

# OFFICERS' PULSE

Issue no. 01 | 30th May to 5th June, 2021



**DREAM THE  
IMPOSSIBLE  
DREAM**

**AT A GLANCE  
& IN DEPTH.**

## **COVERAGE.**

The Hindu  
The Indian Express  
PIB  
Rajya Sabha TV  
All India Radio

Polity and Social Issues  
Economy  
International Relations  
Environment  
Science and Tech  
Culture

**CURRENT AFFAIRS WEEKLY**  
THE **PULSE** OF UPSC AT YOUR FINGER TIPS



# News @ a glance

<b>POLITY</b> .....	<b>3</b>	1) Uighurs .....	19
1) Sedition .....	3	2) Organisation for the Prohibition of Chemical Weapons .....	19
2) NPOP & PGS .....	4	3) Tiananmen Square Massacre .....	20
3) China's coercive population measures serve as warning for India .....	6	<b>SCIENCE AND TECHNOLOGY</b> .....	<b>21</b>
<b>ENVIRONMENT</b> .....	<b>8</b>	1) Medical Oxygen .....	21
1) More firepower for Kaziranga guards approved .....	8	2) Chip shortage.....	22
2) Rare Nagaland bamboo settles well in Vagamon.....	9	3) Venus .....	23
3) Initiative to conserve sacred groves .....	9	4) Tianzhou-2.....	24
4) Conference of the International Nitrogen Initiative (INI) .....	11	5) South-West Monsoon.....	24
5) Strong policies on black carbon can sharply cut glacier melt, says World Bank study.....	12	<b>DEFENCE</b> .....	<b>27</b>
6) World Environment Day .....	14	1) Suryakiran aerobatic display .....	27
<b>ECONOMY</b> .....	<b>16</b>	2) Negative Import List.....	27
1) Index of Eight Core Industries .....	16	3) Andaman-Nicobar theatre command .....	27
2) Purchasing Managers' Index.....	16	<b>PIB ANALYSIS</b> .....	<b>29</b>
3) RBI keeps policy rates unchanged .....	16	1) Pradhan Mantri Van Dhan Yojana .....	29
4) GDP shrinks by 7.3%.....	17	2) Government e-Marketplace .....	29
<b>INTERNATIONAL RELATIONS</b> .....	<b>19</b>	3) Agricultural and Processed Food Products Export Development Authority .....	30
		4) SAGE portal .....	31
		5) SATAT Initiative.....	31

# News in Depth

<b>AIR NEWS .....</b>	<b>32</b>	6) Close the vaccination gap, in global lockstep .....	40
1) MGNREGA .....	32	7) Adverse changes, federalism imperilled ....	41
2) United Nations Security Council .....	32	8) Information Technology Rules: a case of overreach? .....	43
<b>THE HINDU EDITORIALS .....</b>	<b>34</b>	9) Comments to avoid in long-standing ties..	44
1) Only a global effort can tame COVID-19 ....	34	10) The time to limit global warming is melting away .....	45
2) A 'reform wave' Lakshadweep could do without.....	35	11) Saving biodiversity, securing earth's future.....	46
3) Recognising caste-based violence against women.....	36	<b>INDIAN EXPRESS EXPLAINED.....</b>	<b>48</b>
4) Power play to bring the digital ecosystem to heel .....	38	1) SDG India Index 2020-21 .....	48
5) Breaking the cycle of child labour is in India's hands .....	39		

# News @ a glance

## POLITY

### 1) Sedition

#### CONTEXT

- A Supreme Court Bench led by Justice D.Y. Chandrachud recently flagged indiscriminate use of the sedition law against critics, journalists, social media users, activists and citizens for airing their grievances about the governments COVID-19 management.
- The apex court opined that it is **time to define the limits of sedition.**

#### LAW ON SEDITION (Section 124A)

- **Section 124A of the Indian Penal Code (IPC)**, deals with sedition. It was drafted by **Thomas Babington Macaulay** and included in the IPC in **1870**.
- It states that 'Whoever, by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into **hatred or contempt, or excites or attempts to excite disaffection towards, the Government established by law**, shall be punished with imprisonment which may extend to **three years**, to which fine may be added.'
- Sedition is a non-bailable offence. Punishment under the law varies from imprisonment up to three years to a life term and fine.

#### PREVIOUS JUDGEMENTS ON SECTION 124A

- In **Kedar Nath Singh v. State of Bihar (1962)**, the Supreme Court upheld the constitutional validity of sedition and noted it as being a **reasonable restriction on free speech** as provided in **Article 19(2)** of the Constitution.
- It made clear that a **citizen has the right to say or write whatever she likes about the government**, or its measures, by way of criticism or comments, **as long as she does not incite people to violence** against the government established by law or with the **intention of creating public disorder.**

- Following the Kedar Nath case, the **Bombay High Court**, in the **case of cartoonist Aseem Trivedi (2012)**, issued **guidelines** which the police must follow prior to invoking the provisions of sedition.
- These include an **objective evaluation of the material** to form an opinion on whether the words and actions cause disaffection, enmity and disloyalty to the government as they must be of the magnitude that they **incite violence or tend to create public disorder.**
- The Court also directed obtaining a **legal opinion in writing from a law officer of the district** who must give reasons on how the pre-conditions are met.
- This needs to be followed by a **second opinion from the State's public prosecutor.**

#### WHY THE LAW NEEDS RELOOK?

- The sedition law has been in debate ever since it was brought into force by the colonial British rulers in 1860s. Several top freedom movement leaders including **Mahatma Gandhi and Jawaharlal Nehru were booked under the sedition law.**
- **Mahatma Gandhi** described it as the "prince among the political sections of the Indian Penal Code designed to suppress the liberty of the citizen."
- Despite being cautioned by courts on numerous occasions, law enforcement agencies continue to misuse the provisions on sedition and ignore court directions. The problem therefore lies in the **poor implementation of the law and guidelines.**
- Based on data from the **National Crime Records Bureau**, between 2016 and 2019, the number of cases of sedition under Section 124A increased by 160%, while the rate of conviction dropped to 3.3% in 2019 from 33.3% in 2016.
- Notably, out of these cases, **many charges fell outside the ambit of sedition.**

Consequently, the staggering numbers have got people saying that “the aim is not to punish or convict anyone but to incarcerate them... the process itself is the punishment.”

- This data and the gross misuse of the legal provisions compel one to state that even though a Constitution Bench upheld the vires of the law of sedition, the **circumstances now require a complete relook at the provision.**
- When the situation changes, the statute calls for a change as law cannot afford to remain static.
- **The U.K.** has repealed the offence of sedition in 2010 and India is holding onto a relic of the British Empire.
- In its consultative paper on sedition, the **Law Commission of India** said **dissent and criticism of the government are essential ingredients of a robust public debate in a vibrant democracy.**
- The Commission, headed by former Supreme Court judge, Justice B.S. Chauhan, suggested **it was time to rethink or even repeal Section 124A.**

#### WAY FORWARD

- The outcome of the question is unknown, but the discussion needs to be rekindled.
- Till the law on sedition continues to remain on our statute book, courts must adopt an **effect-based test** followed in the west. The test **examines the effects of the seditious text rather than a content-based test which reviews the text alone.**
- It is not the alleged seditious acts that are creating fragments in our society; it is in fact the persecution of individuals and labelling them that are really creating cracks in our socio-political ecosystem.
- In the words of **Martin Luther King, Jr.** **“We must learn to live together as brothers or perish together as fools.”**

## 2) NPOP & PGS

### Organic Farming in India

- Organic products are grown under a system of agriculture **without the use of chemical fertilizers and pesticides with an environmentally and socially responsible approach.**
- This is a method of farming that works at grass root level preserving the reproductive

and regenerative capacity of the soil, good plant nutrition, and sound soil management, produces nutritious food rich in vitality which has resistance to diseases.

- India is bestowed with a lot of potential to produce all varieties of organic products due to its various agro climatic conditions. In several parts of the country, the inherited tradition of organic farming is an added advantage. This holds promise for the organic producers to tap the market which is growing steadily in the domestic and export sector.
- **India's rank 8th in terms of World's Organic Agricultural land and 1st in terms of total number of producers as per 2020 data.**

#### Area

- As on 31st March 2020, total area under organic certification process (registered under National Programme for Organic Production) is **3.67 million Hectare**. This includes 2.299 million ha cultivable area and another 1.37 million Hectare for wild harvest collection.
- Among all the states, **Madhya Pradesh** has covered the largest area under organic certification followed by Rajasthan, Maharashtra, Gujarat, Karnataka, Odisha, Sikkim and Uttar Pradesh.
- During 2016, **Sikkim** has achieved a remarkable distinction of converting its entire cultivable land (more than 75000 ha) under organic certification.

#### Production

- Among different states **Madhya Pradesh** is the largest producer followed by Maharashtra, Karnataka, Uttar Pradesh and Rajasthan.
- In terms of commodities **Oil seeds** are the single largest category followed by Sugar crops, Cereals and Millets, Tea & Coffee, Fiber crops, fodder, Pulses, Medicinal/Herbal and Aromatic plants and Spices & Condiments.

#### Exports

- The total volume of export during 2019-20 was 6.389 lakh MT. The organic food export realization was around INR 4,686 crore (689 million USD). The major export destinations are EU, USA, Canada, Switzerland, Pakistan, New Zealand and Australia.

- In terms of export value realization Processed foods including soya meal, Oilseeds, Plantation crop products such as Tea and Coffee, Cereals and millets, Spices and condiments, Dry fruits , Sugar and Medicinal plants lead among the products.

### National Programme for Organic Production

- The **Agricultural and Processed Food Products Export Development Authority (APEDA)** under the Ministry of Commerce & Industries is implementing the National Programme for Organic Production (NPOP).
- The programme involves the accreditation of Certification Bodies, standards for organic production, promotion of organic farming and marketing etc.
- All types of agriculture, horticulture and non-food crops are grown under organic certification process.
- Livestock, aquaculture, animal feed processing and handling, mushroom production, sea weeds, aquatic plants and green house crop production have also come under the ambit of organic certification.
- **Organic products are currently exported from India only if they are produced, processed, packed and labelled as per the requirements of the NPOP.**
- As per the established norm of organic production systems, the areas having chemical input usage history are required to undergo a **transition period of a minimum 2-3 years** to qualify as organic. During this period, farmers need to adopt standard organic agriculture practices and keep their farms under the certification process. On successful completion, such farms can be certified as organic after 2-3 years. The certification process also requires elaborate documentation and time to time verification by the certification authorities.

### Global Recognition

- The NPOP standards for production and accreditation system have been **recognized by European Commission and Switzerland** for unprocessed plant products as equivalent to their country standards. It enables India to export unprocessed plant products to these countries without the requirement of

additional certification. The equivalency with the EU also facilitates the export of Indian organic products to the **United Kingdom** even in the post Brexit phase.

- Similarly, **The United States Department of Agriculture (USDA)** has recognized NPOP conformity assessment procedures of accreditation as equivalent to that of the National Organic Program (NOP) of the US.
- With these recognitions, Indian organic products duly certified by the accredited certification bodies of India are accepted by the importing countries. APEDA is also in the process of Bilateral equivalence with South Korea, Taiwan, Canada, Japan etc.

### PGS-India

- Participatory Guarantee Systems (PGS) for India programme for local and domestic market was launched by the **Ministry of Agriculture and Farmers Welfare** with an aim to make the certification system affordable and accessible without the need for third party certification agencies.
- PGS-India is a quality assurance initiative that is **locally relevant, emphasizes the participation of stakeholders**, including producers and consumers and operates outside the frame of third party certification.
- In the PGS framework, people in similar situations (in this case smallholder producers) assess, inspect and verify the production practices of each other and take decisions on organic certification.
- The certification is in the form of a documented logo or a statement.

### Difference between NPOP and PGS India Certifications

- Both the programmes (NPOP and PGS-India) are independent of each other and products certified under one system cannot be processed or labeled under another system. While **NPOP certified products can be traded in export and in the domestic market, PGS-India certified products can be traded only in the domestic market.**
- Under the NPOP framework, **Accredited certification agencies** authorized under the programme are certifying organic producers. PGS-India programme was launched with an aim to make the certification system affordable and accessible **without the need for third**

**party certification agencies.** Under the PGS, farmers in a group inspect each other's land and vouch for its organic credentials.

- While NPOP is implemented by **APEDA** under the **Ministry of Commerce & Industries**, PGS-India is facilitated by the **Ministry of Agriculture and Farmers' Welfare** through **National Centre of Organic Farming (NCOF)** as its Secretariat.

#### Advantages of PGS

- Procedures are simple, documents are basic, and farmers understand the local language used.
- All members live close to each other and are known to each other. As practising organic farmers themselves, they understand the processes well.
- Because peer appraisers live in the same village, they have better access to surveillance; peer appraisal instead of third-party inspections also reduces costs.
- Mutual recognition and support between regional PGS groups ensures better networking for processing and marketing.

#### Limitations of PGS

- PGS certification is only for farmers or communities that can organize and perform as a group within the village or in close-by villages with continuous territory and is applicable on, on-farm activities comprising of crop production, processing and livestock rearing (including bee keeping) and off-farm processing "by PGS farmers of their direct products".
- Individual farmers or group of farmers smaller than five members are not covered under PGS. They either have to opt for third party certification or join the existing PGS local group.
- PGS ensures traceability only up to the end till it is in the custody of the PGS group. Once the product leaves the custody of PGS group there is no control of PGS on its integrity.

#### Why in News?

- Union Food Processing Minister Harsimrat Kaur Badal recently said that India's organic food market is growing at 17 per cent annually and has the potential to grow at a faster pace on rising demand for health and wellness food products across the world.

### 3) China's coercive population measures serve as warning for India

#### What's in the news?

- China's decision to relax its two-child norm and allow couples to have three children must serve as a warning for India that **coercive population strategies can be counter-productive**, say experts.

#### News in detail

- After enforcing one-child and two-child policies to control its population over the past four decades, China recently announced that it will allow couples to have a third child.
- The announcement came after recently published census data reported a dramatic decline in births and recording the sharpest slowing down of population in decades. The strict birth limits have **created a rapidly aging population and shrinking workforce that is straining the country's economy.**
- India, on the other hand, has been toying with the **idea of population control measures through a two-child norm**, which found a mention in Prime Minister Narendra Modi's Independence Day speech two years ago.
- Experts argue that India and its states must learn from China's failed experience with enforcing coercive population policies. Stringent population control measures have created a population crisis for China.

#### Misplaced Focus

- India has long been concerned about curbing population 'explosion', but **needs to focus its attention on population stabilisation instead.** India has done very well with its family planning measures and now we are at **replacement level fertility of 2.1**, which is desirable.
- At present, we need to sustain population stabilisation because in some States like Sikkim, Andhra Pradesh, Delhi, Kerala and Karnataka where the **total fertility rate (TFR) is way below replacement level**, which means we will experience in 30-40 years what China is experiencing now.
- *TFR indicates the average number of children expected to be born per woman during her entire span of reproductive period.*

- *Replacement level fertility is the level of fertility at which a population exactly replaces itself from one generation to the next. A rate of less than 2.1 leads to each new generation being less populous than the older, previous one.*
- In India, according to the **United Nations Population Fund's (UNFPA) India Ageing Report 2017**, the share of population over the age of 60 is projected to increase from 8% in 2015 to 19% in 2050. By the end of the century, the elderly will constitute nearly 34% of the population.
- The annual growth rate of the elderly will be over 3% till the middle of this century indicating a faster pace of growth than other age categories. On the contrary, the growth rate of younger age groups is already negative.

#### **Empowerment for women**

- The proven ways to lower the fertility rate are to **give women the control over their fertility and ensure their greater empowerment** through increased access to

education, economic opportunities and healthcare.

- China's fertility reduction is only partly attributable to coercive policies, and is largely because of the sustained investments the country had made in **education, health and job opportunities for women**. These are the three essential things India needs to do for its population to stabilize.
- With China's fertility rates expected to drop in the coming years, demographers have predicted that **India may overtake China as the most populous country by 2023 or 2024**.
- However, experts argue that this should not be a cause for worry and should be turned into an opportunity by focusing on improving employability of youth to improve productivity to fuel economic growth.

**For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# ENVIRONMENT

## 1) More firepower for Kaziranga guards approved



### About Kaziranga National Park

- The Kaziranga national park is located in **Assam** and was formed in 1908 on the recommendation of **Mary Curzon (wife of Lord Curzon)**.
- In 1985, the park was declared as a **World Heritage Site by UNESCO**.
- Kaziranga was declared as Tiger Reserve in 2006 and it is also recognised as an Important Bird Area by Birdlife International for conservation of avifaunal (birds) organisms.
- In the park one can see four types of vegetation like alluvial inundated grasslands, alluvial savanna woodlands, tropical moist mixed deciduous forests, and tropical semi-evergreen forests.
- The park is famous for its **One-horned Rhinoceros**, about 2200 rhinoceros exist in this park, which is half of the world's one-horned rhino population.
- **River Brahmaputra** flows adjacent to the park.

### Why in the news?

- The Assam government has approved more arms to the forest guards of Kaziranga National Park.
- It has also approved Commando training for forest guards thus treating them on par with the State police personnel.
- It has approved helicopter services in the Kaziranga for better management of poaching and also to increase the tourist flow in the coming years.
- These steps have been taken after the the Supreme Court in January 2021 urged the Central government to arm forest officers and provide them with bullet-proof vests and vehicles when told that India recorded the “greatest number of mortal fatalities” among forest officials in the world.
- In this regard let us discuss the debate of arming forest guards.

### About arming Forest Guards

#### Arguments in favour

- Rising cases of violence against forest rangers by poachers and encroachers.
- Today's wildlife trade/hunting mafia can't be opposed with simple gram sabha or local dwellers as they are heavily armed. A

professional, well-trained force is needed to protect forests, with appropriate checks and balances to prevent abuse of power.

- Lack of arms is a threat to the life of foresters. Over 160 of them have died in India during 2012-17 in the line of duty, according to the International Ranger Federation.

#### Arguments against the move

- Can disturb the power balance between forest dwellers and the state.
- Forest Guards already have immense powers like, to search and seize forest produce; arrest, charge and send forest dwellers into detention and impose fines, compound offences and auction seized goods. Arming them can lead to exploitation of forest dwellers.
- Arming them can result in alienation of forest guards as they need immense ground support from the local people and undermine their social connectedness.
- It will also contribute to the “**militarisation of conservation**” or “green militarisation”, which refers to the use of military/paramilitary logics, practices, and technologies in the name of protecting biodiversity and spaces of conservation.
- Constant patrolling of armed commandos disturbs the social fabric, curtailing basic civil liberties and restricting the collection of natural produce. This deteriorates the basic food basket, impinges upon cultural rights, and causes psychological trauma to children, women and the elderly.

## 2) Rare Nagaland bamboo settles well in Vagamon

### Chimonobambusa callosa

- *Chimonobambusa callosa* is a bamboo species which is found in Nagaland and adjacent areas.
- It is found at an altitude of 1200 above Mean Sea Level.
- It has the ability to grow to a height of five to 10 metres.
- A long-rhizome spreading bamboo, *Chimonobambusa callosa* is ideal for soil protection. It has excellent soil binding factors.



- It also has ornamental value as it is characterised by straight, green culms, with rings of thorns adorning the nodes.

### Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI)

- It is an Institute of Kerala State Council for Science, Technology and Environment, founded in 1979 with an objective of establishing a Conservatory **Botanic Garden of tropical plant resources** in general and of the country and the Kerala state in particular.
- It is located in **Palode, Kerala**. It is the only organization in India, which maintains a 300 acre conservatory garden for the wild tropical plant genetic resources of the country, besides a well integrated multidisciplinary R & D system dealing with conservation, management and sustainable utilization of tropical plant resources.

#### Why in the news?

- JNTBGRI collected a few samples of *Chimonobambusa callosa* from Nagaland and introduced it to Vagamon, Kerala.
- The plant has successfully adapted to the local conditions and started to spurt. The JNTBGRI is researching further to spread this species across Kerala for its conservation and other environmental and economic benefits.

## 3) Initiative to conserve sacred groves

### What are sacred groves?

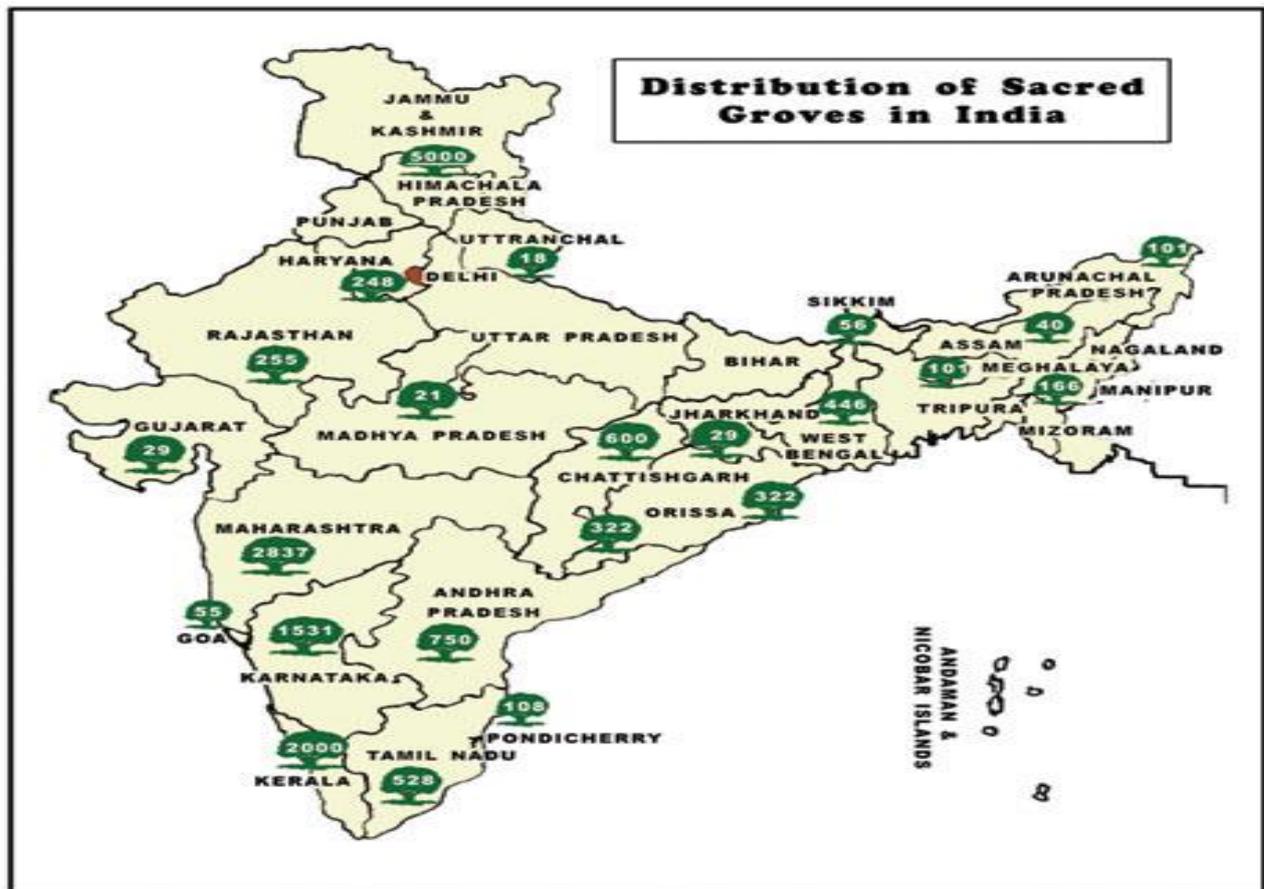
- Sacred groves comprise patches of forests or natural vegetation – from a few trees to forests of several acres – that are usually dedicated to local folk deities (Example – Ayyanar and Amman) or tree spirits (Vanadevatais).

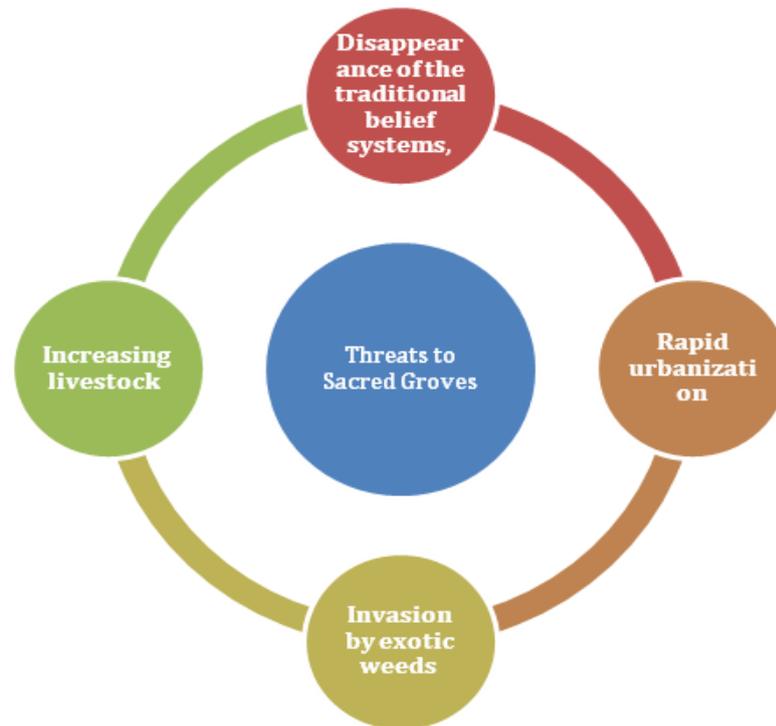
- These spaces are protected by local communities because of their religious beliefs and traditional rituals that run through several generations.
- India having abundance of sacred groves, it known by several names such as kavu in Kerala, devaravana or devarakadu etc. in Karnataka, sarana or jaherthan in Jharkhand, dev van in Himachal Pradesh, devrai or devgudi in Maharashtra, ki law lyngdoh or ki law kyntang etc. in Meghalaya, vanis or kenkris etc in Rajasthan, kovilkadu in Tamil Nadu, and umanglai in Manipur.
- **Himachal Pradesh** has the highest number of sacred groves.

#### Classification

- **Traditional Sacred Groves** – It is the place where the village deity resides, who is represented by an elementary symbol.
- **Temple Groves** – Here a grove is created around a temple and conserved.
- Groves around the **burial or cremation grounds**.
- **Conservation of Biodiversity** – The sacred groves are important repositories of floral and faunal diversity that have been conserved by local communities in a sustainable manner. They are often the last refuge of endemic species in the geographical region.
- **Recharge of aquifers** – The groves are often associated with ponds, streams or springs, which help meet the water requirements of the local people. The vegetative cover also helps in recharging the aquifers.
- **Soil conservation** – The vegetation cover of the sacred groves improves the soil stability of the area and also prevents soil erosion.
- **Source of local medicine** – The local tribal population rely upon some plants in the sacred groves to heal themselves.
- **Carbon sink** – The groves act as an effective carbon sink and are also self-sustainable ecosystem, which reinforce scientific reasons for conservation

#### SIGNIFICANCE





#### Why in the news?

- A Puducherry based non-profit, Indigenous Biodiversity Conservation has started an initiative called '**Uyir Moochu**' Initiative.
- Under this eco-restoration of the sacred grooves around the Puducherry and Marakkanam-Pondicherry-Cuddalore stretch is being undertaken. This area hosts around 163 sacred grooves and is home to several endemic species.
- This region belongs to **Tropical Dry Evergreen Forests (TDEF)** which are second most vulnerable forests after mangroves. IBF has identified 88 rare, endemic and near threatened plant species found in TDEF for conservation as part of 'Uyir Moochu' Initiative.
- As a part of the initiative, the organisation is collecting the seeds of the vulnerable plants of these sacred grooves and raising them in the nursery.
- The local communities are made aware about the sacred grooves and their importance, further the nursery grown plants are distributed among the communities. Their main objective is to strengthen the bond that the local communities shared with the sacred grooves.

#### 4) Conference of the International Nitrogen Initiative (INI)

##### About Nitrogen

- Nitrogen is one of the five major chemical elements that are necessary for life. While nitrogen is the most abundant of these, more than 99% of it occurs as molecular nitrogen, or N<sub>2</sub>, which cannot be used by most organisms.
- This is because breaking the triple bond holding the two nitrogen atoms together requires a large amount of energy, which can be mustered only through high-temperature processes or by a small number of nitrogen-fixing microbes.
- In the prehuman world, a small amount of usable reactive nitrogen was created from N<sub>2</sub> by lightning and biological nitrogen fixation, but the spread of reactive nitrogen was held in check by **denitrification**, a process that converts reactive N back to N<sub>2</sub>.
- Human beings have dramatically altered the nitrogen balance, breaking into the vast reservoir of molecular nitrogen and releasing reactive forms into the environment.
- We have done so **by cultivating legumes, rice, and other crops that promote nitrogen fixation, by burning fossil fuels, and by transforming non reactive atmospheric nitrogen to ammonia to sustain food production and some industrial processes.**
- During the last few decades, the global increase of reactive nitrogen by all human

sources has far outstripped production from all natural terrestrial systems, and since the 1960s, the rate of increase has accelerated sharply.

#### About INI

- The International Nitrogen Initiative (INI) is an international program, set up in 2003 under sponsorship of the Scientific Committee on Problems of the Environment (SCOPE) and from the International Geosphere-Biosphere Program (IGBP).

#### The key aims of the INI are to:

- To optimize nitrogen's beneficial role in sustainable food production, and
- To minimize nitrogen's negative effects on human health and the environment resulting from food and energy production.
- The INI holds a **conference every three years**, inviting members of the international nitrogen community to meet up and discuss ideas and exchange knowledge on nitrogen issues.
- Last conference was held in Melbourne, in December 2016. The 2020 conference in Berlin, Germany was postponed due to COVID-19 pandemic.
- **Why in the news?**
- This year 8th conference of INI in virtual mode was held to assess global nitrogen from May 31-June 3, 2021.
- The United Nations (UN) Sustainable Development Goals (SDGs) have been the main focus in the conference.

### 5) Strong policies on black carbon can sharply cut glacier melt, says World Bank study

#### About Black Carbon



- Black carbon, or soot, is part of fine particulate air pollution (PM2.5) and contributes to climate change.
- Black carbon is **formed by the incomplete combustion** of fossil fuels, wood and other

fuels. Complete combustion would turn all carbon in the fuel into carbon dioxide (CO<sub>2</sub>), but combustion is never complete and CO<sub>2</sub>, carbon monoxide, volatile organic compounds, and organic carbon and black carbon particles are all formed in the process.

- The complex mixture of particulate matter resulting from incomplete combustion is often referred to as soot.
- Black carbon is a **short-lived climate pollutant** with a lifetime of only days to weeks after release in the atmosphere. During this short period of time, black carbon can have **significant direct and indirect impacts on the climate, the cryosphere (snow and ice), agriculture and human health.**

#### What sectors are contributing Black carbon?

- Industry [primarily brick kilns] and residential burning of solid fuel together account for 45–66% of regional anthropogenic [man-made] BC deposition, followed by on-road diesel fuels (7–18%) and open burning (less than 3% in all seasons)

#### Black Carbon and Glaciers



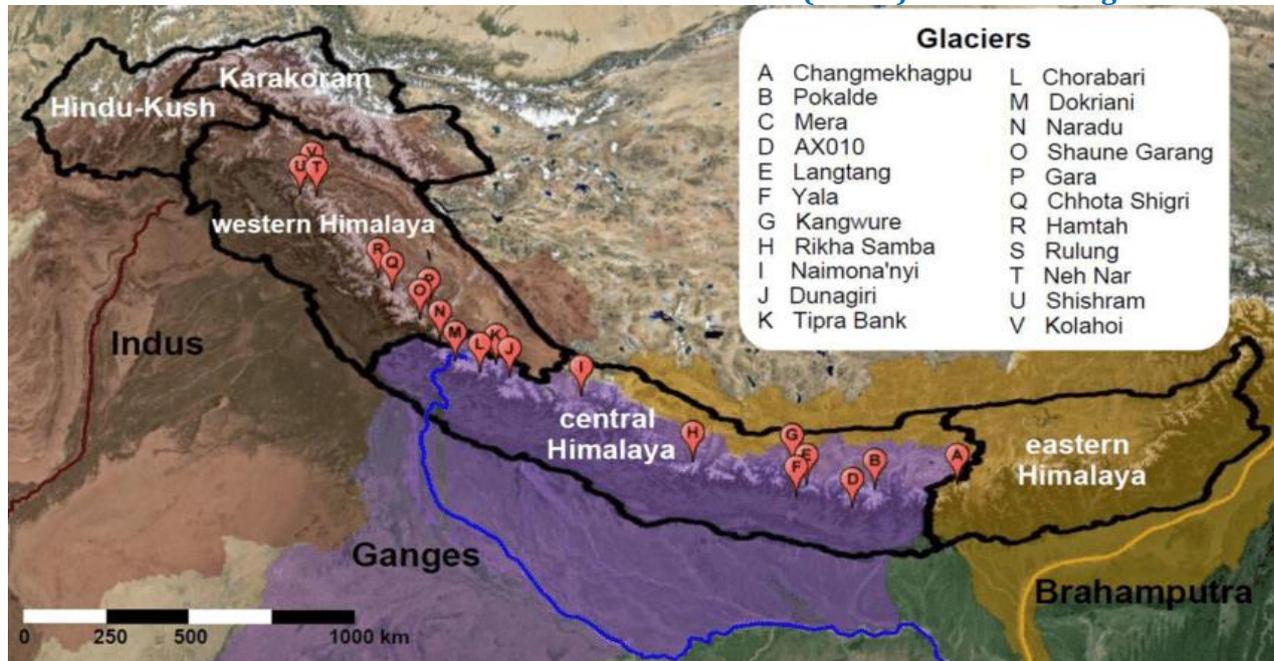
- Glaciers are known to reflect sunlight back into the atmosphere, this is known as the Albedo effect. This reduces the absorption of sunlight and maintains temperature.
- The black carbon, which is mostly due to human activities, reaches high altitudes with the help of wind systems.
- Black carbon absorbs more light and emits infra-red radiation that increases the temperature. So, when there is an increase in black carbon in the high Himalayas, it will **contribute to faster melting of Himalayan glaciers.**

### How black carbon is affecting the glacier melt?

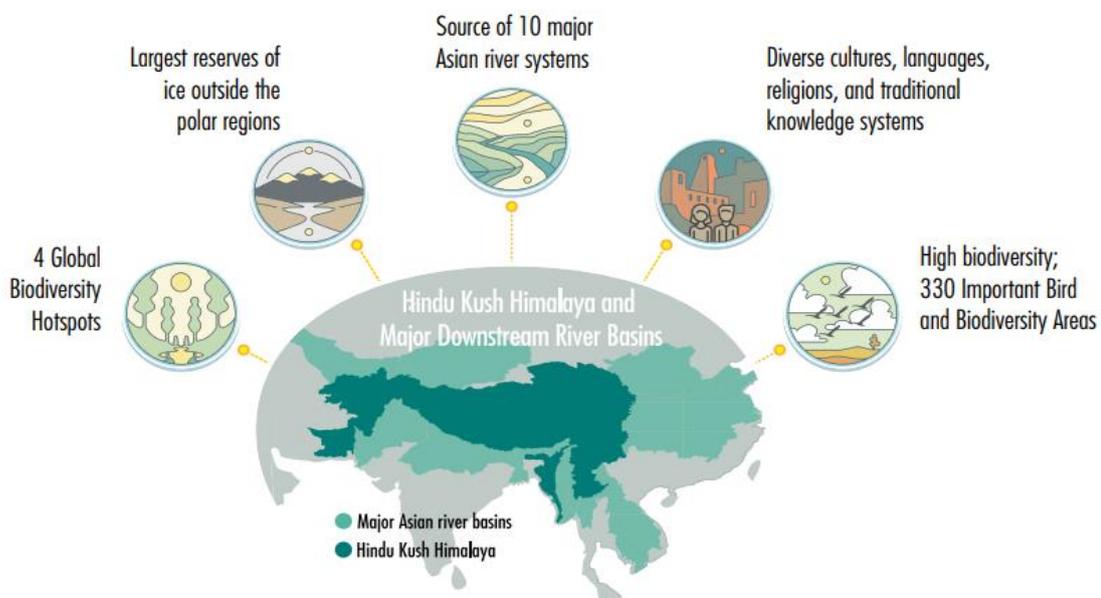
- Deposits of BC act in two ways hastening the pace of glacier melt:

- By decreasing surface reflectance of sunlight (albedo effect) by glaciers
- By raising the air temperature.

### About Himalaya, Karakoram and Hindu Kush (HKHK) mountain ranges



- The HKHK mountain ranges span 2,400 kilometers across six nations (Afghanistan, Bhutan, China, India, Nepal, and Pakistan).
- There are almost 55,000 glaciers in the HKHK mountains, and they store more freshwater “than any other region outside the North and South Poles”.



**240 million**

people depend directly on the HKH for their lives and livelihoods

**1.9 billion**

people depend on the HKH for water, food, and energy

**> 35%**

of the world population benefits indirectly from HKH resources and ecosystem services

- The glaciers contain estimated ice reserves of 163 cubic kilometres, of which almost

80% feeds the Indus, the Ganges and the Brahmaputra, the report says. Snow and

glacier melt from the HKHK play an important role in the timing and magnitude of water availability within the region.

- Glacier melt produces flash floods, landslips, soil erosion, and glacial lake outburst floods (GLOF), and in the short run, the higher volumes of melt water could replace receding groundwater downstream. But in the long run, decreased water availability would aggravate water shortage.
- The rate of retreat of HKHK glaciers is estimated to be 0.3 metres per year in the west to 1.0 metre per year in the east.

#### Why in the news?

- The World Bank's South-Asian Development Forum has recently published a report titled *Glaciers of the Himalayas Climate Change, Black Carbon, and Regional Resilience*.
- The report has positively pointed out that with collaborative approach of all regional governments the effects of Black Carbon in the Himalayan region by 50% from current levels.
- Measure to decrease black carbon emission given in the report are:
  - Enhancing fuel efficiency standards for vehicles,
  - Phasing out diesel vehicles and promoting electric vehicles,
  - Accelerating the use of liquefied petroleum gas for cooking and through clean cookstove programmes,
  - As well as upgrading brick kiln technologies.
- Reducing black carbon emissions from cookstoves, diesel engines, and open burning
- Greater knowledge sharing in the region and regional governments coming together on the policies of water management.
- BC is a short-lived pollutant that is the **second-largest contributor to warming the planet behind carbon dioxide (CO<sub>2</sub>)**. Unlike other greenhouse gas emissions, BC is quickly washed out and can be eliminated from the atmosphere if emissions stop, the report said.

## 6) World Environment Day Stockholm Conference

- United Nations Conference on the Human Environment, by name Stockholm Conference, the first United Nations (UN) conference that focused on international environmental issues.
- The conference, held in Stockholm, Sweden, from June 5 to 16, 1972, reflected a growing interest in conservation issues worldwide and laid the foundation for global environmental governance.
- The Stockholm Conference also led to the creation of the **United Nations Environment Programme (UNEP)** in December 1972 to coordinate global efforts to promote sustainability and safeguard the natural environment.

#### World Environment Day

- World Environment Day has been celebrated since 1974 on June 5, to mark the **Stockholm Conference**, held from June 5-16.
- World Environment Day has helped the UNEP to raise awareness and generate political momentum around growing concerns, such as the depletion of the ozone layer, toxic chemicals, desertification and global warming.
- Every World Environment Day is hosted by a different country in which official celebrations take place.
- **Why in the news?**
- World Environment Day is being celebrated all over the world on June 5th 2021 with the theme '**Ecosystem Restoration**'.
- This will also mark the beginning of the **UN Decade on Ecosystem Restoration (2021-2030)**, a global mission to revive billions of hectares, from forests to farmlands, from the top of mountains to the depth of the sea.
- This year's host of World Environment Day is **Pakistan**.

#### About Ecosystem Restoring

- An ecosystem is a community of living and nonliving things that work together. Ecosystems have no particular size.
- An ecosystem can be as large as a desert or a lake or as small as a tree or a puddle. It is the fundamental unit of the environment.
- Ecosystem restoration means assisting in the recovery of ecosystems that have been degraded or destroyed, as well as conserving the ecosystems that are still intact.

- Restoration can happen in many ways – for example through actively planting or by removing pressures so that nature can recover on its own.
- It is not always possible – or desirable – to return an ecosystem to its original state. We still need farmland and infrastructure on land that was once forest, for instance, and ecosystems, like societies, need to adapt to a changing climate.

#### **What are the benefits of ecosystem restoration?**

- Between now and 2030, the restoration of 350 million hectares of degraded terrestrial and aquatic ecosystems could generate US\$9 trillion in ecosystem services.

- Restoration could also remove 13 to 26 gigatons of greenhouse gases from the atmosphere.
- The economic benefits of such interventions exceed nine times the cost of investment, whereas inaction is at least three times more costly than ecosystem restoration.
- Restoring ecosystems large and small protects and improves the livelihoods of people who depend on them. It also helps to regulate disease and reduce the risk of natural disasters. In fact, restoration can help us **achieve all of the Sustainable Development Goals.**

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# ECONOMY

## 1) Index of Eight Core Industries

### About ICI

- The monthly Index of Eight Core Industries (ICI) is a **production volume index**.
- The objective of the ICI is to provide an advance indication on production performance of industries of 'core' nature. These industries are likely to impact on general economic activities as well as industrial activities.
- The Eight Core Industries- **Electricity, steel, refinery products, crude oil, coal, cement, natural gas and fertilizers**- comprise **40.27 per cent of the weight of items included in the Index of Industrial Production (IIP)**.
- **Industry Weight (In percentage)**
  1. Petroleum & Refinery production - 28.04
  2. Electricity generation - 19.85
  3. Steel production - 17.92
  4. Coal production - 10.33
  5. Crude Oil production - 8.98
  6. Natural Gas production - 6.88
  7. Cement production - 5.37
  8. Fertilizers production - 2.63
- ICI is released by the **Office of Economic Advisor**, under the Ministry of Commerce and Industries. The base year of the ICI is **2011-12**.

### Why in News?

- According to the latest official data, the output of eight core sectors increased by 56.1% in April due to an uptick in production of natural gas, refinery products, steel, cement and electricity.
- The eight infrastructure sectors of coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity had contracted by 37.9% in April 2020 due to the national COVID-19 lockdown.

## 2) Purchasing Managers' Index

### What is PMI?

- Purchasing Managers' Index is an economic indicator which indicates the business activity & economic health of both the **manufacturing and service sectors**.
- PMI of India is published by Japanese firm **Nikkei** but compiled and constructed by

**IHS Markit**, a London-based global information provider.

- PMI is an **investor sentiment tracking index** and is more dynamic in nature. They are derived from monthly surveys of about 400 private companies.
- Variables used for calculating the PMI are: Output, New Orders, Employment, Input Costs, Output Prices, Backlogs of Work, Export Orders, Quantity of Purchases, Suppliers' Delivery Times, Stocks of Purchases and Stocks of Finished Goods.
- 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.

### How to read PMI?

- While PMI >50 implies an expansion of business and economic activity, PMI <50 means contraction.

### Why in News?

- According to the latest PMI data, activity in the dominant services industry contracted in May for the first time in eight months as lockdowns to curb the second wave of COVID-19 dampened demand, prompting firms to cut jobs at the fastest pace since October.
- The Nikkei/IHS Markit Services Purchasing Managers' Index fell to a **nine-month low of 46.4** in May, from 54.0 in April, sliding below the 50-level that separates growth from contraction for the first time in eight months.

## 3) RBI keeps policy rates unchanged

### About MPC

- The Monetary Policy Committee (MPC) is a committee of the RBI which is entrusted with the task of fixing the benchmark policy interest rate (repo rate) to **contain inflation within the specified target level**.
- The 2016 amendment of the Reserve Bank of India Act, 1934 provides for a statutory and institutionalised framework for the MPC.
- The MPC has **six members**

- **RBI Governor (Chairperson)**, RBI Deputy Governor in charge of monetary policy, one official nominated by the RBI Board and remaining 3 members would represent the Government.
- The MPC makes decisions based on **majority vote**. In case of a tie, the **RBI governor will have a second or casting vote**.

#### Why in News?

- The Monetary Policy Committee having taken stock of the evolving macroeconomic and financial conditions as well as the impact of the second wave of the pandemic voted unanimously to maintain status quo, keeping the **policy repo rate unchanged at 4%**.
- The MPC also decided unanimously to continue with the **accommodative stance** as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward.
- The **Marginal Standing Facility (MSF) rate** remains unchanged at **4.25%**. The **reverse repo rate** also remains unchanged at **3.35%**.

#### Related information

##### Repo Rate & Reverse Repo Rate

- Repo rate is the rate of interest which is applied by RBI to commercial banks when the latter borrows from RBI. Reverse Repo rate is the rate at which RBI borrows money from commercial banks by lending securities.
- Both the Repo rate and Reverse Repo rate are used to **control inflation and money supply in the economy**.
- In the event of rising inflation, the RBI increases the repo rate which will act as a disincentive for banks to borrow from the central bank.
- This ultimately reduces the money supply in the economy and thus helps in arresting inflation. Similarly, if it wants to make it cheaper for banks to borrow money, it reduces the repo rate.

#### About MSF

- Marginal Standing Facility is an overnight liquidity support provided by RBI to commercial banks with a higher interest rate over the repo rate.

- MSF can be used by a bank after it exhausts its eligible security holdings for borrowing under other options. Under MSF, banks can borrow funds from the RBI by pledging government securities within the limits of the Statutory Liquidity Ratio (SLR).
- MSF, being a penal rate, is **always fixed above the repo rate**.
- **Objectives**
- The scheme was introduced by RBI with the main aim of **reducing volatility in the overnight lending rates** in the inter-bank market and to enable **smooth monetary transmission** in the financial system.
- In 2020, the RBI increased the cap for liquidity available under the marginal standing facility, **from 2 per cent to 3 per cent of their Net Demand and Time Liabilities (NDTL) — or deposits**.

#### Monetary policy stance

- The Central Banks use different terms to indicate its monetary policy stance on deciding policy rates like repo rate.
- **“Accommodative”** indicates that the central bank is telling the market to expect a rate cut anytime, **“neutral”** means that RBI could either increase or reduce repo rates as per liquidity conditions, **“calibrated tightening”** means that a cut in the repo rate is unlikely in the current rate cycle.

## 4) GDP shrinks by 7.3%

#### What's in the news?

- As per provisional National Income estimates released by the **National Statistical Office, India's Gross Domestic Product (GDP) contracted by 7.3% in 2020-21**, marginally better than the 8% contraction in the economy projected earlier.
- GDP growth in 2019-20, prior to the COVID-19 pandemic, was 4%.

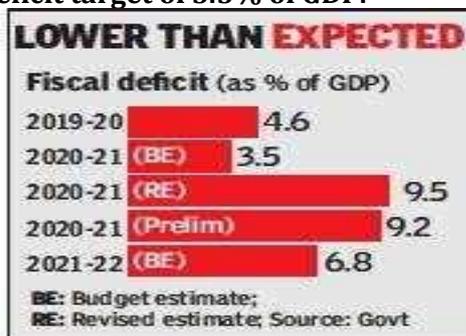
#### GVA

- The **Gross Value Added (GVA) in the economy shrank 6.2% in 2020-21**, compared to a 4.1% rise in the previous year.
- Only two sectors bucked the trend of negative GVA growth — **agriculture, forestry and fishing**, which rose 3.6%, and **electricity, gas, water supply and other utility services** (up 1.9%).

- Though this is the bleakest performance on record for the economy, the fourth quarter (Q4) of 2020-21 helped moderate the damage, with a higher-than-expected growth of 1.6% in GDP.
- This marked the second quarter of positive growth after the country entered a **technical recession** in the first half of the year.
- GDP had contracted 24.4% in the April to June 2020 quarter, followed by a 7.4% shrinkage in the second quarter. It had returned to positive territory in the September to December quarter with a marginal 0.5% growth.

### Fiscal Deficit

- India recorded a **fiscal deficit of 9.2% of GDP in 2020-21**, narrower than the revised estimate of 9.5%, as per data from the Controller General of Accounts (CGA) and official GDP figures.
- The Centre had revised its fiscal deficit target in the Budget from 3.5 per cent to 9.5 per cent due to increased expenditure on various schemes announced by the government to tide over the Covid-19 pandemic.
- Total revenue receipts were about ₹88,000 crore higher than estimated, driven largely by higher excise and customs collections, while total expenditure was ₹61,000 crore more than the revised estimate.
- The CGA projected the **revenue deficit at 7.42% of GDP**, which had been assumed at ₹194.82 lakh crore in the Union Budget.
- **Budget 2020-21**, presented before the COVID-19 lockdowns, had set a **fiscal deficit target of 3.5% of GDP**.



- *Fiscal deficit is the difference between total expenditure and total receipts except borrowing and other liabilities.*
- *Revenue deficit is defined as the difference between revenue expenditure and revenue receipts.*

For free learning, visit [www.officerspulse.com](http://www.officerspulse.com)

### Related Information

#### National Statistical Office

- The National Statistical Office (NSO) is the Statistics Wing of the **Ministry of Statistics and Programme Implementation**.
- In 2019, the central government merged the Central Statistical Organisation (CSO) and National Sample Survey Organisation (NSSO) into the National Statistical Organisation.
- NSO is mandated with the following responsibilities:-
  1. Acts as the nodal agency for planned development of the statistical system in the country
  2. Compiles and releases the **index of industrial production (iip)** every month and conducts the **annual survey of industries (asi)**;
  3. Organizes and conducts periodic **all-india economic censuses**
  4. Prepares national accounts as well as publishes annual estimates of national product, government and private consumption expenditure, capital formation, savings, etc. As also the state level gross capital formation of supra-regional sectors and prepares comparable estimates of state domestic product (sdp) at current prices;

#### What is a technical recession?

- A technical recession is a term used to describe **two consecutive quarters of decline in output**. In the case of a nation's economy, the term usually refers to back-to-back contractions in real GDP.
- The most significant difference between a '**technical recession**' and a '**recession**' is that while the former term is mainly used to **capture the trend in GDP**, the latter expression encompasses an **appreciably more broad-based decline in economic activity** that covers several economic variables including employment, household and corporate incomes and sales at businesses.
- Another key feature of a technical recession is that it is **most often caused by a one-off event** (in this case, the COVID-19 pandemic and the lockdowns imposed to combat it) and is **generally shorter in duration**.

For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)

# INTERNATIONAL RELATIONS

## 1) Uighurs

### About Uighur issue

- The **Xinjiang province** in China's far west has had a long history of discord between the authorities and the indigenous ethnic Uighur population.
- Most Uighurs are **Muslim**, their language is related to **Turkish**, and they regard themselves as culturally and ethnically close to Central Asian nations.



- Some Uighurs living there refer to the region as **East Turkestan** and argue that it ought to be independent from China. There have been open calls for **separation of Xinjiang from China** since the 1990s. Since then, China suppressed any dissent from Uyghur and began placing restrictions on them.
- Ethnic tensions caused by economic and cultural factors are considered the root cause of the recent violence. There are complaints of severe restrictions on Islam, with fewer mosques and strict control over religious schools.

### Recent developments

- Rights activists have said the Xinjiang region is home to a vast network of extrajudicial internment camps that have imprisoned at least one million people, which China has defended as vocational training centres to counter extremism.
- Most of the people who have been arbitrarily detained are Uighur. Human

rights organizations, UN officials, and many foreign governments are urging China to stop the crackdown.

- But Chinese officials maintain that what they call vocational training centers do not infringe on Uighurs' human rights. They have refused to share information about the detention centers, and prevented journalists and foreign investigators from examining them.

### Why in News?

- Three Uighurs who fled from China to Turkey have described forced abortions and torture by Chinese authorities in the far western Xinjiang region, ahead of giving testimony to a people's tribunal in London that is investigating if Beijing's actions against the ethnic Uighurs amount to genocide.
- The three witnesses include a woman who said she was forced into an abortion at six and a half months pregnant, a former doctor who spoke of draconian birth control policies, and a former detainee who alleged he was "tortured day and night" by Chinese soldiers while he was imprisoned in the remote border region.
- The tribunal, which does not have U.K. government backing, will be chaired by prominent human rights lawyer Geoffrey Nice. The tribunal's judgment is not binding on any government, organisers hope the process of publicly laying out evidence will compel international action to tackle concerns about alleged abuses in Xinjiang against the Uighurs, a largely Muslim ethnic group.
- The tribunal is the latest attempt to hold China accountable for alleged rights abuses against the Uyghurs and other predominantly Muslim and ethnic Turkic minorities.

## 2) Organisation for the Prohibition of Chemical Weapons

### About OPCW

- The Organisation for the Prohibition of Chemical Weapons (OPCW) is an intergovernmental organisation and the

### implementing body for the Chemical Weapons Convention (CWC).

- The OPCW, with its 193 Member States (including **India**), oversees the global endeavour to permanently and verifiably eliminate chemical weapons.
- Its headquarters are located in The Hague, Netherlands.

#### About CWC

- The Chemical Weapons Convention is a universal, non-discriminatory, multi-lateral, disarmament treaty which prohibits the development, production, stock-piling and use of chemical weapons and monitors its elimination in order to secure a chemical weapons free world.
- The Convention entered into force in 1997. As on date, 193 countries are parties to the Convention.
- **India** is a signatory and party to the convention. India, pursuant to provisions of the Convention enacted the **Chemical Weapons Convention Act, 2000**.

#### Why in News?

- The head of OPEC Fernando Arias told the U.N. Security Council that its experts have investigated 77 allegations against Syria, and concluded that in 17 cases chemical weapons were likely or definitely used.
- He called it “a disturbing reality” that eight years after Syria joined the Chemical Weapons Convention, which bans the production or use of such weapons, many questions remain about its initial declaration of its weapons, stockpiles and precursors and its ongoing programme.
- Syria was pressed to join the chemical weapons convention in 2013 by its close ally Russia after a deadly chemical weapons attack that the West blamed on Damascus.
- By 2014, President Bashar al-Assad’s government declared that the destruction of its chemical weapons was completed. But Syria’s initial declaration to the OPCW has remained in dispute.
- In April 2020, OPCW investigators blamed three chemical attacks in 2017 on the Syrian government. The OPCW Executive Council responded by demanding that Syria provide details.
- When it didn’t, France submitted a draft measure on behalf of 46 countries in

November to suspend Syria’s “rights and privileges” in the global watchdog. In an unprecedented vote on April 21, the OPCW suspended Syria’s rights until all outstanding issues are resolved.

### 3) Tiananmen Square Massacre

#### What is it?

- The Tiananmen Square protests were student-led demonstrations calling for democracy, free speech and a free press in **China**.
- They were halted in a bloody crackdown, known as the **Tiananmen Square Massacre**, by the Chinese government on June 4 and 5, 1989.
- At the end of June 1989, the Chinese government said 200 civilians and several dozen security personnel had died. Other estimates have ranged from hundreds to many thousands.
- The image of an unidentified man standing alone in defiance and blocking a column of Chinese tanks on June 5 became the defining image of the protests.



#### Why in News?

- Hundreds of people gathered near a Hong Kong park despite a ban on an annual candlelight vigil remembering China’s deadly crackdown in Beijing’s Tiananmen Square.
- Hong Kong police banned the vigil for a second straight year, citing COVID-19 social distancing restrictions, although there have been no local cases in the city for more than six weeks.

**For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# SCIENCE AND TECHNOLOGY

## 1) Medical Oxygen

### Why in News:

- The government lifted restrictions on use of liquid oxygen for industrial purposes.

### What is oxygen?

- Oxygen is the chemical element with the symbol O and atomic number 8
- At standard temperature and pressure, two atoms of the element bind to form dioxygen, a colorless and odorless diatomic gas with the formula O<sub>2</sub>.
- It is a **highly reactive nonmetal**, and an oxidizing agent that readily forms oxides with most elements as well as with other compounds.
- After hydrogen and helium, **oxygen is the third-most abundant element in the universe** by mass.
- Oxygen constitutes about 65% of the mass of the human body and most of this is in the form of water.
- Oxygen also **makes up about 30% of the Earth and 20% of the atmosphere.**
- Another form (**allotrope**) of **oxygen, ozone (O<sub>3</sub>)**, strongly absorbs ultraviolet UVB radiation and the high-altitude ozone layer helps protect the biosphere from ultraviolet radiation. However, ozone present at the surface is a byproduct of smog and thus a pollutant.
- The common uses/effects of Oxygen are: **Breathing, Decomposition, Combustion, and Rusting**

- Oxygen can be produced

### Naturally-

- **Plants:** During photosynthesis, plants use sunlight, water, carbon dioxide to create energy and oxygen gas is liberated as a by-product of this process.
- **Sunlight:** Some oxygen gas is produced when the sunlight reacts with water vapour in the atmosphere.

### Artificially-

- Oxygen is produced in large quantities and at high purity as a gas or liquid by **cryogenic distillation**. Cryogenic Distillation is the process in which Nitrogen and Oxygen are separated from air.

### What is liquid medical oxygen(LMO)?

- Liquid Medical Oxygen is **high purity oxygen** used for medical treatment. It has been developed for use in the human body.
- According to the Drug Prices Control Order, 2013, LMO is placed under the **National List of Essential Medicines (NLEM)**.

### Why was there a sudden demand for medical oxygen?

- Most patients with **Covid-19** have a **respiratory tract infection**, and in the most severe cases their symptoms can include shortness of breath. In a small proportion of such cases, this can progress to a more severe and systemic disease characterised by **Acute Respiratory Distress Syndrome (ARDS)**.
- The lungs enable the body to absorb oxygen from the air and expel carbon dioxide. When a person inhales, the **tiny air sacs** in the lungs — **alveoli** — expand to capture this oxygen, which is then transferred to blood vessels and transported through the rest of the body.
- Respiratory epithelial cells line the respiratory tract. Their primary function is to protect the airway tract from pathogens and infections, and also facilitate gas exchange. And the **SARS-CoV-2 coronavirus can infect these epithelial cells**.
- To fight such infection, the body's immune system releases cells that trigger **inflammation**. When this inflammatory immune response continues, it **impedes the regular transfer of oxygen** in the lungs. Simultaneously, fluids build up too. Both these factors combined make it **difficult to breathe**.

### Government Initiatives undertaken to fight the oxygen shortage

- **Oxygen Express** -Trains that deliver LMO and oxygen cylinders around the country.
- **The Oxygen Enrichment Unit (OEU)** was developed by experts at the Council of Scientific and Industrial Research-National Chemical Laboratory (CSIR-NCL) to help reduce the use of ventilators and oxygen cylinders. In the early phases of a patient's recovery, supplementary oxygen in the form of OEUs can help them recover faster.

- Empty oxygen tankers are being airlifted by the **Indian Air Force (IAF)** to industrial operations that have transitioned to generate medical grade oxygen.
- **Disaster Management Act, 2005:** The Ministry of Home Affairs used the Disaster Management Act of 2005 (DM Act) to order the unfettered movement of inter-state oxygen-carrying vehicles.
- To improve the availability of LMO, the government has **reopened closed factories**, ex: Sterlite Plant
- **Where is industrial oxygen used?**
- Industrial uses of oxygen include **production of steel, plastics and textiles, brazing, welding and cutting of steels** and other metals, rocket propellant, oxygen therapy, and life support systems in aircraft, submarines, spaceflight and diving.
- **Smelting of iron** ore into steel **consumes 55%** of commercially produced oxygen

## 2) Chip shortage

### Why in News:

- Intel Corp's CEO said it could take several years for a global shortage of semiconductors to be resolved, a problem that has shuttered some auto production lines and is also being felt in other areas, including consumer electronics.
  - **What is a semiconductor chip?**
  - **Semiconductors** are materials which have a **conductivity between conductors (generally metals) and nonconductors or insulators** (such as most ceramics). Semiconductors **can be pure elements**, such as **silicon** or germanium, or **compounds** such as gallium arsenide or cadmium selenide.
  - A monolithic **integrated circuit (IC)** also known as microchip, silicon chip, computer chip or chip is basically a **miniaturized electronic circuit** that consists **mainly of semiconductor devices**, as well as passive components.
  - **ICs** are now used in virtually all **electronic equipment** and have revolutionized the world of electronics. **Computers, mobile phones, and other digital home appliances** are now inextricable parts of the structure of modern societies, made possible by the small size and low cost of ICs.
- **Automotive semiconductor ICs** with different functionalities are used in various automotive products, like navigation control, infotainment systems, and collision detection systems.

### Why is there a shortage?

- When the **pandemic** started shutting down parts of the global economy last year, most economists thought consumer spending would drop off a cliff as people lost their jobs or stopped buying nonessential goods.
- **Auto companies cut back on production** and ordered fewer of the chips needed to make their cars run. At the same time, millions of people forced to work or learn from home poured money they may have otherwise spent on movie tickets or vacations into TVs, computers and video game systems. **Electronics companies bought up** all **extra** chips to meet that demand, and when auto companies realized people still wanted cars it was too late.
- **Soaring demand** for smartphones, gaming consoles, tabs and other electronics by homebound consumers has prompted semiconductor makers to divert capacity away from the auto industry, leaving car parts suppliers struggling to keep their customers supplied.
- After the **global auto industry** shut down in the early phase of the coronavirus crisis and the resulting abrupt drop in demand, automobile manufacturers across all regions **increased their production** volumes much faster than expected by market experts. This resulted in large scale supply shortages for semiconductors.

### Who is producing these chips?

- Corporations and consumers globally use semiconductors in millions of devices, including space vehicles, car computers, smartphones, medical equipment, appliances, and more.
- In 2019, the **semiconductor industry** in the **United States** accounted for **47 percent** of the global semiconductor market.
- **Korean manufacturers** are second in the world with about **19 percent** of the market, with companies from Japan and the European Union (EU) each accounting for ten percent of the market.

### India and IC production

- The Indian electronics sector is tremendously growing with the **demand** expected to cross **USD 400 billion by 2023-24**.
- Domestic production has grown from USD 29 billion in 2014-15 to nearly USD 70 billion in 2019-20 (Compounded Annual Growth Rate of 25%).
- Microchip production will help India move up from an assembler to a manufacturer, with **considerable multiplier effect** on the economy.
- **Most of this production** takes place in the **final assembly units** (last-mile industries) located in India and **focussing on them** would help **develop deep backward linkages**, thus inducing industrialisation. This was an idea propounded by economist Albert O **Hirschman** in his **theory** of '**Unbalanced Growth**'.
- **The Economic Survey 2019-20** also promoted this idea and suggested "**assembly in India for the world**", in a bid to create four crore well-paid jobs by 2025 and eight crore jobs by 2030.
- The **government** recently unveiled three **schemes** (**Production Linked Incentive Scheme, Component Manufacturing Scheme and Modified Electronics Manufacturing Clusters Scheme**) with an outlay of about ₹48,000 crore to promote electronics manufacturing in India.

#### What are the challenges faced in India?

- Huge Investments involved
- Semiconductor Fabrication will require cheap but skilled labor
- Requirement of very specific raw materials
- Hazardous Waste
- Infrastructure Requirement
- Absence of Foundries

### 3) Venus

#### Why in News:

- NASA announced plans to launch a pair of missions to Venus between 2028 and 2030.

#### About the mission

- To **study the atmosphere and geologic features of Venus** and better understand why Earth and Venus emerged so differently.
- **NASA** is awarding about \$500 million each to develop the two missions, dubbed **DAVINCI+** (short for Deep Atmosphere

Venus Investigation of Noble Gases, Chemistry and Imaging) and **VERITAS** (an acronym for Venus Emissivity, Radio Science, InSAR, Topography and Spectroscopy).

- **DAVINCI+** will measure the **composition of the dense, hothouse atmosphere** of Venus to further understand how it evolved, while **VERITAS** will **map the planet's surface from orbit** to help determine its geologic history.
- **DAVINCI+**, consisting of a fly-by spacecraft and an atmospheric descent probe, is also expected to return the first **high-resolution images** of unique geological characteristics on Venus called "**tesserae**." Scientists believe those features may be comparable to Earth's continents and suggest that Venus has plate tectonics.
- After two fly-by passes to capture **time-lapse imagery of Venus' clouds**, **DAVINCI+** will release its spherical probe for an hour-long descent to a vast mountainous region.
- Slowed first by a parachute, then by aerial friction, the probe will sample atmospheric chemistry, pressure and temperature all the way down, and take high-resolution images as it nears the surface.

#### About Venus

- **Earth's closest planetary cousin** and the second planet from the sun, Venus is similar in structure but slightly smaller than Earth and much hotter. Above its forbidding landscape lies a thick, toxic atmosphere consisting primarily of carbon dioxide, with **clouds of sulfuric acid droplets**.
- The consequence is a runaway greenhouse effect that scorches the surface of Venus at temperatures as high as 471°C. The "air" on Venus is so dense and pressurized that it behaves more like a fluid than a gas near the surface.
- Scientists believe **Venus may once have harbored seas of water** potentially suitable for life, before unknown forces triggered its extreme greenhouse effect, vaporising its oceans.
- Venus is a 'Rosetta stone' for reading the record books of **climate change**, the **evolution of habitability** and what happens when a planet loses a long period of surface oceans.

- **NASA's last** dedicated mission to Venus, the **Magellan spacecraft**, reached the planet in 1990. After four years in orbit making the first global map of the Venusian surface and charting its gravity field, Magellan was sent plunging to the surface to gather atmospheric data before ceasing operations.
- In 2020, a team of International Astronomers discovered the presence of **phosphine gas** in the atmosphere of Venus. Phosphine acts as a **biosignature** because it is known to be produced mainly through biological processes, and not through any naturally occurring chemical process.
- Earlier in **2011**, the **European Space Agency's** mission, **Venus Express**, found signs of **ozone**, a **biomarker**, in the upper atmosphere of Venus.

#### India's Venus Mission

- The **Shukrayaan** orbiter will be the **first mission to Venus** by the India Space Research Organization (ISRO)
- The purpose of the mission is investigation of the surface processes and shallow subsurface stratigraphy; and solar wind interaction with Venusian Ionosphere, and studying the structure, composition and dynamics of the atmosphere.
- The satellite is planned to be launched **onboard GSLV Mk II** rocket.

## 4) Tianzhou-2

### Why in News:

- **China's** cargo spacecraft, carrying supplies, equipment and propellant, docked with the space station's key module Tianhe.

### What is Tianzhou-2?

- The **Tianzhou-2**, or "Heavenly Vessel" in Chinese, is a **cargo spacecraft** carrying supplies for future astronauts including food for the **Shenzhou-12 crew** (The Shenzhou is a **crewed spaceflight initiative**)
- Tianzhou-2 is the **second of 11 missions** needed to complete **China's first self-developed space station** around 2022, and follows the launch of Tianhe, the first module.
- The three-module **space station will rival** the International Space Station (**ISS**), which is backed by countries including the United States, Russia and Japan. **China** was **barred**

from participating **in the ISS** by the United States.

## 5) South-West Monsoon

### Why in News:

- India Meteorological Department (IMD) predicts the South-west monsoon this year is expected to be normal with projected rainfall of 101 per cent.

### What is monsoon?

- Monsoon, a major wind system that seasonally reverses its direction—such as one that blows for approximately six months from the northeast and six months from the southwest.
- The most prominent monsoons occur in South Asia, Africa, Australia, and the Pacific coast of Central America. Monsoonal tendencies also are apparent along the Gulf Coast of the United States and in central Europe; however, true monsoons do not occur in those regions.
- The primary cause of monsoons lies in different warming trends over land and sea, though other factors may be involved. Seasonal changes in temperature are large over land but small over ocean waters, and monsoons blow from atmospheric heat sinks (that is, cold regions with high atmospheric pressure) toward heat sources (warm regions characterized by low atmospheric pressure). Consequently, monsoon winds typically travel from sea to land in summer and from land to sea in winter.

### What is south west monsoon

- Out of a total of 4 seasonal divisions of India, monsoon occupy 2 divisions-
  1. The southwest monsoon season - Rainfall received from the southwest monsoons is seasonal in character, which occurs between June and September.
  2. The retreating monsoon season - The months of October and November are known for retreating monsoons.

### Factors Influencing South-West Monsoon Formation

- Due to the **differential heating and cooling of land and water**, India's landmass has low pressure, whereas the waters around it have relatively high pressure.

- The **position of the Inter Tropical Convergence Zone (ITCZ)** over the Ganga plain in July (this is the equatorial trough that is generally located approximately 5°N of the equator). During the monsoon season, it is also known as the **monsoon-trough**.
  - In equatorial latitudes, the Inter Tropical Convergence Zone (ITCZ) is a large trough of low pressure. The northeast and southeast trade winds meet at this point. This convergence zone runs roughly parallel to the equator, but it shifts north or south in response to the apparent movement of the sun.
  - **The Southern Oscillation (SO)** occurs when the tropical eastern south Pacific Ocean has high pressure and the tropical eastern Indian Ocean has low pressure. However, there is a reversal in pressure conditions every few years, with the eastern Pacific having lower pressure than the eastern Indian Ocean. The SO is a term that refers to a periodic change in pressure circumstances.
  - **The presence of a high-pressure area over the Indian Ocean**, east of Madagascar, at about 20°S. The Indian Monsoon is affected by the intensity and location of this high-pressure region.
  - **During the summer, the Tibetan plateau** becomes extremely hot, resulting in strong vertical air currents and the creation of low pressure across the plateau at roughly 9 kilometres above sea level.
  - **During the summer, the westerly jet stream** moves north of the Himalayas, and the tropical easterly jet stream passes over the Indian peninsula.
  - **Tropical Easterly Jet** (African Easterly Jet).
- Mechanism of the South-West Monsoon**
- With the apparent **movement of the Sun**, the location of **ITCZ fluctuates north and south** of the equator.
  - The sun shines vertically over the Tropic of Cancer in June, causing the ITCZ to **migrate northwards**.
  - Under the influence of Coriolis force, the southern hemisphere's southeast trade winds cross the equator and begin blowing in a southwest to northeast direction. The force exerted by the rotation of the earth is known as the Coriolis force. Coriolis force is zero at Equator.
- As they pass over the warm Indian Ocean, these **winds accumulate moisture**.
  - The **ITCZ moves to 20°-25° N latitude in July**, and it is positioned in the Indo-Gangetic Plain, where the south-west monsoons blow from the Arabian Sea and the Bay of Bengal. The Monsoon Trough is the name given to the ITCZ while it is in this location.
  - The **phenomena of the westerly jet stream** withdrawing from its position over the north Indian plain, south of the Himalayas, is also linked to the shift in the ITCZ's position.
  - Only after the western jet stream has left the region does the **easterly Jet Stream (Somali Jet)** arrive along 15°N latitude. The easterly jet stream is credited with causing the Indian monsoon to burst.
  - The relief and thermal low pressure over northwest India change the direction of these winds as they reach the land. **The Indian landmass is approached** by the monsoon in two ways:
    1. The monsoon winds that originate over the Arabian Sea are known as the **Arabian Sea branch**.
    2. **The Bay of Bengal branch**-The Arakan Hills on Myanmar's coast deflect a large section of the Bay of Bengal branch towards the Indian subcontinent. As a result, the monsoon approaches West Bengal and Bangladesh from the south and southeast rather than the south-west.
  - The monsoon's **tendency to have 'breaks'** in rainfall is another feature linked with it. The rains of the monsoon season last only a few days at a time. Rainless intervals are interspersed throughout. The **migration of the monsoon trough** causes these gaps in the monsoon.
- Impact of Monsoon Positive**
- In India, agriculture provides a living for about **64%** of the population, and agriculture is **dependent** on the **monsoon**.
  - The monsoon climate varies by region, which aids in the **growth of diverse crops**.
  - The wide range of food, clothing, and home types in India reflects **regional monsoon variance**.
  - **Dams and reservoirs** are refilled, which is then utilised to generate **hydroelectric power**.

- In north India, winter rainfall from temperate cyclones is extremely beneficial to **Rabi crops**.

#### Negative

- **Droughts or floods** occur every year in some sections of the country due to rainfall variability.
- **Soil erosion** is a concern in significant parts of India because of the sudden monsoon burst.
- Sudden **downpour** causes **landslides** in steep locations, destroying natural and physical infrastructure and impacting human life economically and socially.

#### IMD

- The Indian Meteorological Department was established in 1875. It is the National Meteorological Service of the country and the **principal government agency** in all matters relating to meteorology, seismology and allied subjects. In 2014, the IMD started to use numerical models to supplement statistical models for long-range forecasting as well. The IMD collects weather data like **temperature, humidity, wind and precipitation through 679** automatic weather stations, 550 surface observatories, 43 radiosonde or weather balloons, 24 radars and three satellites.
- Currently, highly advanced dynamical models need **supercomputers**. Prediction models will not run until proper data about current weather conditions is available.
- The **functions** of IMD are
  1. To take meteorological **observations** and to provide current and forecast meteorological information for optimum operation of weather-sensitive activities

like agriculture, irrigation, shipping, aviation, offshore oil explorations, etc.

2. To **warn** against severe weather phenomena like tropical cyclones, norwesters, dust storms, heavy rains and snow, cold and heat waves, etc., which cause destruction of life and property.
3. To provide **meteorological statistics** required for agriculture, water resource management, industries, oil exploration and other nation-building activities.
4. To conduct and promote **research** in meteorology and allied disciplines.
5. To **detect and locate earthquakes** and to evaluate seismicity in different parts of the country for development projects.

#### Related Government schemes

- **Monsoon Mission of India-** This **Ministry of Earth Sciences** programme, which began in 2012, uses high resolution, super parameterizations, data assimilation etc. to increase forecast skill for IMD.
- **IMD** provides meteorological **support** to the **Central Water Commission (CWC)** for issuing flood warnings.
- **National Supercomputing Mission** provides the computing superpower required to predict timely and accurate monsoon forecasts.
- The **Research Vessel, 'Sagar Nidhi,'** is part of an Indo-US mission to collect data on the vagaries of the Bay of Bengal-fed southwest monsoon.
- IMD in collaboration with **Indian Council of Agricultural Research (ICAR)** provides **district-level agro-meteorological advisories**

**For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# DEFENCE

## 1) Suryakiran aerobatic display

### Why in News:

- The Suryakiran aerobatic display team of the Indian Air Force (IAF) has just completed 25 years.

### About the team

- One of the few nine aircraft display teams in the world and the only one in Asia.
- Since its inception, the **SKAT** (The Suryakiran Aerobatic Team) has carried out over 600 displays all around the country, it has also represented India across southeast Asia including China.
- Marking the **golden jubilee year of the 1971 Liberation War of Bangladesh**, the SKAT team has been flying different formations over landmarks across the country starting from Kanyakumari in the south.
- **At Aero India 2021**, the Suryakiran teamed up with the **Sarang helicopter display team** in the world's first-ever integrated display of nine aircraft and four helicopter teams.
- Their **first foreign** display was for the **Sri Lankan Air Force Day** in Colombo in 2001 and the most recent was to commemorate the 20th Sri Lankan Air Force Day.

## 2) Negative Import List

### Why in News?

- The Defence Ministry notified the second negative import list — now renamed as the '**positive indigenisation list**'— which can be only purchased from indigenous sources.

### What is a Negative Import List (positive indigenisation list)

- The negative list essentially means that the Armed Forces—Army, Navy and Air Force, will only **procure** such items **from domestic manufacturers**.
- The **manufacturers could be private sector players or Defence Public Sector Undertakings (DPSUs)**.

### Significance

- Not only does the list **recognise** the potential of the **local defence industry**, it will also invigorate impetus to **domestic Research and Development** by attracting

fresh investment into technology and manufacturing capabilities.

- The list also provides an excellent opportunity for '**start-ups**' as also Micro, Small and Medium Enterprises (**MSMEs**).
- As per Stockholm International Peace Research Institute, **India** has been the **second largest importer between 2014 and 2019** with US\$ 16.75 billion worth of imports during this period.
- The government wants to **reduce the dependence on imported items** in defence and give a shot in the arm to the domestic defence manufacturing industry.
- By denying the possibility of importing the items on the negative list, the **domestic industry** is given the opportunity to step up and manufacture them for the needs of the forces.
- This will **boost indigenisation of defence production** and is in line with the government's **target to reach a turnover of USD 25 billion by 2025** through indigenously manufactured defence products.
- It is a big step towards **self-reliance in defence under the Atmanirbhar Bharat initiative**.
- *To read about Aatma Nirbhar Bharat:*
- <https://officerspulse.com/aatma-nirbhar-bharat-package/>
- <https://officerspulse.com/aatmanirbhar-bharat/>

## 3) Andaman-Nicobar theatre command

### Why in News:

- India's Eastern Army Command, Andaman-Nicobar Command gets new chiefs.

### What is a theatre command?

- A **theatre command** is an organisational structure that is responsible for **commanding all military assets** in a theatre of battle in order to achieve military objectives.
- In military jargon, a **combined command** is referred to as a "theatre command" (of army, air force and navy).
- It places a **senior military commander in charge of all forces' resources**.

### About Andaman & Nicobar Command (ANC)

- It is the **first and only Tri-Service theatre command** of the **Indian Armed Forces**, based at Port Blair in Andaman and Nicobar Islands of India.
- It was established in 2001 to protect India's strategic interests in Southeast Asia and the Strait of Malacca by enhancing the speed with which military assets might be deployed in the islands.
- **Officers and personnel from all three services** (Navy, Air Force, and Army) **serve under** the command of an officer from the Navy.
- It **conducts** biannual coordinated patrols (CORPATs) with the navies of Thailand and Indonesia , the annual SIMBEX maritime exercise with Singapore, and the biennial Milan multilateral naval exercise.
- It also performs **maritime surveillance**, humanitarian assistance and disaster relief (**HADR**) throughout India's exclusive economic zone and also combat gun running, **drugs smuggling, piracy, and poaching**.

#### **Importance of Andaman and Nicobar Islands**

- Its **location** in Indian Ocean Region (IOR): **One-Fourth of the total world population**

and **one-third of littoral states** of the world are located around IOR.

- Large **volume of the World's trade**, particularly oil and gas passes through this ocean.
- Islands provide for **30% of India's total Exclusive Economic Zone (EEZ)**.
- Due to the presence of islands in Indian Ocean, India is part of many **maritime regional groupings**.
- Part of Trade Route: The **ten degree channel** (that separates the Andaman Islands and Nicobar Islands from each other in the Bay of Bengal) through which the majority of **trade** passes from South China Sea and Pacific to Indian Ocean is between North and South Nicobar Islands.
- **Buffer Zone:** Andaman and Nicobar Islands act as a buffer zone between India and rest of the nations present in Indian Ocean Region (IOR).
- **Strategic Outpost:** Through these islands, India is able to defend its vital stakes in IOR. The ANC has been set up for this reason only.

**For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

## PIB ANALYSIS

### 1) Pradhan Mantri Van Dhan Yojana

#### About the scheme

- Pradhan Mantri Van Dhan Yojana (PMVDY) is a **retail marketing led value addition plan for Minor Forest Produce (MFP)**, meant for forest-based tribes to optimize the tribal income, locally.
- Under the program, MFP-based tribal groups / enterprises of around 300 members are formed for collection, value addition, packaging & marketing of Minor Forest Produces.
- It is an initiative of the **Ministry of Tribal Affairs and TRIFED**.

#### About Minor Forest Produce

- **MFP** means all non-timber forest produce of plant origin and will include bamboo, canes, fodder, leaves, gums, waxes, dyes, resins and many forms of food including nuts, wild fruits, Honey, Lac, Tusser etc. The Minor Forest Produces provide both **subsistence and cash income for people who live in or near forests**.
  - A number of people from Scheduled Tribes and other forest-dwelling communities depend on the collection and sale of such items for their livelihood.
  - The Minor Forest Produce has significant economic and social value for the forest dwellers as an estimated 100 Million people derive their source of livelihood from the collection and marketing of Minor Forest Produce (Report of the National Committee on Forest Rights Act, 2011).
- These tribal enterprises will be in the form of Van Dhan Self Help Groups which will be a group of 15-20 members and such 15 SHG groups will further be federated into a larger group of **Van Dhan Vikas Kendras (VDVKS)** of around 300 members.
  - **TRIFED** will support the VDVKS through providing them with model business plans, processing plans & tentative list of equipment for carrying out the value addition work of MFPs.

#### TRIFED

- The Tribal Cooperative Marketing Development Federation of India (TRIFED) came into existence in 1987. It is a national-level apex organization functioning under the administrative control of the Ministry of Tribal Affairs.
- TRIFED has its Head Office located in New Delhi and has a network of 13 Regional Offices located at various places in the country.

#### Objectives

- The ultimate objective of TRIFED is socio-economic development of tribal people in the country by way of marketing development of the tribal products such as metal craft, tribal textiles, pottery, tribal paintings and pottery on which the tribals depend heavily for a major portion of their income.
- TRIFED acts as a facilitator and service provider for tribes to sell their product.
- The approach by TRIFED aims to empower tribal people with knowledge, tools and pool of information so that they can undertake their operations in a more systematic and scientific manner.
- It also involves capacity building of the tribal people through sensitization, formation of Self Help Groups (SHGs) and imparting training to them for undertaking a particular activity.

#### Main activities to TRIFED include:

- Retail Marketing Development
- Minor Forest Produce Marketing Development
- Skill up-gradation & Capacity Building of ST Artisans and MFP Gatherers
- R&D Development/Intellectual Proprietary Rights (IPR) Activity

#### Why in the news?

- Van Dhan Yojana is set to be expanded this year in the Union Territories of Dadra and Nagar Haveli and Daman and Diu.

### 2) Government e-Marketplace

#### About GeM

- Launched in 2016, the Government e-Marketplace (GeM) is a 100 percent

government-owned company setup under the aegis of the **Ministry of Commerce and Industry**.

- It is a completely paperless, cashless and system driven e-market place that enables procurement of common use goods and services with minimal human interface.
- GeM aims to enhance transparency, efficiency and speed in public procurement.
- GeM was developed with the technical support of the **National eGovernance Division** (Ministry of Electronics and Information Technology).
- In 2017, the government made it **mandatory** for all the departments and ministries to source goods and services from the GeM.

#### Vision

- To affect an evolution in public procurement promoting a **transparent, efficient and inclusive marketplace**.

#### Mission

- Institute a unified procurement policy to encourage behavioral change and drive reform.
- Establish a lean, dynamic organization capable of continuous innovation and market driven decision making.
- Build an easy to use, fully automated platform to ensure transparency and efficiency in procurement
- Demonstrate commitment to delivering value by ensuring right quality at right price
- Create a sustainable ecosystem covering all stakeholders and driving inclusive development in India.

#### Why in the news?

- Minister of Railways, Commerce & Industry, Consumer Affairs and Food & Public Distribution Piyush Goyal recently called upon **Government e-Marketplace (GeM) to expand its scope** and include more participants in GeM portal for public procurement of both Products & Services.

### 3) Agricultural and Processed Food Products Export Development Authority

#### About APEDA

- The **Agricultural and Processed Food Products Export Development Authority (APEDA)** was established by the Government of India under the

#### Agricultural and Processed Food Products Export Development Authority Act, 1985.

- The Authority replaced the Processed Food Export Promotion Council (PFEPCC).
- It functions under the **Ministry of Commerce and Industry**.

#### Functions of APEDA

- **Development of industries** relating to the scheduled products for export by way of providing financial assistance or otherwise for undertaking surveys and feasibility studies, participation in enquiry capital through joint ventures and other reliefs and subsidy schemes;
- **Registration of persons as exporters** of the scheduled products on payment of such fees as may be prescribed;
- **Fixing of standards and specifications** for the scheduled products for the purpose of exports;
- **Carrying out inspection** of meat and meat products in slaughterhouses, processing plants, storage premises, conveyances or other places where such products are kept or handled for the purpose of ensuring the quality of such products;
- **Improving of packaging** of the Scheduled products;
- **Improving of marketing** of the Scheduled products outside India;
- **Promotion of export oriented production** and development of the Scheduled products;

#### Products monitored

- APEDA is mandated with the responsibility of **export promotion and development** of the following scheduled products:
  - a. **Fruits, Vegetables and their Products.**
  - b. **Meat and Meat Products.**
  - c. **Poultry and Poultry Products.**
  - d. **Dairy Products.**
  - e. **Confectionery, Biscuits and Bakery Products.**
  - f. **Honey, Jaggery and Sugar Products.**
  - g. **Cocoa and its products, chocolates of all kinds.**
  - h. **Alcoholic and Non-Alcoholic Beverages.**
  - i. **Cereal and Cereal Products.**
  - j. **Groundnuts, Peanuts and Walnuts.**
  - k. **Pickles, Papads and Chutneys.**
  - l. **Guar Gum.**
  - m. **Floriculture and Floriculture Products.**
  - n. **Herbal and Medicinal Plants.**

- In addition to this, APEDA has been entrusted with the responsibility to monitor **import of sugar**.

#### Why in the news?

- To commemorate **World Milk Day**, APEDA organized a webinar cum interactive session on the prospects of harnessing the full potential of dairy products exports from the country.

### 4) SAGE portal

#### Why in the news?

- The Minister of **Social Justice and Empowerment**, virtually launched the **SAGE (Seniorcare Aging Growth Engine)** initiative and **SAGE portal** for elderly persons recently.
- An amount of Rs 100 crore has been assigned for the promotion of the **silver economy**.
- *Silver economy is the system of production, distribution and consumption of goods and services aimed at using the purchasing potential of older and ageing people and satisfying their consumption, living and health needs.*

#### About the Portal and initiative

- The SAGE portal will be a “**one-stop access**” of **elderly care products** and services by credible start-ups.
- It has been launched with a view to help such persons who are interested in entrepreneurship in the field of providing services for elderly care.
- The SAGE project aims to identify, evaluate, verify, aggregate, and deliver products, solutions and services directly to the stakeholders.
- The Ministry will act as a facilitator, enabling the elderly to access the products through these identified start-ups.

#### Features:

- Start-ups can apply for being a part of SAGE through the SAGE portal from June 5th 2021 onwards.
- The start-ups will be selected by an **independent screening committee** of experts.
- The start-ups will be selected on the **basis of innovative products and services**, which they should be able to provide across sectors such as health, housing, care

centers, apart from technological access linked to finances, food and wealth management, and legal guidance.

- A fund of **uptoRs.1 crore as one-time equity** will be granted to each selected start-up.

#### Need for the initiative

- The **share of elders**, as a percentage of the total population in the country, is expected to increase from around **7.5% in 2001 to almost 12.5% by 2026**, and surpass **19.5% by 2050** according to some surveys.
- There is an urgent need to create a more robust elder care ecosystem in India, especially in the post-COVID phase.

### 5) SATAT Initiative

#### About the initiative

- SATAT (**Sustainable Alternative Towards Affordable Transportation**) initiative was launched by the **Ministry of Petroleum and Natural Gas**, Government of India in 2018 for **boosting production and availability of CBG** as an alternative and affordable clean fuel for the transportation sector.
- The scheme envisages setting up of **5000 CBG plants by FY 2023-24**.
- SATAT establishes an ecosystem for the production of Compressed BioGas from various waste and biomass sources in the country leading to multiple benefits viz. **reduction of natural gas import, reduction of GHG emission, reduction in burning of agriculture residues, remunerative income to farmers, employment generation, effective waste management** etc.
- The initiative is in line with the goals of Atma Nirbhar Bharat, Swachh Bharat Mission and boosting the MSME sector.

#### Why in the news?

- Union Minister of Petroleum and Natural Gas & Steel Dharmendra Pradhan recently presided over a virtual ceremony in which a number of initiatives were launched to provide a major fillip to the SATAT initiative, and help India leap ahead towards a greener tomorrow.
- **For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# News in Depth

## AIR NEWS

### 1) MGNREGA

#### About the scheme

- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme is the largest social security scheme in the world — guaranteeing **100 days of work** each financial year to **any rural household** willing to do public work-related unskilled manual work at the statutory minimum wage.
- The act makes it **obligatory** for the State to give rural households work on demand. In case such employment is not provided within 15 days of registration, the applicant becomes eligible for an **unemployment allowance**.
- The **Ministry of Rural Development (MRD)** is monitoring the entire implementation of this scheme in association with state governments.

#### Key Features

- **One-third** of the stipulated workforce must be women.
- **Work site facilities** such as creche, drinking water and shade have to be provided.
- The employment will be provided **within a radius of 5 km**: if it is above 5 km extra wage will be paid.
- The wages are revised according to the **Consumer Price Index-Agricultural Labourers (CPI-AL)**.
- A **60:40 wage and material ratio** has to be maintained.
- Permissible works predominantly include water and soil conservation, afforestation and land development works.
- **Work site facilities** such as crèche, drinking water, shade have to be provided.
- **Gram sabhas** must recommend the works that are to be undertaken and at least 50% of the works must be executed by them.

- **Social Audit** has to be done by the Gram Sabha.

#### Why in News?

- The Centre has asked the States to split wage payments under the MGNREGA scheme into separate categories for Scheduled Castes, Scheduled Tribes and others from this financial year. The existing system for wages under the scheme is for only one type, that is there is no category wise provision of wage payment.
- However, workers' rights advocates said this will unnecessarily complicate the payment system, and expressed fears that it may lead to a reduction in scheme funding.

### 2) United Nations Security Council

#### About UNSC

- The United Nations Security Council (UNSC) was established in **1946** as **one of the six principal organs of the UN**. It is generally viewed as the apex of the UN system.
- It is responsible for the **maintenance of international peace and security**.
- Its powers include the establishment of peacekeeping operations, the establishment of international sanctions, and the authorization of military action through Security Council resolutions.
- It is the only UN body with the authority to issue **binding resolutions** to member states.

#### Membership

- UNSC consists of 15 Members.
- The council has **five permanent members** (P-5) United States, Russia, China, United Kingdom and France.
- These permanent members can **veto** any substantive Security Council resolutions, including those on the admission of new member states.

- The Security Council also has **10 non-permanent members**, elected on a **regional basis** as follows:
  1. Five for African and Asian States;
  2. One for Eastern European States;
  3. Two for the Latin American and Caribbean States; and
  4. Two for Western European and other States.
- Each year the 193-member UN General Assembly (UNGA) elects five non-permanent members for a **two-year term**.
- The body's presidency rotates monthly among its members.

#### **Vote and Majority Required**

- Each member of the Security Council shall have **one vote**.
- Decisions of the Security Council on **procedural matters** shall be made by an **affirmative vote of nine members**.

- Decisions of the Security Council on **all other matters** shall be made by an **affirmative vote of nine members including the concurring votes of the permanent members**.
- However, any member, whether permanent or nonpermanent, must abstain from voting in any decision concerning the peaceful settlement of a dispute to which it is a party.

#### **Why in News?**

- A UN Security Council meeting is set to take place as hostilities between Israel and Palestine enters the seventh day.
- International community has called for an end to the escalating conflict.

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

## THE HINDU EDITORIALS

### 1) Only a global effort can tame COVID-19

#### GS-2 Global Groupings; Deglobalisation & Protectionism

##### CONTEXT

- India has been witnessing an unprecedented surge in COVID-19 cases largely due to UK variants of CoronaVirus (B.1.1.7).
- The World Health Organization (WHO) recently declared the variant first found in India (B.1.617) as a variant of global concern as it has already spread to more than 40 countries.
- This fast spread of these New variants underscores the fact that **no one is safe until everyone is safe.**
- Hence there is a **need for the mass production of vaccines** in order to inoculate the global population.

##### ISSUES WITH COVID VACCINES IN INDIA

- Because of the second wave vaccine hesitancy has ended in the country resulting in **shortage of Vaccines** across the country and **criticism of the government's Vaccine Maitri policy.**
- As a result of the shortage, Indian government has imposed temporary restrictions on the export of COVID-19 vaccines.
- Also, all those aged 18 and above became eligible in India to receive the COVID-19 vaccines.
- Yet only a little over **12% of the population has received one dose** and **3.2% has received both the doses in India** so far.
- Further, the local **vaccine producers of Covishield and Covaxin are not able to meet the domestic demand.**
- Despite all of this, it is aspected that soon with the rise of production of these companies and the entry of Sputnik, the condition of vaccine supply is bound to increase in India.
- However, even if all the three vaccines are exclusively used for domestic supply, it will not be sufficient to meet the enormous vaccine demand.

##### WHAT INDIA NEEDS TO DO?

- **India being the pharmacy of the world should rise on the occasion** to meet both its domestic demand and world especially of the poorer countries.
- **Restrictions on export of Covid Vaccines should be only temporary** and it **should not result in vaccine nationalism.**
- **Pandemic needs to be checked globally. If this is not done, the virus will keep mutating.**

##### STEPS TAKEN FOR MASS PRODUCTION OF COVID VACCINE

- In the first week of May, the **Indian Council of Medical Research showed willingness to share the know-how to produce Covaxin** with any company interested in its production.
- This step was aimed at increasing competition and hence reduction in the price and enhancing of vaccine production.
- To enhance the production of Covaxin, the **Government has also involved three public sector enterprises** namely Haffkine Biopharmaceutical Corporation, Bharat Immunologicals and Biologicals Corporation Limited, and Indian Immunologicals Limited in vaccine production.

##### WAY FORWARD

- India needs to frame a **long-term strategy to enhance supply** at the domestic and international level in light of the fact that infectious diseases are expected to increase in the coming years.
- **Public sector enterprises in the pharmaceuticals sector** should be given status as **strategically important** in the Public Sector Enterprise Policy.
- Unavailability of raw materials, complexities in the transfer of technology, and intellectual property barriers all hinder production. Hence India should actively **pursue for waiver under the TRIPS agreement** as Intellectual property rights act as a major barrier in scaling up production.
- **Global cooperation** is needed so that companies interested in producing the mRNA vaccines get open licences from the

innovators. This is because of the higher benefits of mRNA vaccine technology.

- **WHO at present has approved two mRNA COVID-19 vaccines produced by Pfizer-BioNtech and Moderna.**
- Last but not the least **Global Cooperation is needed in sequencing of the viral genome** to track and control the multiple variants.

## 2) A 'reform wave' Lakshadweep could do without

### GS-2 Government Policies & Interventions; GS-3 Infrastructure

#### CONTEXT

- Recently, Administrator of Lakshadweep, introduced a slew of draft legislation that will have a wide-ranging impact on the islands:
- **the Lakshadweep Animal Preservation Regulation, 2021;**
- **the Prevention of Anti-Social Activities Regulation (PASA);**
- **the Lakshadweep Panchayat Regulation, 2021**
- **Lakshadweep Development Authority Regulation 2021**

#### INTENT BEHIND INTRODUCING SUCH DRAFT LEGISLATION

- In the face of widespread criticism of the measures, the administrator says he **intends to develop Lakshadweep like neighbouring Maldives**, "a renowned international tourist destination".

#### ISSUES WITH THE CURRENT PROPOSALS

- The context in which the current proposals are introduced, are in turn **based on distorted facts**. But on the contrary:
- Assertion made by the collector of Lakshadweep that it was only in 2017 that the Centre constituted the Island Development Agency under the Home Minister for the development of the islands is not correct.
- Instead a **special Island Development Authority (IDA) was constituted as early as 1988**, for the island territories of India in Kavaratti, chaired by the then Prime Minister, Rajiv Gandhi.
- The Authority was of the view that an environmentally sound strategy for development of the island hinges on better exploitation of marine resources coupled

with much greater care in the use of land resources.

- Union Territory had its own **decentralised political entity from the adoption of panchayati raj**, much before the constitutional amendments of 1993, in which the Island Development Council, at the apex of the local government, was mandated to advise the Administrator on development.
- Also, the claims that the Lakshadweep is not developed is not true. The island has its own airport and a flourishing tourist industry with an international tourist resort in Bangaram.
- Lakshadweep also gives India a **vast and exclusive economic zone with three distinct ecosystems**.
- Further the island **already has a flourishing culture and literature**.

#### WHY MALDIVES MODEL SHOULD NOT BE IMPLEMENTED IN LAKSHADWEEP

##### Flaws in Maldivian model

- This model has concepts like Water bungalow which is favoured by the NITI Aayog is **expensive and hazardous to the coral**.
- Also, there are issues in the model which **affect the turbulent monsoon**.

##### Development till present in the Lakshadweep

- Lakshadweep today has **rainwater harvesting facilities**, first introduced in government buildings on every island and **Solar power(10% of lighting needs)**.
- All islands have been connected by **helicopter service** since 1986, and **high-speed passenger boats** were purchased in the 1990s by an international tender.
- **Not only on connectivity and infrastructure, Lakshadweep is also good in other indicators too.**
- Lakshadweep today has **no poor people and has plentiful food**.
- Island has had **sufficient computerisation from as early as 1990**.

##### Instead Lakshadweep requires sustainable model of development

- Despite the achievements of the island, there is no doubt that there is scope for improvement in the island. But, **none of this improvement requires any of the measures announced by the Administrator**.

- As suggested by the Island Development Agency, Lakshadweep, whose land ownership is constitutionally protected, should be opened to **international tourism not as a means of generating wealth for investors from the mainland but to bring prosperity to the islanders.**
- Lakshadweep requires **industries which are people-centric and enrich the fragile coral ecology.**
- Hence, there is a need for **clear policy that must include conservation and natural resource management within the existing infrastructure** taking into account the climatic compulsions of Lakshadweep's fragile ecosystem.

#### CONCLUSION

- Administrator draft **proposing cow slaughter ban, preventive detention law in the island, where there are no cows and no crime, makes no sense** with respect to development of the island.
- Also the **steps undermine the tribal land ownership, with judicial remedy denied, along with the plans for widening the roads** on the island, where the maximum road length is 11 km.
- Further the **provisions to allow the mining and exploitation of mineral resources** which could convert the islands into a hub for cement manufacture.
- Hence, there is a need to avoid such policies and instead **focus should be on the sustainable development of the island.**

### 3) Recognising caste-based violence against women

**GS-1 Indian society: salient features, Issues Related to Women; GS-2 Women's Issues**

#### CONTEXT

- Recently, the Supreme Court has given its judgment in **Patan Jamal Vali v. State of Andhra Pradesh**, addressing the intersectionality of caste, gender and disability.
- In this case, the victim of sexual assault was a blind 22-year-old Dalit woman.

#### CONCEPT OF INTERSECTIONALITY

- Intersectionality is **an approach which takes into account multiple**

**marginalities that the victim faces in the society.**

- This term was coined by Kimberle Crenshaw on the statement of the Combahee River Collective which addressed the intersectional discrimination faced by black women in the U.S.
- Using the concept of intersectionality, **the court in the judgement have recognised that when the identity of a woman intersects with her caste, class, religion, disability and sexual orientation**, she may face violence and discrimination due to two or more grounds.
- Hence **society need to understand how multiple sources of oppression** operated cumulatively to produce a specific experience of subordination for the blind Dalit woman.

#### CONCERN REGARDING THE RECENT JUDGEMENT BY THE SC

- It is to be noted that, **initially the trial court and the High Court** had convicted the accused for rape under **Section 376 of the Indian Penal Code (IPC), and under Section 3(2)(v) of the Scheduled Caste and Scheduled Tribe (Prevention of Atrocities) Act, 1989 (PoA Act)**, and sentenced him to life imprisonment.
- But **the Supreme Court**, in its judgment delivered by Justice D.Y. Chandrachud and Justice M.R. Shah, has confirmed the conviction and the punishment for rape under the IPC while **setting aside the conviction under the PoA Act.**
- Hence, on the one hand this judgment is a huge step forward, as the court used the opportunity to bring recognition to intersectional discrimination faced by women on the grounds of sex, caste and disability.
- While on the other the Supreme Court has set aside the conviction under the PoA Act, like its many other previous judgments.

### **SCHEDULE CASTE AND SCHEDULED TRIBE (Prevention of Atrocities) ACT, 1989**

- PoA Act amended in 2015 specifically **recognise more atrocities against Dalit and Adivasi women including sexual assault, sexual harassment and Devadasi dedication.**
- **Section 3(2)(v)** of the act states that if **any person not being an SC/ST member commits any offence under the IPC punishable with imprisonment of 10 years or more against a person on the ground that such a person is from an SC/ST community, he shall be punishable with imprisonment for life and with fine.**
- This section was amended in 2015, to change the phrase “on the ground that such a person is a member of SC/ST” to “knowing that such person is a member of SC/ST”.

### **WHY SETTING ASIDE OF CONVICTION UNDER THE PoA ACT IS PROBLEMATIC?**

- There has been a constant trend that the court has set aside judgements under convictions under the PoA Act.
  - a. **Ramdas and Others v. State of Maharashtra, 2006:** in case of the a **Dalit minor girl case**, SC held that mere fact that the victim happened to be a woman who was member of an SC community would not attract the PoA Act.
  - b. **Dinesh Alias Buddha v. State of Rajasthan, 2006:** Supreme Court held that it is not case of the prosecution that the rape was committed on the victim since she was a member of Scheduled Caste.
  - c. **Asharfi v. State of Uttar Pradesh, 2017:** Supreme court held that the evidence and materials on record did not show that the appellant had committed rape on the ground that the victim was member of an SC community.
  - d. **Khuman Singh v. State of Madhya Pradesh, 2019:** Supreme Court held

that the fact that the deceased was a member of an SC community was not disputed but there was no evidence to show that the offence was committed only on that ground.

- In all these judgements there is **too much focus on the Burden of proof.**
- However it is very difficult for the prosecution to prove in any given case that the accused had sexually assaulted the victim because she being Dalit/Adivasi. **The only evidence that prosecution can prove is that the victim was from an SC/ST community and that the accused was aware of that.**
- In the present case, the accused knew the victim’s caste as he was known to the victim's family.
- Ignoring the caste factor in the intersectionality concept by the court is not justified because it is **very difficult to establish whether it was caste, gender or disability that led to the commission of the offence.**
- Setting aside the conviction under PoA also matters because repeated setting aside of convictions under the PoA Act **bolsters the allegations that the law is misused and amounts to the erasure of caste-based violence faced by women.**
- As stated in the recent **Parliamentary Standing Committee Report on Atrocities and Crimes against Women and Children**, the **high acquittal rate motivates and boosts the confidence of dominant and powerful communities** for continued perpetration.

### **WAY FORWARD**

- **The judgment is a missed opportunity for the court to use intersectionality** to uphold the conviction under the PoA Act. Hence, **the matter should be referred to a larger bench.**

- Intersectionality theory, need to take into account role of caste for the discrimination against women.
- The courts needs to laid down directions to **train judges, the police and prosecutors to be sensitised in cases of sexual assault** in such cases, as done by U.S. courts.

#### 4) Power play to bring the digital ecosystem to heel

##### GS-2 Government Policies & Interventions; IT & Computers

###### CONTEXT

- Recently, the Ministry of Electronics and Information Technology has framed the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**.
- The rules broadly **deal with the regulation of social media and over-the-top (OTT) platforms and digital news**.
- These rules have recently come into effect. Consequently, **WhatsApp has filed a petition in the Delhi High Court alleging that the mandate for traceability violates the privacy rights** of Indian citizens, by rendering WhatsApp unable to provide encrypted services.

###### RULE 4(2) OF IT (Intermediary Guidelines and Digital Media Ethics Code) RULES, 2021

- The rule **imposes an obligation on significant social media intermediaries providing a messaging function to ensure the traceability of the originator of information on their platforms**.
- Failure to do so will result in intermediaries being held responsible for illicit content on their platforms.

###### GOVERNMENT RESPONSE TO WHATSAPP PETITION

- Government has come up with the following stand against the petition of Whatsapp group:
  - **Privacy is not an absolute right.**
  - Traceability obligation is **proportionate and sufficiently restricted**.
  - New Rules mandate traceability **only in the case of significant social media intermediaries (user threshold of 50**

**lakh users) and subject to an order** being passed by a court or government agency.

- The provision will be **used only in the absence of any alternatives**.

###### ISSUE WITH THE GOVERNMENT STAND

- It is true that privacy is not an absolute right, but as noted by the Supreme court in the **K.S. Puttaswamy case, any restriction on Right to Privacy must be necessary, proportionate and include safeguards against abuse**.
- Hence, general obligation to enable traceability as a systemic feature across certain types of digital services is neither suitable nor proportionate.
- Another issue with the rules is that they **lack effective safeguards to provide any system of independent oversight over tracing requests made by the executive**. Hence, prone to misuse by government agencies.
- **Anonymity from the government is required especially for whistle-blowers and Journalists**. Hence, deciding whether to remove anonymity should be done by Judiciary.
- Weakening of encryption systems has its own cost especially in the general digital ecosystem.
- The present regulation of the government will thus result in **compromising privacy and security of all individuals, not only criminals**.
- Thus ill-considered regulation such as the new IT Rules is not the way forward.

###### ALTERNATIVE AVAILABLE TO THE GOVERNMENT

- There are **alternative means of securing relevant information** like accessing unencrypted data such as metadata and other digital trails from intermediaries to investigate online offences. Government should take help from them.
- There are **already vast and overarching surveillance powers of the Government** as recognised even by the Justice B.N. Srikrishna Committee.
- Even at present the ability to **access encrypted data under the IT Act. Section 69(3) of the Information Technology Act and Rules 17 and 13 of the Information Technology Rules, 2009** require intermediaries to assist with decryption where they have the technical ability to do

so and where law enforcement has no alternatives.

### CONCLUSION

- Draft version of the Rules released in 2018 on which present regulations are based, faced a lot of opposition from numerous stakeholders ranging from service providers, academia, and civil society organisations.
- The new Rules should have been **put for consultation before being notified**.
- Also the rules should also be **accompanied by an explanatory memorandum explaining** the rationale for regulation.
- Undoubtedly there are numerous problems in the digital ecosystem, but an ill-considered regulation which appears to have little basis in evidence or care for consequences is not the way forward.
- Indeed, the **only truly democratic and relatively long-term solution would be for legislative change along multiple avenues, including in the form of revising and reforming the now antiquated IT Act, 2000.**

## 5) Breaking the cycle of child labour is in India's hands

### GS-2 Government Policies & Interventions; Issues Related to Children

#### NEWS

- Though the pandemic has amplified its contributing factors, policy and programmatic interventions can save children.

#### CONTEXT

- The true extent of the impact of the **COVID-19 pandemic on child labour** is yet to be measured but all indications show that it would be significant as children are unable to attend school and parents are unable to find work.
- However, not all the **factors that contribute to child labour were created by the pandemic; most of them were pre-existing and have been exposed or amplified by it.**

#### AS PER THE DATA ON CHILDREN

- Globally, **152 million children are still in child labour, 73 million of them in hazardous work.**

#### In India

- A **Government of India survey** suggests that **95% of the children in the age group of 6-13 years and 79.6% in the age group of 14-17 years** are attending educational institutions (formal and informal).
- Hence, a large number of children in India remain vulnerable, facing physical and psychological risks to a healthy development.
- The **Census of India 2011** reports **10.1 million** working children in the age group of 5-14 years.
- As per **UNESCO estimates based on the 2011 Census record, 38.1 million children** were "out of school" (18.3% of total children in the age group of 6-13 years).
- Work performed by these children may not appear to be immediately dangerous, but it may produce **long-term and devastating consequences for their education, their skills acquisition.**
- This in turn may **impact their future possibilities to overcome the vicious circle of poverty**, due to incomplete education and poor quality jobs.
- A **Rapid Survey on Children (2013-14)**, jointly undertaken by the Ministry of Women and Child Development and UNICEF, found that **less than half of children in the age group of 10-14 years have completed primary education.** These remain challenges we must overcome.

#### PIECE OF GOOD NEWS AS A RESULT OF POSITIVE STEPS TAKEN

- Child labour in India has **decreased in the decade 2001 to 2011**, and this demonstrates that the **right combination of policy and programmatic interventions** can make a difference.
- Policy interventions such as the Mahatma Gandhi National Rural Employment Guarantee Act (**MGNREGA**) 2005, the **Right to Education Act 2009** and the **Mid Day Meal Scheme** have paved the way for children to be in schools along with guaranteed wage employment (unskilled) for rural families.
- The **National Child Labour Project Scheme** focuses towards convergence of government schemes. Under this Scheme, the **children in the age group of 9-14 years are withdrawn from work and put**

into NCLP Special Training Centres, where they are provided with bridge education, vocational training, mid-day meal, stipend, healthcare, etc. before being mainstreamed into the formal education system.

- Indian government have further demonstrated its commitment to the elimination of child labour, by **ratifying International Labour Organization Conventions Nos. 138 and 182 in 2017.**
- The **Ministry of Labour and Employment-operated online portal, PENCiL** (Platform for Effective Enforcement for No Child Labour), which **allows government officials, law enforcement agencies and non-governmental organisations to share information and coordinate on child labour cases** at the national, State and local levels for effective enforcement of child labour laws.

#### CONCERNS AGGRAVATED DUE TO PANDEMIC

- The economic contraction and lockdowns ensuing from the pandemic have affected all countries, leading to income reductions, mainly in the informal economy.
- India has experienced slower economic growth and rising unemployment even before the pandemic, and subsequent lockdowns have worsened the situation.
- The large number of returned migrant workers has compounded the socio-economic challenges.
- With **increased economic insecurity, lack of social protection and reduced household income, children from poor households are being pushed to contribute to the family income** with the risk of exposure to exploitative work.
- Hence, pandemic has posed a real **risk of back tracking the gains made in eliminating child labour.**

#### CHALLENGES IN EDUCATION AMIDST PANDEMIC

- With **closure of schools and challenges of distance learning, children may drop out leaving little scope for return.**
- As many schools and educational institutions are moving to online platforms for continuation of learning, the **'digital divide'** is a challenge that India has to reconcile within the next several years.

- a. The **NSS Report titled 'Household Social Consumption on Education in India'** suggests that in **2017-18, only 24%** of Indian households had access to an Internet facility (where 15% was among rural households and 42% among urban households).
- b. The **Annual Status of Education Report (ASER) 2020** survey highlights that a third of the total enrolled children received some kind of learning materials from their teachers during the reference period (October 2020) as digital mode of education was opted for.

#### WAYFORWARD

- The challenges are significant and manifold but it is not impossible to meet them if the **right level of commitment among all the relevant stakeholders** and the **right mix of policy and programmatic interventions** are present.
- It is through **strategic partnerships and collaborations** involving government, employers, trade unions, community-based organisations and child labour families that we could make a difference building back better and sooner.
- As we reinforce the commitment to protect children from unacceptable forms of work, we also **need to focus on mitigating the aftermath of the pandemic.**
- Also, there is a need for a **strong alliance** paving our way **towards ending child labour in all its forms by 2025** as countries around the world have agreed to in **Sustainable Development Goal 8.7.**
- We — governments, employers, unions, civil society organisations and even individuals — must rise and pledge to **'Take Action against Child Labour'** as a part of the **UN's declaration of 2021 as the International Year for the Elimination of Child Labour.** Our actions today will determine the future of children tomorrow.

### 6) Close the vaccination gap, in global lockstep

#### GS-2 Government Policies & Interventions; Health

#### CONTEXT

- There is a lack of equity in vaccination for Covid19. **Only 2.1% of Africans** had

received at least one dose of a COVID-19 vaccine by the end of May 2021.

- This can be called as “**Vaccination Aparthied**” where there is **vaccination gap between advanced economies and developing countries.**

#### **NEED TO FILL VACCINATION GAP**

##### **Check pandemic:**

- The pace of vaccination around the world is slow. **At the current pace it is impossible to vaccinate the whole world before 2023.**
- Hence, wide vaccination is required to **check multiplication of variants** and to end the pandemic.

##### **Bring economies back on track:**

- Wide vaccination is needed to lift the restrictions that are holding back our economies and freedoms.
- Pandemic is affecting developed countries more due to lack of social mechanisms and economic policy levers.
- Further holding of the economic activities in these countries will **reverse the trend of declining poverty and global inequalities in recent decades.**

##### **Fuel global tension:**

- Restricted economic freedom will also result in **global tension.**
- Hence **ending “Vaccination apartheid”** is need of hour and global multilateral action is needed to increase the production of vaccines and accelerate the roll-out worldwide. European Union and **India’s “Vaccine Maitri”** are some of the efforts taken in this direction. Other nations should also come forward.

#### **EFFORTS BY EUROPEAN UNION AGAINST PANDEMIC**

- To enhance vaccination across the globe, the EU is participating in closely coordinated multilateral action.
- The EU has welcomed the **\$50 billion plan proposed by the International Monetary Fund** in order to be able to vaccinate 40% of the world population in 2021 and 60% by mid-2022.
- The EU has rejected both the provision of vaccines to political goals and “vaccine nationalism” that has been witnessed across the world.
- It has been exporting large volumes of vaccines and contributing substantially to

the vaccines roll-out in low-income countries.

- **According to WHO, around 40% of the doses used globally so far are produced by European Union.**
- “**Team Europe**”, an initiative of European Union, is being used for **donating vaccines to neighbours particularly for Western Balkans region.**
- Around **one-third of all COVAX doses delivered so far have been financed by the EU.**
- The steps taken by European Union are praiseworthy, however not sufficient for ending the vaccination gap.

#### **WAY FORWARD**

- Need of the hour is to end this vaccination gap. Doing so is both morally right and in everyone’s interest.
- Countries which have required knowledge and means should increase their production capacities for export to meet both domestic needs and the needs of other nations.
- Restrictive measures that affect vaccine supply chains should be avoided.
- Also there is a need for facilitating the transfer of knowledge and technology so that vaccine production is possible in more countries.
- Facilitation can be relaxed by **Voluntary licensing** to ensure transfer of technology and know-how.
- If Voluntary licensing turns out to be insufficient, the possibility of **compulsory licensing** should be explored within the **Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and the 2001 Doha Declaration.**

## **7) Adverse changes, federalism imperilled**

### **GS-2 Centre state relations, Federalism**

#### **NEWS**

- There needs to be a federal coalition to preserve the idea of a plural India, in terms of culture and politics.

#### **CONTEXT**

- Recently an observation has been made by Niti Aayog, regarding the management of Covid epidemic.
- One of its members asserted that it was the lack of centralisation that led to poor

management of the ongoing COVID-19 vaccination drive.

- The statement in turn has led to the concern among states as it was seen as imperialising federalism.

### RECENT DEVELOPMENTS WHICH IMPERILS FEDERALISM

- Some of these developments are:
- There are **growing incursions of the Union government into sectors where State governments have a primary responsibility** to govern such as health, education and agriculture.
- Also there is a growing narrative of Slogans such as “**one nation-one tax**”, “**one market and one ration**”, which **promotes the narrative of a strong nation state rather than one of governance.**

### UNION ENCROACHMENT, NOT NEW

- Present erosion of powers of State governments by the Central government is not new.
- Since independence, centre on several occasions have used its powers to dismiss or use the Governor to intimidate democratically elected governments.
- This includes instances such as moving of education from state list to concurrent, during emergency periods.
- However **present encroachment is new because it is more systematic.**

### SYSTEM EROSION IN THE NEW ENCROACHMENT

- Following erosion can be observed in the new encroachment:

#### Resource allocations:

- There has been **increasing centralisation in resource allocations and welfare interventions.**
- Post GST, the gap between revenue and expenditure of the state government has increased.
- This year on one side there has been a shortfall in the GST of the state, while on the other expenditure side of the state has gone up because of intensification of centrally sponsored schemes in sectors such as education and health where States are required to spend about 85% and 82% of public expenditure respectively.

#### Economic power:

- Also, a trend in the **centralisation of economic power with political power can be seen.** There has been a **decline of**

**business groups from southern India** over these last few years because of consolidation and expansion of a few big business groups.

- On the one hand, the Centre has sought to insulate Indian big business from global competition by choosing not to enter into the Regional Comprehensive Economic Partnership (RCEP), but has eroded the power of small businesses through support for GST and the call for a single national market.

#### Political financing:

- There has been an **attempt to restrict the political financing of regional parties through levelling of corruption allegations** and the use of central agencies against local financiers. This weakens the ability of regional parties to compete with the National parties.

#### Executive and legislative aggression:

- Not only in the field of economics, **executive and legislative aggression** can be seen by the centre.
- Central institutions such as the IT Department, ED and NIA are being used to increasingly weakening the policy levers of State institutions.
- Even there have been meddling by state in appointment of institutions of state by centre like appointments of vice-chancellors in universities funded and run by State governments.
- There have been **attempts to bypass state government** for e.g. direct transfers to beneficiaries of welfare schemes, phenomenon of increasingly ignoring elected representatives of State governments by holding meetings with State secretaries and district collectors on issues that are primarily under State control as done by the Minister of Education with State Education Secretaries on implementation of the New Education Policy.

#### Educational institutions:

- There have been **moves to ensure national uniformity in educational institutions** e.g. NEET.
- This **uniformity subverts the affirmative action policies developed at the regional level** in response to local political demands.

- This effect can be seen in the case of Health policies also like imposing a national lockdown, fixing differential pricing for procuring Covid vaccines for the state without consulting them.

#### **Social cultural foundation of federalism:**

- Diversity in the cultural foundation of regions is one of the defining characteristics of Indian federalism.
- **Regional identities and cultural traditions have worked against the homogenisation agenda.**
- Markers of regional identities and regional socio-cultural practices are now interpreted as belonging to a pan-Indian Hindu tradition.
- Muslims and Christians are shown to become less Malayalee, less Bengali and less Assamese and more under uniform identity. This is problematic.

#### **WAY FORWARD**

- **Federalism in India is biased towards the centre.** The degree of federalism in India has largely depended on two variables namely the **nature of political coalitions at the Centre** and **role of States in such coalitions.**
- Hence the need of the hour is a **federal coalition that looks beyond the legal-constitutional aspects of federalism** to preserve the idea of a plural India in terms of both culture and politics.

### **8) Information Technology Rules: a case of overreach?**

#### **GS-3 IT & Computers, Challenges to Internal Security Through Communication Networks**

##### **CONTEXT**

- Recently, **WhatsApp decided to legally challenge one of India's new Information Technology rules.**
- New rules have been challenged because it requires messaging platforms to help investigative agencies in identifying the originator of problematic messages.
- However as per WhatsApp, this would break end-to-end encryption and undermine people's right to privacy.
- The government on the other hand is defending the new rules on the ground on ensuring national security.

- These contradictory stands have led to a debate on privacy versus security balance over data security of the state.

#### **WHY NEW IT RULES ARE PROBLEMATIC?**

##### **Vague terminology:**

- New IT rule in its present form is **vague, disproportionate, and probably unnecessary.**
- The reasons for which this traceability power can be used, like 'security of the state', are quite broad and therefore capable of misuse.

##### **Contradicts constitution and IT Act of 2000:**

- Every provision of the new IT rules is ultra vires the Constitution and the parent IT Act of 2000.
- The rules only make superficial attempts at balancing privacy and security interests.
- Hence, it is clear that security interests are being given primacy over both civil liberty interests as well as economic interests.
- Also, as per **Section 79 of the IT Act, which is being used can give effect only to the main provision.**
- Hence, **no new offences can be introduced nor new rules can go beyond the original provisions**

##### **Existing huge powers of surveillance:**

- The rules are not required because the **government already has huge powers of surveillance as recognised by the Justice Srikrishna Committee report.**
- Hence, rather than seeking to revise these powers, the government is giving itself greater ability to snoop on and interfere with the private lives of citizens.

##### **Traceability obligation:**

- To ensure traceability, the **government wants to move away from encryption controlled by the users to encryption done by the intermediary itself.**
- This is problematic because, if intermediaries are controlling encryption, the government can just go to them and ask for this information.

##### **Existence of alternative:**

- There are **laws other than IT rules which allow the government to request decryption of data** where it's held by an intermediary or where the intermediary holds the private encryption key.
- Also Instead of using a specific mandate for traceability, law agencies should use

metadata as well as other forms of unencrypted data.

#### Global example:

- Even in **Australia** where fairly wide-ranging powers have been given to the government under the Telecommunications Act, enforcement has been allowed only to request information and assistance from intermediaries.
- There has been no creation of systemic weaknesses or vulnerabilities.

#### IN FAVOUR OF NEW RULES

- Law enforcement in the digital domain is needed because of the **changing nature of society from pre-digital to digital societies**.
- Even **Justice Srikrishna** has **recommended the need for new law** to be brought out which discusses the rationale, gives good institutional checks and balances, and then places this significant and new legal possibility for the law enforcement in that context.
- Also, those in favour of IT rules argue that traceability of encrypted messages does not require breaking encryption. **Metadata which carries many layers of information will be enough to lock the originator of every message** when it is created.
- The new rules ensure that the intermediary has been given an opportunity of being able to **access to the originators of a message through less intrusive means**.
- There have been grave offences taking place, like circulation of obscene pictures, non consensual, intimate pictures, derogatory message to Dalits, systematic election-related manipulation, leakage of information on WhatsApp. **In the absence of a traceability clause, it becomes difficult to implement laws in the digital domain** and solve such menace.

#### WAY FORWARD

- Need of the hour is a **new law with systemic explanation of intent, purpose, and institutional safeguards**.
- Access to the originator of a message to the Judicial order that too after **giving an adequate opportunity to the intermediary for hearing**.
- The Supreme Court should **clarify terms like 'public order' and 'security of the state'** for rationale and balanced legislation.

## 9) Comments to avoid in long-standing ties

### Gs-2 India & Its Neighborhood - Relations

#### CONTEXT

- Recently, there have been **irresponsible comments from Indian important political leaders which are affecting India's bilateral relationship with the other countries**.
- Comments like, **new strain of Coronavirus from Singapore extremely perilous for children, describing illegal Bangladeshi immigrants as vermin and they should be pushed into the Bay of Bengal**.

#### ISSUE WITH THESE STATEMENTS

- Both the statement given with respect to Singapore and Bangladesh got strong rebuke from the respective countries.
- However, these comments were selectively declared as irresponsible targeting one and avoiding others.
- These actions of political figures in India are **detrimental to the consolidation of cordial bilateral ties**, hence caution should be exercised by the leaders.

#### NEED OF CAUTION IN DIPLOMACY WITH BANGLADESH

- Caution is needed because:
- There are **already inevitable bilateral problems** like-
  - a. Balance of **trade issue**,
  - b. **Drought and flood** in the 54 trans-boundary rivers flowing from india to bangladesh,
  - c. The **smuggling of goods and vulnerable human beings** across the approximately 4,100 km land border.
  - d. Existence of **religion based identity** in some sections of bangladesh.
  - e. There are some in bangladesh who still believe that separation from hindu india in 1947 was more significant than the break with pakistan in 1971.
  - f. There is the presence of **militant islamist groups such as harkat-ul-jihad-al-islami** that have linkages and support from outside bangladesh.
  - g. On the other hand there are others who see Bengali roots and traditions as being of equal validity as their religious affiliation and want a better relationship with India.

- h. Any irresponsible statement by Indian leaders will make the work tough for those who believe in greater unity of India-Bangladesh.
- i. Hence, India should show patience and sympathy to inherent fractures in Bangladeshi society to be resolved, through the internal process of healing.
  - India should **appreciate the steps taken by the Government in Bangladesh** for improving bilateral relations, such as-
    - a. Sheikh Hasina, who was elected for a third consecutive term as the country's PM, since 2008 has maintained **vigilant supervision over Muslim fundamentalist** terrorists as well as on **Northeast militant movements** sheltering in Bangladesh resulting in pacification of India's Northeast.
    - b. **Connectivity between India and its Northeast** has been enhanced by land, river and the use of Bangladeshi ports.
    - c. **Indian investments in Bangladesh** have been encouraged by Sheikh Hasina as a result of which there are at least 100,000 Indian nationals now living and working in Bangladesh. This economic integration is bound to increase between India and Bangladesh, Nepal and Bhutan in the coming time.

### CONCLUSION

- New Delhi should view with satisfaction Bangladesh's coming graduation in 2026 from 'least developed' to 'developing country' status, and its steady progress as one of South Asia's leading performers in human development indicators.
- **Both India and Bangladesh depend on each other for security and stability.**
- Responsible individuals on both sides of the border, whether in government or the Opposition, must be actively discouraged from words and actions detrimental to the consolidation of the existing cordiality.

## 10) The time to limit global warming is melting away

GS-3 Environmental Pollution & Degradation, International Treaties & Agreements, Government Policies & Interventions

### CONTEXT

- This is an incredibly difficult time for the world. The world is facing two momentous challenges: COVID-19 and climate change.
- Hence both need us to come together globally to find a way forward.

### INDIA'S RESPONSE FOR DEALING WITH CLIMATE CHANGE

- India has a strong record in tackling of climate change which includes:
  - Impressive domestic targets to have **450GW of renewable energy by 2030.**
  - Establishment of **International Solar Alliance** and the **Coalition for Disaster Resilient Infrastructure (CDRI).**
  - India played a critical role in the landmark **Paris Agreement** and is working closely with the United Kingdom for COP 26th to be hosted at Glasgow, in 2021.
  - India and the UK are also working on a Roadmap to work together on the best ways to drive the **green growth agenda.**
  - India has an opportunity to show that a different development path is possible.
  - India has **innovation and political will** to do so. It has already proved this by **quadrupling wind and solar capacity in the last decade.**

### UK RESPONSE TOWARDS CLIMATE CHANGE

- UK who will be holding Conference of Parties this year is handling climate change through
  - Setting ambitious **short-term targets backed up by a net zero target** so as to have a low carbon footprint in future.

### IMPORTANCE OF 26, GLASGOW

- It provides a moment to address the enormous threat of climate change and build a cleaner, brighter future for everyone as:
  - Every fraction of a degree makes a difference. An average global temperature rise of 2°C as compared to 1.5°C would see hundreds of millions more people affected.
  - As per **estimates of Climate Action Tracker**, with present countries' current emissions reduction targets world average temperature rise will be of about 2.4°C. Hence, **to limit warming to 1.5°C, we must halve global emissions by 2030.**
  - COP-26 is an opportunity for this to happen.
  - **WAYFORWARD**
  - **Increasing climate vulnerabilities** which is visible from cyclones, **Tauktae and Yaas**, that hit India last month, shows that we

must act on the very real need for **flood defences, warning systems and other vital efforts to minimise, avert and address the loss and damage caused by climate change.**

- India's CDRI in which the U.K. is also a partner needs to be strengthened with global participation.
- Developed countries have promised to deliver the right flow of finance ( \$100 billion annually) and technology to support developing countries such as India in their transition. Hence, there is a **need to push developed countries to honor their commitment as it is a matter of trust.**
- Last but not the least, all which includes governments, businesses and civil society must come forward to deliver the goal of limiting world temperature through **building consensus among governments for an ambitious, balanced and inclusive outcome.**
- COP26 is our last chance to keep hopes of limiting global warming to 1.5°C alive, of building a brighter future, of green jobs and cleaner air.

## 11) Saving biodiversity, securing earth's future

### GS-3 Conservation of Environment and Ecology

#### CONTEXT

- World Environment day is celebrated on 5th June every year.
- This year it is being celebrated in the backdrop of the Covid epidemic. This epidemic brings back our attention to rebuilding our relationship with nature.

#### SIGNIFICANCE OF INDIA'S DIVERSITY

- India's vast and rich biodiversity gives the **nation a unique identity**, of which we can be proud.
- The varied ecosystems across land, rivers, and oceans, **feed our people, enhance public health security, and shield us from environmental disasters.**
- Also, this diversity serves as a perpetual source of **spiritual enrichment**, intimately linked to our physical and mental well-being.

#### NEED TO MEND RELATIONSHIP WITH NATURE

- There is need of rebuilding our relationship with nature because:
- As per estimates, forests alone yield **ecosystem services worth more than a trillion rupees per year.** The value of ecosystem services provided by biodiversity which includes grasslands, wetlands, freshwater, and marine etc. is much greater than this value. Hence, with the loss in biodiversity, value attached will also be lost.
- Not only India but the entire world has witnessed a decline in biodiversity. **World has lost 7% intact forests since 2000.** Recent assessments indicate that over a million species might be lost forever during the next several decades.
- Climate change and the ongoing pandemic will put additional stresses on our natural ecosystems and hence preservation of biodiversity is needed.
- It is also the only way to **mitigate climate change and curtail future outbreaks of infectious diseases.**

#### EXPOSED DYSFUNCTIONAL RELATIONSHIP

- The ongoing pandemic has exposed the dysfunctional relationship between humanity and nature. It is must to urgently address the issues the pandemic has laid bare:
  - a. The emergence of **infectious diseases**;
  - b. Lack of food and **nutritional security**;
  - c. **Rural unemployment**;
  - d. **Climate change**, with all its stresses on nature,
  - e. Rural landscapes, and **public health.**

#### SIGNIFICANCE OF NATIONAL BIODIVERSITY MISSION AMIDST PANDEMIC

- The ongoing spread of COVID-19 places the **National biodiversity Mission** among the most significant national initiatives.
- The Mission offers a **holistic framework, integrated approaches, and widespread societal participation**, in response to these critical and interrelated issues.

#### NATIONAL BIODIVERSITY MISSION

- This recently launched mission **aims to explore the neglected links between biodiversity science and human well-being across the sectors of health, economic development, agricultural production and livelihood generation, in combination with efforts to mitigate climate change and related disasters.**

- One of the components of the mission explicitly links biodiversity to human health through the **One Health framework**.

#### **BENEFITS OF NATIONAL BIODIVERSITY MISSION**

- It will steer leading biodiversity science and conservation organisations in the country.
- It will **strengthen the science of restoring, conserving**, and sustainably utilising India's natural heritage.
- Mission will also allow India which is home to **nearly 8% of global biodiversity on just 2.3% of global land area**, and contains sections of four of the 36 global biodiversity hotspots to emerge as a leader in demonstrating linkage between conservation of natural assets and societal well-being.
- Mission will empower India to **restore, and even increase our natural assets** by millions of crores of rupees by lessening the impacts of climate change and other natural disasters, such as pandemics and floods.
- It will help in **rejuvenation of agricultural production systems, increasing rural incomes from biodiversity-based agriculture, green jobs in restoration and nature tourism and restoration of degraded lands**.
- It will help India **meet its commitments under the new framework for the Convention on Biological Diversity (CBD), UN SDGs** and will generate a strong national community committed to sustaining biodiversity, promoting social cohesion and uniting the public behind an important goal
- It will **offer solutions to numerous environmental challenges**, including degradation of rivers, forests, and soils, and ongoing threats from climate change.

#### **SIGNIFICANCE OF ONE HEALTH PROGRAMME**

- The One Health programme **aims to encourage team science by having networks of institutions collectively bid for grants to set up integrated One Health surveillance systems across India**.
- In order to amend the dysfunctional relationships with nature, the Concept of

“One Health” for all living organisms has to be brought into focus which should also **include invisible biota in soils that sustain our agricultural systems**.

- This programme which integrates human health with animal, plant, soil and environmental health has both the **preventive potential to curtail future pandemics along with the interventional capability for unexpected public health challenges**.

#### **STEPS TAKEN BY INDIA**

- Indian government is considering **major investments in biodiversity science** to meet societal needs.
- The **Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC)** in consultation with the Ministry of Environment, Forest, and Climate Change and other Ministries have approved an ambitious **National Mission on Biodiversity and Human Well-Being (NMBHWB)**.
- Bengaluru based Biodiversity Collaborative is working with the National Biodiversity Authority to hold consultations and prepare road maps for the National Biodiversity mission.

#### **WAYFORWARD**

- Planned mission of National Biodiversity Mission will require a **strong and extensive cadre of human resources required** to meet the enormous and complex environmental challenges of the 21st century. Hence need of the hour includes:
  - a. **Raining professionals of the highest calibre** in sustainability and biodiversity science.
  - b. There is a **need for cultural change** which can occur through change from **environmental education for millions of students**, from kindergarten to postgraduate levels.
  - c. **Public engagement** in exploration, restoration and conservation of biodiversity is also crucial for the mission.

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# INDIAN EXPRESS EXPLAINED

## 1) SDG India Index 2020-21

### What is SDG India Index?

- The Index for Sustainable Development Goals (SDGs) evaluates progress of states and Union Territories (UTs) on various parameters including **health, education, gender, economic growth, institutions, climate change and environment**. It is released by the NITI Aayog.
- First launched in **December 2018**, the index has become the primary tool for monitoring progress on the SDGs in India. It has also fostered competition among the states and UTs by ranking them on the global goals.
- The SDG India Index scores range between 0–100, higher the score of a State/UT, the greater the distance to target achieved. States and UTs are classified in four categories based on their SDG India Index score — **aspirant**: 0–49; **performer**: 50–64; **front-runner**: 65–99, **achiever**: 100.

### What is the significance of the SDG India Index?

- The index is developed in **collaboration with the United Nations in India**. It tracks the progress of all states and UTs on **115 indicators** aligned with the **National Indicator Framework (NIF) of the Ministry of Statistics and Programme Implementation**.
- The index is a key tool for focused policy dialogue, formulation and implementation through development actions, in line with the global SDG framework. It helps in identifying crucial gaps related to tracking the SDGs and the need for India to develop its statistical systems.

### Why in News?

- NITI Aayog has released its SDG India Index 2020-21.
- From covering 13 Goals with 62 indicators in its first edition in 2018, the third edition

of the index covers **16 Goals on 115 quantitative indicators**.

### Highlights of the latest report

#### Top Performers

- While **Kerala** has retained the top rank in 2020-21 Index, **Mizoram, Haryana, and Uttarakhand** are the top gainers in terms of improvement in their rankings from 2019, with an increase of 12, 10 and 8 points, respectively.
- Bihar, Jharkhand and Assam were the worst performing states in this year's India index.

#### Overall Score

- The country's **overall SDG score improved by 6 points** — from 60 in 2019 to 66 in 2020-21 — on accounts of improvement in performance in providing facilities including clean water and sanitation, affordable and clean energy among others.
- While Kerala retained its rank as the top with a score of 75, **Himachal Pradesh** and **Tamil Nadu** both took the second spot with a score of 74.
- **Chandigarh** maintained its top spot among the UTs with a score of 79, followed by **Delhi** (68).

#### Categories

- While in 2019, 10 states/UTs belonged to the category of front-runners (score in the range 65-99, including both), 12 more states/UTs find themselves in this category in 2020-21.
- Uttarakhand, Gujarat, Maharashtra, Mizoram, Punjab, Haryana, Tripura, Delhi, Lakshadweep, Andaman and Nicobar Islands, Jammu and Kashmir and Ladakh graduated to the category of front-runners (scores between 65 and 99, including both).
- Currently, there are **no states in the aspirant and achiever category**; 15 states/UTs are in the performer category and 22 states/UTs in the front runner category.

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

## References

### Polity:

- <https://www.hindustantimes.com/india-news/its-time-we-define-what-is-and-is-not-sedition-sc-101622486269556.html>
- <https://retail.economictimes.indiatimes.com/news/food-entertainment/grocery/indias-organic-food-mkt-growing-at-17-pc-annually-harsimrat-kaur-badal/74244139>
- <https://www.thehindu.com/news/national/china-as-coercive-population-measures-serve-as-warning-for-india-experts/article34701448.ece>

### Environment

- <https://www.worldenvironmentday.global/about-world-environment-day>
- <https://officerspulse.com/world-environment-day-2020/>
- <https://nhpbs.org/natureworks/nwepecosystems.htm>
- <https://www.decadeonrestoration.org/what-at-ecosystem-restoration>
- <https://www.decadeonrestoration.org/types-ecosystem-restoration>
- <https://www.thehindu.com/sci-tech/energy-and-environment/strong-policies-on-black-carbon-can-sharply-cut-glacier-melt-says-world-bank-study/article34719913.ece>
- <https://openknowledge.worldbank.org/handle/10986/35600>
- <https://lib.icimod.org/record/34450/files/SummaryofHKHAssessmentReport.pdf>
- <https://www.ccacoalition.org/en/slcps/black-carbon>
- <https://www.downtoearth.org.in/blog/climate-change/black-carbon-is-a-threat-to-himalayan-glaciers-74542>
- <https://www.thehindu.com/news/national/tamil-nadu/initiative-to-serve-sacred-groves/article34686374.ece>
- <https://www.outlookindia.com/outlooktraveller/explore/story/69898/did-you-know-sacred-groves-of-india#:~:text=Sacred%20groves%20refer%20to%20a,trees%20or%20an%20entire%20forest.>
- <https://www.thehindu.com/news/national/tamil-nadu/initiative-to-serve-sacred-groves/article34686374.ece>
- <http://www.fao.org/3/XII/0509-A1.htm>
- <https://www.thehindu.com/news/national/other-states/more-firepower-for-kaziranga-guards-approved/article34682023.ece>

### Environment

- <https://www.downtoearth.org.in/news/wildlife-biodiversity/debate-should-forest-guards-in-india-be-armed-with-firearms--76283>
- <https://www.thehindu.com/news/national/supreme-court-asks-centre-to-arm-forest-officers-in-fight-against-poachers/article33527563.ece>
- <https://www.thehindu.com/news/national/kerala/rare-nagaland-bamboos-settle-well-in-wagamon/article34688092.ece>
- <https://jntbgri.res.in/index.php>
- <https://initrogen.org/content/why-care-about-nitrogen>
- <https://www.downtoearth.org.in/news/pollution/eighth-global-nitrogen-conference-focuses-on-sustainable-development-goals-77186>
- <https://ini2021.com/information/#about-ini>
- <https://www.downtoearth.org.in/news/pollution/nitrogen-pollution-limits-safe-margin-for-other-environmental-issues-say-scientists-77207>

### Economy

- <https://www.thehindu.com/business/Economy/overall-impact-of-second-pandemic-wave-on-economy-not-likely-to-be-large-says-cea/article34691328.ece>
- <https://www.thehindu.com/business/Industry/april-core-sector-output-jumps-561-base-buoys/article34692356.ece>
- <https://www.thehindu.com/business/Economy/indias-services-sector-activities-slumps-into-contraction-territory-in-may-pmi/article34716137.ece>
- <https://www.thehindu.com/business/rbi-keeps-key-rates-unchanged-as-virus-lashes-economy/article34723511.ece>

### IR

- <https://www.thehindu.com/news/international/ughur-exiles-describe-torture-in-xinjiang/article34720958.ece>
- <https://www.thehindu.com/news/international/syria-has-likely-used-chemical-weapons-17-times-international-chemical-weapons-watchdog/article34724203.ece>

- <https://www.thehindu.com/news/international/hong-kong-seals-off-tiananmen-vigil-site/article34730891.ece>

### S&T

- <https://www.reuters.com/technology/intel-reiterates-chip-supply-shortages-could-last-several-years-2021-05-31/>
- <https://www.thehindu.com/sci-tech/science/nasa-plans-two-new-missions-to-venus-its-first-in-decades/article34713518.ece>
- <https://www.thehindu.com/sci-tech/science/tianzhou-2-cargo-spacecraft-docks-with-chinas-space-station-module/article34680859.ece>
- <https://www.thehindubusinessline.com/economy/agri-business/imd-projects-monsoon-rainfall-likely-to-be-normal-at-101-percent/article34696299.ece>

### DEFENCE

- <https://www.thehindu.com/news/national/suryakiran-aerobatic-display-team-completes-25-years/article34678827.ece>
- <https://www.thehindu.com/news/national/defence-ministry-notifies-second-negative-import-list/article34690749.ece>
- <https://www.thehindu.com/news/national/new-heads-at-andaman-and-nicobar-command-eastern-army-command/article34700092.ece>

### PIB

- <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1718791>
- <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1718221>
- <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1718141>

### AIR

- <https://www.thehindu.com/news/national/centre-tells-states-to-split-rural-jobs-scheme-wages-into-separate-categories-for-scs-sts-others/article34711212.ece>

- <http://newsonair.com/News?title=UNSC-to-hold-meeting-on-Israel-%26-Palestine&id=416954>

### Editorials

- <https://www.thehindu.com/opinion/lead/saving-biodiversity-securing-earths-future/article34731266.ece>
- <https://www.thehindu.com/opinion/op-ed/the-time-to-limit-global-warming-is-melting-away/article34731302.ece>
- <https://www.thehindu.com/opinion/lead/comments-to-avoid-in-long-standing-ties/article34721356.ece>
- <https://www.thehindu.com/opinion/op-ed/information-technology-rules-a-case-of-overreach/article34721074.ece>
- <https://www.thehindu.com/opinion/lead/adverse-changes-federalism-imperilled/article34711388.ece>
- <https://www.thehindu.com/opinion/lead/close-the-vaccination-gap-in-global-lockstep/article34711396.ece>
- <https://www.thehindu.com/opinion/op-ed/breaking-the-cycle-of-child-labour-is-in-indias-hands/article34702648.ece>
- <https://www.thehindu.com/opinion/op-ed/power-play-to-bring-the-digital-ecosystem-to-heel/article34693088.ece>
- <https://www.thehindu.com/opinion/op-ed/recognising-caste-based-violence-against-women/article34692073.ece>
- <http://thehindu.com/opinion/lead/a-reform-wave-lakshadweep-could-do-without/article34684315.ece>
- <https://www.thehindu.com/opinion/op-ed/only-a-global-effort-can-tame-covid-19/article34683660.ece>

### INDIAN EXPRESS

- <https://indianexpress.com/article/explained/niti-aayog-sustainable-development-goals-ranks-explained-7343640/>