **flora and fauna which are**

endemic to only this part of the world.

- ★ The **Kaziranga National Park** houses 35 mammalian species out of which 15 are listed as threatened in the **IUCN Red List**.
- ★ The river itself is home to the **Gangetic river dolphin**, which is listed as **critically endangered**.

Unfavourable Location:

- ★ The location of the dams also poses a risk as the **Himalayas are one of the most vulnerable to earthquakes and seismic activity**.
- ★ **Landslides** resulting from earthquakes pose a significant threat. For example, the 2015 Nepal earthquake and the resultant landslides wiped out several dams and other facilities.

Risk to Inhabitants:

- ★ Damming this perennial river would **result in water security in an era of unprecedented shifting climate patterns**.
- ★ The **sheer size of the infrastructure projects** undertaken by China and increasingly by India, poses a significant threat to the populations living downstream.
- ★ Close to a million people live in the Brahmaputra basin in India and tens of millions further downstream in Bangladesh.

Strategic Implications:

- ★ There is the potential to **significantly change the flow rate** during times of standoffs and high tensions.
- ★ During the **2018 Doklam border standoff** between India and China, China stopped communication of water flow levels from its dams, effectively ren-

dering India blind to floods during the standoff.

Way Forward

- With **India-China relations hitting its lowest point** since the 1962 war, border infrastructure has come under intense scrutiny. Alternative solutions to solving the water crisis which have to be adopted in order to neutralise this ticking water bomb.
- Both nations must cease new constructions on the river and commit to potentially less destructive solutions like building a decentralised network of check dams, rain-capturing lakes and using traditional means of water capture.
- These measures have shown effective results in restoring the ecological balance while supporting the populations of the regions in a sustainable manner.
- India and China do not have a water-sharing agreement and they should work upon it. Both nations share hydrological data so it becomes important to share genuine data and have a continuous dialogue on issues like a warning of droughts, floods and high water discharges.

Virtual G20 Summit

Recently, at the G20 (Group of Twenty) summit held virtually India called for a "New Global Index" for the post-Corona world .

- **New Global Index** will be based on 4 pillars of
 - ★ **Talent,**
 - ★ **Technology,**
 - ★ **Transparency and**
 - ★ **Trusteeship towards the planet.**
- This year's summit was hosted by **Saudi Arabia.**

Key Points

Talent:

- ★ The **focus** must shift to **multi-skilling** and **reskilling** from **capital and finance** to create a vast **human talent pool.**
- ★ Indian initiatives such as the **National Skill Development Mission (NSDM)** which aims to create convergence across sectors and States in terms of **skill training activities** is already in direction of creating a **vast human talent pool.**
- ★ India's **New Education policy** and programmes such as **Pradhan Mantri Innovative Learning Program (DHRUV)** are well aligned with this element.

Technology:

- ★ Ensuring that technology reaches all segments of the society and the value of new technologies should be measured by their **benefit to humanity.**
- ★ India suggested that as **follow-up action** and creation of a G20 virtual secretariat as a **repository of documentation.**
- ★ **Digital India** and **E-governance** campaigns of India have increased people's access to technology and other government services.

Transparency:

- ★ Reforms such as **Right to Information and Ease of Doing Business** promote transparency in governance in India.
 - **Trusteeship:**
- ★ The world should deal with the environment and nature as **trustees** rather than **owners** which would inspire us towards a **holistic and healthy lifestyle.**
- ★ Climate change must be fought

not in silos but in an **integrated, comprehensive and holistic** way.

- ★ A principle whose benchmark could be a **per capita carbon footprint.** A **carbon footprint** is the amount of **greenhouse gases** primarily carbon dioxide released into the atmosphere by a particular human activity.
- **Future meetings:** Italy in 2021, Indonesia in 2022, **India in 2023** and Brazil in 2024.

India's Initiatives for Lowering Emissions

- **Infrastructure Push:** India's **next-generation infrastructure** push will not only be **convenient and efficient**, but will also contribute to a **cleaner environment.** E.g.: **Coalition for Disaster Resilient Infrastructure**, announced by the Prime Minister at the Hamburg G20 meet in 2017. This will act as a convening body that will pool best practices and resources from around the world for reshaping construction, transportation, energy, telecommunication and water, so that building in these core infrastructure sectors factors in natural catastrophes.
- **Producing Clean Energy:** The India-France joint initiative of **International Solar Alliance (ISA).**
- ★ ISA will contribute to reducing **carbon footprint.**
- ★ India will meet its goal of **175 GigaWatts of renewable energy** as a part of its climate commitments made under the **paris climate deal** well before the target of 2022.
- ★ Unnat Jyoti by Affordable LEDs for All (UJALA) and LED Street Lighting National Programme

(SLNP) scheme has made LED lights popular, saving around 38 million tons of carbon dioxide emissions per year.

- ★ **Ujjwala Scheme: Smoke-free kitchens** have been provided to over **80 million house holds** making it among the **largest clean energy drives** globally.
- **Combat Desertification: The United Nations Convention to Combat Desertification (UNCCD)** links development and environment to sustainable land management and aims to combat desertification and the ill-effects of drought.
- **Clean Air & Water: The National Clean Air Programme (NCAP)** aims to decrease air pollution and **Namami Gange program** seeks to rejuvenate river Ganga and show the **spirit of trusteeship in governance**.

Making Old Europe Relevant in New World

While Covid-19 has disrupted societies, it has also brought greater clarity for individuals and nations. The European Union (EU) and the United Kingdom (UK) are two political geographies that may be experiencing this and are certainly at an inflection point. In this context, foreign secretary Harsh Vardhan Shringla's visit to Paris, Berlin and London gains salience. That he has chosen Europe for his first Covid-19-era visit outside the neighbourhood suggests that New Delhi has sensed the importance of this moment.

- ★ Europe's economic obsession following the 2008 Global Financial Crisis saw it withdraw from key political theatres. The

pandemic has brought it right back to the great churning in Asia and indeed to the Indo-Pacific. The Indo-Pacific Strategies released by Germany and France and the India Strategy announced by EU are indications that the Old Continent is changing course.

- ★ The UK has hinted that it is realigning its political positions. It is currently engaged in its most comprehensive integrated review of security, defence, development and foreign policies since the Cold War.
- ★ Much has been written about the divisions within EU. Economic differences, migration policies and the China factor all have a real basis and have impacted EU. These may well remain points of friction among member-states. The UK's exit has also had consequences. Paradoxically, the events of 2020 have exposed the limits of fissiparous tendencies in EU.
- ★ There is now a disturbing realisation that China is no friend, and it is not like Europe. It drives the same vehicles and uses the same phones, but is not driven by the same values and principles. There is no convergence in world views. The perverse, even vulgar, conduct of mask diplomacy and thereafter the Wolf Warrior doctrine has been deeply disturbing to European sensibilities. Chinese foreign minister Wang Yi's troublesome EU sojourn indicated a new European resolve to call out China, even as Beijing dug its heels in.
- ★ In the UK, too, the boundaries of Brexitism are being tested.

On 5G and technology choices, the UK and major EU countries are aligning positions. Global Britain is navigating new seas, but its ethical and strategic compass is keeping it firmly in the Atlantic Order.

EU-India: Convergence

- ★ EU needs a strong partnership with India to meet its leadership objectives of becoming a global actor and tackling climate change.
- ★ Security cooperation is the area where political investment is the greatest. With the institutionalisation of maritime security dialogue, and the stated objective of exploring connectivity in the region, cooperation in the Indo-Pacific now officially features on the agenda. The Indo-Pacific region is where geopolitics will unfold in the coming years. Indeed, if the EU really wants to be seen as a global actor, it needs to step up its presence in the region in its own right, beyond the initiatives of France, and recently Germany.
- ★ Yet the real potential for unlocking the relations lies in the possible reopening of the free trade (FTA) negotiations. Their suspension in 2013 hit the partnership hard, as the absence of talks on economic cooperation was misread by most as a lack of political interest. Seen from Delhi, the EU was slowly becoming an appendix to its bilateral relations with EU member states.
- ★ EU efforts to steer the narrative away from this misconception by building on political relations has finally paid off, and the partners are now ready to tackle the thorny issues of

trade relations, which go beyond mere sectoral tariffs to include unease with the sustainability clause of the EU FTA standard template.

- ★ So with the establishment of a high-level dialogue on trade and investment at ministerial level, the reopening of FTA negotiations is potentially back on the table. Enhanced business cooperation can help both the EU and India to diversify their strategic value chains and reduce economic dependency – notably on China. Moreover, a new study by the European Parliament assesses the potential gains of an EU-India trade agreement at between -8 bn and -8.5 bn from increased trade for both sides. The study also highlights potential benefits from enhanced coordination on the provision of global public goods, such as environmental standards.
- ★ Working together for more ambitious climate action and clean-energy transition is indeed another priority on the list. This is also where the greatest economic opportunities lie and, should both the EU and India succeed in transforming into carbon-neutral economies by 2050, we would all gain from the investment

India-EU: Balancing China

- ★ Technology and climate are EU priorities and leaders know they cannot achieve them alone. India, meanwhile, needs to forge new relationships in a post-Brexit EU to advance its own policy aims and better capitalise on an underutilised partnership with the EU.
- ★ Spurred by the pandemic, US-China trade war and US unpre-

dictability, Europe is particularly cognisant of the fragility of supply chains, the risks that come with an overreliance on China, and the need to strengthen the global community of democracies.

- ★ Both India and the EU require strong domestic technological bases to remain competitive. Options for bolstering these industries include talent exchanges, the facilitation of work permits for students and professionals, rules on reciprocal market access for businesses, joint innovation initiatives, and funding for joint research projects.
- ★ Considering China's ascendancy, the EU and India now share a stronger political interest in shaping global norms and standards in the technological domain, including rules on information flows and the ethical application of technologies like facial recognition. The global dividing lines are epitomised especially by discussions on 5G and associated lock-ins on infrastructure, standards, security protocols, and the potential weaponisation of technological interdependence.

Economic Reorientation

- ★ About 6000 EU companies are invested in India but EU investment in India is half that in China. The EU needs to deal with India with new geopolitical interest. It ought to encourage more investment in India. It can do more with the connectivity agenda and provide support to infrastructure that is also green through strategic lowcost financing. These can also be extended to Southeast Asia, Africa, and West Asia.

- ★ The EU can, through its members, play a bigger role to support the free and open Indo-Pacific. It can raise the costs for China as it continues to breach international rules brazenly. And the EU could try and make more supportive statements unlike their bland one after the Galwan clashes.
- ★ The effort has to be to make the India-EU partnership rise to its potential and provide a new model for international relations today.

Way Forward

- ★ India and the EU are ideal partners to make a difference in an international environment that is increasingly shaped by strategic rivalry between the US and China. They have a common interest in avoiding a bipolarised world and developing the rulesbased international order. They are credible defenders of the international rule of law, not least the pacta sunt servanda principle. They see strong and effective multilateralism as a preferred mode of international cooperation.
- ★ That is why Germany and France have taken the initiative to launch the Alliance for Multilateralism— an informal network of countries that share a commitment to multilateral cooperation, upholding international norms and reforming international institutions—and why India has opted to join it.

Pakistan Usurping Gilgit-Baltistan

India has fiercely rejected Pakistan's move of granting provincial status to Gilgit-Baltistan (GB). In a strongly worded reply, spokesperson of the min-

istry of external affairs Anurag Srivastava said “the area of so-called GilgitBaltistan” are an integral part of India.

- ★ Underlining India’s stand on the issue, MEA officials said that the territory has been illegally and forcibly occupied by Pakistan. ¾ To Gilgit-Baltistan’s west is Afghanistan, to its south is Pakistanoccupied Kashmir, and to the east J&K.
- ★ The plan to grant G-B provincial status gathered speed over the last one year. While some commentary links it to CPEC and Chinese interest, others in Pakistan say the push might have well come from India’s reassertion of its claims after the August 5, 2019 re-organsiation of Jammu & Kashmir.
- Background
- ★ The political nature of GilgitBaltistan has been directionless from the beginning. Pakistan initially governed the region directly from the central authority after it was separated from ‘Azad Jammu and Kashmir’ on April 28, 1949.
- ★ During the first Indo-Pak war of October 1947, Pakistan occupied 78,114 sq km of the land of Jammu and Kashmir, including the ‘Northern Areas’. The Northern Areas is the other name of GilgitBaltistan that Pakistan has used for administrative reasons because it was a disputed territory.
- ★ Following the raiders’ attack on Jammu and Kashmir on 22 October 1947, involving 20,000 armed tribesmen equipped by Pakistani arms and ammunition, progressing towards Srinagar to occupy it and cut it off from the rest of India, Pakistan began to launch an operation to attack G-B.

- ★ As the Indian Army was engaged to vacate the Kashmir valley from the raiders, Pakistan sensed an opportunity and the Pakistani government pocketed Major William Brown, who was the commander of the Gilgit Scouts under Maharaja Hari Singh. He led a coup on 1 November 1947, to capture Governor Ghansara Singh. Mirza Hassan Khan, a radical Muslim of the Jammu and Kashmir 6th Infantry assisted Brown.
- ★ All happened under the command of Khan Abdul Qayyum Khan, a defected leader of the Congress Party, who later defected to the Muslim League. He helped establish a temporary government with Raja Shah Rais Khan as the president and Mirza Hassan Khan as the Commander-inchief. Political agent appointed by Pakistan, Khan Mohammad Alam Khan, arrived on 16 November with the Pakistani Army and took over the administration of Gilgit. Gilgit Scouts along with tribal raiders advanced towards Baltistan and Ladakh and captured Skardu by May 1948. The Indian Army vacated regions of Ladakh during Autumn 1948.
- ★ Pakistan’s operation was entirely led by the military and tribals and the public of G-B was not at all involved. Soon after the constitution of the provisional government, locals came out to protest the Pakistani occupation, only to be met with atrocities.
- ★ On March 2, 1963, Pakistan gave away 5,180 sq km of the region to China, despite local protests. Under Prime Minister

Zulfiqar Ali Bhutto, the name of the region was changed to the Federally Administered Northern Areas (FANA).

GB: Linking Pakistan with China

- ★ Pakistan does not have territorial contiguity with China; it is only through the Occupied Kashmir and Northern Areas, precisely through the territories of Gilgit-Baltistan, that Pakistan has been able to link with China.
- ★ Pakistan prime minister Imran Khan was most worried about Chinese reaction when India announced abrogation of Article 370, which altered Jammu and Kashmir’s status in August last year. After all, Pakistan had lured China into its fold under the pretext of showing Jammu and Kashmir as part of its territory.
- ★ Earlier, Chinese interest in the area was limited to Shakshgam Valley as it wanted continuous connectivity through the area to its Xinjiang region. Pakistan was only too happy to comply with the Chinese request and handed it over 5180 sq km of its territory in 1963.
- ★ Pakistan abrogated many of the privileges associated with erstwhile state of Jammu and Kashmir in the region, including abolition of state subject law in 1974, and making the home of Shias into a Sunni majority area. The people of G-B still do not have even the most basic rights and privileges.
- ★ Pakistan got China to construct Karakoram highway in order to have a backup plan for the region. The ecologically fragile region witnessed the folly of

human intervention when in 2010 in Hunza, a landslide killed 20 people and blocked the flow of River Hunza. The resultant flooding displaced more than 6,000 people and inundated about 20 km of the Karakoram highway.

- ★ China has other interests in the Gilgit-Baltistan region as well - the projects financed and undertaken by it include Sust Dry Port, upgradation of Karakoram Highway (KKH), 820 km OFC project connecting Khunjerab to Rawalpindi and Jaglot-Skardu road. All these projects can be seen to be actually catering to the Chinese interests, a fact gradually sinking into the minds of an average Pakistani, who does not see any opportunity coming his way.
- ★ The Chinese banks finance the projects undertaken by their companies involving their engineers and machinery and even labour. The markets in Pakistan are flush with Chinese goods and the Chinese people never deny an opportunity to snub a local in Pakistan even forcing pork markets in Pakistan.

India's First Reaction

- "The Union Territories of Jammu and Kashmir and Ladakh, including the area of so-called "Gilgit-Baltistan", are an integral part of India by virtue of the legal, complete and irrevocable accession of Jammu and Kashmir to the Union of India in 1947. The Government of Pakistan has no locus standi on territories illegally and forcibly occupied by it," a statement released by MEA stated.
- ★ Such attempts by Pakistan,

MEA said, 'intended to camouflage its (Pakistan) illegal occupation, cannot hide the grave human rights violations, exploitation and denial of freedom for over seven decades to the people residing in these Pakistan occupied territories.

- "Instead of seeking to alter the status of these Indian territories, we call upon Pakistan to immediately vacate all areas under its illegal occupation," the statement read.

Opposition Within Pakistan

- ★ As Pakistan prepares to celebrate the day of occupation on Gilgit-Baltistan (G-B), massive protests have erupted in the area against the atrocities committed by the Pakistani Army and the Federal government. The protestors are aggressively demanding to release human rights activists and political leaders.
- ★ Pakistan is facing strong domestic opposition from groups that accuse it of systematically exploiting GB of its resources and sharing no dividends with them. Any resistance is met with brutal government reprisal, with activists and leaders hounded, arrested and tortured.
- ★ Maulana Fazlur Rehman, chief of Pakistan's 11-party opposition alliance, the Pakistan Democratic Movement, is among opponents of Pakistan's GB move.
- "A deal has been made over the blood of Kashmiris. Business is being done in the name of Kashmir diplomacy," the cleric had said earlier and pledged "not to allow the partition of Kashmir".

Way Forward

- ★ People of Gilgit-Baltistan are apprehensive not only about Pakistan's intention but China's too. Some of the pro-independence parties, including JKLF, have opposed Pak government decision to grant provincial status to Gilgit-Baltistan. So called PM of Azad Kashmir, Farooq Haider Khan, along with local units of the mainstream parties of Pakistan have also opposed the move, fearing it may be overtaken by the Chinese.
- ★ A majority of the estimated 1.5 million G-B residents are Shias. There is anger against Pakistan for unleashing extremist sectarian militant groups that target Shias, and for dictating over the use of their natural resources, but the predominant sentiment is that all this will improve once they are part of the Pakistani federation. There is a small movement for independence, but it has very little traction

India and Bahrain Relations

Recently, India and Bahrain have agreed to further strengthen their historic ties, including in areas of defence and maritime security.

- Bahrain is a member of the **Gulf Cooperation Council (GCC)** and signed the **Abraham Accord** with Israel and the UAE, which was mediated by the USA.

Key Points

- The **bilateral issues**, as well as **regional and global matters of mutual interest**, included areas of defence and maritime

security, space technology, trade and investment, infrastructure, IT, FinTech, health, hydrocarbon and renewable energy.

- Both sides affirmed to further **strengthen their Covid-19 related cooperation.**
- ★ Bahrain **appreciated the assistance provided by India during the pandemic** through the supply of medicines, medical equipment and medical professionals.
- ★ They expressed satisfaction on the **operationalisation of the Air Bubble** arrangement between the two countries.
- ★ **Air bubbles** (travel corridors or travel bubbles) are systems established between two countries that perceive each other to be safe and allow carriers of both the countries to fly passengers either way without any restrictions.
- India **renewed invitation to Bahrain** for visiting India for the **3rd India-Bahrain High Joint Commission** meeting to be held in the upcoming months.
- In **2019**, India launched a **USD 4.2 million redevelopment project of the Sri Krishna temple** in the Bahraini capital, **Manama**.
- ★ The **200-year old temple** stands as a testimony for the enduring India-Bahrain friendship.
- India also conveyed **condolences on the demise of late Prime Minister Prince Khalifa bin Salman Al Khalifa**, who significantly **contributed to the strengthening of India-Bahrain relations** and to the welfare of the Indian community in Bahrain.



India-Bahrain Relations

▪ **Historical Ties:**

- ★ Their history goes back to about 5,000 years ago, to the period of Dilmun Civilization in Bahrain to the era of Indus valley civilization in India.
- ★ Ancient Bahraini traders are believed to have carried out a flourishing trade of **Bahraini pearls with Indian spices.**

Bilateral Agreements/Memorandums of Understanding (MoUs):

- ★ **Extradition Treaty** (January 2004)
- ★ MoU on cooperation in the field of **Information and Communication Technology** (May 2012)
- ★ MoU on the establishment of a **Joint High Commission** (February 2014)
- ★ **MOU on Water Resources Development and Management** (February 2015)
- ★ **Agreement on cooperation in combating international terrorism, transnational organised crime and trafficking in illicit drugs, narcotics and psychotropic substances and precursors chemicals** (December 2015)
- ★ MoU for cooperation in the fields of **Renewable Energy and Healthcare** and **Agreement on Exemption from Short Stay Visa for Holders of Diplomatic and Special/Official Passport** (July 2018)

- ★ MoU on cooperation in the exploration and uses of **Outer Space** for Peaceful Purposes (March 2019)

Trade and Economic Relations:

- ★ Total bilateral trade stands at **USD 1282.96 million in 2018-19** and **USD 753.60 million in 2019-20** (April-Dec).
- ★ **Indian Exports to Bahrain:** Mineral fuels and oils, inorganic chemicals, organic or inorganic compounds of precious metals of rare earth, cereals, nuts, fruits, articles of apparel and clothing accessories etc.
- ★ **Indian Imports from Bahrain:** Crude oils, mineral fuels and their bituminous substance, distillation, aluminium, fertilizers, ores/slugs/ashes of aluminium, iron and copper, pulp, etc.

Indian investment in Bahrain:

- ★ India's total capital investment into Bahrain between January 2003 and March 2018 has been estimated at **approximately USD 1.69 billion.**
- ★ **Financial services** have the highest investment value (40% of total projects), followed by the **real estate and hospitality sector.**

Indian Expatriate Community:

- ★ **Approximately 3,50,000 Indians are living in Bahrain currently** and around 70% are in the category of unskilled labour.
- ★ In addition to the predominant blue-collar labour force, there is a sizable number of other professionals who play a **vital role in Bahrain's socio-economic development.**

- ★ In November 2015, Bahrain launched 'Little India in Bahrain' project to acknowledge and mark the contribution of the Indian community to the history and progress of Bahrain.

Gulf Region Transformation & the Opportunity for India

Recently, India's External Affairs Minister visited Bahrain and the United Arab Emirates. The visit reflects the growing importance of gulf countries in India's foreign policy.

For decades, India's saw the Gulf countries largely from the economic prism, as a source of oil and a destination for labour exports. However, over the last few years, this economic prism has morphed into a strategic embrace.

Present Prime Minister's personal outreach to the Gulf rulers has helped crack open immense possibilities for political and strategic cooperation. This elevation of India's strategic priorities vis-a-vis the Gulf countries reflects on the structural changes taking place in the Gulf and the region's growing influence in the Indian Ocean.

Transformation of Gulf Region

- **No Longer Exclusive Petro-States:** The Gulf states are no longer seen as a collection of petro-states, now they have established a strong structure of finance capital built on the massive accumulation of oil revenues over the last few decades.
- ★ This has given rise to what is today called "Khaleeji" or Gulf capitalism.
- **Khaleeji Capitalism:** It is a concept developed by Adam Hanieh, a scholar based in London's School of Oriental and African Studies Capitalism, which tracks the rise of large conglomerates and sovereign wealth funds in the Gulf.
- ★ It is due to this capitalism model the gulf countries dominate several regional sectors — from banking and finance to infrastructure and logistics, from agribusiness and real estate to retail to telecom.
- ★ Further, the growing financial clout of the Gulf countries has also begun to translate into expansive geopolitical influence in the Middle East and the Indian Ocean.
- **Moving Towards Modernisation:** Gulf countries, in the present times, seek to reduce the heavy hand of religion on social life, expand the rights of women, widen religious freedoms, promote tolerance, and develop a national identity that is not tied exclusively to religion.
- ★ The UAE has been the leader in this regard. It has initiated reforms including the decriminalisation of alcohol use, permission for cohabitation among unmarried couples, criminalisation of honour crimes against women, and the institution of long-term visas.
- **De-hyphenation of India-Pakistan:** Today, the Gulf countries are eager to build strong and independent political ties with India, without getting affected by the India-Pakistan relations.

India's Relations with the Gulf Countries

- **Political:** The governments of the Gulf countries are India-friendly and Indian-friendly.
- ★ Recently, the Prime Minister of India has received the 'Order of Zayed', the highest civilian order of the UAE and the 'King Hamad Order of the Renaissance', the third-highest civilian order of Bahrain.
- ★ In the recent past, Saudi Arabia and the UAE have not adopted hostile posture to India's domestic developments such as **removing the special status for Jammu & Kashmir under Article 370**.
- **Economic:** The Gulf countries are among India's key suppliers of energy and annual remittances from Indians.
- ★ The United Arab Emirates (UAE) and Saudi Arabia are India's third and fourth-largest trading partners respectively and the total bilateral trade of the Gulf countries with India for the year 2018-19 stood at USD 121.34 billion.
- ★ UAE also features in the top 10 sources of FDI inflows into India.

Way Forward

- **Shielding India's Economic Interest:** First and foremost, Indian foreign policy should shield India's interests in the post-pandemic turbulence.
- ★ Due to economic instability caused by the pandemic, the Gulf countries are considering cutting back on foreign labour.
- ★ India should ensure that the Indian expatriates will not be affected by this.
- **Focusing Beyond Oil:** There is a need to focus on the new and long-term possibilities for eco-

conomic cooperation with the Gulf countries, which is looking at a future beyond oil.

- ★ The Gulf states have embarked on massive economic diversification and are investing in a variety of new projects including renewable energy, higher education, technological innovation, smart cities, and space commerce.
- ★ India must get its businesses to focus on the range of new opportunities in the Gulf.
- ★ India also needs to tap into the full possibilities of Gulf capital for its own economic development. The big gap between the investments that the Gulf is ready to offer and India's ability to absorb needs to be reduced.

- ★ In 2015, the UAE committed to investing \$75 billion in India. However, there is still a long distance away from facilitating that scale of investments.

▪ Leveraging Gulf-Israel

Normalisation: Earlier this year, UAE and Bahrain have normalised relations with Israel. This provides an opportunity for India to increase economic and technological engagement with Israel.

- **Getting Along With Khaleeji Capitalism:** With the rise of Khaleeji capitalism, the Gulf countries today deliver economic and security assistance to friendly states, build ports and infrastructure, acquire military bases and broker peace between warring parties and states.

- ★ The UAE currently chairs the **Indian Ocean Rim Association** (IORA) and has been eager to work with India in developing joint infrastructure projects.

- ★ India needs to bring scale and depth to its regional initiatives on connectivity and security in the Indian Ocean.

Conclusion

The Middle East has become more multipolar, with power diffused among a variety of regional and extra-regional actors. Within this mix, the rise of modern values and Khaleeji Capitalism in the Gulf countries make the case for India to discard outdated perceptions of the Gulf and seize the new strategic possibilities with the region.



ANALOG
IAS ACADEMY



Humble Contribution to
Nation Building

ANALOG IAS ACADEMY IS PROUD TO CONTRIBUTE

61 RANK HOLDERS IN UPSC CSE 2019-20
towards serving the nation

OUR TOPPERS



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SHRESTHA ANUPAM
DELHI



AIR 46
PEDDITI DHATRI REDDY
HYDERABAD



AIR 105
MANOJ MADHAV S
BENGALURU



Pankaj
AIR 56



Narwade Vishal Tej Rao
AIR 91

Chavan Rahul
Laxman

AIR 109

M V Satya Sai
Karthik

AIR 103



Keerthana H S
AIR 167

Shailaja Das
AIR 190

ECONOMY

UPI Transactions crossed the 2 Billion

According to the data released by the National Payments Corporation of India (NPCI), the total number of transactions conducted on the Bharat Interface for Money-Unified Payments Interface (BHIM-UPI), known more simply as the UPI, crossed the 2 billion transactions count in a month in October 2020.

Key Points

- UPI is currently the **biggest among the NPCI operated systems** including National Automated Clearing House (NACH), Immediate Payment Service (IMPS), Aadhaar enabled Payment System (AePS), Bharat Bill Payment System (BBPS), RuPay etc.
- Digital transactions were already on the rise but the **lock-down imposed during the pandemic** provided a thrust and the value of UPI transactions crossed the 200 crore-mark.
- The **Reserve Bank of India (RBI)** had advised to **resort to digital payment** due to the threat of coronavirus spreading

through physical exchange of currency. This resulted in businesses accepting mostly prepaid orders and in turn rise in digital transactions.

- Further, after being able to conveniently pay utility bills and even receive cashback at times, people might now be preferring to transact digitally. So, **their habit** may have played an important role in this thrust.
- India's digital payments industry is **likely to grow** from Rs. 2,153 trillion at 27% Compounded Annual Growth Rate (CAGR) to Rs. 7,092 trillion by 2025.
- The **growth is likely to come on the back** of strong use cases of **merchant payments**, government policies including Jan Dhan Yojana, **personal data protection bill** along with the **growth of MSMEs**, growth of millennials and high **smart-phone penetration**.

Challenges:

- ★ The **threat of cybercrime** on the global banking and financial services industry has increased amid the coronavirus

pandemic.

★ E.g. Malicious Software **Cerberus**

- ★ Fraudulent claims, chargebacks, fake buyer accounts, promotion/coupon abuse, account takeover, identity theft, card detail theft and triangulation frauds are emerging as challenges.

National Payments Corporation of India

- National Payments Corporation of India (NPCI), an umbrella organisation for operating retail payments and settlement systems in India, is an initiative of **Reserve Bank of India (RBI) and Indian Banks' Association (IBA)** under the provisions of the **Payment and Settlement Systems Act, 2007**.
- It is a "**Not for Profit**" Company under the provisions of **Section 25 of Companies Act 1956 (now Section 8 of Companies Act 2013)**, with an intention to provide infrastructure to the entire Banking system in India for **physical** as well as **electronic** payment and settlement systems.

Various NPCI Operated Systems

- **Bharat Interface for Money- Unified Payments Interface (BHIM-UPI):**
- ★ It is an initiative to enable fast, secure, reliable cashless payments through the mobile phone. BHIM is based on **Unified Payment Interface (UPI)** to facilitate e-payments directly through banks. It is an **app**.
- ★ **UPI is an advanced version of Immediate Payment Service (IMPS)** - round-the-clock funds transfer service to make cashless payments **faster, easier and smoother**.
- ⇒ This is a system that **powers multiple bank accounts into a single mobile application** (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.
- ⇒ It also **caters to the “Peer to Peer” collect request** which can be scheduled and paid as per requirement and convenience.
- **Aadhaar enabled Payment System (AePS):**
- ★ AePS allows people to carry out financial transactions on a Micro-ATM by furnishing just their Aadhaar number and verifying it with the help of their fingerprint/iris scan.
- ★ This system adds another layer of security to financial transactions as **bank details would no longer be required** to be furnished while carrying out these transactions.
- **National Electronic Toll Collection (NETC):**
- ★ It helps in electronic toll collection at toll plazas using FASTag.

- ★ **FASTags** is a device that employs **Radio Frequency Identification (RFID)** technology for making toll payments directly while the vehicle is in motion.
- ★ FASTag (RFID Tag) is affixed on the windscreen of the vehicle and enables a customer to make the toll payments directly from the account which is linked to FASTag.
- ★ RFID tagging is a system that uses **small radio frequency detection devices** for identification and tracking purposes.
- **National Automated Clearing House (NACH):**
- ★ It is a service offered by NPCI to banks which aims at facilitating interbank high volume, low value debit/credit transactions, which are repetitive and electronic in nature.
- **Immediate Payment Service (IMPS):**
- ★ It offers an **instant 24X7 inter-bank electronic fund transfer service** through mobile phones.
- ★ IMPS is an emphatic tool to transfer money instantly within banks across India through mobile, internet and ATM.
- **Bharat Bill Payment System (BBPS):**
- ★ Bharat Bill Payment System is a tiered structure for operating a unified bill payment system.
- ★ NPCI functions as the authorised **Bharat Bill Payment Central Unit (BBPCU)**, which is responsible for setting business standards, rules and procedures for technical and business requirements for all the participants.
- ★ Under BBPS, the **Bharat Bill Payment Operating Units (BBPOUs)** function as entities

facilitating collection of repetitive payments for **everyday utility services**, such as, electricity, water, gas, telephone and Direct-to-Home (DTH).

RuPay:

- ★ RuPay is the **first-of-its-kind domestic card payment network of India**, with wide acceptance at ATMs, POS devices and e-commerce websites across India. It is a highly secure network that **protects against anti-phishing**.
- ★ The name, derived from the words ‘Rupee and ‘Payment’, emphasizes that it is India’s very own initiative for Card payments.

Way Forward

- To further penetrate digital transactions, the government’s constant push to digitisation through necessary education, digital rewards and incentives along with intelligent innovations in financial transactions focussed on improving customer experience is necessary.
- Further, there is a need for the convergence of anti-money laundering, fraud and cybersecurity processes in Financial Institutions (FIs). This includes more information sharing, tightening due diligence requirements and investing in maintaining systems to strengthen their defences.

Gas-Based Economy

Recently, Natural Gas Marketing Reforms were approved by the government of India. These were introduced with the objective to prescribe standard procedure to discover the market price of gas through a transparent and competitive e-bidding process.

Globally, natural gas has been gaining traction as a key alternative and an ideal fuel to support the energy shift in favour of cleaner and greener energy sources. India too is on its path to become a sustainable development and has set a vision to become a gas-based economy.

However, a well-functioning gas market will require the enabling regulatory framework to reduce entry/exit barriers, achieve balance between safeguarding the interests of customers pricing, delivery expectations and sellers returns expectations.

India's Pursuit of Becoming Gas Economy

- With its aim to increase the share of gas in the energy mix from the current 6% to about 15% by 2030, India has bolstered its efforts in making the environment favourable to ensure such an increase.
- Gas markets will play a crucial role in achieving the national aspirations of increasing the share of gas.
- Increasing domestic gas production has been a key government priority. Further, the plan to achieve '**One Nation One Gas Grid**' will shift Indian economy towards a gas-based economy.
- A liquid and well-functioning domestic gas market, as also suggested by **International Energy Agency (IEA)**, would be a strong pillar for building gas economy in India.

Significance of Recent Reforms

- The latest reforms are with the intent to keep to the letter and spirit of ensuring marketing and pricing freedom for gas pricing in India.

- They allow transparent price discovery based on e-bidding through an independent agency selected from a panel maintained by the Directorate General of Hydrocarbons.
- This permits affiliates to participate in the bidding process for sale of gas and allow marketing freedom to certain field development plans (FDPs) where production sharing contracts already provide pricing freedom.
- This is to bring uniformity to the bidding process across various contractual regimes and policies to avoid ambiguity.
- Such a platform will aid in expanding the gas industry by providing competitive and transparent pricing, flexibility in procurement and payment security.

Associated Challenges

- **Nascent Gas Sector:** The gas makes only 6% of India's energy basket mix.
- ★ While the government is putting all its might, critics are quick to point out that domestic production is yet to take off and majority of India's gas requirement continues to be met through imports.
- **Differential Pricing:** Today, gas in India is sold at varied prices — the gas under administered price regime at \$1.79 per mBtu and other domestic gas in the range of \$4.5 to \$5.5 per mBtu.
- ★ This hampers the evolution of a vibrant gas market.
- **Public Sector Domination:** Almost 80 per cent of Indian domestic gas is produced from blocks given on nomination basis to national oil companies.
- ★ Also, the obsolete technology and efficiency with the public

sector hampers gas production as well.

Way Forward

- **Deregulation of Pricing:** A key aspect of ensuring market reforms to boost gas economy, would be deregulation of pricing for domestically produced gas.
- ★ It will allow freedom to price and market domestic gas and in turn boost domestic production, making it more viable for players to invest.
- ★ Moreover, market-determined and affordable pricing would also boost industrial growth and economic competitiveness.
- **Boosting Infrastructure:** These markets have greatly benefited from factors such as open access to infrastructure, system operator, unbundled marketing and transport functions and market-friendly transport access and tariff besides strong pipeline infrastructure.
- **Freeing Gas Markets:** Through ensuring price benchmarks, it will drive competition across the value chain and stimulate investments in exploration and production along with downstream infrastructure.
- ★ Moreover, factors such as inclusion under GST and an overarching regulatory framework will also play an important role in boosting the overall gas markets.

Conclusion

India has currently gas pipeline infrastructure of around 16,000 km and plans to double the capacity in 2-3 years. Coupled with necessary policy and regulatory support, India can indeed accelerate its pace towards building a market-based gas economy.

Differential Licensing on Telecom Sector

Recently, various telecom operators have collectively opposed the move to introduce differential licensing via unbundling of various layers (infrastructure, network, services, and application layer).

Key Points

Background:

- ★ In May 2019, the Department of Telecommunications (DoT) informed that the National Digital Communications Policy 2018, under its 'Propel India' mission, envisages reforming the licensing and regulatory regime to catalyse investments and innovation and promote Ease of Doing Business.
- ★ Enabling unbundling of different layers through differential licensing is one of the action plans for fulfilling the strategy.
- ★ For that, the Telecom Regulatory Authority of India (TRAI) was requested to furnish recommendations and seek stakeholders' (telecom operators) inputs on possible benefits and measures.

Current Licencing Regime:

- ★ The grant of telecom licenses in India is primarily governed by the Indian Telegraph Act 1885, and the Indian Wireless Telegraph Act 1933.
- ★ These Acts provide an exclusive authority to the Central Government for establishing, maintaining, and working telegraphs, and wireless telegraphy equipment, and to grant licenses for such activities.

- ★ The 1885 Act defines "Telegraph" as any appliance, instrument, material or apparatus used or capable of use for transmission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, visual or other electromagnetic emissions, Radio waves or Hertzian waves, galvanic, electric or magnetic means.
- ★ In November 2003, the Unified Access Service License (UASL) regime was introduced which permitted an access service provider to offer both fixed and/or mobile services under the same licence, using any technology. It came into being in 2013.
- ★ In June 2012, the National Telecom Policy was issued with the aim to simplify the licensing framework, and to strive for the creation of One Nation-One License across services and service areas.

Issues Highlighted:

- ★ Separating the network licence will introduce uncertainty in the licensing regime and adversely impact the future investment in the networks.
- ★ A converged licence for network and service layer offers clarity and certainty to an operator making an investment in the network.
- ★ Any such changes will require business models to be reconfigured which would be counterproductive.
- ★ The process of unification is yet to be completed under the existing licensing regime and the proposal to unbundle network and service layers with a completely new type of licens-

ing regime would introduce a great level of uncertainty in the system, with unknown and unpredictable impact on investments.

- Measures if Implemented:
- ★ There should not be any mandatory migration of licences until the validity of existing licences.
- ★ A clear compensation methodology should also be enumerated, especially for investments made in the last 10 years.
- ★ Address the underlying issue of the poor financial health of the telecom sector.
- ★ Strengthening telecom infrastructure which would require enormous fund infusion, estimated to be about Rs. 2,00,000 crore over the next 2-3 years.
- ★ The government needs to provide incentives, reduce regulatory cost, provide appropriate policy and financial stimulus to the existing service providers.

Way Forward

- Unbundling has been termed as "neither necessary nor desirable" by the telecom service providers.
- Ushering in changes that require business models to be re-configured at a time when existing investments are not already fully recovered, would be counter-productive.
- Therefore, there is a need to address the existing underlying issues prevailing in the sector instead of recommending or implementing another licensing framework which will create ambiguity and additional challenges.

Purchasing Managers' Index

With India's PMI for manufacturing, at 58.9 in October, recording the strongest growth in 13 years, and that for services expanding for the first time in eight months, there is a spring in policymakers' step. They would like to point out that their fiscal and monetary responses for COVID times are yielding results and the economy is normalising at a faster pace than expected.

What is PMI?

- ★ It is an **economic indicator** that is **calculated from monthly surveys of purchasing managers and supply executives from specific companies.**
- ★ PMI Manufacturing gives an **indication of the economic health of the manufacturing sector.** The most followed PMI readings come from Markit and Institute of Supply Management.

How is it calculated?

- ★ To arrive at PMI, a **questionnaire seeking factual information on variables such as new orders, output, employment, supplier deliveries, inventories, new export orders and prices** are sent to purchasing managers of business enterprises and they are asked if these factors are above or below the level of the previous month.
- ⇒ It is calculated separately for the manufacturing and services sectors and then a **composite index** too is constructed.

How does one read the PMI?

- ★ A figure above 50 denotes an **expansion** while anything

below 50 denotes a **contraction** in activity. The higher the difference from this mid-point of 50, greater the expansion or contraction.

- ★ Also, the rate of expansion can be judged by comparing the PMI with that of the previous month reading.
- ★ If the latest figure is higher than previous month's, then manufacturing or services is expanding at a faster rate. If it is lower than previous month, then it is growing at lower rate.

Why is it important?

- ★ The PMI is becoming one of the most tracked indicators of business activity across the world. It provides a reliable expectation of how an economy is doing as a whole — and manufacturing in particular.
- ★ It is a **good gauge of boom and bust cycles in the economy** and closely watched by investors, business, traders and financial professionals besides economists.
- ★ Also, the PMI, which is **usually released at the start of the month**, serves as a **leading indicator of economic activity.** It comes before the official data on industrial output, core sector manufacturing and GDP growth.
- ★ Even **central banks use the PMI to take decisions on interest rates.**
- ★ Besides influencing equity market movements, **PMI releases also impact bond and currency markets.** Since manufacturing sector is often where recessions begin and end, PMI manufacturing is always closely watched.
- ★ A good reading of PMI **enhances the attractive-**

ness of an economy vis-a-vis other competing economies. Suppliers can decide on prices depending on PMI movements.

Spot the Seeds of Growth

Due to the economic downturn caused by Covid-19 pandemic, India's GDP contracted by 23.9 % in the first quarter. However, a silver lining in this degrowth scenario can be noted as agriculture grew by 3.4%.

Despite green shoots, agriculture in India is ailing for a long time. It has been grappling with issues like fast depleting groundwater, soil degradation, fragmented markets, barely functioning agricultural extension services and speeding up of climate change.

It is due to these factors agriculture cannot overturn contraction in other sectors, but along with the non-farm rural sector, it could jump-start the economy. Apart from this, Non-Farm rural activities (livestock, fisheries and food processing, etc.) are advantageous in lifting the poor above the poverty line.

Therefore, it becomes imperative to identify the issues of the non-farm rural sector in India to focus on building strong growth links between the non-farm rural economy and agriculture.

Importance of Rural Non-Farm Sector

The non-farm sector, particularly in rural areas is being accorded wide recognition in recent years for the following reasons:

- **Check on Unregulated Migration:** A planned strategy of rural non-farm development may prevent many rural people from migrating to urban industrial and commercial centres.

- **Bridging Rural-Urban Divide:** When the economic base of the rural economy extends beyond agriculture, rural-urban economic gaps are bound to get narrower along with salutary effects in many other aspects associated with the life and aspirations of the people.
- **Employment Generation:** Non-farm rural industries are generally less capital-intensive and more labour absorbing. Thus, they can play a critical role in employment growth in rural areas.
- **Reducing Inequalities:** Rural income distribution is much less unequal in areas where a wide network of non-farm avenues of employment exists.
- ★ As the lower strata of rural societies participate much more intensely in non-farm activities, it helps in increasing social mobility.

Associated Challenges

- **Weak Institutional Structure:** There are many institutions (KVIC, SIDBI, etc.) which were established for the development of the rural non-farm sector.
- ★ However, these institutions are marred by issues like administrative inefficiency, lack of financial autonomy, overlapping jurisdiction, etc.
- **Quality of Manpower:** High levels of illiteracy in rural India have hampered the growth of the rural non-farm sector.
- ★ In the rural areas, lack of education leads to labour being stagnant in agriculture or moving to casual work occupations in the non-farm sector, and not to salaried employment with higher wages and benefits.
- ★ Together with a lack of technical skills, there is little incentive for rural firms to invest in

technology, leading to low levels of labour productivity in the rural manufacturing sector compared to urban manufacturing.

▪ **Forward and Backward**

Linkages: The gaps in the integration of the production linkages brought about by low accessibility of market, support service weaknesses and intervention of middlemen have constrained the development of non-farm enterprises in India.

- ★ Apart from this, the most significant bottleneck in generating higher levels of rural non-farm activity in India is the quantity, quality and reliability of infrastructure.
- ★ Although corrective steps are now being taken, increased infrastructure remains the most important priority for the future.

Way Forward

Efforts are needed to identify appropriate and effective institutional vehicles for the development of non-farm sector policy and interventions for creating employment opportunities. In this context, the following policy interventions can be taken by the government.

- **China's TVEs Model:** China's labour-intensive township and village enterprises (TVEs), are often described as the "engine of growth" behind China's remarkable growth.
- ★ The TVEs are hybrid institutions, generally unusual alliances between entrepreneurs and local government officials (acting in the capacity of "owners" of TVE enterprises).
- ★ In this regard, the role of government is crucial, especially in the provision of necessary

infrastructure and other support services.

- **Supply Chain Integration:** It is also vital to improve the marketing links between the village entrepreneurs and the larger business firms located in the towns/cities.
- ★ Such strategic alliances or partnerships can contribute to the sustainability of small villages and tiny enterprises in rural areas.
- **Addressing Structural Issues:** Other important considerations that need to be focused on may include human resource development, financial/credit facilities, research and development and women's participation with a view to making the activities self-sustaining in the changing competitive environment.

Conclusion

The non-farm rural sector is increasingly playing an important role in the development of rural areas of India. Specifically, as agriculture's contribution to the economy is declining, the non-farm sector will need to become more and more a major provider of employment and income to many people in rural areas.

However, it should be noted that the non-farm rural sector is not a substitute for employment in agriculture but rather as a supplementary measure. Agricultural development is still important and should be pursued as a necessary precondition for inclusive development.

Evolution of India's Trade Negotiations

During the 300 years of Colonial rule, the East India

Company completely controlled India's external trade, allowing export of mainly raw cotton and spices and dumping finished products in the country.

Multilateral Trade under GATT

- The General Agreement on Tariffs and Trade (GATT) of 1948 was the first multilateral agreement under UN aimed at boosting economic recovery by reducing barriers to trade. Even though India was one of the 28 founding members of GATT, it was not a serious stakeholder in multilateral trade negotiations.
- In the eight GATT Rounds held in the later half of the 20th century, India and developing countries were primarily concerned about safeguarding their agriculture interests against largescale agriculture subsidies of developed countries.
- Moreover, agriculture being a livelihood issue for a large number of people in developing countries, it was felt necessary to protect it from external competition.

World Trade Organisation

- India, along with 76 countries, was a founder member of the World Trade Organisation (WTO) in 1995 which subsumed the Uruguay Round GATT negotiations from 1986-1994. India believes that a fair, equitable, justiciable and predicable rules-based multilateral trading system embodied in WTO is in the best interest of developing and Least Developed Countries (LDCs).
- Under Agreement on Agriculture (AoA), the domestic support policies, subject to reduction commitments, were calculated by the total Aggregate Measurement of

Support (AMS) on the base years of 1986-88. Accordingly, input subsidies known as 'Amber Box' have been calculated for exclusion from reduction commitments at less than 5% of the value of production for developed countries and less than 10% for developing countries. India and other developing countries have argued that developed countries have taken undue advantage of the huge domestic support provided under other boxes namely, 'Green' and 'Blue' that have been tacitly kept outside the reduction commitments. Efforts to bring balance in AoA negotiations remained unsuccessful till date.

Trade and Development

- It was not until the beginning of the 21st century that WTO recognised the causal link between trade and development. This recognition led to the launching of the 'Doha Development Round' in 2001 putting 'development' at the centre of global trade.
- India scored a major victory at the Bali Ministerial Conference in 2013 when it successfully negotiated a 'permanent peace' clause on domestic support for agriculture as a trade-off for agreeing to WTO Agreement on Trade Facilitation. The 'permanent peace' clause allows India to pursue its agriculture domestic support programs, without the risk of being challenged in the WTO Dispute Settlement Body, until the issue is resolved collectively by all members.

Reform of WTO -

- Presently, talk on reform of the WTO has gathered momentum in the wake of unilateral measures and counter-measures

imposed by mostly USA and China. Developed countries are seeking to graduate few emerging countries like India, China, Brazil, South Africa etc. from the status of 'developing countries' by withdrawing Special and Differential Treatment (S&DT).

- India strongly opposed this distorted view arguing that development parameters of developing countries are not even remotely close to those of developed countries and putting them in the same basket as developed countries is unfair.
- Another challenge in WTO for developing countries is effort by plurilateral groups to push for new issues on the WTO Agenda for rule making such as e-commerce, investment facilitation, MSME and gender. For India and developing countries, Doha Development Round remains unfinished and new issues run the risk of undermining the 'development' agenda.

Tariff and Non-Tariff Barriers

- WTO member countries had bound their tariff rates for each line of product; developed countries bound 99% of their tariff lines to below 5% rates and developing countries bound their rates to 98% but with varying peak rates, within which they can maintain flexible applied rates.
- India brought down its applied rates significantly from an average 100% rates in the 90s to currently around 15% for industrial products and 25% for agriculture products.
- WTO Agreements on Sanitary and Phytosanitary Standards (SPS) and Technical Barriers to Trade (TBT) have defined rules on standards but these are not

enforceable. As Standards are voluntary in WTO, countries tend to take advantage of the ambiguity in the Article 20 of GATT that allows governments to restrain imports in order to protect human, animal or plant life or health, provided they do not discriminate or use it as disguised protectionism. For developing countries coping up with these high standards is hard as they add up costs.

India's Share in World Trade

- India's share in the world merchandise exports at the time of our independence in 1947 was 2.2%; it dropped to 0.5% in 1983 and marginally raised to 0.7% in 2000. Currently, India's share in global exports is 1.7%.
- In 2000, India's total trade was about \$103 billion (exports \$43 billion+ imports \$60 billion); in 2010, it was \$528 billion (exports \$201 billion \$327 billion imports) and in 2019-20, it was about \$787 billion. India's major trading partners are USA, EU, China, UAE, Germany, Singapore, UK, etc.
- A worrisome factor for India is the ever widening trade deficit with China, which is feared to be dumping its goods in India indiscriminately through a deliberate state-sponsored unfair trade practices, while insulating its markets through highly cumbersome non-tariff measures.
- India's export product profile more or less remained constant for several years; petroleum products, Gems and Jewellery, machinery, organic chemicals, pharmaceuticals, electronics, leather etc. have been consistently leading the chart. Diversifying export basket with value added products would

help to expand its global market share.

- Services constitute more than 55% of India's GDP, similar to the economic profiles of most developed countries. India's export of services trade has been gradually growing in the last two decades; in 2019, services exports were \$214 billion and imports \$128 billion and India supplies 40% of global demand for IT skilled manpower. However, India's share in world services trade is only 2.6%, mostly concentrated in IT and IT-enabled services.

Global Value Chains

- Global value chains or Supply Chains are a reflection of fragmentation of production processes that have assumed a high degree of sophistication and specialisation due to changes in technology, skills, capital and investment policies.
- It denotes an underlying principle that companies source raw materials and intermediate products at qualitative and competitive prices from wide ranging sources across the world. It marks a shift away from the traditional way of manufacturing where components and finished products are all produced in one country.
- Some sectors of India, especially Pharma, Auto and Textiles are well-integrated into GVCs while those of China, Japan, Korea, Singapore etc, are not only extensive but also deeply entrenched in several countries around the world, lending their products competitive edge in the global markets.

Free Trade Agreements

- Free Trade Agreements (FTAs) create conducive environment

for GVCs to operate efficiently.

- GATT Article 24 of WTO allows member countries to enter into bilateral/regional preferential trade arrangements in order to achieve higher level of trade liberalisation, notwithstanding that this provision, amounts to derogation of GATT Article 1 'Most Favoured Nation' (MFN) that stipulates non-discriminatory treatment on trade preferences to all countries.
- India concluded about 16 FTAs/PTAs and another 29 of them are under either negotiation or review. India's most notable bilateral FTAs are with Japan, South Korea, Chile, Singapore and regional FTAs are SAFTA, ASEAN, MERCOSUR, APTA etc.
- Traditionally, India has been conservative to opening its economy through Free Trade Agreements for fear of exposing domestic industry to external competition. However, trade data of last 10 years suggests that India's volume of trade with its FTA partner countries has significantly grown and trade deficit remained either constant or widened marginally.
- Not being part of preferential trade architecture could be detrimental for a growing economy like India as it would amount to inevitable erosion of its market share when FTA countries begin to trade amongst their partner countries at zero duty tariffs. Therefore, the way to go about an FTA negotiation is to seek longer staging phase out of its tariffs with a partner country while at the same time seek immediate phase outs in areas of core interest. For example, as India is relatively strong in

textile, leather, chemicals, automobile components, pharma etc., seeking immediate tariff phase out in these sectors through FTA could be beneficial.

- Also, India's interest in services trade has grown exponentially; seeking openings in services sector for movement of professionals should be a priority. Similarly, encouraging investments through FTA route should form part of the strategy

Why Trade Deals are the Next Logical Step

Reacting to the Regional Comprehensive Economic Partnership (RCEP) agreement signed by 15 Asia-Pacific countries, India's External Affairs Minister, S Jaishankar, gave a scathing assessment of trade agreements.

"In the name of openness we have allowed subsidised products and unfair production advantages from abroad to prevail," he said, adding that "the effect of past trade agreements has been to de-industrialise some sectors. The consequences of future ones would lock us into global commitments, many of them not to our advantage." The government, he said, has decided to move away from trading arrangements towards an 'Aatmanirbhar Bharat'.

Arguments against trade agreements -

It is true that India's experience with trade agreements has not been good. Most of the 15 free trade agreements (FTAs), many signed during the UPA government, have resulted in trade deficits. For instance, FTAs with Asean, Japan and South Korea

have seen India's share of exports to these markets decline from 51 per cent to 46 per cent. Dumping and re-routing of merchandise in violation of the Rules of Origin norms have been causing lot of challenges for the domestic industry.

Arguments in favour of trade agreements -

For India to become a \$5 trillion economy rapidly, domestic demand alone will not suffice. Global demand (or exports) is critical. Leave alone additional demand. India will lose its present competitive advantage in exports if it does not strike trade deals as its competitors are actively pursuing them. Take the case of Vietnam's recent FTA with the European Union (EU). Its textile exports into the EU from August 1 this year benefit from nil import duty whereas India suffers a 12-14 per cent tariff. Bangladesh has been eating into Indian textile exports to the EU and the US, taking advantage of its 'least developed country' status. Only an FTA with the EU and the US will offer Indian exporters a level-playing field to regain the volumes.

Impact on reforms

Avoiding trade agreements will also negate some of the far-reaching reforms that the Modi government has taken to revive the economy and make India a global manufacturing hub.

- ★ Last year, in October, the government cut corporate tax rates. The rate cut for manufacturing companies incorporated after October 2019 (and those that start manufacturing before March 2023) was particularly sharp — from 34 per cent to 17.01 per cent. It was done to capture a fair share of the glob-

al manufacturing capacity realignment triggered by the US-China trade war and a permanent change in their relationship from being 'co-operating rivals' to 'competing rivals'.

- ★ The government sees an opportunity here to make India a global manufacturing hub. But companies which are looking to de-risk their dependence on China will come to India only if they can export their products in the most competitive manner.
- ★ The same logic holds good for the production-linked incentive scheme that the government has rolled out for 13 sectors at a cost of over ₹ 2 lakh crore. The policy not only aims to reduce India's import dependence in these sectors but also, over time, make India an export hub. Why will Apple set up its manufacturing unit in India if it cannot export the handsets at a low or a zero rate of duty to large markets?
- ★ The government, to attract foreign investments, has also reformed the foreign direct investment norms for defence production, contract manufacturing, apart from opening up space, atomic energy and commercial coal mining for the private sector. For all these measures to deliver effectively, the global market access that India offers is key.

Way forward

- ★ India should start by looking into the reasons why existing FTAs have not worked. It has already taken an important step in plugging dumping and re-routing of merchandise imports by implementing CAROTAR — The Customs (Administration

of Rules of Origin under Trade Agreements) Rules, 2020. The rules, which came into effect from September, seeks to weed out those who are trying to misuse the FTAs.

- ★ At the same time, the government should focus on negotiating FTAs with countries that have high potential to improve trade. According to a study, untapped export potential with the US, as a percentage of current exports, is 60 per cent. In the case of the EU, it is even higher at 90 per cent. The UK, post-Brexit, is another potential market to tap. All these countries are tough negotiators but it makes immense sense to work with them.
- ★ It is time for India to think long term and look beyond the various vested interests that are holding back a deal. It is wine, auto, dairy and fishery in the case of the EU while it is pharma, agriculture and data security as regards the US. It is the access to agriculture that is preventing a deal with Australia despite nine rounds of talks that extended over eight years. The government has to adopt a 'give and take' approach to make these deals happen, keeping in mind the long term interest of the country.

Conclusion

India may have had strong reasons to walk out of the RCEP deal but trade agreements cannot be completely wished away. The External Affairs Minister has used 'Aatmanirbhar Bharat' as a reason to move away from trade deals, but the question is: Will India achieve 'Aatmanirbharta' without them?

Unified Single-window Clearance System

The government is working on a new, unified single-window clearance system for foreign direct investment (FDI) proposals.

- It is taking up **several other active reform-related steps** related to **sovereign wealth funds and tax dispute settlements** to continue the momentum of reforms. It also **seeks feedback from global investors** to make the system more functional.

Key Points

- **Background:**
- ★ Despite the presence of several IT platforms for investing in India such as the **Foreign Investment Facilitation Portal (FIFP)** and **state single-window clearances**, **investors need to visit multiple platforms to gather information and obtain clearances** from different stakeholders.
- ★ FIFP is the **online single point interface** of the Government of India with investors to facilitate FDI.
- ★ It is administered by the **Department for Promotion of Industry and Internal Trade (DPIIT)**, Ministry of Commerce and Industry.
- **About Single-window System:**
- ★ To address this, the creation of a **centralised Investment Clearance Cell** was proposed by the DPIIT.
- ★ The cell will be a **one-stop digital national portal** that **integrates the existing clearance systems** of various ministries/departments of the government and will have a **single, unified application form**.
- ★ It would **provide end-to-end facilitation support**, including

pre-investment advisory, information related to land banks and facilitating clearances at Central and state level.

- ★ It will allow **digital access** to regulators, policymakers and facilitators at one point **irrespective of their geographical location** and also provide **time-bound approvals and a real-time status update** to investors.
- ★ It will **enable the potential investor to interact** with all the ministries whose approvals are required, in the central government as well as in the states.

Sovereign Wealth Funds:

- ★ Despite the **Covid-19 pandemic**, the government has seen **fresh interest from large sovereign wealth funds** looking to invest in the country.
- ★ In the **Budget 2020-21**, the government promised **100% tax exemption** to the interest, dividend and capital gains income on the investment made in infrastructure and priority sectors **before 31st March, 2024 with a minimum lock-in period of 3 years** by the Sovereign Wealth Fund of foreign governments.
- ★ A **sovereign wealth fund** is a **state-owned investment fund** composed of the **money generated by the government**, often derived from a country's surplus reserves.
- ★ Despite **lockdowns**, the **National Infrastructure Investment Fund (NIIF)** actively engaged with the investors to find out the best way **to facilitate them with the benefits of the tax exemptions**.
- **Advance Pricing Agreements and Tax Dispute Settlements:**
- ★ Various MNCs highlighted the

concerns about **delays in bilateral Advance Pricing Agreements (APAs) and tax dispute settlements.**

- ★ APA is an **agreement between a taxpayer and tax authority determining the transfer pricing methodology**, for pricing the taxpayer's international transactions for future years.
- ★ In February 2020, Government approved an amendment to the **Direct Tax Vivad se Vishwas Bill 2020** which provides a mechanism for resolution of pending tax disputes in a simple and speedy manner.
- ★ India needs a **robust system to resolve disputes on an ongoing basis** instead of waiting for specific schemes to be announced for them. There should be **simultaneous tracking of disputes and efforts to settle them at the earliest.**

Negative Yield Bonds

Recently, demand for negative yield bonds is on rise in the global market.

Key Points

- **Negative Yield Bonds:** Are **debt instruments** that offer to pay the investor a maturity amount **lower than the purchase price** of the bond. These are generally **issued by central banks or governments**, and **investors pay interest to the borrower** to keep their money with them.
- ★ **Bond:** Is an **instrument to borrow money**. A bond could be **floatated/issued** by a country's **government** or by a **company** to raise funds.
- ★ **Yield:** The yield of a bond is the **effective rate of return** that it earns. But the rate of return is **not fixed**; it

changes with the price of the bond.

- ★ Generally, investors purchase the bonds at their **face value**, which is the principal amount invested. In return, **investors typically earn a yield** of a bond.
- ★ Each bond has a **maturity date**, which is when the investor gets paid back the **principal amount**.
 - **Reasons behind buying Negative Yield Bonds:**
- ★ **To create a diverse portfolio:** Many hedge funds and **investment firms** that manage **mutual funds** invest in negative bonds in order to diversify their investment.
- ★ **To use them as collateral:** Bonds are often used to pledge as **collateral** for financing and as a result, need to be held regardless of their price or yield.
- ★ **To take Benefit from Currency Gain:** Foreign investors might believe the currency's exchange rate will rise, which would offset the negative bond yield.
- ★ **To Avoid Domestic Deflation Risk:** Domestically, investors might expect a period of deflation, or lower prices in the economy.
- ★ **For Example:** Consider a one-year bond that yields minus 5% but at the same time inflation is expected to be minus 10% over the same period.
- ★ That means the investor in the bond would have more purchasing power at the end of the year because prices for goods and services would have declined far more than would the value of the investment in the fixed-income security.
- ★ **To Create Safe Haven Assets:** Investors might also be interested in negative bond

yields if the loss is less than it would be with another investment. In times of **economic uncertainty**, many investors rush to buy bonds because they're considered **safe-haven investments**.

- ★ These purchases are called the **flight-to-safety-trade** in the bond market. During such a time, investors might accept a negative-yielding bond because the negative yield might be far less of a loss than a potential double-digit percentage loss in the equity markets.
- **Current Scenario:**
- ★ Today when the world is fighting the **Covid-19 pandemic** and **interest rates** related to bonds and other financial instruments in developed markets across Europe are much lower, investors are looking for relatively better-yielding debt instruments **to safeguard their interests**.
- ★ **China** sold its negative-yield bonds for the first time, and this saw a high demand from investors across **Europe**.

Reason for High Demand:

- ★ **Low risk with Chinese Bonds :** Yields offered in safe European bonds are much lower than ones offered by China.
- ★ As against minus -0.15% yield on the 5-year bond issued by China, the yields offered in safe European bonds are much lower, between -0.5% and -0.75%.
- ★ **China's positive Gross Domestic Product (GDP):** Majority of the large economies are facing a contraction in their GDP for 2020-21 while China is one country that is set to witness positive growth as its GDP expanded by 4.9% in the third quarter of 2020.
- ★ **Increase in Covid-19 cases:** While Europe, the United States

and other parts of the world are facing a second wave of Covid-19 cases, China has demonstrated that it has controlled the spread of the pandemic and is therefore seen as a more stable region.

★ **Factor Driving the High Demand:**

★ **Availability of money:** Huge amount of **liquidity** injected by the **global central banks** after the pandemic.

★ They have injected an estimated more than **10 trillion dollars** of liquidity through various instruments in the financial system.

★ **Avoiding risk:** Investors might also be temporarily parking money in negative yield bonds for the purpose of hedging their risk portfolio in equities. To gain profit and avoid losses in case the fresh wave of the **Covid-19 pandemic** leads to further lockdowns of economies.

NIA Activism to Combat Fake Currency Trade in India

The National Investigation Agency (NIA) recently filed its third supplementary chargesheet in the Fake Indian Currency Notes (FICN) case of Visakhapatnam in which Bangladeshi smugglers were also involved. This type of serious economic crimes are infact a blow to economic sovereignty of the country . That's why the Central Government had empowered NIA to deal with fake currency and bank note cases through NIA amendment act , 2019. Before this it was not under the jurisdiction of NIA.

The NIA was also empowered to deal with this kind of offence through its special courts trial and

2019 amendment allowed central government to designate session courts as special courts of NIA so that it may deal with the offences effectively.

The chargesheet, filed by NIA under Indian Penal Code sections before the special NIA court in Vijayawada, names West Bengal resident Enamul Haque, who was involved in cross-border smuggling and circulation of FICN after procuring them from his associates in Bangladesh.

About NIA :

★ At present NIA is functioning as the Central Counter Terrorism Law Enforcement Agency in India. NIA Act was enacted on 31-12-08 and the National Investigation Agency (NIA) was born.

★ NIA has registered and investigated 315 cases as on date i.e. 05.02.2020. After submission of charge sheets, 60 cases have been finally or partially decided in trial. Of these, 54 cases have ended in conviction giving NIA an enviable conviction percentage of 90%.

★ The National Investigation Agency aims to be a thoroughly professional investigative agency matching the best international standards.

★ The NIA aims to set the standards of excellence in counter terrorism and other national security related investigations at the national level by developing into a highly trained, partnership oriented workforce.

★ NIA aims at creating deterrence for existing and potential terrorist groups/individuals. It aims to develop as a storehouse of all terrorist related information.

NIA Mission :

★ In-depth professional investigation of scheduled offences using the latest scientific methods of investigation and setting up such standards as to ensure that all cases entrusted to the NIA are detected.

★ Ensuring effective and speedy trial and Developing into a thoroughly professional, result oriented organization, upholding the constitution of India and Laws of the Land giving prime importance to the protection of Human Rights and dignity of the individual.

★ Developing a professional work force through regular training and exposure to the best practices and procedures.

★ Displaying scientific temper and progressive spirit while discharging the duties assigned.

★ Inducting modern methods and latest technology in every sphere of activities of the agency.

★ Maintaining professional and cordial relations with the governments of States and Union Territories and other law enforcement agencies in compliance of the legal provisions of the NIA Act.

★ Assist all States and other investigating agencies in investigation of terrorist cases.

★ Build a data base on all terrorist related information and share the data base available with the States and other agencies.

★ Study and analyse laws relating to terrorism in other countries and regularly evaluate the adequacy of existing laws in India and propose changes as and when necessary.

★ To win the confidence of the citizens of India through selfless and fearless endeavours.



GEOGRAPHY AND ENVIRONMENT

Ganga Utsav 2020

Recently, the Ganga Utsav 2020 has begun which celebrates the glory of the National river Ganga.

- Ganga was declared as the National River of India on 4th November 2008.

Key Points

- **Ganga Utsav:**
- ★ The **National Mission for Clean Ganga (NMCG)** celebrates the festival every year.
- ★ NMCG is the **implementation wing of National Ganga Council**, set up in 2016, which replaced the National Ganga River Basin Authority (NRGBA).
- ★ The **three-day festival** aims to **promote stakeholder engagement and ensure public participation**.
- ★ It celebrates mystical and cultural river Ganga through storytelling, folklores, dialogues with eminent personalities, quizzes, displaying traditional art forms, dance and music performance by renowned artists, photo galleries and exhibitions and much more.
- **Programmes Held During the Festival:**
- ★ **Ganga Task Force (GTF)** conducted an **afforestation drive** with **National Cadet Corps (NCC)** cadets and educational tour for youth.
- ★ GTF is a **unit of battalion of ex-servicemen deployed in the services of the Ganga** with the approval of the Ministry of Defence for the period of four years till December 2020.
- ★ It was approved by the Cabinet under the **Public Participation component of the Namami Gange Programme** and the **first battalion was raised in March 2016**.
- ★ **Mini Ganga Quest**, designed to make youth and students aware of environmental issues and explain their role in conservation.
- ★ Ganga Quest is a **pan India bilingual quiz** to increase public participation in Namami Gange program and encourage the youth.
- ★ **Suggestion on the innovative ways in which Namami Gange** can engage in activities throughout the year.
- ★ In 2014, **Namami Gange Programme** was launched to accomplish the **twin objectives of effective abatement of pollution and conservation, and rejuvenation of Ganga**.
- **Government Initiatives on River Ganga:**
- ★ **Ganga Action Plan:** It was the **first river action plan** which was taken up by the **Ministry of Environment, Forest and Climate Change** in 1985, to improve the water quality by the interception, diversion and treatment of domestic sewage.
- The **National River Conservation Plan** is an extension to this plan, which aims at **cleaning the Ganga river under Ganga Action Plan phase-2**.
- ★ **National River Ganga Basin Authority:** It was formed by the Government of India in the year 2009 under **Section-3 of the Environment Protection Act 1986**.
- ★ **Clean Ganga Fund:** In 2014, it was formed for cleaning up of the Ganga, setting up of waste

treatment plants and conservation of biotic diversity of the river.

★ **Bhuvan-Ganga Web App:** It ensures the involvement of the public in the monitoring of pollution entering into the river Ganga.

★ **Ban on Waste Disposal:** In 2017, the **National Green Tribunal** (NGT) banned the disposal of any waste in the Ganga.

More than Commission to Check Air Pollution

Air pollution is a serious problem with environmental, public health and economic dimensions. Northern India gets exposed to hazardous levels of air quality almost every year.

Acknowledging this public health hazard, the centre government has promulgated an ordinance. Through this ordinance, the Centre set up a Commission for Air Quality Management (CAQM) in National Capital Region (NCR) and Adjoining Areas.

The commission replaces 22 year old Environment Pollution (Prevention and Control) Authority (EPCA) and envisages to streamline the public participation, the inter-State cooperation, the expert involvement and persistent research and innovation.

CAQM is a statutory mechanism to coordinate and oversee diverse efforts to improve air quality in Delhi, Punjab, Haryana, Rajasthan and UP, with the underlying remedial approach. The establishment of CAQM has the potential to address the problem of air pollution but an institution by itself is not a solution.

Significance of the New Commission

■ **Establishing a Statutory Body:** So far, the matter was overseen by the Supreme Court-mandated Environment Pollution (Prevention and Control) Authority that had taken decisions like converting public transport to the CNG mode of fuel and imposing a pollution charge on old polluting vehicles.

★ However, the EPCA was criticised for not exercising its statutory powers and for merely functioning as an advisory body to the Supreme Court.

★ Through this ordinance, a statutory body is being set up to regulate the process by coordinating between the Central Government and the states concerned.

■ **Consolidated Approach:** The ordinance envisages for consolidated approach towards monitoring, elimination of pollution sources and enforcement.

★ The commission will have the power to coordinate with relevant state and central governments on the multi-sector plan including industry, power plants, agriculture, transport, residential and construction.

■ **Participatory Democracy:** The Commission would function under the oversight of the elected representatives with regular reports to the Parliament.

★ The ordinance claims, adding “the highest degree of democratic oversight would ensure effective enforcement of the efforts and proposals of the commission”.

■ **Removal of Ad-hocism:** As the Commission is to function

under the aegis and the overall supervision and guidance of the Central government, the ordinance hopes it would replace multitudes of committees, task forces, commissions and informal groups formed temporarily or otherwise, by various orders of the constitutional courts or the Centre and the States concerned and synergise the efforts of different stake-holders.

■ **Empowered Body:** The new commission will reportedly have more powers — in its constitution and scope as well in terms of punitive provisions.

★ The ordinance talks of a Rs 1 crore fine or five years’ imprisonment or both for violators of pollution control norms.

Associated Issues

■ **Federal Issue:** The ordinance vests the commission with great power and its domain overlaps that of different state bodies.

★ As the coordinating body, the commission will be dependent on states for enforcement.

★ Separately, many areas of the commission’s mandate such as ending stubble burning and finding ways to lower carbon emissions from vehicle tailpipes involve economic tradeoffs and fiscal measures.

★ As the five states are administered by different political parties, politics will have a say in the outcome.

■ **Dilution of Judicial Oversight:** The intervention of the Supreme Court in environment protection matters stems from a deep distrust of the Executive. It is due to this Supreme Court established EPCA.

- ★ As the ordinances dissolve all other committees and authorities that were set up under judicial and administrative orders, there are apprehensions of limiting the role of the judiciary and creating a supra-centralised framework for air-quality management in the region.
- **Non-Inclusive:** Air pollution impacts health, restrictions imposed to control air pollution impacts agricultural labourers and dealing with stubble burning requires incentives which is the domain of rural development.
- ★ However, no farmers' body has been allowed to be co-opted as members while representatives of any association or commerce or industry' can be co-opted as members.
- **Unrealistic Punitive Measures:** By putting an unrealistic limit of Rs 1 crore to the fine payable, irrespective of the damage caused to the environment, the Ordinance is deviation from the polluter pays principle.

Conclusion

An impediment to improving air quality has been the inability and unwillingness of the authorities, particularly state governments, to address the issues outside of emergency situations or seasonal spikes.

Therefore, while coordination between authorities is, no doubt, a precondition for clearing the air, these have to be founded on policies to bring a holistic plan and enable behavioural changes for farmers to incentivise them to give up stubble burning.

Cold Waves

As per the India Meteorological Department (IMD), there are cold wave conditions over Delhi.

Key Points

- **Cold Wave:** A rapid fall in temperature within 24 hours to a level requiring substantially increased protection to agriculture, industry, commerce, and social activities.
- **Cold Wave Conditions:**
 - ★ For the **plains**, a cold wave is declared when the **minimum temperature is 10 degrees Celsius or below** and is **4.5 degrees Celsius (C) less than normal for two consecutive days**.
 - ★ For **coastal stations**, the threshold value of minimum temperature of 10 degree Celsius is rarely reached. However, the local people feel **discomfort due to the wind chill factor** which reduces the minimum temperature by a few degrees depending upon the wind speed.
 - ★ A **wind chill factor** is a measure of the cooling effect of the wind on the temperature of the air.
 - **India's Core Cold Wave Zone:** India's 'core cold wave zone' covers Punjab, Himachal Pradesh, Uttarakhand, Delhi, Haryana, Rajasthan, Uttar Pradesh, Gujarat, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal, Odisha and Telangana.
 - ★ In 2019, **Delhi and adjoining areas** in the north had **experienced its coldest winter of the century**.
 - **Cold Wave Situation in Delhi:**
 - ★ On 3rd November 2020, **Delhi** recorded a **minimum**

temperature of 10 degree Celsius which was 5 degrees C below normal.

- ★ **IMD may consider** declaring a cold wave if the **temperature continues to stay the same for another day**.
- **Reasons for the Fall in Minimum Temperature:**
 - ★ **Absence of cloud cover in the region:** Clouds trap some of the outgoing infrared radiation and radiate it back downward, warming the ground.
 - ★ **Snowfall in the upper Himalayas** that has blown **cold winds** towards the region.
 - ★ **Subsidence of cold air over the region:** Subsidence is the **downward movement of cold and dry air closer to the surface**.
 - ★ Prevailing **weak La Nina conditions** in the Pacific Ocean.
 - ★ La Nina is the **abnormal cooler sea surface temperatures** reported along the equatorial Pacific Ocean and it is known to favour cold waves.
 - ★ **During La Nina years**, the **severity of cold conditions becomes intense**. The frequency and area covered under the grip of a cold wave becomes larger.
 - **Winters 2020:** November is **expected to be colder than usual** after the **mean minimum temperature in October 2020 was 17.2 degrees Celsius**, the **lowest since 1962**, when it was 16.9 degrees Celsius.

Water Risk Filter

Nearly a third of the 100 cities in the world susceptible to 'water risk' — defined as losses from battling droughts to flooding — are in India, according to the WWF Water Risk Filter.

What is Water Risk Filter?

- ★ This is an online tool, co-developed by the Worldwide Fund for Nature that helps evaluate the severity of risk places faced by graphically illustrating various factors that can contribute to water risk.
- ★ Launched in 2012, it is a practical online tool that helps companies and investors assess and respond to water-related risks facing their operations and investments across the globe.
- ★ After a major upgrade in 2018, the Water Risk Filter 5.0 enables companies and investors to Explore, Assess, Value and Respond to water risks.
- ★ Lately, the Water Risk Filter provides scenarios of water risks for 2030 and 2050, integrating climate and socio-economic changes in different pathways.

Highlights of the recent analysis

- ★ It reported 30 Indian cities that would face a 'grave water risk' by 2050 due to a dramatic increase in their population percentage to 51 per cent by 2050, from 17 per cent in 2020.
- ★ Jaipur topped the list, followed by Indore and Thane. Mumbai, Kolkata and Delhi also featured on the list.
- ★ The global list includes cities such as Beijing, Jakarta, Johannesburg, Istanbul, Hong Kong, Mecca and Rio de Janeiro. China accounts for almost half the cities.

Major recommendations

- ★ The future of India's environment lies in its cities. As India rapidly urbanizes, cities will be at the forefront both for India's growth and for sustainability.

- ★ For cities to break away from the current vicious loop of flooding and water scarcity, nature-based solutions like restoration of urban watersheds and wetlands could offer solutions.
- ★ Urban watersheds and wetlands are critical for maintaining the water balance of a city, flood cushioning, micro-climate regulation and protecting its biodiversity, the report notes.

Saffron Cultivation in Northeast

A pilot project of saffron cultivation has yielded successful results in Yangyang village of Sikkim, which produced its first crop of saffron recently.

Key Points

About:

- ★ **Saffron** is a plant whose dried stigmas (thread-like parts of the flower) are used to make **saffron** spice.
- ★ Saffron cultivation is believed to have been **introduced in Kashmir by Central Asian immigrants** around the **1st Century BCE**.
- ★ It has been associated with traditional Kashmiri cuisine and represents the rich cultural heritage of the region.
- ★ It is a very precious and costly product.
- ★ In ancient Sanskrit literature, saffron is referred to as '**bahukam**'.
- ★ It is cultivated and harvested in the **Karewa (highlands)** of Jammu and Kashmir.

Importance:

- ★ It **rejuvenates health** and is used in **cosmetics** and for medicinal purposes.

- ★ It has been associated with **traditional Kashmiri cuisine** and represents the rich cultural heritage of the region.

Season:

- ★ In India, saffron Corms (seeds) are cultivated during the months of **June and July** and at some places in **August and September**.
- ★ It starts flowering in **October**.

Conditions:

- ★ Saffron grows well at an altitude of 2000 meters above sea level. It needs a photoperiod (sunlight) of 12 hours.
- ★ **Soil:** It grows in many different soil types but thrives best in **calcareous** (soil that has **calcium carbonate** in abundance), **humus-rich** and **well-drained soil** with a **pH between 6 and 8**.
- ★ **Climate:** For saffron cultivation, we need an explicit climatological summer and winter with temperatures ranging from no more than **35 or 40 degree Celsius in summer to about -15 or -20 degree Celsius in winter**.
- ★ **Rainfall:** It also requires adequate rainfall that is **1000-1500 mm per annum**.
- **Saffron Producing Regions in India:**
- ★ Saffron production has long been restricted to a limited geographical area in the Union territory of **Jammu & Kashmir**.
- ★ **Pampore region**, commonly known as **Saffron bowl of Kashmir**, is the main contributor to saffron production.
- ★ **Pampore Saffron Heritage of Kashmir** is one of the **Globally Important Agricultural Heritage systems (GIAHS)** recognised sites in India.

★ Other districts producing saffron are Budgam, Srinagar, and Kishtwar districts.

★ Recently, the **Kashmir saffron** got **Geographical Indication (GI)** tag status.

▪ **Production & Demand in India:**

★ India cultivates about **6 to 7 tonne** of saffron while the demand is **100 tonne**.

★ To meet the growing demand of saffron the **Ministry of Science and Technology**, through the **Department of Science and Technology (DST)**, is now looking at extending its cultivation to some states in the Northeast (Sikkim now, and later to Meghalaya and Arunachal Pradesh). There is a huge similarity of climate and geographical conditions between Kashmir and few regions of Northeast.

▪ **North East Centre For Technology Application and Reach (NECTAR)**, an autonomous body under the DST in collaboration with the **Botany and Horticulture departments of Sikkim Central University** implemented a pilot project in **Yangyang village of South Sikkim**.

Benefits

★ The extension of saffron production will help in meeting the annual demand in India.

★ It will help in reducing imports.

★ It will also diversify agriculture and provide new opportunities to the farmers in the North-East.

Other Initiatives:

★ The **National Saffron Mission** was sanctioned by the central government in the year 2010 in order to extend support for creation of irrigation

facilities through tube wells and sprinkler sets which would help in production of better crops in the area of saffron production.

★ Recently, the **Institute of Himalayan Bioresource Technology (CSIR-IHBT)** and the **Government of Himachal Pradesh**, have jointly decided to increase the production of the two spices namely, Saffron and Heeng (asafoetida).

★ Under this plan, IHBT will be introducing new varieties of saffron and heeng from the exporting countries and will be standardized under Indian conditions.

Way Forward

▪ Initiatives such as the **National Saffron Mission** and extension of saffron production to the North-East will help to **diversify the agricultural sector**. It will also enforce **Atmanirbhar Bharat Abhiyan in the agricultural sector**.

High Biodiversity in Ganga River

Recently, the Wildlife Institute of India (WII) in its survey of the Ganga river (the main river without its tributaries), has found that 49% of the river has high biodiversity.

★ Increased biodiversity sightings, including of the **Gangetic Dolphin** and **Otters**, indicates **reduced pollution levels** and a **healthier state of the river**.

Key Points

▪ **The Study:**

★ The study was initiated by **WII** on behalf of the **National Mission for Clean**

Ganga, one of the flagship projects undertaken by the **Ministry of Jalshakti**.

★ This is the first study ever done in the country on the **entire river**, and the first also of all its biodiversity.

High Biodiversity Areas of Ganga:

★ 10% of the high biodiversity areas fall alongside national parks and sanctuaries such as **Rajaji national park in Uttarakhand**, **Hastinapur wildlife sanctuary in UP** and **Vikramshila gangetic Dolphin sanctuary in Bihar**.

★ **Method Used:** The institute has been tracking biodiversity through some key aquatic and semi-aquatic species such as the **Gangetic Dolphins**, **gharials**, **otters**, **turtles** and **various species of water birds**.

Findings:

★ Many species that used to be found in the main stem and had disappeared, are now coming back.

★ Nesting colonies of the **Indian Skimmer** found.

★ Seibold's, a species of **water snake**, disappeared 80 years ago and has now resurfaced.

★ New distributions of the **puffer fish** found.

★ Many other species have started travelling back from tributaries to the main stem of the river **indicating improving water quality and increasing Biodiversity**.

Background:

★ The distribution and density of key aquatic species such as the **Gangetic Dolphin**, the **gharial** and the **mugger** had in earlier years, significantly reduced due to **loss of suitable**

habitat conditions, and change in the river's morphology due to the construction of dams and barrages, bank alteration, agriculture and sand mining.

- ★ In the early 19th century, 10,000 **Gangetic Dolphins** were estimated which reduced to 3,526 by early 2000, disappearing entirely in Haridwar and most of the Yamuna and becoming extinct in smaller tributaries.

Biodiversity Threat Higher in Freshwater Ecosystem:

- ★ Freshwater ecosystems account for **0.01%** of the earth's surface water but support **10%** of species.
- ★ According to the **United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)**, decline in diversity of freshwater species is the highest, and surpasses losses in marine and terrestrial species.
- **World Conservation Monitoring Centre (UNEP-WCMC)**, is an executive agency of the **United Nations Environment Programme** which provides information for policy and action to conserve the living world.
- ★ Globally 20% of all known freshwater fish, 44% waterbirds and 42% amphibian species are under threat of extinction.
- ★ The highest loss of freshwater biodiversity has been reported from the Indian subcontinent, specifically the **Gangetic plains**.
 - **Government Initiatives on River Ganga:**
- ★ **Ganga Action Plan:** It was the first river action plan which was taken up by the Ministry of Environment, Forest and Climate Change in 1985, to

improve the water quality by the interception, diversion and treatment of domestic sewage.

- ★ The **National River Conservation Plan** is an extension to this plan, which aims at cleaning the Ganga river under **Ganga Action Plan** phase-2.
- ★ **National River Ganga Basin Authority:** It was formed by the Government of India in the year 2009 under the **Environment Protection Act 1986**.
- ★ **Clean Ganga Fund:** In 2014, it was formed for cleaning up of the Ganga, setting up of waste treatment plants and conservation of biotic diversity of the river.
- ★ **Bhuvan-Ganga Web App:** It ensures the involvement of the public in the monitoring of pollution entering into the river Ganga.
- ★ **Ban on Waste Disposal:** In 2017, the **National Green Tribunal (NGT)** banned the disposal of any waste in the Ganga.

Way Forward

- Efforts made by the Indian government to save the biodiversity of Ganga are aligned with the **sustainable development goal no 15** that is to **protect, restore and promote sustainable** use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and **reverse land degradation and halt biodiversity loss**.
- Government efforts to save Ganga are being fructified in the form of improved water quality and increased biodiversity. There is a need to change the approach to development

which must lay emphasis on understanding that how protecting nature is also about protecting ourselves.

Vulture Action Plan



Recently, the Ministry of Environment, Forests and Climate Change (MoEFCC) launched a **Vulture Action Plan 2020-25** for the conservation of vultures in the country.

Key Points

- **Background:**
- ★ Vulture numbers saw a decline as much as **90%** in some species in India since the 1990s in one of the most drastic declines in bird populations in the world.
- ★ Between the 1990s and 2007, numbers of three presently **critically-endangered species**, the **Oriental white-backed, long-billed and slender-billed vultures** decreased massively with **99%** of the species having been wiped out.
- ★ The number of **red-headed vultures**, also **critically-endangered** now, declined by **91%** while the **Egyptian vultures** by **80%**.
- ★ The decline in vulture populations came into limelight in the mid-90s..

Reason for decline:

- The **cause of the decline** was established as **diclofenac**, a **veterinary nonsteroidal anti-**

inflammatory drug (NSAID) in 2004, which is used to treat pain and inflammatory diseases such as gout in carcasses that vultures would feed off.

- ★ Just 0.4-0.7% of animal carcasses contaminated with diclofenac was sufficient to decimate 99% of vulture populations.
- ★ The MoEFCC released the **Action Plan for Vulture Conservation 2006** with the **Drugs Controller General of India (DCGI)** banning the veterinary use of diclofenac in the same year.
- **Objectives of the Action Plan for Vulture Conservation 2020-2025.**

Drug control:

- To ensure minimum use of **Diclofenac**.
- ★ To **Prevent the poisoning** of the principal food of vultures, the cattle carcasses, with veterinary **NSAIDs**, by ensuring that sale of veterinary **NSAIDs** is regulated and is disbursed only on prescription and by ensuring that treatment of livestock is done only by qualified veterinarians.
- ★ To carry out **safety testing** of available **NSAIDs** on vultures and to develop new ones which do not affect vultures.
- ★ To ensure that **DGCI** must institute a system that automatically removes a drug from veterinary use if it is found to be toxic to vultures.
Such a system would ensure that drugs other than **diclofenac** that are toxic to vultures like **aceclofenac** and **ketoprofen** are banned for veterinary use.

Upscaling conservation:

- ★ To establish **Additional Conservation Breeding Centres** along with **Vulture Conservation Centres** with samples and information collected from the wild analysed and stored at these centres.
To implement the **Vulture Safe Zone programme** at eight different places in the country where there are existing populations of vultures.
To launch conservation plans for the **Red-headed and Egyptian vultures**, with breeding programmes for both.
To declare a **Vulture Safe Zone** only when **no toxic drugs** are found in undercover pharmacy and cattle carcass surveys, for two consecutive years, and the vulture populations are stable and not declining.
To build **Four rescue centres** for different geographical areas like Pinjore in the north, Bhopal in ventral India, Guwahati in Northeast and Hyderabad in South India.

Other Efforts:

- ★ **National:** The **Central Zoo Authority (CZA)** and **Bombay Natural History Society (BNHS)** also established the **Vulture Conservation Breeding Programme**.
A **Vulture Care Centre (VCC)** was set up at Pinjore, Haryana in 2001 to study the cause of deaths of vultures in India.
The **Jatayu Conservation Breeding Centre in Pinjore** is the world's largest facility within the state's Bir Shikargah Wildlife Sanctuary for the breeding and conservation of Indian vulture species.

- ★ **International:** **SAVE (Saving Asia's Vultures from Extinction)** The consortium of like-minded, regional and international organizations, created to oversee and coordinate conservation, campaigning and fundraising activities to help the plight of south Asia's vultures.

Objective: To save three critically important species from extinction through a single programme.

SAVE partners: Bombay Natural History Society, Bird Conservation Nepal, RSPB (UK), National Trust for Nature Conservation (Nepal), International Centre for Birds of Prey (UK) and Zoological Society of London.

Vultures in India

- India is home to nine species of **vultures**, but most of them face the danger of extinction.
- The nine species of vultures & their **International Union for Conservation of Nature (IUCN)** status are:
- **Why vultures should be protected:**
- ★ The scavenging lifestyle that gives them a bad reputation is, in fact, that makes them so important for the environment, nature and society.
- ★ Vultures feeding on dead animals help **areas getting rid of carcasses** that, otherwise, would provide foul smells and scenery for a much longer period hence also known as **nature's cleanup crew**.
- ★ Vultures also play a valuable role in keeping wildlife **diseases in check**.

Outer Space Territory Needs Global Governance

Several space events planned well in advance have proceeded amidst the COVID-19 pandemic without much attention.

- ★ The launch of missions to Mars by China and the United States (US) along with the United Arab Emirates (UAE's) Mars orbiter; the first astronaut trip to orbit on a commercial enterprise built by Space X; the completion of the Chinese 'BeiDou' satellite navigation system; and the US Space Command statement that Russia conducted a "nondestructive test of a space-based anti-satellite weapon" all portray a trend that outer space is witnessing a welter of new activity. Introduction
- ★ Work in the space industry has always continued even under the most difficult circumstances. Missions take years to plan and launch. The global space industry has, out of necessity, always embraced uncertainty. Innovation will not stop. International cooperation is still strong. Missions are continuing.
- ★ Outer space is the expanse that exists beyond Earth and between celestial bodies. ; Outer space is not empty but contains a low density of particles (predominantly a plasma of hydrogen and helium) as well as electromagnetic radiation, magnetic fields, neutrinos, dust, and cosmic rays.
- ★ The Karman line at an altitude of 100 km above sea level, is conventionally used as the start of outer space in space treaties and for aerospace records keeping.

- ★ The framework for international space law was established by the Outer Space Treaty, which entered into force on 10 October 1967.
- ★ Despite the drafting of United Nations (UN) resolutions for the peaceful uses of outer space, antisatellite weapons have been tested in Earth orbit.

Space Economy

- ★ The space sector has emerged as one of the most attractive sectors due to advancement in technologies and increasing use of space technology in public life. The major factors favouring space economy are:
 - ★ Increased Cost Efficiency: The price tag for reaching low Earth orbit has declined by a factor of 20 in a decade. NASA's space shuttle cost about \$54,500 per kg; now, SpaceX's Falcon 9 advertises a cost of \$2,720 per kg.
 - ★ Increased Market: According to a Bank of America Report, the \$350 billion space market today will touch \$2.7 trillion by 2050. In a decade, 80,000 such satellites could be in space compared to less than 3,000 at present
 - ★ Increased Participation by Private Players leading to fast paced innovation ; Starlink, the constellation being constructed by SpaceX to provide global Internet access, plans more than 10,000 massproduced small satellites in low Earth orbit.
 - ★ US Federal Communications Commission gave approvals for more than 3,000 micro-satellites to Amazon's Project Kuiper.
 - ★ These missions hope to transcend the digital divide and

provide everyone, everywhere access to services such as distance education and telemedicine.

- ★ Companies such as Planet, Spire Global and Iceye are using orbital vantage points to collect and analyse data to deliver fresh insights in weather forecasting, global logistics, crop harvesting and disaster response

United Nations Space Legislations

- ★ The United Nations General Assembly adopted five declarations and legal principles:

1. **The Outer Space Treaty (1967):** The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies forms the basis of international space law.

- ★ It prevents any claims of national sovereignty and permits all states to freely explore outer space. ; It entered into force on 10 October 1967. India signed it in 1967.

- ★ As of June 2020, 110 countries are parties to treaty including the US, Russia, China, and India.

2. **The Rescue Agreement (1968):** Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space.

3. **The Liability Convention (1972):** Convention on International Liability for Damage Caused by Space Objects.

4. **The Registration Conven-**

tion (1976): Convention on Registration of Objects Launched into Outer Space.

5. The Moon Agreement (1984): Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.

Concerns

1. Outdated Space Laws

- ★ Multilateral framework for Space governance is becoming outdated for present context as Space laws were a product of a golden age of two decades — the 1960s and 1970s.
- ★ The Outer Space Treaty of 1967 enshrines the idea that space should be “the province of all mankind” and “not subject to national appropriation by claims of sovereignty”. The Rescue Agreement, Space Liability Convention, and the Space Registration Convention expanded provisions of the Outer Space Treaty.
- ★ As the outer space becomes democratised, commercialised and crowded, the multilateral framework for its governance is becoming outdated. Space laws do not have a dispute settlement mechanism.
- ★ The Moon Treaty of 1979 was not ratified by major space-faring nations.
- ★ The laws are silent on collisions and debris and offer insufficient guidance on interference with others’ space assets.
- ★ These gaps heighten the potential for conflict in an era of congested orbits and breakneck technological change.

2. Diversity amongst Space Players

- ★ The problem the international community now faces is that

the use of space is changing dramatically and rapidly. There are more satellites than ever – well over 1,000 – and more owners of satellites – almost every country uses information generated from space. Increasingly, however, those owners are not countries, militaries or international organizations but the commercial sector. Very soon, the owners will even include individuals.

- ★ Small ‘mini-satellites’ or ‘cube-sats’ are poised to be deployed in space. These can act independently or in ‘swarms’, and are so small that they piggy-back on the launching of other satellites and so are very cheap to launch. This is changing the cost-benefit equation of satellite ownership and use. Developing countries are increasingly dependent on space for communications, the internet and information on, for example, weather systems, coastal activities and agriculture.
- ★ Another major development is the advent of asteroid mining. Asteroids contain a wide range of metals and minerals – some asteroids are more promising than others, and some are closer to Earth than others. Several companies have been set up and registered around the world to begin the exploitation of asteroids for precious metals (such as platinum) and compounds (such as rare-earth minerals).

3. Weaponising the Space

- ★ The 1967 Outer Space Treaty (OST) is the mainframe for space law. It recognizes the importance of the use and scientific exploration of outer space for the benefit and in the

interests of all countries. It also prohibits national sovereignty in space, including of the Moon and other celestial bodies.

- ★ The OST prohibits all weapons of mass destruction in space – in orbit or on other planets and moons – and does not allow the establishment of military infrastructure, manoeuvres or the testing of any type of weapon on planets or moons. As the treaty makes clear, outer space is for peaceful purposes only. Except of course, it is not – nor has it ever been so.
- ★ The very first satellite, Sputnik, was a military satellite which kicked off the Cold War space race between the US and the USSR. The militaries of many countries followed suit, and space is now used for military communication, signals intelligence, imaging, targeting, arms control verification and so on.
- ★ The space arms race is difficult to curb since almost all space technologies have military applications.

Need for space legislation

- ★ Despite concerns about military activity in outer space for long, not much progress has been made in addressing them.
- ★ The current geopolitics doesn’t seem to address the concerns of a space arms race.
- ★ India has invested enormous resources in its space programme through the Indian Space Research Organisation.
- ★ India has proposed involvement of private players and created an autonomous body Indian National Space Promotion and Authorisation Centre (IN-SPACe) under the Department of Space for permitting and regulating activities.

- ★ The space environment that India faces requires to go beyond meeting technical milestones.
- ★ We need space legislation with coherence across technical, legal, commercial, diplomatic and defence goals.

Way Forward

- ★ As ambitious space missions are proliferating with advances in commercial space flight, there are concerns about possible 'indiscriminate space mining', 'interplanetary contamination' and 'militarisation of outer space'.
- ★ A cross-regional group of like-minded countries (for example Algeria, Canada, Chile, France, India, Kazakhstan, Malaysia, Nigeria, Sweden, the UAE and the UK) should link up with UN bodies, including the Office for Outer Space Affairs (UNOOSA), COPUOS and ITU, and key private sector companies to kick-start a new process for a global code of conduct to establish norms and regulate behaviour in space.

India's First Green Energy Convergence Project

India's first convergence project to generate green energy for rural and agriculture consumption is set to come up in Goa.

- **Energy Efficiency Services Ltd (EESL)**, a joint venture of PSUs under the Ministry of Power, and Goa government signed a memorandum of understanding (MoU) for the same.

Key Notes

Convergence Project of EESL:

- ★ **Focus:** It focuses on energy solutions that lie at the **confluence** of **renewable energy**,

electric mobility and **climate change**.

- ★ **Objective:** It seeks to connect seemingly independent sectors like Solar Energy, Energy Storage and LED lights to provide solutions, which can enable in decarbonisation and affordable energy access.

Mechanism:

- ★ EESL is offering **convergent interventions**, which solve multiple gap areas in the energy ecosystem.
- ★ Solutions such as **solarised agriculture feeders, LED street lights** in local villages and **battery energy storage systems**.
- ★ Leveraging the **carbon financing mechanism** to rapidly strengthen rural infrastructure in a clean and sustainable manner, and to create a **resilient and sustainable rural community** in India.
- ★ EESL's climate financing interventions currently include **Gram UJALA, Decentralised Solar and Gram Panchayat Street Lights** programmes.

Benefits of the Project:

- ★ **Promote Renewable Energy:** It will **accelerate** the usage of **renewable energy sources**, especially for agricultural and rural power consumption in the State.
- ★ **Energy Efficient:** Contribute to **reduction of peak energy demand** through deployment of energy efficient pumping and lighting thus contributing to overall sustainability.
- ★ **Improve Health of DISCOMs:** Accrue savings of **Rs 2,574 crores** to the State over the period of 25 years, while improving the health

of **DISCOMs** and providing cleaner power.

- ★ **Check Technical Losses:** Provide clean day time electricity to farmers as well as energy efficient pump sets which would **reduce the power consumption** as well as **T&D** (Transmission and Distribution Losses) losses associated with transmitting power to agriculture and rural feeder networks.

Energy Efficiency Services Ltd

- It is a joint venture of **National Thermal Power Corporation Limited (NTPC) Limited**, **Power Finance Corporation**, **Rural Electrification Corporation** and **POWERGRID**. It was set up under the **Ministry of Power** to facilitate implementation of energy efficiency projects.
- EESL is a **Super Energy Service Company (ESCO)** that seeks to unlock the energy efficiency market in India, estimated at Rs. 74,000 crore that can potentially result in energy savings of up to **20%** of current consumption, by way of innovative business and implementation models.
- It also acts as the resource centre for capacity building of State **DISCOMs**, financial institutions, etc.

Way Forward

- In a solar power rich country like India, effective harnessing of this abundant resource can yield handsome returns for all stakeholders and therefore initiatives like **Convergence** can help India to produce more energy at less cost.
- **Project Convergence** is also well aligned and is in consonance with the **International Solar Alliance**, an initiative of the Indian government.

Deemed Forests in Karnataka

Recently, Karnataka has announced that it would declassify 6.64 lakh hectares (nearly 67%) of the 9.94 lakh hectares of deemed forests in the state and hand it over to Revenue authorities.

- The issue of deemed forests is a contentious one in Karnataka, with legislators across party lines often **alleging that large amounts of agriculture and non-forest land are “unscientifically” classified as such.**

Key Points

Definition of Deemed Forests:

- ★ Deemed forests, **comprising about 1% of India’s forest land**, are a controversial subject as they **refer to land tracts that appear to be a “forest”, but have not been notified so by the government or in historical records.**
- ★ The concept of deemed forests **has not even been clearly defined in any law including the Forest Conservation Act 1980.**
- ★ In the *T N Godavarman Thirumalpad case* 1996, the **Supreme Court (SC)** accepted a **wide definition of forests** under the Act and held that the word ‘forest’ must be **understood according to its dictionary meaning.**
- ★ This description **covers all statutorily recognised forests**, whether designated as reserved, protected or otherwise for the purpose of **Section 2 (1) of the Act** and also includes any **areas recorded as forest in the government record irrespective of the ownership.**

- ★ The **provisions for the conservation of forest and the matters connected therewith applies clearly to all forests** irrespective of the ownership or classification.
- ★ The **freedom to define which tracts of forest** qualify as forest has been the **prerogative of States since 1996.**
- ★ However, this **only applies to forest land** that has not already been historically classified as “forest” in revenue records, or categorised so by the government as “protected” or “reserve forest”.

Deemed Forests in Karnataka:

- ★ **Areas Included:** An expert committee constituted by the state government **identified ‘deemed forests’ as:**
- ★ Land having the characteristic of forests irrespective of the ownership.
- ★ Thickly wooded areas of the Revenue Department, not handed over to the Forest Department.
- ★ Thickly wooded areas recommended to be handed over to the Forest Department.
- ★ Thickly wooded land distributed to grantees but not cultivated.
- ★ Thickly wooded plantations of the Forest Department.
- ★ **Land Coverage:** The **expert committee reports in 1997 and 2002** identified 43.18 lakh hectares of forest land for conservation in Karnataka, which included 33.23 lakh hectares notified forest area as per forest records and 9.94 lakh hectares ‘deemed forests’.

Issue of Contention:

- ★ In 2014, the government **relooked at the categorisation**

of forests and found that some of the ‘statutory forests’ had been **wrongly classified as ‘deemed forest’.**

- ★ It also held that a **well-defined scientific, verifiable criterion was not used** while applying the dictionary definition which **resulted in a subjective classification** of areas as deemed forests.
- ★ The subjective classification, in turn, resulted in **conflicts between the Forest Department and other departments** like Revenue, Irrigation, Public Works and Energy.
- ★ The random classification caused **hardship to farmers** in some areas and there is also a **commercial demand for mining in some regions** designated as deemed forests.

Revised Coverage:

- ★ Later, newly formed committees identified 5.18 lakh hectares of deemed forest land that could be released from the total area.
- ★ After a **recent study of the actual extent of deemed forest areas**, the amount of deemed forest land to be released has been **revised to 6.64 lakh hectares.**
- ★ In 2019, the **state had filed an interim application** in the SC for the exclusion of the revised area but the **Court did not pass an order** on the application.

Flash Drought

Quite unlike the conventional drought that takes months or even years to develop, the onset of a flash drought agriculture.

What is a ‘flash drought’?

A flash drought is characterised by rapid onset and intensi-

fication caused by high evapotranspiration due to extreme heat, wind and high incoming solar radiation. It can develop in as little time as 10 to 15 days.

Flash droughts in India

- The country suffered 39 flash droughts between 1951 and 2018, four of which were major. The worst was in 1979 affecting north-central India and the Indo- Gangetic Plains, followed by 2001, 1958 and 1986, in the order of intensity, and affecting northern and central India.
- Each year, flash droughts have affected 10 to 15 per cent area under rice and maize since 1951.
- 82 per cent of the flash droughts occurred during monsoon and in central northeast, northeast, northwest, west central regions that fall in the core monsoon zone. Only the Himalayan and peninsular regions experienced more flash droughts in non-monsoon seasons.

Recent flash droughts in India

- Take the case of Madhya Pradesh. The state is India's largest soybean producer, but as per the Indian Institute of Soybean Research, Indore, it lost 15 per cent of the crop this July due to nearly a month-long dry spell. Though most districts here reported above the normal rainfall that month, some like Chhatarpur, Tikamgarh, Hoshangabad and Shivpuri recorded a deficit rainfall by 40 per cent.
- Similarly, nine of Odisha's 30 districts reported 40 per cent deficit rainfall. The dry spell ended in August, but by then

farmers were already dis-
traught.

International mechanisms

- The US first recognised the weather event in the early 2000s. It created the US Drought Monitor, and in 2012 recorded the expansion of abnormally dry conditions from 30 per cent of the continent in May to over 60 per cent by August. This had a significant impact on agriculture. Now, the US declares a flash drought if, within four weeks, the US Drought Monitor records changes in at least two of the five categories—abnormally dry, moderate drought, severe drought, extreme drought and exceptional drought. Meanwhile, China and Australia have shifted their focus of research on flash droughts.
- But India does not even recognise a flash drought. So when farmers suffer crop losses they cannot approach the government for compensation. Worse, India's drought management plan is outdated and does not take into account the changing rainfall patterns.

What should be our response?

- The only solution to the problem is predicting flash droughts and developing an early warning system at the local level so that farmers can prepare themselves.
- There is the tendency to treat drought with relief schemes, adopted after crops are already destroyed. It is handled by the revenue department. This needs to change to a preventive model. All departments should work together to help farmers adapt.

- Insurance schemes like Fasal Bima Yojana must take flash drought into consideration.
- Since rapid depletion in soil moisture leads to flash drought, soil moisture should be the main indicator to identify a flash drought. At present, Indian Meteorological Department (IMD) uses Standardised Precipitation Index to measure drought, but it is related only to rainfall and does not consider wind speed, soil moisture, temperature and rainfall. IMD must come up with a localised index for agriculture.
- Further, efforts should be made to improve soil's water holding capacity. We talk about groundwater and surface water, but forget green water. The water transpired by plants that comes from rains and stored in soil is green water. Improving this requires steps such as arresting run-off or velocity of water so that it has more time to percolate, and improving soil quality and structure through additional biomass and green manure and compost. These can help plants withstand the dry spell.
- Changing cropping patterns can also curb quick setting of a drought. Farmers should sow drought-resistant plants that ensure a crop even if one flowering gets disrupted by a flash drought. Organic matter conservation and enhancement is also important to make farmlands resistant to drought.

World Fisheries Day

The World Fisheries Day is observed on the 21st November every year.



- On the occasion of the **World Fisheries Day**, for the first time in the Fisheries Sector, the Government of India will award best performing States.

Key Points

- **World Fisheries Day** is celebrated to demonstrate **solidarity** with all **fisherfolk, fish farmers and concerned stakeholders** throughout the world.
- ★ It was started in the year **1997** when "World Forum of Fish Harvesters & Fish Workers" met at New Delhi leading to formation of "**World Fisheries Forum**" with representatives from **18 countries** and signed a declaration advocating for a global mandate of sustainable fishing practices and policies.
- ★ **Aim:** To draw attention to over-fishing, habitat destruction and other serious threats to the sustainability of marine and inland resources.

Importance of Fisheries Sector:

- ★ Around 30 million to over 60 million people in the developing world are involved in inland fisheries; it is thought that about 50% are women.
- ★ Around **65%** of fish caught from inland fisheries are from low-income food deficit countries.
- ★ More than **25%** of world dietary protein is provided by the fish.

Importance of Fisheries for India:

- ★ India is the **second major producer of fish through aquaculture** in the world.
- ★ India is the **4th largest exporter** of fish in the world as it contributes **7.7%** to the global fish production.
- ★ Fish constituted about **10%** of total exports from India and almost **20%** of agriculture exports in 2017-18.
- ★ The fisheries and aquaculture production contribute around **1%** to India's GDP and over **5%** to the agricultural GDP.
- ★ Around **28 million people** are employed in the fisheries sector in India.
- ★ The sector has immense potential to more than double the **fishers and fish farmers' incomes**, as envisioned by the government.

Challenges for Fisheries sector:

- ★ The **Food and Agriculture Organization (FAO)** points out that nearly 90% of the global marine fish stocks have either been **fully exploited or over-fished or depleted** to the extent that recovery may not be biologically possible.
- ★ Discharge of **harmful substances** like plastics and other waste into water bodies that cause devastating consequences for aquatic life.

Changing climate.

- **Indian Government's Effort to Improve Fisheries:**
- ★ Establishment of **Fisheries and Aquaculture Infrastructure Development Fund (FIDF)** during 2018-19.
- ★ **Pradhan Mantri Matsya Sampada Yojana:** The programme aims to achieve 22 mil-

lion tonnes of fish production by 2024-25. Also, it is expected to create employment opportunities for 55 lakh people.

★ Focus on Blue Revolution:

Focuses on creating an enabling environment for integrated and holistic development and management of fisheries for the socio-economic development of the fishers and fish farmers.

- ★ Extension of **Kisan Credit Card (KCC)** facilities to fishers and fish farmers to help them in meeting their working capital needs.

Writing on the water

Recently, two bills related to water governance were passed by the Lok Sabha viz. the Interstate River Water Disputes Amendment Bill 2019 and the Dam Safety Bill 2019. These bills seek to deal with the emerging challenges of inter-state water governance in India.

The Interstate River Water Disputes Amendment Bill 2019 seeks to improve the inter-state water disputes resolution by setting up a permanent tribunal supported by a deliberative mechanism the dispute resolution committee.

The Dam Safety Bill 2019 aims to deal with the risks of India's ageing dams, with the help of a comprehensive federal institutional framework comprising committees and authorities for dam safety at national and state levels.

However, the agenda of future federal water governance is not limited to these issues alone. These include emerging concerns of long-term national water security and sustainability, the risks of climate change, and the growing

environmental challenges, including river pollution.

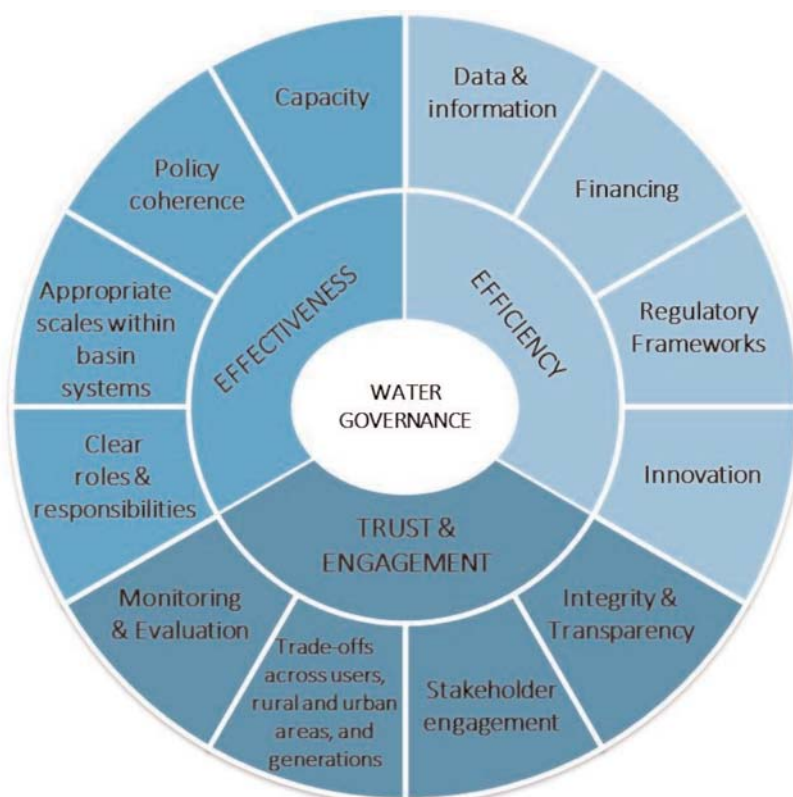
Therefore, these challenges need systematic federal response where the Centre and the states need to work in a partnership model.

Challenges in Water Governance

- **Federal Issue:** Water governance in India is perceived and practised as the states' exclusive domain. However, their powers are subject to those of the Union under Entry 56 about inter-state river water governance.
- ★ Combined with the states' dominant executive power, these conditions create challenges for federal water governance.
- ★ Further, the **River Boards Act 1956** legislated under Entry 56. However, till this date, no river board was ever created under the law.
- **Water Knows No political Boundaries:** Owing to different jurisdiction and control of states, the interconnectedness of surface and groundwater systems resulted in fragmented surface and groundwater policies.
- ★ Also, due to this, data availability in India is currently fragmented, scattered across multiple agencies, and inadequate for sound decision-making.
- ★ Moreover, data gaps exist on the interconnectivity of rainwater, surface water, and groundwater, land use, environmental flows, ecosystems, socio-economic parameters, and demographics at the watershed level.

Need For Cooperative Federalism

- **Looming Water Crisis:** A NITI Aayog report held that 21



major cities are expected to run out of groundwater as soon as 2020 which may affect nearly 100 million people.

- ★ Moreover, the 2030 Water Resources Group projects a 50% gap between water demand and water supply in India by 2030.
- ★ Therefore, in order to address the over-abstraction and over-use of water in multiple geographies, there is a need for the concerted effort of centre and state governments.
- **Pursuing National Projects:** Greater centre-states coordination is also crucial for pursuing the current national projects like Ganga river rejuvenation or inland navigation or inter-basin transfers.
- ★ Also, the latest centrally sponsored scheme (CSS), **Jal Jeevan Mission (JJM)**, envisages achieving universal access to

safe and secure drinking water in rural areas, which otherwise is a domain of the states.

Way Forward

- **Centre-States Dialogue:** The Centre can work with the states in building a credible institutional architecture for gathering data and producing knowledge about water resources.
- ★ In this context, JJM presents an opportunity to get states on board for a dialogue towards stronger Centre-states coordination and federal water governance ecosystem.
- ★ The dialogue can consider the long-recommended idea of distributing responsibilities and partnership-building between the Centre and states, like centre can build a credible institutional architecture for gathering data and states can improve the delivery of this essential service to its populations.

- **Multi-Stakeholder Approach:** In view of multiple stakeholders (farmers, urban communities, industry and government) influencing and affected by water flows, and governance framework should strive to achieve joint decision-making.
- ★ In this context, the establishment of stakeholder councils can help to a large extent.
- **Implementing Mihir Shah Committee Recommendations:** There is a need to carry out some essential reforms as recommended by **Mihir Shah committee**. For example,
- ★ Merging Central Water Commission and the Central Ground Water Board into one National Water Commission which would cover both groundwater and surface water issues.

Conclusion

Water governance is widely acknowledged as an important factor for sustainable development. Thus, a concerted effort of all stakeholders is required for resolving conflicts and developing a shared vision for the use of water resources to support economic growth, social development and environmental protection.

Cyclone Nivar

Recently, the tropical cyclone Nivar has made landfall along the Tamil Nadu-Puducherry coast.

- Landfall refers to the phenomenon of a cyclone's outer wall moving over the coastline and beyond.

Key Points

Tropical Cyclone:

- ★ A tropical cyclone is an intense

circular storm that **originates over warm tropical oceans** and is **characterized by** low atmospheric pressure, high winds, and heavy rain.

- ★ A characteristic feature of tropical cyclones is the **eye**, a central region of clear skies, warm temperatures, and low atmospheric pressure.
- ★ Storms of this type are called **hurricanes in the North Atlantic** and **eastern Pacific typhoons in SouthEast Asia** and China. They are called **tropical cyclones in the southwest Pacific and Indian Ocean region** and **Willy-willies in north-western Australia**.
- ★ Storms **rotate anticlockwise in the northern hemisphere** and **clockwise in the southern hemisphere**.

Cyclone Nivar:

- ★ It is the **fourth cyclone** that has taken shape in the North Indian Ocean region this year. The first three cyclones were **Cyclone Gati** (made landfall in Somalia in November), **Cyclone Amphan** (eastern India witnessed it in May), and **Cyclone Nisarga** (in Maharashtra).
- ★ Nivar will be the **second cyclone to hit Tamil Nadu in two years** after **Cyclone Gaja** in 2018.
- ★ The storm has been **named Cyclone Nivar**, based on the **guidelines of the World Meteorological Organisation (WMO)**. Nivara has been **selected from the list of names given by Iran**.
- ★ According to WMO guidelines, countries in every region are supposed to give names for cyclones.

- ★ The North Indian Ocean Region covers tropical cyclones formed over Bay of Bengal and Arabian Sea.
- ★ The **13 members**, which come under the region, are Bangladesh, India, Maldives, Myanmar, Oman, Pakistan, Sri Lanka, Thailand, Iran, Qatar, Saudi Arabia, the UAE and Yemen.
- ★ A total of **169 cyclones** were **named** by these countries for this year, with **13 names from each country**.
- ★ It has weakened from a very severe cyclonic storm to a severe cyclonic storm with a wind speed of 100-110 km per hour.

Government Steps:

- ★ The **Tamil Nadu government** has announced a **public holiday** under the **Negotiable Instruments Act, 1881**, in 16 districts, including Chennai, considering the impact of Cyclone Nivar.
- ★ **Fishing activities** have been **restricted and residents evacuated** in coastal areas hit by the cyclone. The **National Disaster Response Force (NDRF)** has deployed its teams in the affected regions.

Climate Change Knowledge Portal

Recently, the Ministry of Environment, Forest and Climate Change has launched the 'India Climate Change Knowledge Portal'.

Key Points

- **India Climate Change Knowledge Portal:**
- ★ **Objective:** The Portal will **help in disseminating knowledge among citizens** about all the

major steps the Government is taking at both national and international levels to address **climate change issues**.

★ **Benefit:** It will be a **single point Information** resource which provides information on the different **climate initiatives** taken by various Line Ministries enabling users to access updated status on these initiatives.

★ **Components:** The eight major components included in the knowledge portal are:

★ **India's Climate Profile**

★ The northern part of the country is characterized as a continental climate with hot summers and cold winters. The coastal regions of the country, however, experience warmer temperatures with little variation throughout the year and frequent rainfall.

★ **National Policy Framework**

★ For Example In order to strengthen the implementation of environmentally sound management of hazardous waste in the country, the Ministry of Environment, Forest and Climate Change has amended the **Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016**.

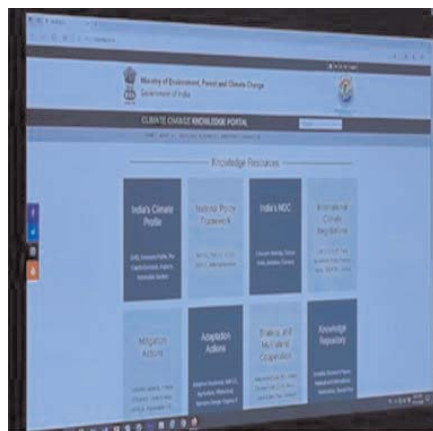
★ **India's Nationally determined contributions (NDC) Goals**

★ NDC's are at the heart of the **Paris Agreement** and the achievement of these long-term goals.

★ NDC's embody efforts by each country to reduce national emissions and adapt to the impacts of climate change.

★ **Adaptation Actions**

★ To meet the high energy demand India is adapting to clean energy development. **Example: Jawaharlal Nehru**



National Solar Mission which aims to increase the share of **solar energy** in India.

★ **Mitigation Actions**

★ For example, to mitigate water issues Indian government launched the **National Water Mission**.

★ **Bilateral and Multilateral Cooperation**

★ **The Paris climate deal** is a great example of multilateral cooperation.

International Climate Negotiations

★ In the **Conference of Parties (COP21)** in **Paris in 2015**, India accepted 1.5 degrees Celsius as a target limit for the increase in the global average temperature and announced an ambitious domestic renewable energy programme.

Reports & Publications

★ For example, reports like **Assessment of Climate Change over the Indian Region** published by the Ministry of Earth Sciences (MoES).

Other Initiatives to Fight Climate Change:

★ **National Clean Air Programme (NCAP):** It is a five-year action plan with a tentative target of

20-30% reduction in concentrations of PM10 and PM2.5 by 2024, with 2017 as the base year.

★ India has also shifted from **Bharat Stage-IV (BS-IV) to Bharat Stage-VI (BS-VI) emission norms** from 1st April 2020 which was earlier to be adopted by 2024.

★ It has distributed more than **360 million LED bulbs** under the **UJALA scheme**, which has led to energy saving of about 47 billion units of electricity per year and **reduction of 38 million tonnes of CO2 per year**.

★ **International Solar Alliance:** It is an Indian initiative conceived as a coalition of solar-resource-rich countries (which lie either completely or partly between the tropic of Cancer and the tropic of Capricorn) to address their special energy needs.

★ The **National Action Plan on Climate Change (NAPCC)** was launched in **2008** which aims at creating awareness among the representatives of the public, different agencies of the government, scientists, industry and the communities on the threat posed by climate change and the steps to counter it.



SCIENCE AND TECHNOLOGY

Luhri Stage-I Hydro Electric Project

Recently, the Cabinet Committee on Economic Affairs has approved the investment for 210 MW Luhri Stage-I Hydro Electric Project.

- It is located on **River Satluj in Shimla and Kullu districts of Himachal Pradesh.**

Key Points

- It is being implemented by Satluj Jal Vidyut Nigam Limited (SJVNL) on Build-Own-Operate-Maintain (BOOM) basis with active support from Government of India and the State Government.
- ★ **Government of India is providing grants of Rs. 66.19 crore** for enabling infrastructure.
- ★ SJVNL has envisaged **Internal Growth Targets** of total installed capacity from all sources of 5000 MW by 2023, 12000 MW by 2030 and 25000 MW by the year 2040.
- **Significance:**
- ★ This project will generate **758.20 million units of electricity annually**, which will



help in providing grid stability and improve the power supply position.

- ★ Besides adding valuable renewable energy to the grid, the project would also lead to a reduction of 6.1 lakh tons of carbon dioxide from the environment annually, thus contributing to an improvement in air quality and less air pollution.
- ★ The construction activities will result in **direct and indirect employment** and will **contribute to the overall socio-economic development** of the State.

- ★ **Himachal Pradesh will benefit with free power** worth around Rs. 1140 crore, during the **Project Life Cycle of 40 years.**
- ★ The project affected families will be provided with **100 units of free electricity per month for ten years.**

Radio Burst in Milky Way

Recently, the National Aeronautics and Space Administration (NASA) has spotted fast Radio Burst for the first time in the Milky Way.



Key Points

Fast Radio Burst:

- ★ FRB are **bright bursts of radio waves** (radio waves can be produced by astronomical objects with changing magnetic fields) whose **durations lie in the millisecond-scale**, because of which it is **difficult to detect them** and determine their position in the sky.
- ★ It was **first discovered in 2007**.

Discovery of FRB in Milky Way:

- ★ NASA observed a **mix of X-ray and radio signals** never observed before in the Milky Way.
- ★ The X-ray portion of the simultaneous bursts was detected by several satellites, including **NASA's Wind mission**.
- ★ **NASA's Wind** is a spin stabilized spacecraft launched on 1st November, 1994. After several orbits through the **magnetosphere**, Wind was placed in a halo orbit around the **L1 Lagrange point** in early 2004 to observe the unperturbed solar wind that is about to impact the magnetosphere of Earth.
- ★ The **radio component** was discovered by the **Canadian Hydrogen Intensity Mapping Experiment (CHIME)**, a radio telescope located at Dominion Radio Astrophysical Observatory in British Columbia, which is led by McGill University in Montreal, the University of British

Columbia, and the University of Toronto.

- ★ **CHIME** is a novel radio telescope that has no moving parts. Originally conceived to map the most abundant element in the universe - hydrogen - over a good fraction of the observable universe, this unusual telescope is optimized to have a high "mapping speed".
 - **Source of FRB in Milky Way:**
- ★ The source of the FRB detected recently in the Milky Way is a very powerful **magnetic neutron star** referred to as a **magnetar**, called **SGR 1935+2154** or **SGR 1935**, which is located in the **constellation Vulpecula** and is estimated to be between 14,000-41,000 light-years away.
- ★ The FRB was part of one of the magnetar's most prolific flare-ups, with the X-ray bursts lasting less than a second.
- ★ The radio burst, on the other hand, lasted for a thousandth of a second and was thousands of times brighter than any other radio emissions from magnetars seen in the Milky Way previously.
- ★ It is possible that the FRB-associated burst was exceptional because it likely occurred at or close to the magnetar's magnetic pole.
- ★ This flare-up, which lasted for hours, was picked up by **NASA's Fermi Gamma-ray Space telescope** and **NASA's Neutron star Interior Composition Explorer (NICER)**.
- ★ The **Fermi Gamma-ray Space Telescope**, formerly called the Gamma-ray Large Area Space Telescope (GLAST), is a space observatory being used to per-

form gamma-ray astronomy observations from low Earth orbit.

- ★ **NASA's Neutron star Interior Composition Explorer** is an **International Space Station (ISS)** payload devoted to the study of neutron stars through soft X-ray timing.

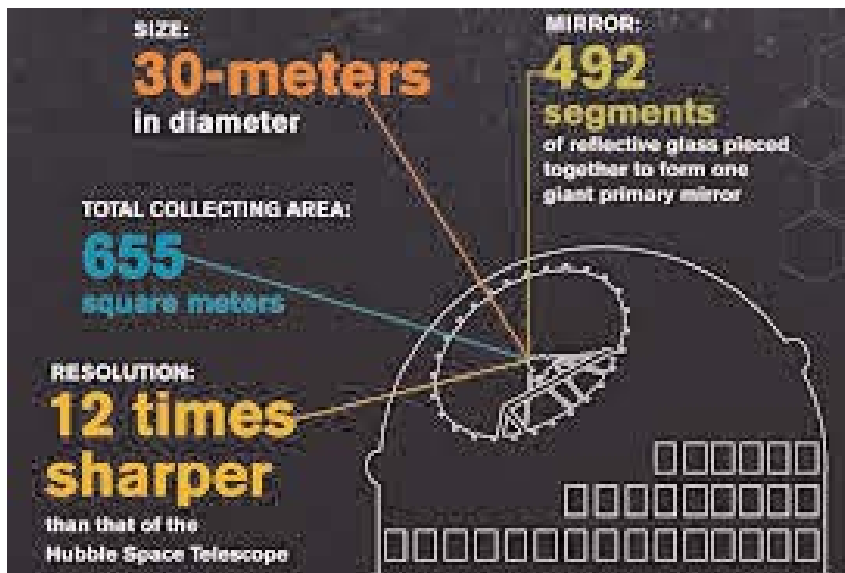
Thirty Meter Telescope Project

The design

Telescope (TMT) project being installed at Maunakea in Hawaii has been developed by close collaboration between the 2020 Physics Nobel Laureate Prof. Andrea Ghez and Indian astronomers.

Key Points

- The Thirty-meter telescope (TMT) project is an international partnership between the **USA, Canada, Japan, China, and India**.
- It will allow deeper exploration into space and **observe cosmic objects** with unprecedented sensitivity.
- **Other Global Projects with Indian Collaboration:**
- ★ **The Laser Interferometer Gravitational-Wave Observatory (LIGO) Project**
- ★ The Indian scientists contributed in several aspects such as **designing algorithms for analysis of signals from gravitational waves**, estimating energy and power radiated from black holes etc.
- ★ Now **LIGO-India** is a planned advanced gravitational-wave observatory to be located in India as part of the worldwide network.



- ★ **CERN Project**
- ★ India became a **full Associate Member** of world's largest particle **Physics laboratory CERN** in 2017, thereby **getting full access** to data generated there.
- ★ The contribution of Indian scientists there is mainly in building the **Large Hadron Collider (LHC)** and construction of two significant CERN experiments, **CMS and ALICE**.
- ★ **Facility for Antiproton and Ion Research (FAIR)**
 - FAIR is coming up at **Darmstadt, Germany** for **studying the building blocks of matter and the evolution of the Universe**.
- ★ FAIR is a sophisticated **accelerator complex** that will **use the high energy and ion beams to mimic the condition inside the core of the stars and early phase of the universe**.
- ★ The role of Indian scientists would be to build **NUSTAR (Nuclear Structure, Astrophysics and Reactions)**, **CBM (Compressed Baryonic Matter)** and **PANDA (Antiproton Annihilation at Darmstadt)**.

- ★ **Square Kilometre Array (SKA)**
 - India has joined **nine other countries** to build the **world's largest and most sophisticated radio telescope** called Square Kilometre Array (SKA).
- ★ **The core of the telescope will be based in Karoo desert in South Africa**. Since the **total detection area** of the receiver dishes would exceed **1 square kilometer**, it is called Square Kilometre Array.
- ★ **International-Thermonuclear-Experimental-Reactor (ITER)**
- ★ The **International-Thermonuclear-Experimental-Reactor (ITER)** is focused around **creating an environment mimicking the Sun in laboratory conditions using nuclear fusion**.
- ★ India's scientists and institutions such as **Institute for Plasma Research, Ahmedabad** are playing an important role in this.

Regulations on OTT and Digital Content

Recently, the Government has brought Over The Top (OTT) platforms, or digital video streaming

service providers such as Netflix, Amazon Prime and others, under the ambit of the Ministry of Information and Broadcasting.

Key Points

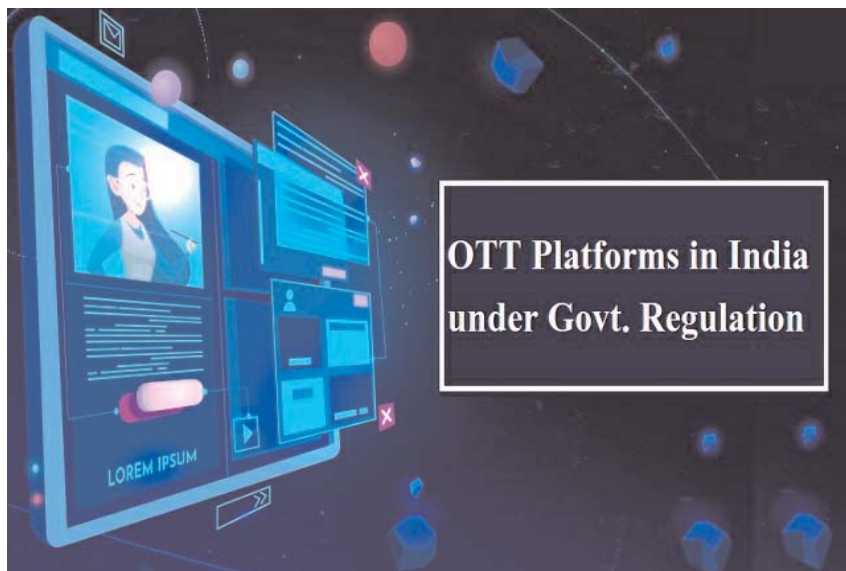
- **Background:**
- ★ The government had **indicated the necessity to monitor these platforms** and wanted the **platforms to come up with a self-regulatory body**.
- ★ In **January 2019**, eight video streaming services had **signed a self-regulatory code** that laid down a set of **guiding principles for content on these platforms** which **prohibited five types of content**:
- ★ Content that **deliberately and maliciously disrespects the national emblem or national flag**.
- ★ Any visual or storyline that **promotes child pornography**.
- ★ Any content that "maliciously" intends to **outrage religious sentiments**.
- ★ Content that "deliberately and maliciously" **promotes or encourages terrorism**.
- ★ Any content that has been **banned for exhibition or distribution by law or court**.
- ★ However, the **government refused to support this code** and **expressed displeasure** at a model suggested by the **Internet and Mobile Association of India (IAMAI)**, and **Digital Curated Content Complaints Council (DCCC)**.
- ★ IMAI is a **not-for-profit industry body** registered under the **Societies Registration Act, 1860**. Its mandate is to **expand and enhance the online and mobile value-added services sectors**
- ★ DCCC was **launched by the**

Online Curated Content Providers (OCCP) in February 2020 to empower consumers to make informed choices on viewing content over OTT platforms and to also provide consumers with a complaints redressal mechanism.

- ★ It held that the model **lacked independent third-party monitoring**, did not have a well-defined code of ethics and did not clearly enunciate prohibited content.

▪ **Current Order:**

- ★ It covers **"Digital/Online Media"**, including **"films and audio-visual programmes made available by online content providers"** and **"news and current affairs content on online platforms"**.
- ★ It will give the government control over these platforms, which were unregulated **till now as there is no law or autonomous body governing digital content.**
- ★ Online content providers come **under the legal framework of the Information Technology Act 2000** but, unlike print and broadcast media, were **not directly under any Ministry.**
- ★ However, there are no **details on how the government will regulate it.** There is a **possibility that the Programme Code of the Cable Television Network Regulation Act 1995, that governs content on TV, may serve as a template** to frame rules for online content.
- **Reasons Behind the Order:**
- ★ The Ministry also keeps receiving **complaints from the public underlining the concerns of unregulated content** and need to regulate it. In **October**



OTT Platforms in India under Govt. Regulation

2020, the Supreme Court issued notice to the Centre and the IAMAI, on a petition to regulate OTT platforms.

- ★ The Ministry is **already regulating news and entertainment content on TV and radio** through statutory bodies so it is important to bring the digital content under its purview as well.
- ★ With the growth of the digital media and a significant shift of viewership from traditional media platforms to digital media, there is a **real need for having an appropriate oversight framework for online news and content**, at par with traditional media platforms.

Rules and Regulatory Bodies for Other Platforms

▪ **Regulations:**

- ★ The **Cable Television Network (Regulation) Act, 1995** penalises television channels for any violation of the programming and advertising.
- ★ Complaints can be sent directly to the Ministry, or raised through the internal mechanism of the Electronic Media Monitoring Centre.

- ★ In **November 2019**, the Government had brought out a **draft Registration of Press and Periodicals (RPP) Bill**, which sought to replace the 150-year-old Press and Registration of Books Act, 1867.

- ★ **Cable Networks Regulation Act 2005** regulates both news and entertainment on television.

▪ **Various Sectors and Regulating Bodies:**

- ★ **Print Media:**
- ★ **Press Council of India** (a statutory, quasi-judicial authority).
- ★ **Television:**
- ★ **News Broadcasting Standards Authority** (self-regulatory body) set up by the **News Broadcasters Association (NBA)** regulates television news.
- ★ **Electronic Media Monitoring Centre**, set up in 2008, monitors content on TV.
- ★ **Broadcasting Content Complaints Council** (independent and self-regulatory) for television entertainment.
- ★ **Films:**
- ★ **Central Board of Film Certification (CBFC)** under the

Ministry of Information and Broadcasting.

★ **Advertisement:**

- ★ **Advertising Standards Council of India** (a self-regulatory body).

Western Bias in Science

Recently NASA released a news about the discovery of molecular water on the sunlit side of moon by the Stratospheric Observatory for Infrared Astronomy (SOFIA), piggybacked on a Boeing-747 aircraft at approximately 45,000 feet above the ground. The finding of 100-412 parts per million water (equivalent to a 12-ounce bottle) in a cubic metre soil from the Clavius Crater was published in Nature Astronomy, triggering speculation about extracting water from lunar rocks for future deep space programmes.

However, beneath this euphoria was the story of the painstaking efforts by a few Indian scientists, who discovered molecular water in the sunlit part of the moon in 2010, nearly 10 years ago, before the NASA discovery.

Indian contribution to Science (Water on the Moon)

- ★ Lunar rock samples brought back by Apollo-11 astronauts in 1969 were dated almost immediately by Gerry Wasserburg of the California Institute of Technology and K Gopalan, an Indian scientist of the University of California, which provided the first information that the moon and the entire solar system are as old as 4.6 billion years. The moon is made up of anorthosites, a rock composed of dry mineral of calcium aluminium silicates,

and terrestrial analogues to it have been found, for example, in Tamil Nadu.

- ★ Scientists detected trace quantities of water in lunar glass and a mineral apatite. But these were all indirect and often controversial evidence. For example, in apatite, it was not molecular H₂O but hydroxyl (OH-).
- ★ The search for lunar water was, however, on until 2008, when a team of young spirited scientists from Space Physics Laboratory, Vikram Sarabhai Space Centre, Thiruvananthapuram, embarked upon a challenging mission of direct probing of lunar surface. It was a suicidal mission when the Moon Impact Probe (MIP) plunged into the lunar south pole and crashed after the separation from the mother spacecraft of ISRO's Chandrayaan-I mission.
- ★ The entire journey of the MIP lasted 22 minutes, descending to a distance of about 2,800 km above the lunar surface. When the team extracted the data, there came a beautiful, clean mass spectrum in the 1 - 100 amu (atomic mass unit) with an H₂O peak of 18 amu flashing on the screen.

Denigrating

Indian contribution

- ★ Little did the VSSC team realise that the **western world will refuse to acknowledge such pioneering results from the completely indigenous efforts of Indian scientists.** Towards the end of 2008, a manuscript explaining every feature of the experiment and the unique results was submitted to Nature for rapid communication.

★ The journal reviewers were sceptical about the contamination from outgassing of the mass spectrometer surface and the fact that it was a one-time observation. The former was no issue since the VSSC team already performed a simulation experiment to exclude possibility of contamination. And yes, impact probes are always one-time events and a developing country like India could not afford multiple attempts.

- ★ These replies from the CHACE team and a revision of the manuscript, however, did not cut ice with the editors of Nature. The team lost a precious year and the results were eventually published in 2010 in Planetary and Space Science. Interestingly, Chandrayaan-I had six payloads from foreign countries, including two from NASA itself.

Recent observations

- ★ The observations of SOFIA were unique in the sense that **it observed 6-micron band data fundamental to molecular vibration of H₂O and a definitive indicator of water** in the sunlit side of the moon. In 2019, nearly 10 years later, Science published a chronological order of detection of water on the moon, a kind of reluctant acknowledgement of CHACE's contribution.
- ★ Today, a second generation CHACE-2 is revolving around Chandrayaan-2 in its 100-km polar lunar orbit. Nevertheless, the truth is that none of the groups working in this area have recognised the results of the earliest detection of water in the sunlit side of moon by the CHACE-I, even today.

More examples

- ★ In 1895, renowned polymath Jagadish Chandra Bose was the first to demonstrate radio communication with millimetre wavelengths, which form the backbone of 5G technology today. But in 1909, Guglielmo Marconi received the Nobel Prize in Physics for wireless communication. The story of S N Bose – the rejection of his work on statistics of quanta of light photons, exchanges with Albert Einstein and eventual publication of his results in *Zeitschrift der Physik* in 1924 – is well-known.
- ★ Again, pioneering work in quantum optics and coherence by E C G Sudarshan did not get due recognition and the Nobel Prize was awarded to Roy Glauber in 2005.

Conclusion

A global study on publications in medical research showed that there is a perceived editorial bias against the researches from the less-developed world. A 2019 review by Mayo clinic also indicated similar peer review bias.

NSO Time Use Survey (TUS) in India

National Statistical Office (NSO) conducted the first Time Use Survey (TUS) in India during January – December 2019. The survey measures the participation rate and time spent on paid activities, care activities, unpaid activities, etc.

About Time Use Survey (TUS)

- ★ Time Use Survey (TUS) provides a framework for measuring time dispositions by the population on different activities.

- ★ One distinguishing feature of TUS from other household surveys is that it can capture time disposition on different aspects of human activities, be it paid, unpaid or other activities with such details which is not possible in other surveys.
- ★ TUS is an important source of information on the time spent in unpaid caregiving activities, volunteer work, and unpaid domestic service producing activities of the household members. It also provides information on time spent on learning, socializing, leisure activities, self-care activities, etc., by the household members.
- ★ The primary objective of TUS is to measure participation of men and women in paid and unpaid activities.

People in Employment

- ★ As much as 38.2 per cent of persons who were of the age of six years or above were engaged in employment and related activities in the country in 2019.
- ★ 57.3 per cent males were engaged in employment and related activities while the proportion was 18.4 per cent for females in the country.
- ★ In the rural areas, the proportion of women engaged in employment and related activities were higher at 19.2 per cent compared to 16.7 per cent in cities.
- ★ The proportion of males above the age of six years engaged in gainful employment or related activities were higher in cities at 59.8 per cent in cities compared 56.1 per cent in rural areas.

Unpaid Tasks

- ★ Overall, 53.2 per cent of participants in the survey were engaged in unpaid domestic services for household members. The proportion of females in the category was higher at 81.2 per cent compared to 26.1 per cent for males.
- ★ The proportion of females engaged in unpaid domestic services for household members in rural areas was higher at 82.1 per cent compared to 79.2 per cent in cities.
- ★ The proportion of males engaged in unpaid domestic services for household members in villages too was higher at 27.7 per cent compared to 22.6 per cent in cities.
- ★ Overall, the percentage of persons engaged in unpaid domestic services for household members in villages was also higher at 54.6 per cent compared to 50.1 per cent.
- ★ The TUS also showed that the proportion of people who were engaged in production of goods for own final use was 17.1 per cent in the country. The proportion of such males was 14.3 per cent while it was 20 per cent for women in the country.
- ★ As much as 20.7 per cent people were engaged in unpaid caregiving services for household members in the country. The proportion of such men was 14 per cent while it was 27.6 per cent in case of women.
- ★ The study also showed that just 2.4 per cent of people opted for unpaid volunteer, trainee and other unpaid work.

Self-care and Socialisation

- ★ The study showed that all persons above the age of six years, who participated in the survey,

were engaged in self-care and maintenance.

- ★ As much as 91.3 per cent people went for socializing and communication, community participation and religious practice. The proportion of people who opted for culture, leisure, massmedia and sports practices was 86.9 per cent in the country.
- ★ It also showed that people utilise 50.4 per cent of total time of 1440 minutes in a day on self-care and maintenance followed by 11.4 per cent on employment and related activities.

Chapare Virus

Researchers from the US Centers for Disease Control and Prevention (CDC) have recently discovered a rare Ebola-like illness that is believed to have first originated in rural Bolivia in 2004.

- The virus is named Chapare after the province in which it was first observed.
- **Chapare**, is a rural province in the northern region of **central Bolivia**.

Key Points

About:

- ★ Chapare Virus belongs to the same **Arenavirus family** that is responsible for illnesses such as the **Ebola virus disease (EVD)**. It causes Chapare Hemorrhagic Fever (CHHF).
- **Vector:**
- ★ Chapare virus are generally **carried by rats** and can be transmitted through **direct contact with the infected rodent, its urine and droppings, or through contact with an infected person**.
- ★ A disease vector is any agent which **carries and transmits** an infectious pathogen into another living organism.
- **Symptoms of Chapare Hemorrhagic Fever (CHHF):**
- ★ Hemorrhagic fever much like Ebola. Viral hemorrhagic fevers are a severe and life-threatening kind of illness that can **affect multiple organs and damage the walls of blood vessels**.
- ★ Abdominal pain,
- ★ Vomiting,
- ★ Bleeding gums,
- ★ Skin rash,
- ★ Pain behind the eyes.
- **Transmission:**
- ★ Virus can spread from **person to person**.
- ★ Chapare spreads only through **direct contact** with bodily fluids.
- ★ **Sexually transmission:** Researchers also found fragments of **Ribonucleic acid (RNA)** associated with Chapare, in the semen of one survivor **168 days** after he was infected.
- **Diagnosis:**
- ★ Chapare virus is **much more difficult** to catch than the **coronavirus** as it is **not transmissible** via the **respiratory route**. Instead, Chapare spreads only through direct contact with **bodily fluids**.
- ★ New sequencing tools will help develop an **RT-PCR test** — much like the one used to diagnose **Covid-19** to help detect Chapare.
- **Treatment:**
- ★ Since there are **no specific drugs** to treat the disease, patients generally receive **supportive care** such as intravenous fluids.
- ★ **Intravenous therapy** is a medical technique that delivers a liquid directly into a person's vein. The intravenous route of administration is commonly used for rehydration solutions or to provide nutrition in those who cannot consume food or water by mouth.
- ★ Maintenance of **hydration**.
- ★ Management of shock through fluid resuscitation.
- ★ Fluid resuscitation is the medical practice of **replenishing bodily fluid** lost through sweating, bleeding, fluid shifts or other pathologic processes.
- ★ Pain Relief Medicines
- ★ Transfusions as the supportive therapy that can be administered on patients.
- **People at Risk:**
- ★ The disease is also known to be most commonly transmitted in more **tropical regions**, particularly in certain parts of South America where the small-eared pygmy rice rat is commonly found.
- **Mortality Rate:**
- ★ As there are very few cases on record, the mortality and risk factors associated with the illness are **relatively unknown**.
- ★ In the first known outbreak, the only confirmed case was fatal. In the second outbreak in 2019, three out of five documented cases were fatal (**case-fatality rate of 60%**).
- **Recent Outbreak:**
- ★ The recent biggest outbreak of the 'Chapare virus' was reported in 2019, when three health-care workers contracted the illness from two patients in the Bolivian capital of La Paz.

Averting a Lost Covid Generation

Recently, the United Nations Children's Fund (UNICEF) has released the report "Averting a lost Covid generation", which highlights significant and growing consequences of Covid-19 on children.

- The report came ahead of the **World Children's Day** (20th November).

Key Points

▪ About the Report:

- ★ It is the **first UNICEF report to comprehensively outline** the dire and growing consequences for children as the pandemic goes on.
- ★ It shows that while symptoms among infected children remain mild, **infections are rising** and the longer-term **impact on the education, nutrition and well-being of an entire generation** of children and young people can be life-altering.
- **Data Analysis:**
- ★ Children and adolescents account for **1 in 9 reported Covid-19 infections**.
- ★ As of the **beginning of November 2020**, children and adolescents accounted for **11% of the 25.7 million infections** reported across 87 countries.
- ★ It estimated that a **third of the countries** analysed, witnessed a **drop of at least 10% in coverage of health services** and there was a **40% decline in the coverage of nutrition services** for women and children across 135 countries.
- ★ As of **October 2020**, **265 million children** were still **missing out on school meals** globally.

- ★ **65 countries** reported a **decrease in-home visits by social workers** in September 2020, compared to 2019.

▪ Concerns:

- ★ These numbers **bust the myth that children are barely affected** by the disease, which has been prevalent throughout the pandemic.
- ★ **Disruptions to key services and soaring poverty rates** pose the biggest threat to children and the longer the crisis persists, the deeper its impact on children's education, health, nutrition and well-being.
- ★ **Vulnerabilities of women and children have increased**, as **health services continue to be disrupted and schools shut, denying children free mid-day meals** offered at schools for underprivileged children.
- ★ While children could **transmit the virus to each other and to older age groups**, there was strong evidence that, with **basic safety measures in place**, the net benefits of keeping schools open outweighed the costs of closing them.
- ★ **Schools are not the main driver of community transmission**, and children are more likely to get the virus outside of school settings.
- **India Specific Highlights:**
- ★ **Infections in Under 20:**
- ★ As per data from the **Indian Council of Medical Research (ICMR)** on the dashboard of the **National Centre for Disease Control**, **11.89% of Covid-19 cases in India** are in under 20.
- ★ **Education:**
- ★ **1.5 million school closures have impacted 247 million children** enrolled in elementary

and secondary education and **28 million children** who were attending pre-school education in **Anganwadi Centres**.

★ Nutrition:

- ★ An estimated **20 million children under 5 years of age** are suffering from **wasting** (low weight for height), over **40 million children** are **chronically malnourished** and more than half of the **Indian women aged 15-49 years** are **anaemic**.
- ★ The pandemic has **further exposed the fragility** of children, less by the virus itself but much more by the indirect and long-term fallout.
- ★ **Newborn Mortality:**
- ★ Covid-19 poses a grave threat to the gains made by India in the **Neonatal Mortality Rate (NMR)** and **Infant Mortality Rate (IMR)** which saw improvements in recent years.
- ★ **NMR** is defined as the 'number of deaths during the first 28 completed days of life per 1,000 live births in a given year or period'.
- ★ **IMR** is defined as the 'number of deaths of children under the age of 1 year per 1000 live births for a given year.'
- ★ **Sanitation:**
- The **socio-economic stress and migration** resulting due to the Covid-19 put **access to toilets and the practice of using them at risk**.
- ★ The schools which offered **improved access to and quality of water, sanitation and hygiene facilities** are closed and the facilities are not accessed.
- **Recommendations:**
- ★ Ensure all children **learn**, including by closing the **digital divide**.

- ★ Guarantee access to **nutrition** and **health services** and make **vaccines** affordable and available to every child.
- ★ Support and protect the **mental health** of children and young people and bring an end to abuse, gender-based violence and neglect in childhood.
- ★ Increase access to **safe drinking water, sanitation and hygiene** and address **environmental degradation** and **climate change**.
- ★ Reverse the rise in **child poverty** and ensure an inclusive recovery for all.
- ★ Redouble efforts to protect and support children and their families living through **conflict, disaster and displacement**.

Making of a Biotech Hub

Over the last few decades, India has made huge strides to emerge as one of the medical hubs in the world. The country has seen an immense improvement in the number and quality of its health-care facilities, reduction in pregnancy-related deaths, improvement in sanitation and immunisation coverage and has successfully averted several preventable disease epidemics.

Continuing on this trend, be it on attaining self-sufficiency in PPE kits or leading global effort in the development of a potent vaccine, India has carried out a robust response to Covid-19 pandemic.

Moreover, the pandemic has provided an opportunity for India to play the lead role in a global biotech ecosystem. By leveraging existing strengths in the medical sector, India can enter the next stage, from being the pharmacy of the world to being the biotech hub in the world.



Potential of Biotechnology

- **Recognising the Potential:** In 1986, much before any other country in the world, the Government of India recognised the **enormous potential of biotechnology** and established a separate department committed to this branch of

science.

- **Multi-Faceted Domain:** Biotechnology is a multi-faceted domain encompassing **applications in agriculture, pharmaceuticals, scientific discoveries, etc.** The biotech sector can be broadly divided into five major segments:

- ★ Biopharma
- ★ Bio-agriculture
- ★ Bio-services
- ★ Bio-industrial Applications
- ★ Bioinformatic
 - **Current Economic Status:** Currently, India accounts for approximately 3% of the global biotech industry.
- ★ The biotechnology sector in India has grown from \$1.1 billion in 2003 to a mammoth **\$64 billion sector in 2019** and by 2024, it is expected to be a \$100 billion industry.
- **Growing Biotech Start-ups:** India's pioneering achievements in biotechnology is the primary reason why the sector employs the best of minds and contributes to the development of generic and affordable medicare.
- ★ Currently, there are over 2,700 biotech start-ups and are expected to touch the 10,000-mark by 2024.
- **Role of BIRAC:** Biotechnology Industry Research Assistance Council (BIRAC), established under the Department of Biotechnology in 2012, continues to play a crucial role in the development of the biotech sector in India.
- ★ BIRAC brings innovators and funders on to a common table, enabling ideas to become a reality and facilitate technological advances that make human progress possible.

Government Initiatives

- Make in India, Skill India, Start-up India programmes are aimed to develop India as a world-class biotechnology and bio-manufacturing hub.
- The government's aspirational goal of developing the country into a \$100-billion biomanufac-

turing hub by 2024 is certainly going to give a fillip to the biotechnology sector as well.

- Biotech has been recognised as the sunrise sector among 14 champion sectors under the 'Make in India' programme which has the potential to contribute to the \$5-trillion economy goal of India.

Associated Challenges

- **Structural Issues:** Considering that manufacturing in the biopharma sector is capital intensive, such investments have been suboptimal in India due to limited access to capital, inadequate infrastructure and complex and ever-evolving regulatory framework.
- ★ As Biotechnology products and solutions often require ethical and regulatory clearance, making the process long, expensive and cumbersome.
- ★ Further, low remuneration of scientists (compared to the developed economies) and a few institutional research bases have not helped create more jobs in biotechnology.
- **Heavily Public Sector Dominated:** Compared to the developed economies (the United States), biotechnology research in India is mainly funded by the public exchequer.
- ★ Unless the private sector starts supporting applied research and engages with academic institutions, the innovation in applied and translational biotechnology will be minimal.
- **Lack of Innovation:** In terms of innovation, entrepreneurship, and technology creation, the biotechnology sector requires years of experience in the domain, access to labs with

sophisticated instruments, sustained and long-term funding to innovate.

- ★ However, India has not done well enough in improving innovation culture.
- ★ India is currently ranked at 52nd on the **Global Innovation Index (GII) 2019**, with a jump of five places since last year, and 29 places in the past five years.

Way Forward

- **Need for Active Government Support:** Some of the opportunities to enhance growth and innovation within the biotechnology sector in India are:
 - ★ Government policies to attract global talent.
 - ★ Government investment in new areas, eg. new vaccines for human and veterinary use, biosimilars.
 - ★ Enforcement of strong IP regime in India.
 - ★ Faster regulatory approvals; transparent and consistent drug approval process
 - ★ Building legal and institutional infrastructure for conducting clinical trials in India.
 - ★ The adequate reward for innovation.
 - ★ Promotion of private sector investment to substitute imports.
- **Favourable Industrial Location:** The favourable location of the biotech hubs will depend on critical factors like research and technology development competence, market, industry policies, infrastructure, investments.
- ★ Setting up the integrated biotech hubs will facilitate Foreign Direct Investments (FDIs), build the confidence of investors, enhance Indian

export potential for quality products, boost in-house capacity towards import substitution, and nurture and support innovations to generate more IP for India.

Conclusion

Biotechnology occupies a strategic position in the socio-economic advancement and development of the nation and the world at large. It provides an answer to various current and future challenges not only for India but the entire world.

In this context, India should leverage the never before seen collective ownership for a global crisis presented by Covid-19 pandemic.

Indian Regional Navigation Satellite System

The Maritime Safety Committee (MSC) of the International Maritime Organisation (IMO) has recognised the Indian Regional Navigation Satellite System (IRNSS) as a component of the World Wide Radio Navigation System (WWRNS) during its 102nd session held virtually.

- The IMO is the **United Nations specialised agency** responsible for the safety and security of shipping and the **prevention** of marine and atmospheric **pollution** by ships.

Key Points

- India has become the **fourth country** in the world to have its independent regional navigation satellite system recognised by the IMO as a part of the **World Wide Radio Navigation System (WWRNS)**.
- The other three countries that have its navigation systems

recognised by the IMO are the **USA, Russia and China**.

▪ Significance:

- ★ The IMO has accepted IRNSS as an alternative navigation module in Indian waters. It was in use only on a pilot basis earlier but now all merchant vessels are authorised to use it, even small fishing vessels.
- ★ The navigation system **can now replace GPS in the Indian Ocean waters upto 1500 km** from the Indian boundary.
- ★ IRNSS is a **regional and not a global navigation** system.
- ★ With the recognition as a component of the WWRNS, the Indian navigation system is similarly placed as **Global Positioning System (GPS - USA)**, most commonly used by marine shipping vessels across the world or the Russian Global Navigation Satellite System (**GLONASS**).
- ★ It is being considered as a significant achievement towards the '**Atmanirbhar Bharat**' initiative.
- ★ Apart from navigational benefits it has strategic importance as it reduces overdependence on the global navigation system.

Important Navigation Systems:

- ★ **USA navigation system:** The **Global Positioning System (GPS)** is a satellite-based navigation system that consists of 24 orbiting satellites.
- ★ **Glomass is Russian** Satellite Navigation System considered as a counterpart to GPS of the USA.
- ★ **BeiDou Navigation Satellite System of China:** A hybrid constellation consisting of around 30 satellites in three kinds of orbits.

★ **Galileo** is **Europe's** Global Navigation Satellite System.

Indian Regional Navigation Satellite System

- IRNSS is an independent regional navigation satellite system developed by the **Indian Space Research Organization (ISRO)**.
 - The main objective is to provide reliable position, navigation and timing services over India and its neighbourhood.
 - The IRNSS constellation was named as "**NavIC**" (Navigation with Indian Constellation) by the Prime Minister.
 - NavIC provides **two types of services**:
- ★ **Standard Positioning Service (SPS)** is meant for the general public.
- ★ **Restricted Service (RS)** is an encrypted service meant for authorised users and agencies.
- Unlike the widely used GPS which includes 24 satellites, NavIC has **8 satellites** and their range is within India and its adjoining regions extending up to **1,500 km** from the **country's border**.
 - Technically satellite systems with more satellites provide more accurate positioning information. However, compared to GPS which has a position accuracy of **20-30 metres**, the NavIC is able to pinpoint location to an estimated accuracy of **under 20 metres**.

Chang'e-5 Mission

China has launched an unmanned spacecraft to bring back lunar rocks, the first attempt by any nation to retrieve samples from the Moon in four decades.

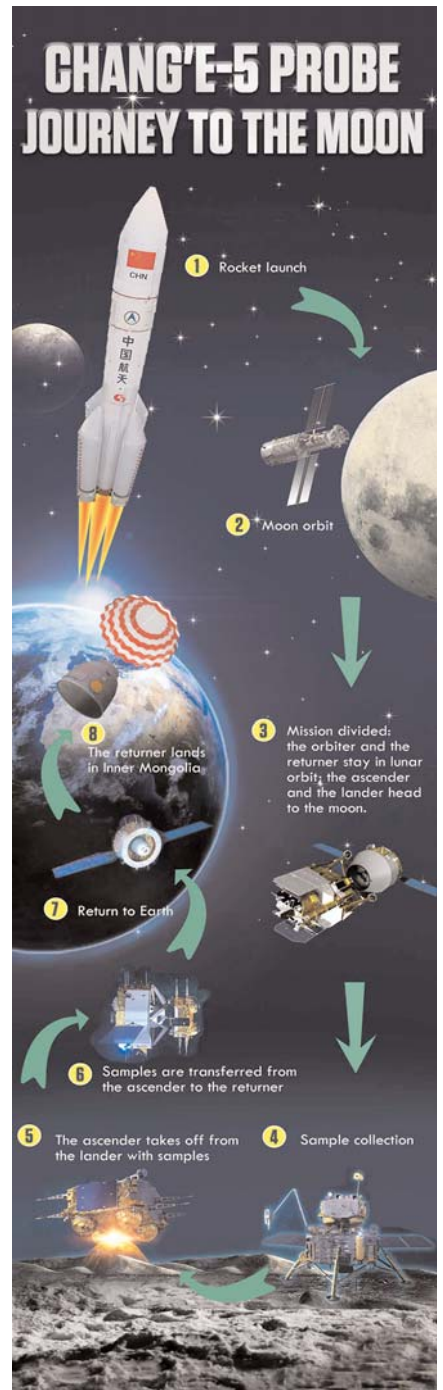
The Chang'e-5 mission, named after the ancient Chinese goddess of the moon, will seek to collect lunar material to help scientists understand more about the moon's origins and formation.

Key Points

- **Launch:** The Long March-5 Y5 rocket, carrying the Chang'e-5 spacecraft, was launched from Wenchang Space Launch Center (China).
- **Key Task of the Mission:** To drill 2 meters beneath the moon's surface and scoop up about 2 kilograms of rocks and other debris to be brought back to Earth.
- ★ It will **help scientists** learn about:
 - ★ Moon's origins,
 - ★ Volcanic activity on its surface and its interior, and
 - ★ When its magnetic field, key to protecting any form of life from the sun's radiation dissipated.
- **Functioning:**
 - ★ Upon entering the moon's orbit, the spacecraft is intended to deploy **a pair of vehicles to the lunar surface, a lander and an ascender.**
 - ★ A lander will drill into the ground, then transfer its soil and rock samples to an ascender that will lift off and dock with an orbiting module.
 - ★ There will be an attempt to collect 2 kg of samples in a previously unvisited area in a massive lava plain known as **Oceanus Procellarum, or "Ocean of Storms".**
 - ★ Area of the moon where the spacecraft is due to land is **1-2 billion years old.**
 - ★ If this is successful, the samples will be **transferred to a**

return capsule that will return them to Earth, with a landing in China's **Inner Mongolia region.**

- ★ The entire mission is scheduled to take around **23 days.**
 - **Significance:** If the mission is **completed as planned,** it would make **China** only the **third country** to have retrieved lunar samples, joining the **United States** and the **Soviet Union.**
- ★ The **Apollo programme** (which first put men on the moon), the **United States** landed 12 astronauts over six flights from 1969 to 1972, bringing back 382 kg of rocks and soil.
- ★ **The Soviet Union Lead Luna:** Deployed three successful robotic sample return missions in the 1970s. The last, the Luna 24, retrieved samples in 1976 from **Mare Crisium, or "Sea of Crises"** - a lunar basin.
- ★ The **Apollo-Luna sample zone** of the moon, while critical to our understanding, was undertaken in **an area that comprises far less than half the lunar surface.**
- ★ Subsequent data from orbital remote sensing missions have shown a wider diversity of rock types, mineralogies and ages than represented in the **Apollo-Luna sample collections.**
 - **China's Moon Missions:**
- ★ China made its **first lunar landing** in 2013.
- ★ In January 2019, the **Chang'e-4 probe** touched down on the far side of the moon, the **first by any nation's** space probe.
- ★ Chang'e is a series of lunar probes launched by China National Space administration.
 - **China's Other Space Plans:**
- ★ It aims to have a **permanent manned space station in serv-**



ice by around 2022.

- ★ Within the next decade, China **plans to establish a robotic base station** to conduct unmanned exploration in the **south polar region of the moon.**
- ★ It is to be developed through the Chang'e-6, 7 and 8 missions through the 2020s.

MISCELLANEOUS

National Unity Day 2020

Every year, the National Unity Day (Rashtriya Ekta Diwas) is celebrated on 31st October to commemorate the birth anniversary of Sardar Vallabhbhai Patel.

- ★ The Prime Minister launched the **seaplane service** from Ahmedabad to the **Statue of Unity**, Kevadia.

Key Points

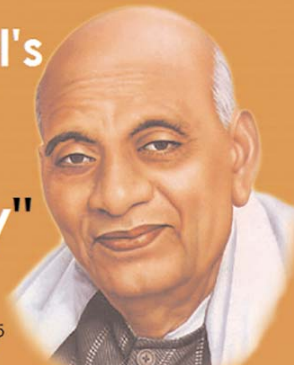
- ★ The day was **celebrated for the first time in 2014**, when the Government of India decided to celebrate Patel's birthday as the National Unity Day to recognise his monumental contribution and service to the nation.
- ★ On this day, several events like Run For Unity, a nationwide marathon to increase awareness about Patel's contributions, National Unity pledge, Ekta Parade, etc. are organised.
- ★ In **2018**, the Government unveiled the **Statue of Unity** in Gujarat in Patel's honour.
 - It is the **tallest statue** (182-meter) **in the world**.
 - In January 2020, it was added in the **'Eight Wonders'** of the **Shanghai Cooperation Organisation** (SCO).

About Sardar Vallabhbhai Patel

- ★ **Born:** 31st October 1875 in Nadiad, Gujarat.
- ★ **Achievements:**
 - First Home Minister and Deputy Prime Minister of India.

Sardar Vallabhai Patel's Birth Anniversary Celebrated as "National Unity Day"

BORN ON 31 OCT 1875
DEATH 15 DEC 1950



- **Headed various Committees of the Constituent Assembly of India**, namely:
 - ★ Advisory Committee on Fundamental Rights.
 - ★ Committee on Minorities and Tribal and Excluded Areas.
 - ★ Provincial Constitution Committee.
 - Integrated the farmer's cause in Kheda Satyagraha (1918) and Bardoli Satyagraha (1928) with the national freedom movement.
- ★ **Women of Bardoli bestowed the title 'Sardar'** on Vallabhbhai Patel, which means 'a Chief or a Leader'.
 - Known as the **"Iron Man of India"** for playing an important role in unification and **integration of Indian princely states** into the Indian federation and for convincing princely states to align with the Indian Union.
 - Requested the people of India to live together by uniting (Ek Bharat) in order to create a foremost India (Shresth Bharat).

- ★ This ideology still reflects in the **Atmanirbhar Bharat** initiative which seeks to make India self-reliant.

- Remembered as the 'Patron Saint of India's Civil Servants' as he established the modern all-India services system.

- ★ **Death:** 15th December 1950 in Bombay.

Nataraja - the dance of Infinity, Unity and Inclusivity

One of the most celebrated sculptures in the Indian civilisation is the lithe, elegant, exquisite vigraha of Nataraja, the divine lord of dancers.

- ★ Nataraja is the most brilliant symbolic manifestation of one of the Trinity Gods of Hinduism - Shiva. One of India's greatest philosophers, historian and metaphysician Ananda K. Coomaraswamy, wrote on the power and grace of the Nataraja, "it is the clearest image of the activity of God which any art or religion can boast of".



- ★ The very form depicts the joyous dance of life – **of creation, sustenance and destruction, all three represented in a single image.** *Nata* meaning dance, *Raja* meaning the King, Nataraja, the cosmic dancer is thus the **King of Dance.**
- ★ The divine dance is balanced between the opposing concepts of nature of life – **joy of creation and dissolution of self.** The lotus upon which he dances is the human heart. The demon *Apsamara* or *Muyalaka*, on whom he dances embodies the **ignorance of the individual.**
- ★ His lower right hand of benediction is in the gesture of the *Abhaya mudra* which says to the individual – “*Do not fear, I shall protect & bless those who follow the path of righteousness with love & devotion.*”
- ★ Nataraja’s front left hand, pointing to his raised left foot, signifies **freedom of the individual from the cycle of birth & death and all problems in-between.** With every rhythm in his dance, he steps on the **dwarfish demon** who per-

sonifies the trap of worldly existence and his victory over it.

Dance of Five Elements –

The iconography of Nataraja shows that the Cosmic Dancer is set inside a halo of flames. The divine lord dances within the circular ring called the *Prabha Mandala*, indicating the **cycle of life, death and continuity.** Some texts have also interpreted this fire as **denoting the many colours of human life, fear, joy, sorrows, hope, all dissolving in the illusion of existence.**

Nataraja’s face radiates **knowledge & serenity**, and his four arms indicate the **four cardinal directions.**

- ★ The hour-glass like instrument he holds is the damaru representing the space & sound (sabda) of creation. Empty space enclosed in the damaru enabling it to generate sound (sabda) symbolises **Akasha.**
- ★ The tresses *jata* of Nataraja are horizontal, flying out, revealing motion and the headdress ties them in place against the wind representing **Vayu**
- ★ The fire Nataraja holds in his left-hand represents **Agni**
- ★ Water flows from his head, signifying the life-giving water of Ganga- **Apaha**
- ★ His majestic form represents the Earth – **Prithvi**

Scientific symbolism

- ★ The scientific symbolism that the Nataraja enshrines has not been lost on the global scientific community. Switzerland based European Organization for Nuclear Research, popularly known as **CERN**, that operates

the largest particle physics laboratory in the world **has a Nataraja statue at its entrance.** CERN is known for the discovery of the **God-particle (Higgs Boson elementary particle)** in 2012. The cosmic dance of the Nataraja and the modern study of the ‘cosmic dance’ of subatomic particles both are **attempts to unravel the mysteries of the universe and to understand the real nature of our existence.**

- ★ The plaque on the statue at CERN reads “*Modern physics has shown that the rhythm of creation and destruction is not only manifest in the turn of the seasons and in the birth and death of all living creatures, but is also the very essence of inorganic matter.*”

Conclusion

For the modern physicists, then, Shiva’s dance is the dance of subatomic matter. Hundreds of years ago, Indian artists created visual images of dancing Shivas in a beautiful series of bronzes. In our time, physicists have used the most advanced technology to portray the patterns of the cosmic dance. The metaphor of the cosmic dance thus unifies ancient mythology, religious art and modern physics.

National Legal Services Day

The National Legal Services Day is celebrated on 9th November every year to spread awareness for ensuring reasonable fair and justice procedure for all citizens.



Key Points

- ★ National Legal Services Day (NLSD) was first started by the **Supreme Court of India** in 1995 to provide help and support to poor and weaker sections of the society.
- ★ Free legal services are provided in matters before **Civil, Criminal and Revenue Courts, Tribunals** or any other authority exercising judicial or quasi judicial functions.
- ★ **In line with Constitutional Provisions:**
 - ❑ **Article 39A** of the Constitution of India provides that State shall secure that the operation of the legal system **promotes justice** on a basis of **equal opportunity**, and shall in particular, provide free legal aid, by suitable legislation or schemes or in any other way, to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disability.
 - ❑ **Articles 14 and 22(1)** also make it **obligatory** for the State to ensure equality before law and a legal system which promotes justice on a basis of equal opportunity to all.
- ★ **Objectives of Legal Services Authorities are:**
 - ❑ Provide free legal aid and advice.

- ❑ Spread legal awareness.
- ❑ Organise lok adalats.
- ❑ Promote settlements of disputes through Alternative Dispute Resolution (ADR) Mechanisms. Various kinds of ADR mechanisms are Arbitration, Conciliation, Judicial settlement including settlement through Lok Adalat, or Mediation.
- ❑ Provide compensation to victims of crime.

★ Legal Services Institutions for providing Free Legal Services

- ❑ **National Level :** National Legal Services Authority. The National Legal Services Authority (NALSA) was constituted under the **Legal Services Authorities Act, 1987**. The **Chief Justice of India** is the **Patron-in-Chief**.
- ❑ **State Level :** State Legal Services Authority. It is headed by the **Chief Justice of the State High Court** who is its Patron-in-Chief.
- ❑ **District Level :** District Legal Services Authority. The **District Judge** of the District is its **ex-officio Chairman**.
- ❑ **Taluka/Sub-Division Level :** Taluka/ Sub-Divisional Legal Services Committee. It is headed by a senior Civil Judge.
- ❑ **High Court :** High Court Legal Services Committee
- ❑ **Supreme Court :** Supreme Court Legal Services Committee

Way Forward

It can be noted that the role played by NALSA and its networks is very much relevant to achieving the Sustainable Development Goal-

16, which seeks to "Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels".

National Education Day



The Union Minister of Education virtually inaugurated the National Education Day programme organised by IIT Bombay.

Key Points

- ★ **National Education Day**
 - ❑ It has been observed every year on **11th November**, since 2008 to commemorate the **birth anniversary of Maulana Abul Kalam Azad**.
 - ❑ **Maulana Abul Kalam Azad :**
- ★ He was the **first Union Education Minister** of India.
- ★ He was a freedom fighter, scholar and eminent educationist.
- ★ He was a key architect of Independent India who was responsible for setting up apex education bodies like **All India Council for Technical Education (AICTE)** and **University Grants Commission (UGC)**.
- ★ He was posthumously awarded **Bharat Ratna**, India's highest civilian award in 1992.
- ★ **About the Event**
 - ❑ In the event India's commitment to establish India as

a global hub of education and to ensure high quality of education was reiterated through Study in India, Stay in India and Internationalization of Education.

★ **Study in India, Stay in India** is an extension of the **Study in India programme**, a flagship project of the Government of India, launched in collaboration with the **Ministry of Education, Ministry of External Affairs, Ministry of Home Affairs, and Ministry of Commerce and Industry in April 2018.**

★ **Study in India programme objectives:**

- ★ To improve the soft power of India with focus on the neighbouring countries and use it as a tool in diplomacy.
- ★ To boost the number of inbound International students in India.
- ★ To double India's market share of global education exports from less than 1 percent to 2 percent.
- ★ Increase in contribution of international students in the form of direct spends, indirect spends, spillover effects.
- ★ Improvement in overall quality of higher education.
- ★ Increase in global ranking of India as an educational destination.
- ★ To reduce the export - Import imbalance in the number of International students.
- ★ Growth of India's global market share of International students.
- ★ India is **cooperating and coordinating with the leading universities of the world.** This has been incorporated in **National Education Policy (NEP)**

2020 by inviting top 100 World Universities to set up campuses in India.

Education in India

★ **Constitutional Provisions:**

- Part IV of Indian Constitution, **Article 45 and Article 39 (f)** of Directive Principles of State Policy (DPSP), has a provision for **state-funded as well as equitable and accessible education.**
- The **42nd Amendment** to the Constitution in 1976 moved education from the State to the **Concurrent List.**

★ The education policies by the Central government provides a broad direction and state governments are expected to follow it. However, it is **not mandatory**, for instance Tamil Nadu does not follow the three-language formula prescribed by the first education policy in 1968.

- The **86th Amendment in 2002** made education an enforceable right under **Article 21-A.**

★ **Related Laws:**

- **Right To Education (RTE) Act, 2009** aims to provide primary education to all children **aged 6 to 14 years** and enforces education as a Fundamental Right.

★ It also mandates **25% reservation** for disadvantaged sections of the society where disadvantaged groups

★ **Government Initiatives:**

- **Sarva Shiksha Abhiyan, Mid Day Meal Scheme,**

Navodaya Vidyalayas (NVS schools), Kendriya Vidyalayas (KV schools) and use of IT in education are a result of the NEP of 1986.

Way Forward

★ Programmes like **Study in India** and the **New Education Policy** aim to facilitate an **inclusive, global and high quality education**, which takes into consideration field experiences, empirical research, stakeholder feedback, as well as lessons learned from best practices.

★ If **implemented in its true vision**, they will bring India at par with the leading countries of the world and establish India as a **global hub of education.**

National Water Awards



The Department of Water Resources, River Development and Ganga Rejuvenation of the Ministry of Jal Shakti, is organising the 2nd National Water Awards (NWAs) for the year 2019.

Key Points

★ **National Water Awards:**

- The awards are organised by the **Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti.**
- The NWAs were launched in 2007 for the first time also

ng with the **Ground Water Augmentation Awards** and the winners in different categories are given a **citation, trophy and cash prize**.

- ❑ These focus on the good work and efforts made by individuals and organisations across the country, and the government's vision for the path to '**Jal Samridh Bharat**'.

Objectives:

- ★ To **motivate** individuals/organisations who are doing commendable work in the field of **water resources conservation and management**.
- ★ To **create awareness** among the people about the importance of water and encourage them to adopt the best water usage practices.
 - ❑ Opportunities Provided: Start-ups, leading organisations and people can engage, deliberate and strengthen existing partnerships on issues concerning water conservation and management activities.
- ★ **Need for Water Conservation and Management:**
 - ❑ Depletion of water resources due to **overuse and decline in water supplies due to climate change** is pushing India closer to the tipping point of water scarcity.
 - ❑ Apart from these, several government policies especially pertaining to agriculture resulted in over-exploitation of water. These factors make India a water-stressed economy. In this context there is a need

for water resource conservation and management.

Initiatives by the Government

★ Mahatma Gandhi National Rural Employment Guarantee Act:

- ❑ The huge workforce employed under the MGN-REGA has enabled the government to introduce water conservation as a project under the Act.
- ❑ The government aims to improve groundwater harvesting, build water conservation and storage mechanisms through MGNREGA.

★ Jal Kranti Abhiyan:

- ❑ Under it, the government is making active efforts to revolutionise villages and cities through block-level water conservation schemes.
- ❑ For example, the Jal Gram Scheme under the Jal Kranti Abhiyan is aimed at developing two model villages in water-starved areas to lead the other villages towards water conservation and preservation.

★ National Water Mission:

- ❑ It was launched with the objective of conservation of water, minimising wastage and ensuring more equitable distribution both across and within states through integrated water resources development and management.

★ NITI Aayog's Composite Water Management Index:

- ❑ With the objective of achieving effective utilization of water, **NITI Aayog** has developed the Composite Water Management Index.

★ Jal Shakti Ministry and Jal Jeevan Mission:

- ❑ The efforts like the formation of Jal Shakti Ministry (to tackle water issues holistically) and the goal to provide piped water to all rural households by 2024, under the Jal Jeevan mission, are steps in the right direction.

★ Atal Bhujal Yojana:

- ❑ It is a central sector scheme worth Rs.6,000 crore for sustainable management of groundwater with community participation.
- ❑ It envisages people's participation through the formation of 'Water User Associations', water budgeting, preparation and implementation of Gram-panchayat-wise water security plans, etc.

★ Jal Shakti Abhiyan:

- ❑ It was launched in July 2019 as a campaign for water conservation and water security in the country.

Way Forward

- ★ People tend to neglect the importance of water conservation because in most places it is **free of cost or charged nominally**, so it is important for them to realise its importance and be aware of its degrading status.
- ★ Initiatives like National Water Awards, along with the other government initiatives will help to create that awareness and motivate them to adopt the best water usage practices which will help India in becoming 'Jal Samridh Bharat'.



Students Corner

CAN CAPITALISM BRING INCLUSIVE GROWTH?

"It is not the benevolence of the farmer, the brewer and the baker that we expect our daily dinner from, but from their own concern for their self-interest."
-Adam Smith

One of the earliest proponents of free-market capitalism, Adam Smith argued that individuals pursuing their own self-interest in a market benefits everyone. It is the desire of telecom companies to maximize their profits which leads to consumers benefiting from a wide range of services unlimited calls, high-speed data and much more. It is pharmaceutical companies drive for profits that leads to investments in R&D to discover cures for life threatening diseases. While there is a general consensus that capitalism encourages human innovation and multiplies wealth, the question whether the fruits of this innovation and wealth benefits everyone in society is highly debatable.

Capitalism's critique by Karl Marx

One of the most influential critics of capitalism was the German philosopher, Karl Marx.

Marx, who lived in the 19th century Europe, was critical of the class society created by capitalism. He saw the capitalist class as

exploiting the working class by usurping the surplus value created by their labour. He claimed that capitalism advances, it would lead to the "pauperization of working class" i.e. the widening economic inequalities between workers and capitalist class. This he predicted would lead to a working class revolution and capitalism would be replaced by communism.

If we look at modern Indian society, we realise that Marx's claims were not entirely wrong. Reports in 2018 highlighted that top 1% of Indians own 51.5% of country's wealth while the bottom 60% owns a mere 4.7%. All free the world, capitalism has been found to mark the "rich get richer and the "poor get poorer".

India, which is the sixth largest economy of the world in terms of nominal GDP with an impressive growth rate 7%, is also home to a large numbers of stunted and malnourished children. These statistics highlight that capitalism driven growth since 1990's economic reforms has not benefitted the population equals. In other words, capitalism has had a poor record



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in ensuring inclusive growth so far in India.

Reasons for non-inclusive growth

Firstly, the lack of access to quality education, nutrition and healthcare have emerged as major impediments to person.

The service sector boom in India generated thousands of jobs but it is the educated and skilled middle class who were able to benefit from it. Poor quality of pri-

many education high dropout rates, learning disabilities due to stunting and wasting meant many children from backward areas were out of the race even before it began.

Secondly India's growth story has been described by some economists as "jobless growth". This is because the industrial sector which is an important job creator did not grow to the desired extent. On the other hand, china has been able to lift house sectors of its population above poverty due to its manufacturing boom.

I hardly, the lack of infrastructure and investments in states like Bihar, up, Rajasthan have led to wide regional disparities with well-performing states like Maharashtra, Tamilnadu, etc. Cities like Mumbai, Bangalore, Hyderabad, continue to attract investors while rural areas have fallen behind.

Fourth, the agriculture sector in India has not been able to benefit from capitalism. Most of the agriculture in India is ranked, does not have accent to advanced machinery and has not been able to tap into the global market. Increasing indebtedness and farmer's suicide have emerged as the dark side of capitalist growth story.

Potential of capitalism

In-spite of the various short comings, capitalism has the potential to bring about inclusive growth as has been observed in countries like China, USA, Singapore which have managed to improve their per capital income thanks to capitalism.

While it may not be easy to reduce the gap between the poor and rich, it is certainly possible to

ensure a minimum standard of living for all our citizens through inclusive growth.

Steps to bring about inclusive growth

Firstly India needs to invest in health and education as they form the base of increasing the quality of our workforce.

Secondly government must invest in infrastructure development. The governments "Make in India" initiative to attract foreign investments is a step in the right direction. Government has also launched the "Bharathmala" initiative to improve road connectivity which is the backbone of our economy.

Third, government must also focus on up-skilling of workforce to be job ready for the new 21st century economy. "Skill India" initiatives are an important step to ensure more youth of India are able to participate in the workforce.

Fourth, government has also taken steps to rejuvenate the agriculture by setting up agro-processing industries which help add value to agriculture and ensure farmers get more money for their produce.

Fifth, it is not just the government but even the talented youth is India can be job-creator and not just job seekers. Schemes like "Start-up India" offer financial, technical support for young entrepreneurs to form start-ups. Several Indians born start-ups like Swiggy, Pay-tm have tasted great success and created many jobs.

Way forward

India has set itself an ambitious target for becoming a 5 trillion \$ economy by 2025. This target can only be achieved if we are successful in bringing those who have earlier left out of the growth story farmers, unorganised sector workers, rural youth-into the mainstream and ensure their active participation in the economy.

Thus, the more than 200 years old capitalism is very much alive even today it has come a long way from the time of industrial revolution with new forms of production and technology. A course correction is needed to ensure capitalism can address the challenges of today's society and bring about inclusive growth.

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Weekly Test	20 (20*1 = 20 marks)	2 (20*1 = 20 marks)	40
Frotnightly Test	30 (30*1 = 30 marks)	3 (30*1 = 30 marks)	60
Monthly Test	50 (50*1 = 50 marks)	5 (50*1 = 50 marks)	100
3 Months Test	100 (100*1 = 100 marks)	10 (100*1 = 100 marks)	200
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