



**Goaltide**  
A Prelims IAS Academy

**July 2020**

**part - II**

# **Current Affairs**

**(consolidation)**

## Introduction

Hello Everyone,

Every year more than 50 percent of the Prelims Paper is based on Current Affairs. It become important for us to have very good command on Current Affairs. Hundreds of publications are available in market. Aspirants are always confused how to prepare Current Affairs and most of the times they end up choosing wrong publications. We will not let you fall in this trouble. Three important courses are running simultaneously on our website for Current Affairs from Monday to Friday- **Daily Quiz section, Daily Current Affairs section and Daily News Section.**

**Daily Quiz will help you do the best preparation to handle any question in UPSC Prelims Exam, Daily News section contains best opinion based Articles important for your Mains Exam and Daily Current Affairs section will give you best Current Affairs which is relevant for you Exam from all important sources (PIB+ all government websites, The Hindu+ 10 different newspaper, etc. ). Nothing will be missed. This document is related to Current Affairs section.**

**You might find it bulky but don't worry. It contains lot of images to simplify your understanding.**

Hope you enjoy reading.

Thanks,

Abhishek Agarwal

Founder, GoalTide IAS Prelims Academy

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## CA1. Methane emissions rose 576 mn tonnes every year between 2008 and 2017

### News:

The amount of methane in the Earth's atmosphere has continued to rise, with 576 million tonnes of the gas added every year between 2008 and 2017, showed two recent studies from the Global Carbon Project

We will see:

- a. **Global Carbon Project**
- b. **Introduction to Methane and few important diagrams from report. Very important for Prelims.**

### About Global Carbon Project (GCP): in brief.

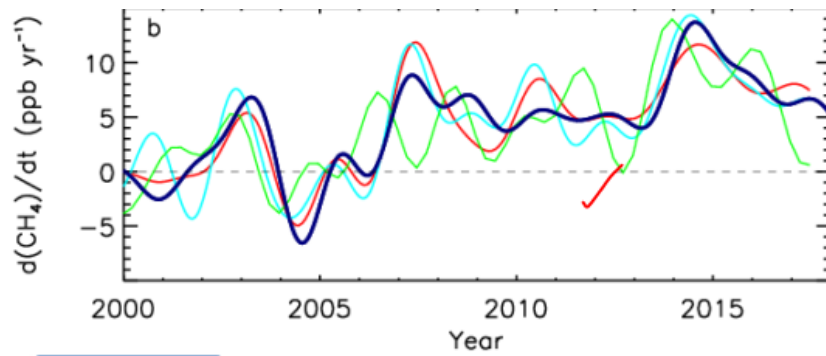
The Global Carbon Project (GCP) integrates knowledge of greenhouse gases for human activities and the Earth system. Our projects include global budgets for three dominant greenhouse gases — **carbon dioxide, methane, and nitrous oxide** — and complementary efforts in urban, regional, cumulative, and negative emissions.

 The Global Carbon Project was established in 2001 by a shared partnership between the International Geosphere-Biosphere Programme ([IGBP](#)), the International Human Dimensions Programme on Global Environmental Change ([IHDP](#)), the World Climate Research Programme ([WCRP](#)) and [Diversitas](#). This partnership constituted the Earth Systems Science Partnership (ESSP) which subsequently evolved into Future Earth. 

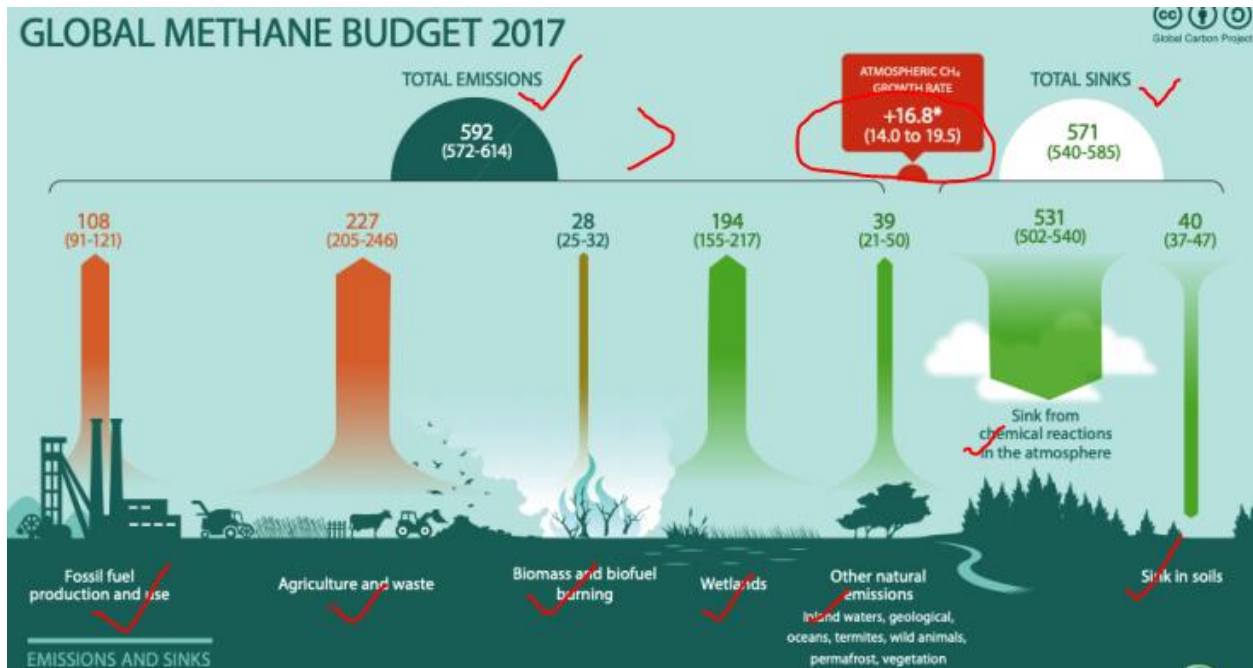
### Introduction to Methane:

- ✓ After carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) is the most important greenhouse gas contributing to human-induced climate change.
  - ✓ For a time horizon of 100 years, CH<sub>4</sub> has a Global Warming Potential 28 times larger than CO<sub>2</sub>.
  - ✓ Methane is responsible for 23% of the global warming produced by CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O.
  - ✓ The concentration of CH<sub>4</sub> in the atmosphere is 150% above pre-industrial levels (cf. 1750).
  - ✓ The atmospheric lifetime of CH<sub>4</sub> is 9±2 years, making it a good target for climate change mitigation
- 
- ✓ Methane also contributes to tropospheric production of ozone, a pollutant that harms human health, food production and ecosystems.
  - ✓ Methane also leads to production of water vapor in the stratosphere by chemical reactions, enhancing global warming.

#### Rise in Methane:

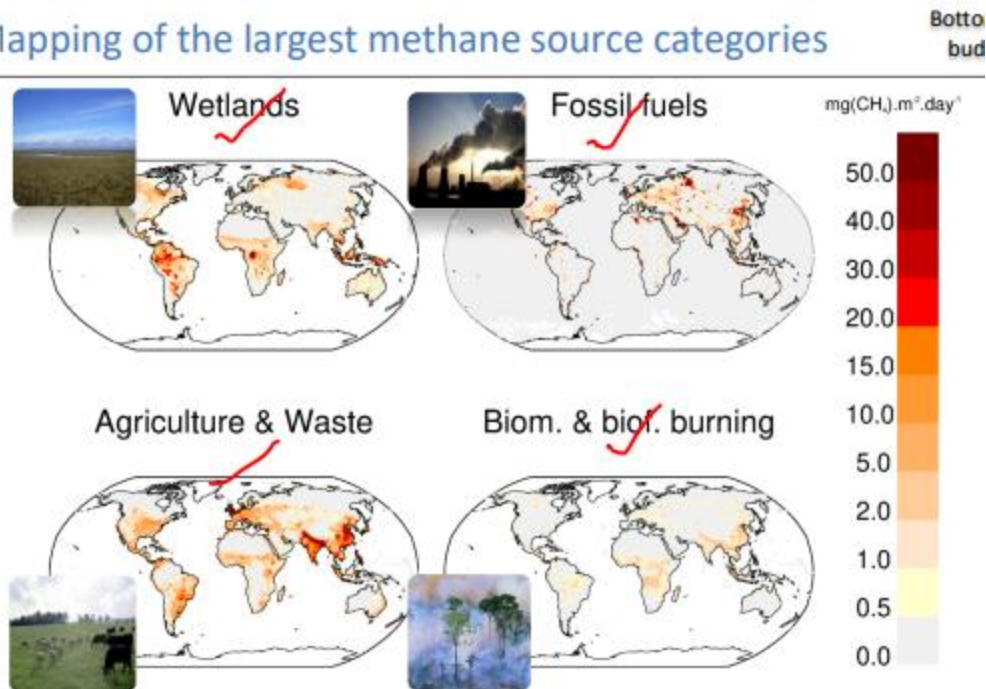


- Slowdown of atmospheric growth rate before 2006
- Resumed increase after 2006





## Mapping of the largest methane source categories



Emission changes between 2000-2006 and 2017:

- Global increase mainly from anthropogenic sources equally between Agriculture and Waste and Fossil Fuel
- Fossil Fuel emissions increased in China, North America (USA), Africa, and Asia
- Agriculture and Waste emissions increased mostly in Africa, Southern Asia and South America
- Emissions decreased in Europe from both Fossil Fuel and Agriculture and Waste sources

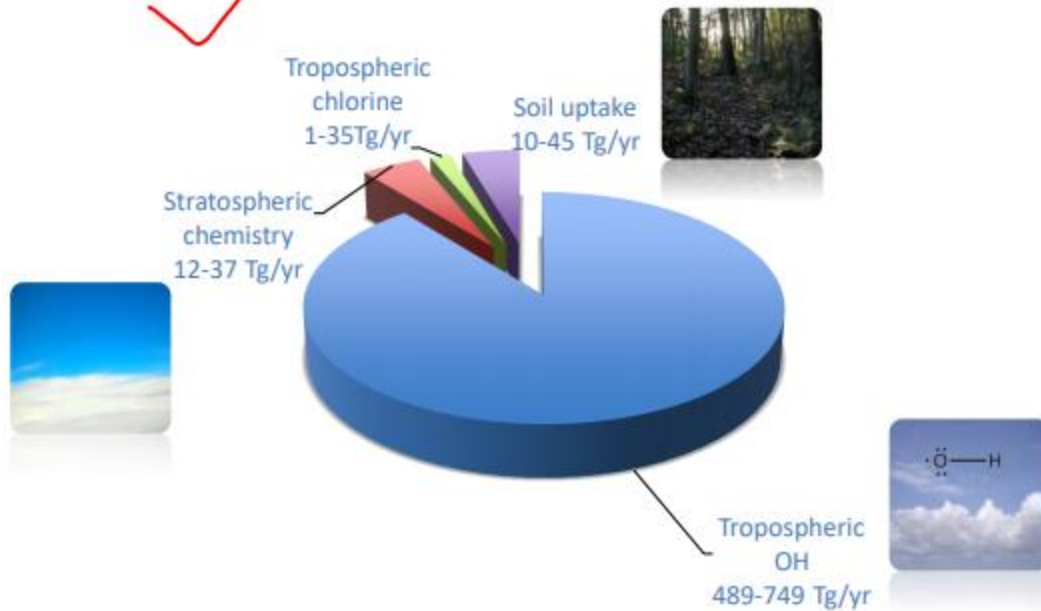
### Methane Sink:

Hydroxyl radical, OH is the main oxidant of CH<sub>4</sub>, responsible of about 90% of methane removal in the atmosphere. The atmosphere, and more precisely the troposphere, is the largest sink for methane. Methane in the troposphere reacts with hydroxyl (OH) radicals, **forming mainly water and carbon dioxide.**



## Methane Sinks (2000s)

Bottom-up  
budget



CA2. Nano technology enables scientists to study migrations of Pied Cuckoo

Link: <https://www.downtoearth.org.in/news/wildlife-biodiversity/nano-technology-enables-scientists-to-study-migrations-of-pied-cuckoo-72336>



- a. A new project by a number of agencies is **using advancements in nano technology to study migratory patterns of the Pied Cuckoo**, a bird closely linked with the arrival of the south west monsoon in India.
- b. The project is a joint effort by the **Wildlife Institute of India, Dehradun and the Indian Institute of Remote Sensing (IIRS)**, which comes under the Indian Space Research Organisation or ISRO.
- c. There are basically **three subspecies of the Pied Cuckoo** of which one is resident in Africa while another is resident in South India. The third is a migrant moving between India and Africa. It moves to India during the summer.
- d. Being a small, terrestrial bird, a sea crossing holds a lot of risk for this cuckoo. Before it migrates back to its home in the southern African region, by flying over the Arabian Sea and the Indian Ocean, **it must be stopping somewhere. It is these stopovers that scientists want to find out about.**
- e. The Pied Cuckoo is famous in North Indian folklore as '**chatak**', a bird that quenches its thirst only with raindrops.
- f. This collaborative effort is a **first of its kind and through this an online web-based geospatial dashboard** will be developed for near-real-time monitoring of trends and patterns in movement of Pied Cuckoo i.e., development of a location analytical tool with an API for interoperability and to perform geospatial modeling.
- g. **The Pied Cuckoo migration study is part of a larger project — Indian Bioresource Information portal (IBIN)** funded by the Department of Biotechnology, under the Union Ministry of Science and Technology, that aims to deliver relevant bioresources (plant, animal and other biological organisms) information of India through a web portal.

### Indian Bioresource Information portal (IBIN)

IBIN was launched at Eleventh meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 11) in Hyderabad, India.

### What is this IBIN? Just have basic idea of Portal.

In view of promoting the **development of a national level database on vegetation cover, biological resources, and biological diversity of the country**, India have compiled three sets of databases:

1. Biodiversity Characterization at Landscape Level in India Database – a database covering entire India has been prepared during past 12 years. It comprises spatial database on vegetation/land use types, landscape fragmentation, disturbance regimes, species richness, biodiversity value, and biological (plant) richness.
2. Jeeva Sampada – a database on plants, animals, marine and microbial resources of the country. This data was compiled by over 400 scientists from about 200 organizations.

3. Jeeva Manachitra – a spatial database on the vegetation, forest cover, and other landscape elements of the entire country, based on satellite images and ground inventory done over the last two decades. This data also highlights the conservation value of the species.

**The three data sets are the largest data sets ever created on the country's biological resources and the biodiversity.**

### CA3. Coir Products Touches Rs 2758 crore; India Sets Record

Link: <https://krishijagran.com/agriculture-world/coir-products-touches-rs-2758-crore-india-sets-record/>

News:

During 2019-20, coconut fibre and coir products were exported from India to the tune of Rs.2757.90 crore. **This is higher than ever before which is more than 30 crores previous year 2018-19.**

Exports of coconut fibre particles, knotted mats, earthenware, rope rugs, carpets, other materials, coconut fibre and loom mats are highly valued. Exports of handloom mats, rope yarn, rubber rope and power loom mats have increased in value despite the declining volume.

**Maximum export is to which country: Its China.**

### Export Statistics

#### COUNTRY-WISE EXPORT OF COIR AND COIR PRODUCTS (2018-19)

Quantity in Tonnes.		Value in Rs.Lakhs			
Sl.No.	COUNTRY	QUANTITY	VALUE	QTY%	VAL%
1	REPUBLIC OF CHINA	354267.55	71505.98	36.75	26.21
2	USA	122220.78	60134.19	12.68	22.04
3	NETHERLANDS	96981.75	24841.02	10.06	9.11
4	SOUTH KOREA	75186.43	14251.99	7.80	5.22
5	UK	22192.45	11743.33	2.30	4.30

**Something important related to coir:**

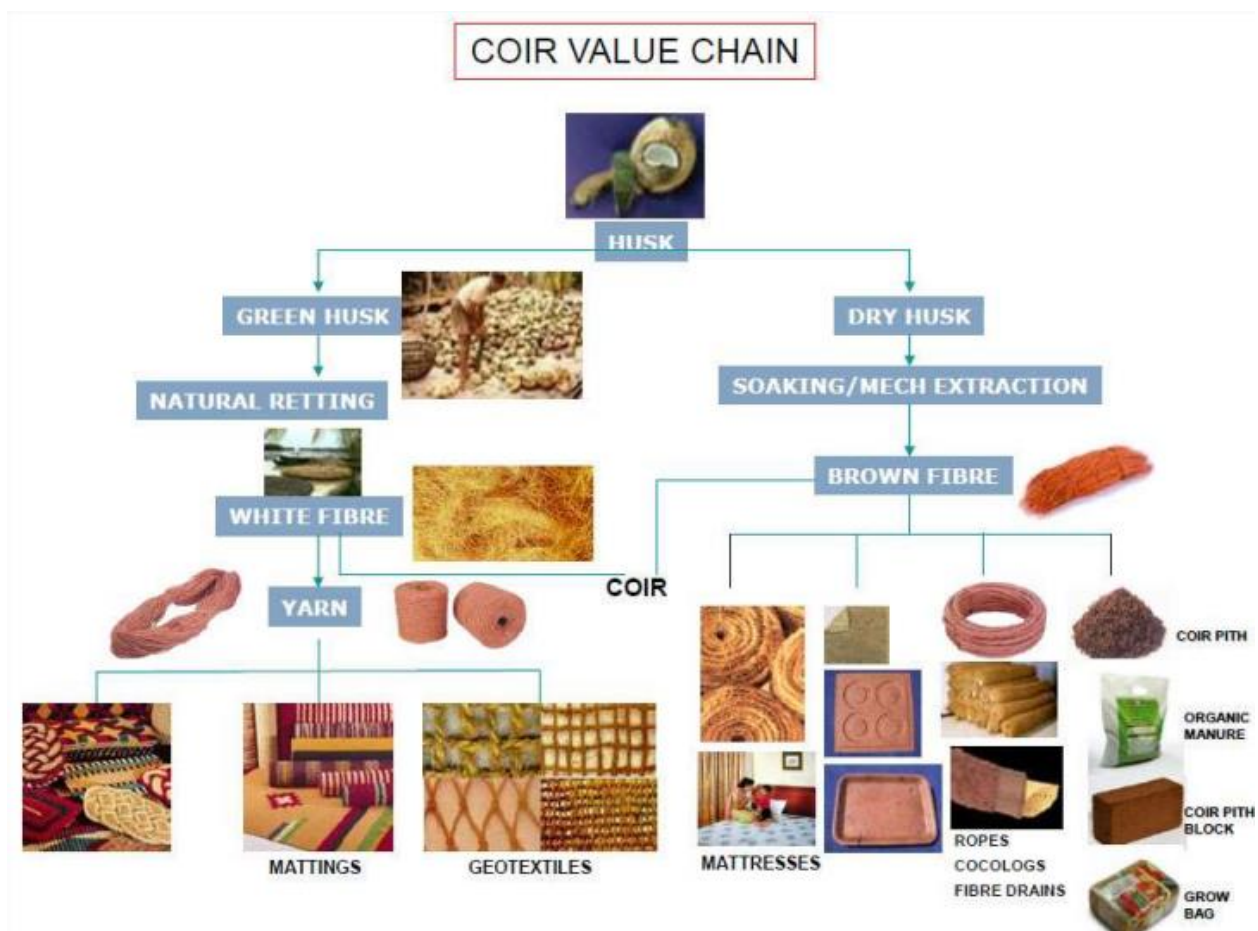
India is the **largest producer of coir in the world** with a production of 5,42,000 MT which comes to around 55% of world production of coir. India is followed by Sri Lanka and Vietnam in terms of production of coir.

## What government is doing to promote coir?

Government of India is implementing various Schemes for promotion of coir in the country and to enhance the production and export of coir and coir products.

### The Schemes are:

- Coir Udyam Yojana**, Science & Technology and Coir Vikas Yojana comprising of components like Skill Upgradation, Quality Improvement Scheme and Mahila Coir Yojana, Export Market Promotion & Domestic Market Promotion.
- Government is also implementing the Scheme of Funds for Regeneration of Traditional Industries (SFURTI) for development of Coir Clusters.**
- Under the ASPIRE Scheme of the Ministry of Micro, Small and Medium Enterprises (MSME), Coir Board is in the process of establishing Livelihood Incubation Centres in various parts of the country, which will provide training and handholding support to new entrepreneurs of coir sector.**



History of coir: we are taking points from the website of coir board of India.

The first recorded history of coconut in the country dates back to Ramayana period. In the Valmiki Ramayana there are references of coconut in the Kishkindha Kanda and Aranya Kanda. It is reported that Ramayana was written by Valmiki sometimes in 3rd Century BC. Generally, it is believed that coconut was introduced in India during the post-Vedic period.

**Alleppey (Alappuzha in Malayalam) is the nerve centre of Kerala's famous Coir industry.** In fact, even the name Kerala (Kerlam in Malayalam) is derived from this tree ("Kera" in Malayalam language means Coconut and "Alam" means Land, thus Keralam = Land of Coconut).

**Coir Board of India comes under: Ministry of MSME and chairman is not a Union Minister.**



#### CA4. NISHTHA Programme

Link: <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1639103>

Recently, the National Initiative for School Heads and Teachers Holistic Advancement (NISHTHA) programme has been launched for the first time in online mode in the state of Andhra Pradesh.

**About Program: UPSC will simply ask its main aim. So, no need to go in much detail. Just few diagrams and you will understand well.**

**National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA)** is a capacity building programme for improving the quality of school education through integrated teacher training.

It aims to build competencies among all the teachers and school principals **at the elementary stage (very important).**



## National Initiative for School Heads' and Teachers' Holistic Advancement



Training of all heads and teachers as first level counsellors



Promoting experiential and joyful learning



Awareness on centrally sponsored schemes/ initiatives

### Highlights of NISHTYA



- ▶ Capacity building of 4.2 million teachers ✓
- ▶ Integrated training of principals/heads as key academic support ✓
- ▶ Focus on competency and higher order thinking skills based teaching learning
- ▶ Training of all heads and teachers as first level counsellors ✓
- ▶ Promoting experiential and joyful learning
- ▶ Awareness of centrally sponsored schemes/initiatives ✓
- ▶ Online monitoring and support system ✓
- ▶ Convergence of multi-departmental efforts
- ▶ Activity based training modules ✓

### CA5. National Biopharma Mission (NBM)

Link: <https://pib.gov.in/PressReleasePage.aspx?PRID=1638979>

#### Context:

BIRAC has announced that ZyCoV-D, the plasmid DNA vaccine designed and developed by Zydus and partially funded by the Department of Biotechnology (DBT) has initiated Phase I/Phase II clinical trials in healthy subjects, making it the first indigenously developed vaccine for COVID-19 to be administered in humans in India.

DBT has partnered with Zydus to address rapid development of an indigenous vaccine for COVID-19 under the National Biopharma Mission.

#### About National Biopharma Mission (NBM):

- a. It is an industry-academia collaborative mission for accelerating biopharmaceutical development in the country.
- b. It was launched in 2017 at a total cost of Rs 1500 crore and is 50% co-funded by World Bank loan.
- c. It is being implemented by the Biotechnology Industry Research Assistance Council (BIRAC).
- d. Under this Mission, the Government has launched Innovate in India (i3) programme to create an enabling ecosystem to promote entrepreneurship and indigenous manufacturing in the biopharma sector.

**It has a focus on following four verticals:**

- a. Development of product leads for Vaccines, Biosimilars and Medical Devices that are relevant to the public health need by focusing on managed partnerships.
- b. Upgradation of shared infrastructure facilities and establishing them as centres of product discovery/discovery validations and manufacturing.
- c. Developing human capital by providing specific training.
- d. Developing technology transfer offices to help enhance industry academia inter-linkages.

### CA6. Why India's Greenhouse Gas Emissions Are About to Rise Faster?

Take Climate Action Tracker, a website tracking countries' actions on climate change.

**Citing India's ambitious renewable energy targets – 450 GW by 2030**, it says that **India's climate commitment in 2030 is within the range of what is considered to be a fair share of global effort**. It also adds that, if the country abandons plans for new coal-fired power plants, the website adds, it could become a global climate leader.

### **What is the biggest problem we are observing in achieving Paris Climate Targets (INDCs)?**

Since 2017, a rising number of fossil fuel producers, mostly from Russia, America and the Middle East, have begun entering India, seeing the country as one of the last big markets for fossil fuels.



### Global oil and gas majors and their India plans

- August, 2017 – Rosneft buys Essar Refinery
- April, 2018 – Aramco-ADNOC announce plans for an Indian refinery in Ratnagiri, Maharashtra
- January, 2019 – Shell buys out Total from its gas unit at Hazira, Gujarat
- January, 2019 – Vedanta announces expansion plans for oil exploration/production from India
- August, 2019 – Aramco in talks with Reliance Industries to pick up 20 percent stake in its petrochemical complex at Jamnagar, Gujarat
- August, 2019 – British Petroleum and Reliance Industries form a JV for service station network and aviation fuel retailing
- September, 2019 – Russia's Novatek ties up with Hiranandani Group to sell LNG in India
- September, 2019 – Tellurian signs MoU with Petronet LNG
- October, 2019 – ADNOC and Borealis invest in Adani petrochemical plant
- October, 2019 – Total picks up 37% in Adani Gas
- January, 2020 – India asks Brazil to sell it oil
- February, 2020 – Rosneft to supply Urals Crude to Indian Oil
- February, 2020 – Exxon inks deal to supply gas to Indian Oil

### Why global oil and gas majors are entering India?

Foreign energy majors have eyed India for long.

- The country is the **world's second largest importer of coal; the third-largest importer of oil; and the fourth-largest importer of liquefied natural gas.**
- It's also a regional refining hub, with an installed capacity above 249 million tonnes per annum (4.6 million barrels a day). Now, two new developments have further added to India's allure.
- First, **competition is intensifying amongst oil, gas and coal majors.** Not only are renewables depressing growth, the shale revolution has turned America, once an oil importer, into an oil and gas exporter.
- At the same time, as renewable energy prices fall and pressures to decarbonize rise, fossil fuel producers have no more than thirty years **to monetize their fossil fuels** and re-establish themselves on alternative economic fundamentals.
- The outcome is one **where fossil fuel majors are looking east** (at fast-growing fossil fuel markets like India and China) and **downstream** (focusing more on sales than exploration in new markets).

- f. **Aramco, for instance**, is boosting its daily production (12 million barrels a day) by another 1.45 million barrels, and its refining capacity from 5 million barrels a day to 8-10 million barrels.

Even as India invites global oil and gas majors, the country is also investing in fossil fuel fields overseas, amping up coal production and pushing renewables.

## India best place for oil & gas investors: Pradhan to foreign firms

India is expanding oil refining capacity to produce more fuel and petrochemicals as also investing in pipelines and terminals to increase the share of natural gas in the energy mix.

### Can COVID-19 change this?

For folks in the renewable sector, COVID-19 seems like good news. The global pandemic triggered an unprecedented **collapse in demand, and prices, of crude oil**. Studying the impact of oil selling at \$35 a barrel on companies' investment plans for 2020, energy consultancy Wood Mackenzie found **three out of four projects couldn't even cover their cost of capital**. At \$20 a barrel, the industry would be decimated.

### Coronavirus and a price war has sent oil tumbling

Brent crude, \$ per barrel



If you forgot India's INDCs, read once again:

At the Conference of the Parties (COP) 15 in Copenhagen in 2008, India announced voluntary targets to reduce the emissions intensity of its GDP by 20-25% against 2005 levels by 2020. In 2015 the GoI built on this target in its submitted Intended Nationally Determined Contribution (INDC), conditional upon financial assistance, which became India's first Nationally Determined Contribution (NDC) after the GoI ratified the Paris Agreement in 2016. India's NDC focuses strongly on action in the energy sector and includes the following energy sector-related targets:

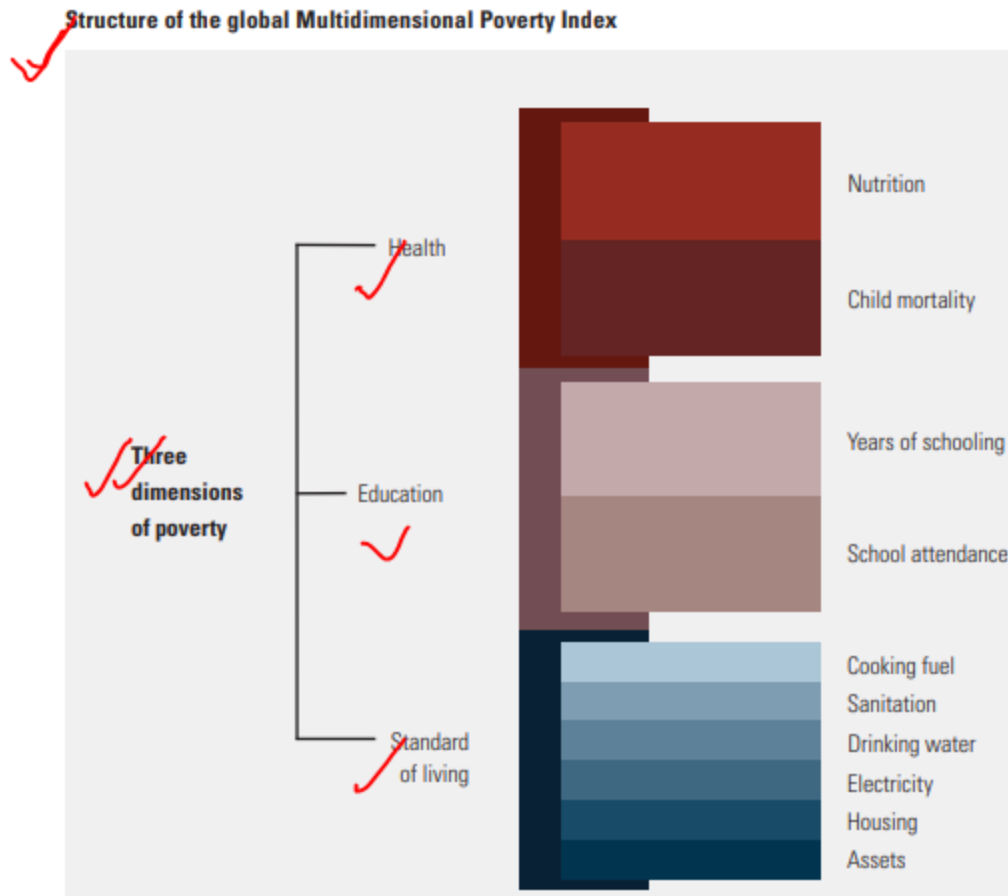
- To reduce the emissions intensity of GDP by 33-35% from 2005 levels by 2030.
- To achieve about 40% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030, conditional on the transfer of technology and low-cost international finance including from the Green Climate Fund (GCF).
- To create an additional carbon sink of 2.5-3 billion tonnes of CO<sub>2</sub> equivalent through additional forest and tree cover by 2030.
- To better adapt to climate change by enhancing investment in sectors vulnerable to climate change, particularly agriculture, water resources, Himalayan region, coastal regions, health and disaster management.

[Click here](#) for total installed capacity. And check which sector contributes highest, lowest (Thermal, Renewable, etc.).

### CA7. Global Multidimensional Poverty Index 2020

Recently, Global Multidimensional Poverty Index 2020 was released by the **United Nations Development Programme (UNDP)** and the **Oxford Poverty & Human Development Initiative (OPHI)**.

In the global MPI, people are counted as multidimensionally poor if they are deprived in one-third or more of 10 indicators, where each indicator is equally weighted within its dimension, so the health and education indicators are weighted 1/6 each and the standard of living indicators are weighted 1/18 each.



We see report in two aspect, **Global and India.**

#### What report talks about Global?

- 1.3 billion people are still living in multidimensional poverty. More than 80% are deprived in at least five of the ten indicators used to measure health, education and living standards in the global MPI.
- The burden of multidimensional poverty disproportionately falls on children - half of multidimensionally poor people are children under age 18.
- 65 out of 75 countries studied significantly reduced their multidimensional poverty levels between 2000 and 2019.
- About 84.3% of multidimensionally poor people live in Sub-Saharan Africa and South Asia.
- 67% of multidimensionally poor people are in middle-income countries.

#### What report mentions about India?

- Four countries halved their MPI value. **India** (2005/2006–2015/2016) did so nationally and among children and had the biggest reduction in the number of multidimensionally poor people (273 million).

- b. Of the 65 countries that reduced their MPIT value, 50 also reduced the number of people living in poverty. **The largest reduction was in India**, where approximately 273 million people moved out of multidimensional poverty over 10 years.
- c. Ten countries account for 60 percent of unvaccinated children, and 40 percent of children unvaccinated for diphtheria, tetanus and pertussis (DTP3) live in just four countries: Nigeria, **India**, Pakistan and Indonesia.
- d. More than 450 million people have gained access to clean cooking fuels since 2010 in China and **India** as a result of liquefied petroleum gas programmes and clean air policies.

Where does the water go during a drought? Germany researchers try to find out

Where does the water go in a drought? How does it get distributed during low-precipitation periods and what are the ways to improve water retention in such a situation?

#### CA8. Bathynomus raksasa: Isopod Species

Link: <https://indianexpress.com/article/explained/explained-raksasa-cockroach-from-the-deep-the-stuff-nightmares-are-made-of-6513281/>



Recently, scientists have reported the discovery of the **first super giant isopod species** in the **eastern Indian Ocean** named 'Bathynomus raksasa. **It has been described as the 'cockroach of the sea'.** A team of researchers from Singapore discovered it while exploring waters of the Indian Ocean in Banten, off the southern coast of West Java in Indonesia in 2018.

**Features:**

The Bathynomus raksasa is a giant isopod in the genus Bathynomus. The giant isopods are distantly related to crabs, lobsters, and shrimps (which belong to the order of decapods), and are found in the cold depths of the Pacific, Atlantic, and Indian Oceans.

The cockroach of the sea has 14 legs but uses these only to crawl along the bed of oceans in search of food. The Darth Vader appearance is due to the shape of the cockroach's head and compound eyes.

The Bathynomus raksasa measures around 50 centimetres (1.6 feet) in length, which is big for isopods, which normally do not grow beyond 33 cm (just over a foot). Isopods that reach 50 cm are referred to as supergiants. The only member of the isopod species that exceeds the raksasa in size is the Bathynomus giganteus, which is commonly found in the deep waters of the western Atlantic Ocean.

**How does the discovery of the cockroach matter to science?**

Until now, the scientific community knew of five supergiant species, two of which are found in the western Atlantic. This is the first record of the genus from Indonesia.

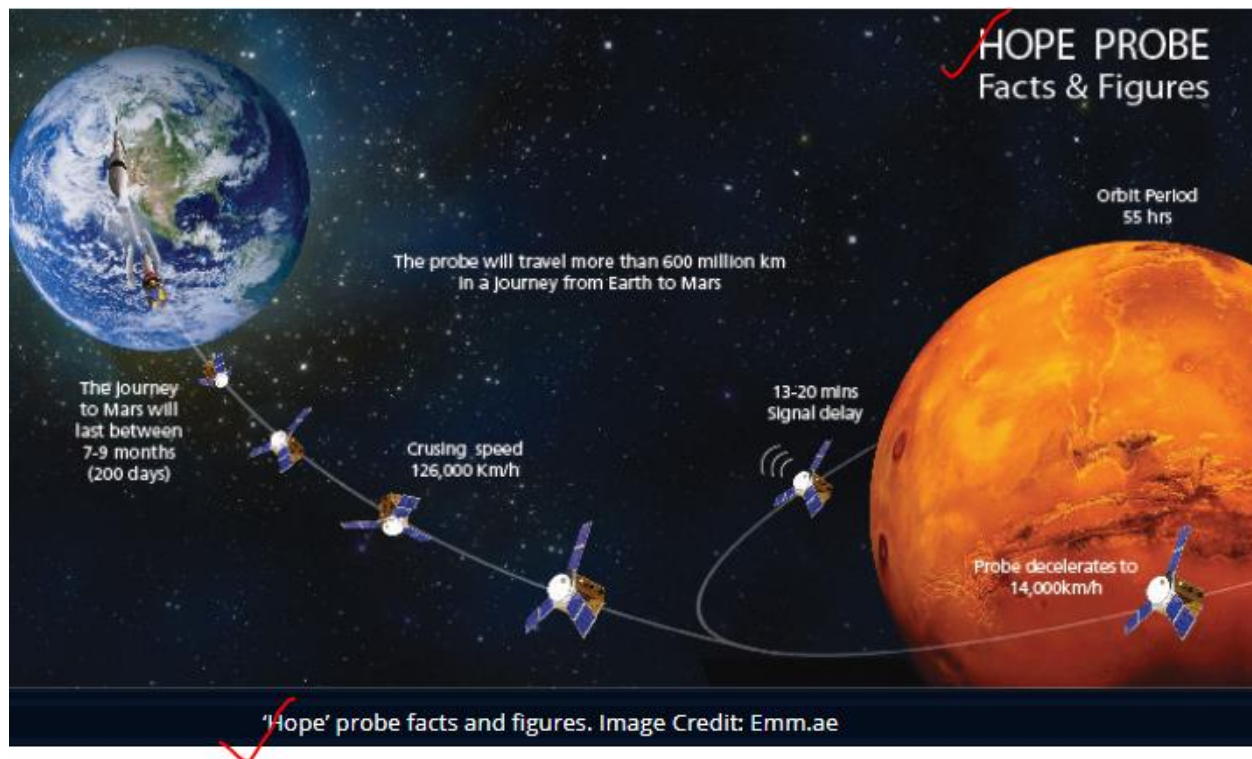
"Bathynomus raksasa is the sixth 'supergiant' species from the Indo-West Pacific, and is one of the largest known members of the genus," the researchers wrote.

The discovery takes the number of known giant isopods to 20. As the Bathynomus raksasa reveals its secrets, it will contribute towards increasing knowledge about the deep.

CA9. UAE Launches Interplanetary Mission to Mars

Link: <https://science.thewire.in/space/uae-hope-probe-mars-launched/>





A rocket carrying the Hope probe, developed by the Mohammed Bin Rashid Space Centre, UAE, lifts off after blasting off from **Tanegashima Space Center, Japan**. **The first Arab mission to Mars** was initially due to launch on July 14 but has been delayed twice due to bad weather.

The main aim of Mission Hope **is to understand the weather on the Red Planet through all seasons and study how atmospheric oxygen and hydrogen escape into space.**

**Hope has three instruments** — two spectrometres and one exploration imager (high-resolution camera). While one spectrometre will determine the temperature of the planet through the next year, the other will measure the oxygen and hydrogen levels at least 40,000 kilometres from the surface of Mars. The imager will provide information on the ozone levels on the Red Planet.



The UAE first announced plans for the mission in 2014 and launched a National Space Programme in 2017 to develop local expertise. Its population of 9.4 million, most of whom are foreign workers, lacks the scientific and industrial base of the big spacefaring nations.

It has an ambitious plan for a Mars settlement by 2117. Hazza al-Mansouri became the first Emirati in space last September when he flew to the International Space Station.

To develop and build the Hope probe, Emiratis and Dubai's Mohammed Bin Rashid Space Centre (MBRSC) worked with US educational institutions.

There are currently **eight active missions** exploring Mars; some orbit the planet and some have landed on its surface. **The only other country to land a spacecraft on Mars was the Soviet Union in 1971 and 1973.** In 2014, **India's Mars Orbiter Mission successfully enters Mars' orbit**, becoming the first nation to arrive on its first attempt, and the first Asian country to reach the Red Planet. India's MARS mission has taken place in 2014, so we won't need to go in detail about it now.

**Be careful, if UPSC is asking landed on MARS or orbiting.**

## CA10. Zonal Councils in India

The idea of creation of Zonal Councils was mooted by the **first Prime Minister of India, Pandit Jawahar Lal Nehru in 1956.** This can be again a part of your Prelims Question. If you remember, something similar was asked in Prelims 2019:

The Ninth Schedule was introduced in the constitution of India during the prime ministership of

- (a) Jawaharlal Nehru
- (b) Lal Bahadur Shastri
- (c) Indira Gandhi
- (d) Morarji Desai

Zonal Councils were set up under **States Re-organisation Act, 1956**. There are total five Zonal Councils- North, South, West, East and Central.

Don't include North-Eastern Zonal Councils in it. **North Eastern Council is a statutory advisory body constituted under the NEC Act 1971.**

#### IV. ORGANISATIONAL STRUCTURE OF ZONAL COUNCILS

(i) Chairman

The Union Home Minister is the Chairman of each of these Councils.

(ii) Vice Chairman

The Chief Ministers of the States included in each zone act as Vice-Chairman of the Zonal Council for that zone by rotation, each holding office for a period of one year at a time.

(iii) Members

Chief Minister and two other Ministers as nominated by the Governor from each of the States and two members from Union Territories included in the zone.

(iv) Advisers

One officer nominated by the Planning Commission for each of the Zonal Councils, Chief Secretaries and another officer/Development Commissioner nominated by each of the States included in the Zone;

One more important thing to understand here is Standing Committee to Zonal Councils.

#### III. COMMITTEES OF ZONAL COUNCILS

Each Zonal Council has set up a Standing Committee consisting of Chief Secretaries of the member States of their respective Zonal Councils. These Standing Committees meet from time to time to scrutinize items/issues sponsored for consideration of Zonal Councils, resolve as many issues as possible at their level, and recommend important issues for consideration at the meetings of Zonal Councils. Senior Officers of the Planning Commission and other Central Ministries are also associated with the meetings of the Standing Committees depending upon necessity.

#### VI. FUNCTIONS OF THE COUNCILS

Each Zonal Council is an advisory body and may discuss any matter in which some or all of the States represented in that Council, or the Union and one or more of the States represented in that Council, have a common interest.

In particular, a Zonal Council may discuss, and make recommendations with regard to,-

- any matter of common interest in the field of economic and social planning;
- any matter concerning border disputes, linguistic minorities or inter-State transport; and
- any matter connected with, or arising out of, the re-organisation of the States under the States Reorganisation Act.

Nothing more than this is required for your Exam.

CA11. How glaciers in the western Himalayas are reacting differently to climate change and human activities?

Link: <https://science.thewire.in/environment/western-himalaya-glaciers-climate-change/>



*The Chhota Shigri glacier in Himachal Pradesh. Photo by Mohd. Farooq Azam.*

**The western Himalayan region holds about 15% of the total ice mass** of the Himalayas and the meltwater from these glaciers is significant for the surrounding countries. *A report was recently published regarding western Himalayas. We will see below.*

### **Who has published the study?**

The study was done between **2002-2019** by a set of researchers from different institutes across India led by **Jawaharlal Nehru University (JNU) at the Chhota Shigri Glacier** in the Lahaul-Spiti valley (Himachal Pradesh) in the western Himalayan region. It was published in the Journal of Glaciology in June 2020.

The study is based on the longest recorded field-based datasets in the whole Himalayan range and the observed research components include “mass balance, ice velocity, high-altitude meteorology and glacier runoff, and their interactions under the ongoing climate change,” according to the researchers

### **Three important studies:**

Three studies shed light on glacier health in the western Himalayas, with results that are in contrast with previous speculation on glacial melts and could better inform glacier protection and policy.

- a. **Summer-monsoonal snowfall plays an important role in maintaining glacier mass in the western Himalayan region.** *More frequent and strong snowfall in the years ahead could likely sustain the health of glaciers,* says one study.
- b. **Less impact of warming at high altitude**
- c. Another study from the western Himalayan region reveals that **biomass burning and not fossil fuel is the primary driver behind carbon-induced melting of glaciers** in the region.

**Explanations of all three points in brief:**

### **Summer-monsoonal snowfall**

**Summer-monsoonal snowfall** plays an important role in maintaining glacier mass in the western Himalayas. If this snowfall is more frequent and stronger in the years ahead, the **health of glaciers will most likely sustain**, says a latest study by a group of researchers from across India.

Though the health of the glaciers mainly depends on the fluctuations in air temperature, it is also influenced by the sporadic summer-monsoonal snowfall. With more extreme events in the coming years, where frequency and intensity of this snowfall is expected to be higher, **western Himalayan glaciers could still continue to sustain**, steering away from the expectation that climate change will cause increasing glacier mass loss.

### **Less impact of warming at high altitude**

It found that the Chhota Shigri Glacier is losing its mass similar to the glaciers in other parts of the world and that the rate of mass loss is not extraordinarily high as against what has been speculated in the past. However, the study noted that this glacier is trying to adjust to the changes in climate through its retreat. **But at the higher altitudes, the ice flow hasn't changed much which indicates that there is less impact of warming at the higher altitudes.**

### **Biomass burning is the main source of black carbon**

To understand the impact of climate change on glaciers it is important to also look at the impact of black carbon (BC) on them. According to another recent study, published in journal Environmental Science and Technology in June 2020, factors like **wood burning and forest fires – and not the carbon emitted** from the use of fossil fuel – **are the primary drivers behind carbon-induced melting of glaciers in the western Himalayan region.**

**This is in contrast** to the glaciers of the central and eastern Himalayan region as they are affected **significantly by carbon from the fossil fuel sources.** This study was done by a team of researchers from various institutes in India, the United Kingdom, Canada, the United States of America and China.

## CA12. Referendums and The Indian Constitution

Link: <https://www.livelaw.in/columns/referendums-and-the-indian-constitution-160211>



Very important article for Prelims and Mains both. You won't find anywhere. Please read.

Earlier this month, Russia voted on an important referendum that brought significant changes to its Constitution. The Russians decided to grant President Putin the option of leading the country until the year 2036, by limiting a President's Rule to two six-year terms in total rather than two consecutive terms. They also voted to effectively ban same-sex marriages in the country

### What is the difference between direct and indirect democracy?

**Majority of democratic nations** across the world, **follow the system of an indirect democracy**, wherein the citizens elect their representatives, who in turn make laws, determine policies and carry on administrative work. **On the other hand**, in some countries citizens directly take part in the administration of the country, decide on policy issues and make laws as well. **This form is called a direct democracy** and a referendum is a facet/means of it. In a referendum, the citizens are called to vote in person (rather than through their elected representatives) on a policy decision to be taken by the government (for instance, United Kingdom's decision to leave the European Union) or an amendment to their Constitution. *Several nations have incorporated provisions for referendums in their Constitution.*

**Here we will discuss the position of referendums in India, starting from the discussions in the Constituent Assembly.**

#### 1. Constituent Assembly and Referendums

The Constituent Assembly while debating upon the provisions of the Constitution, witnessed a lengthy discussion on the position of a referendum. We will not go in detail, just we will see statements put up by leaders during discussion.

- a. Dr. Rajendra Prasad (President of the Assembly) responded to this demand, by stating that any discussions on a referendum would be futile, since there is no provision for one in the Constitution
- b. Dr. Ambedkar cited the examples of the Irish Constitution, Swiss Constitution and the Australian Constitution, to argue that a referendum involves an elaborate and difficult procedure and hence, has not been included in our Constitution.
- c. Shri Brajeshwar Prasad during debate in Assembly advocated for referendums. Very important for you people if you want to write something supporting referendum. Read below.

*"Sir, I am in favour of a referendum, because referendum has many advantages. Referendum is democratic as it is only an appeal to the people, and no democratic government can have any objection to resorting to referendum in order to resolve a deadlock, when there is a conflict between Parliament and provincial governments. Secondly, I am in favour of referendum because it cures patent defects in party governments. People think that it is too radical a weapon and that a conservative people like ourselves ought not to use it without proper consideration and thought. It is conservative since it ensures the maintenance of any law or institution which the majority of the electors effectively wish to preserve. Therefore it cannot be a radical weapon. Thirdly, Sir, referendum is a clear recognition of the sovereignty of the people. Fourthly, it would be a strong weapon for curbing the absolutism of a party possessed of a parliamentary majority." (17 September 1949)*

## 2. Independent India and Referendums

The Constitution as adopted by the Constituent Assembly, did not have any provisions for a referendum. However, the nation witnessed referendums on five key occasions.

- a. First, during the incorporation of Chandernagore within the territory of India
- b. Incorporation of princely state of Junagadh, wherein the citizens voted to accede to India rather than Pakistan in the year 1948
- c. Pondicherry (a former French territory) voting to join the Indian Union in the year 1954.
- d. Incorporation of Goa, Daman and Diu. It should be noted that the government did not call this exercise a 'referendum' but an Opinion Poll. However, in effect it was a referendum.
- e. The last referendum happened in the year 1975, wherein the inhabitants of Sikkim decided on their merger with India

**Note:** *It should be noted that while the Constitution does not allow for referendums, the tribal areas in the states of Assam, Meghalaya, Tripura and Mizoram, recognised under the Sixth Schedule have incorporated provisions allowing referendums in election matters [For instance, United Khasi Jaintia Hills Autonomous District (Appointment and Succession of Chief and Headman) Act, 1959]. These areas have been given such autonomy so as to protect their distinct culture.*



### 3. Demand for Re-instating Referendums in the Constitution of India

The Union government passed the infamous 42nd Amendment [Constitution (Forty Second Amendment) Act, 1976] that gave unbridled powers to the Parliament. Therefore, when a new Union government came to power in the year 1977, it tried its best to undo the wrongs of the past.

Law Minister Shanti Bhushan was keen on granting additional protection to the provisions of fundamental rights and **introduced a provision in the 44th Amendment that fundamental rights could be amended only through a referendum**. He introduced a provision stating that **wherever an amendment affected the basic features of the Constitution** i.e. secularism, democracy, fundamental rights, free and fair elections, independence of the judiciary etc., the **final call on it would be taken through a referendum**.

Ultimately, **the provisions on referendum were defeated in the Rajya Sabha and the 44th Amendment Bill was sent back to the Lok Sabha with changes**. Arguably, *this became the first instance in India's parliamentary history, wherein a Constitution Amendment Bill passed by the Lok Sabha was changed and returned by the Rajya Sabha*. The issue of incorporating referendums in the Constitution, **was put to rest**.

#### Concluding Remarks-

- a. The **Constitution of India is silent on a referendum**, therefore theoretically a referendum is **neither allowed nor prohibited**.
- b. A country like **India does not need a referendum**. The periodical elections conducted, act as the referendum where people express their views at large.
- c. Constitutional expert Shri Subhash Kashyap has rightly remarked that, *every election is a referendum on the basis of agenda, policy, programme and ideologies of the parties concerned*. In his opinion, **referendum in India shall carry the risk of stifling the voice of minorities**. *Even the Courts will be hesitant to interfere, knowing that the law in question is backed by the sovereign i.e. the people of India.*

CA13. Researchers use metamaterials to enhance detection of defects in large structures

Link: <https://www.downtoearth.org.in/news/science-technology/researchers-use-metamaterials-to-enhance-detection-of-defects-in-large-structures-72410>

**Periodic testing** is required to prevent catastrophic failures in many engineering structures like buildings, pipelines and rails. High-frequency sound waves that travel in the bulk (bulk ultrasound) are widely used for non-invasive and non-destructive testing of structural materials.



### Why bulk ultrasonic inspection is not good?

Conventional bulk ultrasonic inspection is tedious and time-consuming, as it involves point-by-point assessment of structures, and this is especially challenging in large-scale assets.

### So, what now?

To address this challenge, **Indian Institute of Technology (IIT) Madras and University of Nairobi researchers have used metamaterials** to improve detection of defects in large structures by Guided Wave Ultrasound. **In Guided Wave Testing (GWT)**, the sound waves are sent along the length of the structure rather than into the structure. This allows the waves to travel long distances.

Whereas conventional ultrasound-based testing has to be done at multiple regions of the test material and is therefore quite difficult to be used with large objects such as train tracks, oil-pipelines and reinforcing structures of tall buildings, etc.

### What are metamaterials?

Metamaterials are artificially crafted materials with unique internal microstructures that give them properties not found in nature. The constituent artificial units of the metamaterial can be tailored in shape, size, and interatomic interaction, to exhibit unusual properties.

## CA14. National Financial Reporting Authority

Link: <https://www.thehindubusinessline.com/companies/nfra-constitutes-technical-advisory-committee/article32140340.ece>

Recently, the National Financial Reporting Authority (NFRA) has constituted a Technical Advisory Committee (TAC) to aid and advise the executive body of the NFRA on issues relating to drafts of accounting standards and auditing standards. The TAC comprises seven members including the chairman - R. Narayanaswamy.

3. Rule 15 of the NFRA Rules, 2018, provides that the NFRA may constitute advisory committees, study groups and task forces for the effective performance of its functions under the Act.

4. Accordingly, a Technical Advisory Committee (TAC) for NFRA is now constituted, comprising of the following:

S.N.	Name and Designation	Position
1.	Dr R Narayanaswamy, Professor, Indian Institute of Management, Bangalore	Chair

### Functions of TAC:

- i. Aid and advise the Executive Body (EB) of the NFRA on issues relating to the drafts of accounting standards and auditing standards;
- ii. Advise on improvements to the processes followed by the EB, especially relating to AQRs;
- iii. Provide inputs from the perspectives of users, preparers, and auditors of financial statements;
- iv. Advise on suitable methods for promoting awareness (a) relating to compliance with accounting and auditing standards and (b) of the role of the NFRA in protecting investors through independent auditor regulation;
- v. Advise on development of measures of audit quality;
- vi. Any other matters that may be referred to the Committee by the EB.

## Now learn National Financial Reporting Authority

### Constitution:

NFRA was constituted in 2018 by the Government of India under section 132 (1) of the Companies Act, 2013. It is an audit regulator.

**132. Constitution of National Financial Reporting Authority.**— (1) The Central Government may, by notification, constitute a National Financial Reporting Authority to provide for matters relating to accounting and auditing standards under this Act.

### Background:

The decision to constitute the NFRA was taken after the role of auditors and the Institute of Chartered Accountants of India came under the scanner for alleged **lapses** in various corporate scams including that at the **Punjab National Bank**.

### Composition:

It consists of a chairperson, who shall be a person of eminence and having expertise in accountancy, auditing, finance or law, **appointed by the Central Government** and such other members not exceeding 15.

### Functions and Duties:

- a. Recommend accounting and auditing policies and standards to be adopted by companies for approval by the Central Government.
- b. Monitor and enforce compliance with accounting standards and auditing standards.
- c. Oversee the quality of service of the professions associated with ensuring compliance with such standards and suggest measures for improvement in the quality of service.
- d. Protect the public interest.

NFRA's mandate is to protect the public interest, and the interests of investors, creditors and others associated with the companies or bodies corporate (in other words, the users of corporate financial statements) over which it has jurisdiction. NFRA has to achieve this objective by establishing high quality standards of accounting and auditing, and exercising effective oversight of accounting functions performed by companies, and auditing functions performed by auditors. Audit Quality Reviews (AQRs) are an essential component of the method used by NFRA to monitor compliance with accounting and auditing standards. They also provide key inputs to the investigation and disciplinary proceedings activities of the NFRA.

### CA15. Zoram Mega Food Park: Mizoram

Link: <https://www.dnaindia.com/business/report-mega-food-park-in-mizoram-to-create-5000-jobs-benefit-25000-farmers-2833226>

Recently, the government has operationalized the first Mega Food Park (MFP) of **Mizoram** i.e. **Zoram Mega Food Park**. It has been set up under the 'Mega Food Park Scheme'.



सत्यमेव जयते

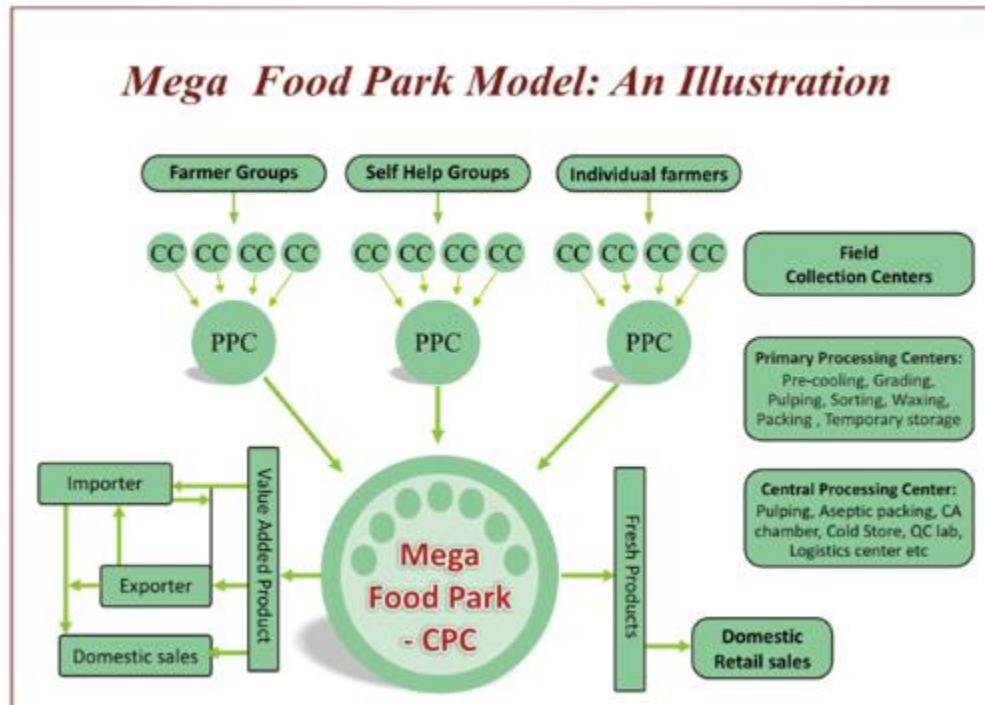
## खाद्य प्रसंस्करण उद्योग मंत्रालय MINISTRY OF FOOD PROCESSING INDUSTRIES

The Zoram Mega Food Park (MFP) in Mizoram will provide direct and indirect employment to 5,000 persons and benefit about 25,000 farmers in the CPC (Core Processing Centre) and PPC (primary processing Centre) catchment areas.

### About Mega Food Park Scheme:

- Launched in 2008-09 under the purview of the **Ministry of Food Processing Industries**.
- The Scheme of Mega Food Park aims at **providing a mechanism to link agricultural production to the market by bringing together farmers, processors and retailers so as to ensure maximizing value addition, minimizing wastage, increasing farmers income and creating employment opportunities particularly in rural sector**.
- The Mega Food Park Scheme is based on “**Cluster**” **approach** and envisages creation of state of art support infrastructure in a well-defined agri / horticultural zone for setting up of modern food processing units in the industrial plots provided in the park with well-established supply chain.
- Mega food park typically consists of supply chain infrastructure including *collection centers, primary processing centers, central processing centers, cold chain and around 25-30 fully developed plots for entrepreneurs* to set up food processing units.

- e. The Mega Food Park project is implemented by a **Special Purpose Vehicle (SPV) which is a Body Corporate registered under the Companies Act.**
- f. State Government, State Government entities and Cooperatives **are not required to form a separate SPV** for implementation of Mega Food Park project.



**See below all operational Mega Food Parks:** you will find this is not the first one in North East, one more is there in Assam. Can be your Prelims question.

So far following 18 Mega Food Parks are operational:

1. Srimi Mega Food Park, Chittoor, Andhra Pradesh.
2. Godavari Mega Aqua Park, West Godavari, Andhra Pradesh.
3. North East Mega Food Park, Nalbari, Assam.
4. Gujarat Agro Mega Food Park, Surat, Gujarat.
5. Cremica mega Food park, Una, Himachal Pradesh.
6. Integrated Mega Food Park, Tumkur, Karnataka.
7. Indus Mega Food Park, Khargoon, Madhya Pradesh.
8. Avantee Mega Food Park, Dewas, Madhya Pradesh.
9. Paithan Mega Food Park, Aurangabad, Maharashtra.
10. Satara Mega Food Park, Satara, Maharashtra.
11. MITS Mega Food Park, Rayagada, Odisha.
12. International Mega Food Park, Fazilka, Punjab.
13. Greentech Mega Food park, Ajmer, Rajasthan.
14. Smart Agro Mega Food Park, Nizamabad, Telangana.
15. Tripura Mega Food Park, West Tripura, Tripura.
16. Patanjali Food and Herbal Park, Haridwar, Uttarakhand.
17. Himalayan Mega Food Park, Udham Singh Nagar, Uttarakhand.
18. Jangipur Bengal Mega Food Park, Murshidabad, West Bengal.

Q16. 'Wrap, trap, zap': New strategy to kill antibiotic resistant bugs

Link: <https://www.downtoearth.org.in/news/science-technology/-wrap-trap-zap-new-strategy-to-kill-antibiotic-resistant-bugs-in-wastewater-72418>



A new **'wrap, trap and zap' strategy** that employs microspheres wrapped in graphene oxide — forming a graphene 'shield' — helps destroy antibiotic-resistant bacteria and free-floating **antibiotic-resistant genes (ARG)** produced by them in wastewater treatment plants, **showed new research.**

**Spheres introduced in the wastewater** by scientists **inactivated multidrug-resistant Escherichia coli bacteria in wastewater.** They also degraded the bacteria's plasmid encoded ARGs in secondary wastewater effluent.

#### **What was the problem?**

Superbugs are known to breed in wastewater plants and release extracellular ARGs when they are killed while disinfecting effluent. The ARGs, once discharged from the bacteria, **transform indigenous bacteria in the receiving environment**, making them resistome receivers. **The resistome consists of all the antibiotic resistance genes.**

#### **What is the benefit of this innovation?**

This innovation **will minimize the discharge of extracellular ARGs** and mitigate dissemination of antibiotic resistance from wastewater treatment plants. The graphene-wrapped spheres — with cores of bismuth, carbon and oxygen wrapped with nitrogen-doped graphene oxide — **kill the bacteria by producing three times the amount of reactive oxygen species (ROS)**, compared to spheres without the graphene 'shield'.



## CA17. Standing Committee advocates DBT of Fertilizer subsidy to the Farmer

Link:

[http://164.100.47.193/lsscommittee/Chemicals%20&%20Fertilizers/17\\_Chemicals\\_And\\_Fertilizers\\_5.pdf](http://164.100.47.193/lsscommittee/Chemicals%20&%20Fertilizers/17_Chemicals_And_Fertilizers_5.pdf)

Fertilizer Scam by Rajasthan Government, excess use of Fertilizers was in news recently. So, we will use this an opportunity to present something very important: **A parliamentary standing committee on the 'study of system of fertilizer subsidy' in March 2020**

**Read now. So many Prelims questions will be hidden inside it. So, read carefully.**

A parliamentary standing committee recently submitted its report on the '**study of system of fertilizer subsidy' in March 2020**. Among other things, the committee noted that there was a delay in settlement of subsidy dues. **It advocated for DBT of fertilizer subsidy to the farmer instead of the manufacturer.**

### **How Fertilizers are made available to farmers?**

In India, Fertilizers are made available to the farmers at a subsidized and affordable price to help with increase in yield. **The subsidy is passed onto companies manufacturing fertilizers** so that farmers get the fertilizers at subsidized MRP. The quantum of subsidy varies with type of fertilizer like Urea, DAP etc. The subsidy is given only to those fertilizers **which meet the standards laid down by the government.**

### **How supply is regulated?**

- a. The appointment of dealers and retailers who supply fertilizers to farmers is done by companies and licensing of these dealers & retailers is done by the state governments.
- b. Their availability & supply within the state is monitored by the state governments.
- c. The state governments are required to prepare a monthly estimate of the amount of fertilizers required and submit it to the Department of Agriculture which in turns coordinates with Department of Fertilizers.
- d. The Department of Fertilizers prepares the monthly supply plan after consultations with manufacturers and importers to meet the demands projected by the agriculture department.

### **When subsidy scheme for Fertilizers was introduced?**

Subsidy scheme for fertilizers was **first introduced by the Indian Government in 1977** through the Retention Price Scheme (RPS) for indigenous nitrogenous fertilizer units. Subsequently, **it was extended to phosphatic and other complex fertilizers and Single Super Phosphate.**

### **When Nutrition Based Subsidy Policy was introduced?**



In the case of P&K fertilizers, those which contain Phosphorous and Potassium compounds, **a Nutrition Based Subsidy (NBS) Policy was implemented since 2010**, under which a fixed rate of subsidy, in Rs per Kg basis, on each nutrient- Nitrogen (N), Phosphate (P), Potash (K) and Sulphur (S), is provided by the government each year taking into consideration international prices, exchange rate, and other factors.

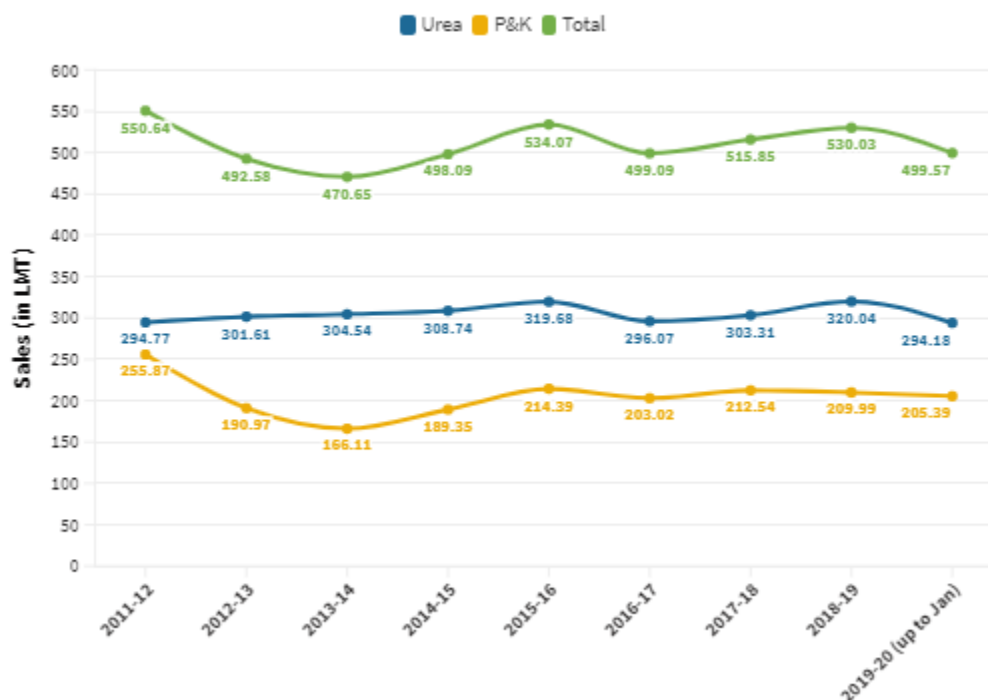
**City compost is a new category of fertilizers introduced in 2016**

**A third category of fertilizers, known as City Compost**, is given a fixed subsidy of ₹ 1500 per tonne. This scheme **was notified in 2016** to promote the use of city compost made from garbage in cities, that would provide carbon and other primary and secondary nutrients to the soil, in addition to keeping cities clean.

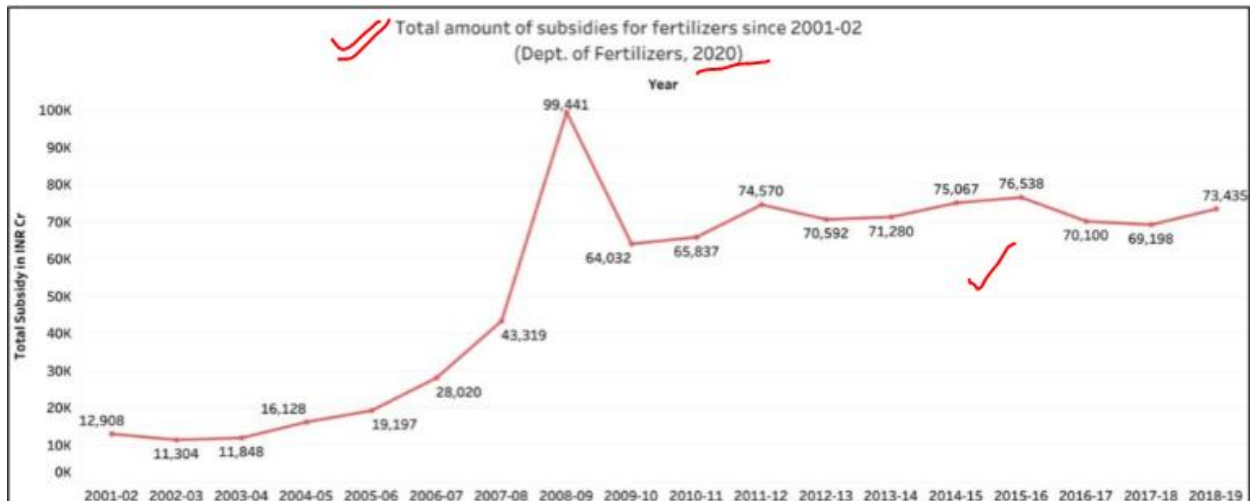
**The expenditure on fertilizer subsidy is increasing:**

- Since 2001-02, there has been a continuous increase in the fertilizer subsidy expenditure. **The expenditure on P&K fertilizers, both indigenous and imported was the highest in 2008-09**, when the subsidy expenditure also touched the peak since in these 18 years.

**National Total Fertilizer Consumption (Lok Sabha, March 2020)**

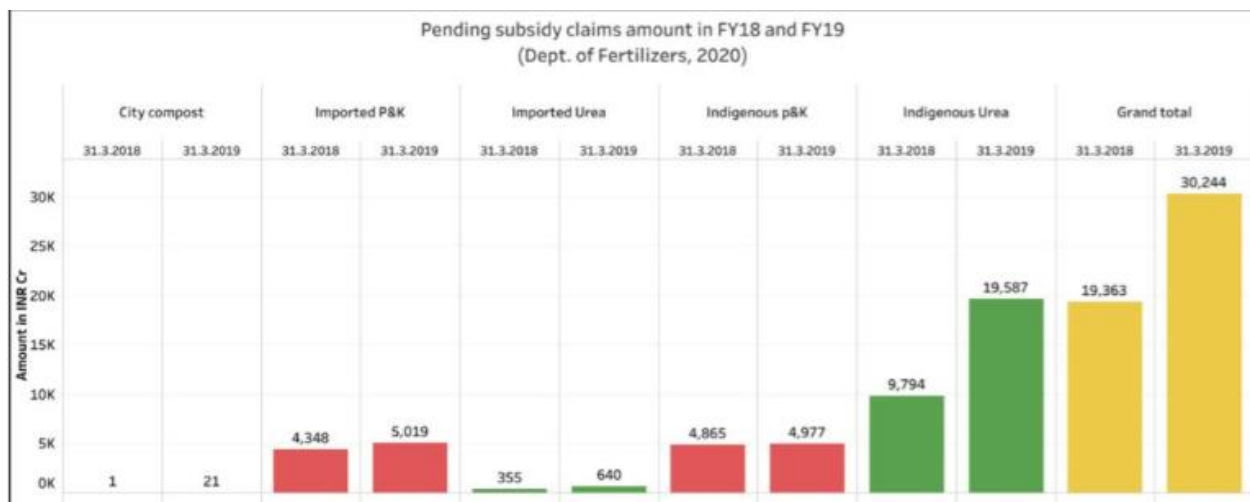


- While expenditure on P&K fertilizers **reduced since then**, the use of urea & hence the corresponding subsidy has increased. The NBS was also introduced in 2009. The shift in pricing regime was to ensure that balanced use of fertilizers. **Otherwise, the farmers ended up using more fertilizers than the desired quantity.**



### Delay in subsidy settlement is still a problem

The estimated subsidy expenditure for 2019-20 is ₹ 83476 crores. By the end of financial year 2017-18, subsidy claims worth ₹ 19,363 crores were pending and by the end of 2018-19, an amount of ₹ 30,244 was outstanding, higher than the previous year. **As per the existing policy guidelines, DBT claims should be settled within 7 working days from the date of submission of the claims.** However, there is no time limit mentioned for settlement of non-DBT claims.



### Usage of fertilizers in India is much higher than desired levels

- As per the standing committee report on fertilizers subsidy submitted in the Lok Sabha in March 2020, the consumption of fertilizers is much higher compared to the desired ratio. Although the desired consumption in case of NPK fertilizers is 4:2:1, the usage is (6.7):(2.4):1.

- b. It has also been reported that the consumption in states like Punjab and Haryana where agriculture is dominant, the consumption ratio was as high as (31.4): 8:1 and (27.7) :(6.1):1 respectively.

#### Conclusion report of Committee:

- a. Parliamentary standing committee advocates DBT on fertilizer subsidy directly to the farmer.
- b. Furthermore, the standing committee observed that manufacturers did not produce efficiently, and that the government had to bear the expense of this inefficiency. As a measure to reduce the overuse by farmers and to push manufacturers to take up more efficient production methods, **the standing committee has recommended that the subsidy be directly given to farmers by depositing the amount directly into their accounts on producing the necessary purchase vouchers.**
- c. The committee has further advised the **government to reduce the expenditure on fertilizer subsidy by making energy norms stringent and modernizing manufacturing plants.**
- d. It was also recommended that subsidy **amounts should be cleared within a limited period of time** to put an end to the delay in settlement.

Also remember, Fertilizers are included in the Essential Commodities Act, 1955

CA18. What's Behind China's Expansion of Its Territorial Dispute with Bhutan?

Link: <https://thediplomat.com/2020/07/whats-behind-chinas-expansion-of-its-territorial-dispute-with-bhutan/>



Disputed areas between Bhutan and China

We will mention here three important reasons:

- a. First, the purported eastern sector dispute over the Sakteng Wildlife Sanctuary, in geographic terms, would be the single largest tranche (part) of disputed territory across all sectors in the China-Bhutan context, representing about **11 percent of the territory currently administered by the Bhutanese government.**



- b. Second, the territory in question abuts **(have a common boundary with) the Indian state of Arunachal Pradesh**, which is itself claimed in its near entirety as part of Tibet. Not only is this the case, but the **Sakteng area specifically borders Arunachal's western Tawang region**, which China has particularly prioritized in negotiations with India. Given the ongoing Sino-Indian tensions in the western sector of their border in Ladakh, the timing of the revelation of this “new” dispute with Bhutan will likely be seen as coercive by India.
- c. Third, given that a 25th round of China-Bhutan talks (delayed due to coronavirus) has yet to convene after the 2017 Dokhlam standoff, the purpose of opening this expansive claim to more than **10 percent of sovereign Bhutanese territory** may be primarily intended to **coerce (to do something by using force or threats) Bhutan** into making concessions in other areas, such as Dokhlam, on terms favorable to China.
- d. Given the special relationship between India and Bhutan, as well, Chinese pressure on Bhutan may be designed **to test the relationship between New Delhi and Thimphu.**

These three points will always be used and remembered by you while explaining China and Bhutan dispute and its consequence in India. *We have to wait for further updates to see how talks proceed between China and Bhutan.*

## CA19. What are the different types of tests being used in India for COVID-19 detection?

India has so far conducted around 1.45 crore COVID-19 tests with the number of daily tests around 3 lakh. However, India's tests per million continue to be among the lowest in the world, because of the huge population of over 1.3 billion. There has been a significant improvement over the past two months in the number of daily tests.


Across the world, different countries are using varied testing strategies and different types of tests. India is also using multiple types of tests to detect COVID-19 among suspect cases. **Here is a detailed look at the different types of approved tests being carried out in India for COVID-19 detection.**

### RT-PCR Tests

RT-PCR Tests are the standard tests being conducted in India for detecting cases of COVID-19. Even across the world, RT-PCR is the most used test. RT-PCR Test implies 'Reverse Transcription – Polymerase Chain Reaction' test.

In this test Nasal & Throat Swabs are used to detect the presence of the virus. RT-PCR tests help in early detection of COVID-19 as this test detects the RNA of the virus, which is present in the body before the formation of any antibodies or any visible symptoms. A process called 'Reverse transcription' is used to convert RNA to DNA, before detecting the virus.

### TrueNat & CBNAAT tests



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कल्याण मंत्रालय, भारत सरकार

Indian Council of Medical Research  
Department of Health Research, Ministry of Health  
and Family Welfare, Government of India

**Date: 19/05/2020**

**Revised Guidelines for TrueNat testing for COVID-19**

The TrueNat system is now a comprehensive assay for screening and confirmation of COVID-19 cases.

- 1) The sample is collected in viral lysis buffer and hence biosafety and biosecurity requirements for use of TrueNat machines are minimal.



TrueNat tests have a quick turnaround time of around 60 minutes. These are commonly used for detection of Tuberculosis and HIV. TrueNat is developed by an Indian firm MolBio Diagnostics' Pvt ltd. On 19 May 2020, ICMR approved the use of TrueNat testing for COVID-19. The working principle of TrueNat tests is same as that of RT-PCR but uses a smaller kit. However, the challenge with these tests is that only 1-4 samples can be run in one go. This restricts the maximum number of tests that can be conducted to around 24-48 samples per day.

### Rapid Point-of-Care (PoC) Antigen Detection Test

Rapid Antigen detection tests also look out for virus similar to that of RT-PCR tests. On 14 June 2020, ICMR issued an advisory on the **use of Antigen tests for detection of COVID-19**. There is no reliable antigen test across the world. The antigen test approved by ICMR is **a point-of-care test, performed outside the conventional laboratory setting and is used to quickly obtain the results.**

anxiety and fear of healthcare workers and aid in better clinical management of the patients. In view of this, an independent two site evaluation of the only available or stand-alone antigen detection assay available in India, **Standard Q COVID-19 Ag detection kit**, was conducted with an aim to evaluate its sensitivity, specificity and feasibility of use as a point-of-care test for early detection of SARS-CoV-2.

#### Brief description of the Standard Q COVID-19 Ag detection:

- i) **Standard Q COVID-19 Ag detection kit** is a rapid chromatographic immunoassay for qualitative detection of specific antigens to SARS-CoV-2. has been developed by SD Biosensor, a South Korea based company, having its manufacturing unit in Manesar, Gurugram, India.

Standard Q COVID-19 Ag detection kit developed by SD Biosensor; a South Korea based company is approved by ICMR. The company has a manufacturing unit in Manesar, Gurugram, India.

### IgG Antibody test for COVID-19

IgG Antibody test is being used only for the purpose of surveillance and not for diagnosis. IgG antibodies generally start to appear after two weeks of onset of infection once the individual has recovered after infection. These antibodies are proteins produced by the body and are used by the immune system to neutralize the viruses. Therefore, the IgG test is not useful in detecting acute infection. However, ICMR has advised the use of these tests for.

- A. **Sero surveys** to understand the proportion of population that is exposed to the infection. Relevant public health interventions can be planned for prevention and control of the infection based on the level of seroprevalence of the infection.
- c. **Survey in high risk or vulnerable population** to know who has been infected in the past and has since recovered.



Unlike RT-PCR tests, the antibody tests require blood samples to identify antibodies for coronavirus.

It is strictly advised to use IgG based ELISA and CLIA assays only for conduct of serosurveys. ICMR has validated and approved IgG ELISA kits for COVID-19. In addition, USFDA approved IgG ELISA and CLIA kits are also available and can be used. Guidance of ICMR on the list of available ELISA and CLIA kits can be accessed at [https://www.icmr.gov.in/pdf/covid/kits/ELISA\\_CLIA\\_Kits\\_List\\_03062020.pdf](https://www.icmr.gov.in/pdf/covid/kits/ELISA_CLIA_Kits_List_03062020.pdf). It is

## CA20. MANODARPAN: Mental Health Initiative

Link: <https://pib.gov.in/PressReleasePage.aspx?PRID=1625812>

Recently, the Ministry of Human Resources Development (MHRD) has launched the 'Manodarpán' initiative under Atmanirbhar Bharat Abhiyan. It is aimed to provide psychosocial support to students, family members and teachers for their mental health and well-being during the times of Covid-19.

### **Description:**

The platform includes a national toll-free helpline for students of schools, universities and colleges, which will be manned by a pool of experienced counsellors, psychologists and mental health professionals. It also has a website, a national database of counsellors which will host an interactive online chat platform, advisories and tips through webinars and other resources.

### **Significance:**

- a. It would act as an element of strengthening human capital and increasing productivity for the education sector in the wake of covid-19.
- b. Covid 19 lockdown had led to forced close down of schools and colleges. Therefore, it would help children as well as their parents in facing tense situations and its effects on academics.

## CA21. The Grand Renaissance Dam

Link: <https://www.downtoearth.org.in/blog/the-grand-renaissance-dam-what-s-at-stake-and-what-could-break-the-deadlock-72441>

Ethiopia is building Grand Renaissance Dam which will be Africa's biggest hydroelectric power plant. Its construction began in 2011 on the Blue Nile tributary in the northern Ethiopia highlands, from where 85% of the Nile's waters flow. However, the mega dam has caused a row between Egypt and Ethiopia, with Sudan caught in between.

## ~~Ethiopia's~~ Ethiopia's new Nile dam



### Why is Egypt so upset?

- Egypt relies on the Nile for 90% of its water. It has historically asserted that having a stable flow of the Nile waters is a matter of survival in a country where water is scarce.
- A 1929 treaty** (and a subsequent one in 1959) gave Egypt and Sudan rights to nearly all of the Nile waters. The colonial-era document also gave Egypt veto powers over any projects by upstream countries that would affect its share of the waters.
- Neither agreement made any allowance for the water needs of the other riparian states that were not parties to the deal, including Ethiopia, whose Blue Nile contributes much of the river waters.

- d. **Ethiopia has said it should not be bound by the decades-old treaty** and went ahead and started building its dam at the start of the Arab Spring in March 2011 without consulting Egypt.

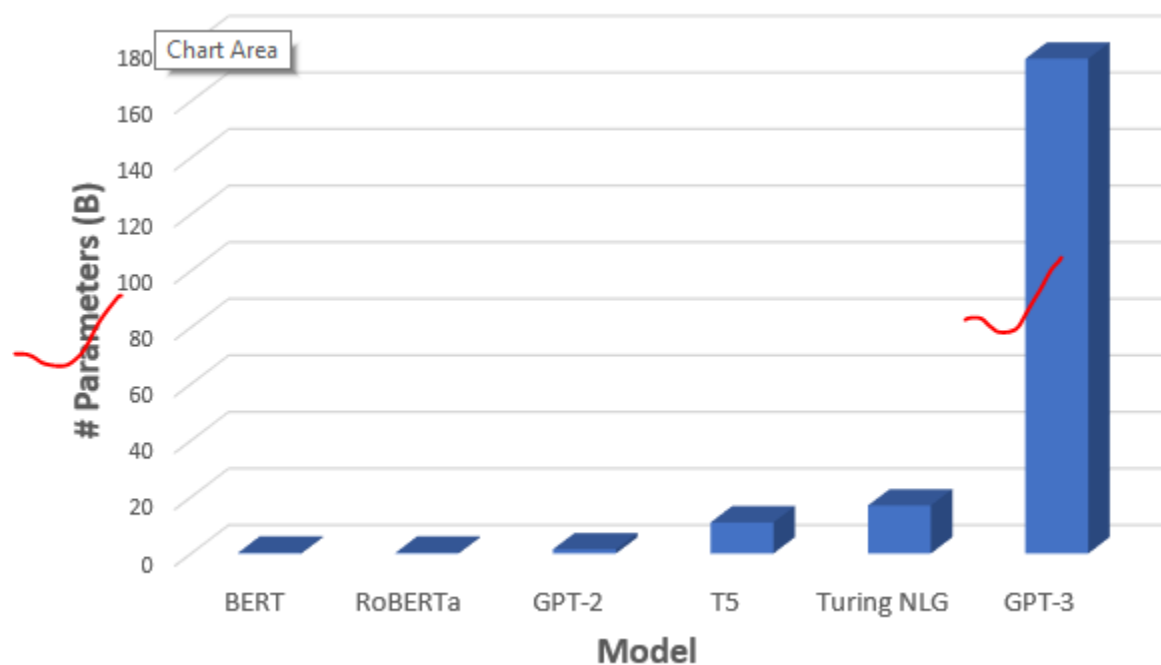
### Why does Ethiopia want such a big dam?

- The \$4bn (£3bn) dam is at the heart of Ethiopia's manufacturing and industrial dreams. When completed it is expected to be able to generate a massive 6,000 megawatts of electricity.
- Ethiopia has an acute shortage of electricity, with 65% of its population not connected to the grid.
- The energy generated will be enough to have its citizens connected and sell the surplus power to neighbouring countries.

### CA22. What's GPT-3, the Language Model Built by OpenAI

Link: <https://science.thewire.in/the-sciences/openai-gpt-3-language-model-natural-language-processing-artificial-general-intelligence/>

In 2018, OpenAI – the AI company co-founded among others by Elon Musk – released GPT, an **AI language model** that could perform a variety of language tasks, like write letters and compose articles. Two years and one more iteration later, **OpenAI has released the newest version of this model, called GPT-3. Its a much bigger and better version of its predecessor GPT-2.**



### What GPT-3 does?

- a. GPT-3 can write essays, stories, blog posts, tweets, poems, press releases, business memos and technical manuals – and with better grammar than most of us.
- b. It can imitate the styles of different authors, compose music and even write code. It can answer questions requiring basic comprehension and translate languages.
- c. It will **allow us to solve many natural language** generation problems for our clients in accelerated fashion even with limited data. **For example**, you could ask GPT-3 for a website designed a certain way, in plain English, and it could give you the corresponding code.
- d. As such, GPT-3 represents the most powerful language model built to date. Its purpose is simple: to consume a large volume of text, and then predict what word will come next.
- e. It achieves this feat using an artificial neural network, which is a logical architecture invented to help machines learn from data and make predictions.

### What is this Artificial Neural Network?

The artificial neural network at the heart of GPT-3 contains 175 billion training parameters – over a hundred-times as many as GPT-2, released last year, to learn and predict. GPT-3 was trained on 45 TB of text sourced from all over the internet, including Wikipedia. Using this data, GPT-3 taught itself the statistical dependencies between different words, which were encoded as parameters in its neural network.

### What else about GPT-3?

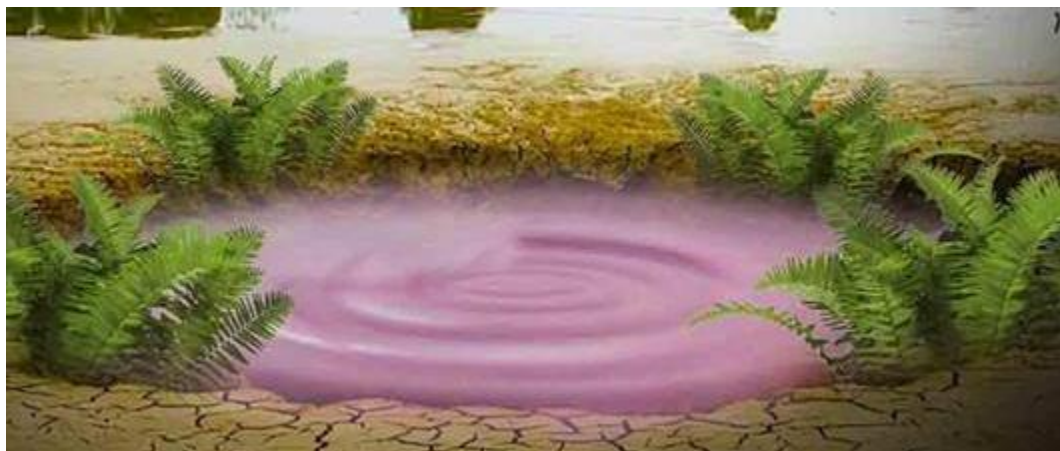
GPT-3 is the latest instance of a long line of pre-trained models, like Google's BERT, Facebook's RoBERTa and Microsoft's Turing NLG. Pre-trained models are large networks trained on massive datasets, usually without supervision. Taking pre-trained models and fine-tuning them to solve specific problems has become a popular trend in the field of natural-language processing.

If a model has already learned how to identify cats in images, it can quickly learn how to identify dogs. However, training the model from scratch to identify dogs will require far more images. Similarly, it is easier for developers to adapt GPT-3 for their purposes instead of developing custom models from scratch.

However, the GPT models do one thing differently. Language models like BERT need to be fine-tuned before they can be used for downstream tasks. But GPT can perform a range of tasks out-of-the-box without any fine-tuning. This is enhanced by its 'text in, text out' API, which allows users to reprogram the model using simple instructions written in plain English.

### CA23. Reasons Behind Pink Water of Lonar Lake

Link: <https://www.thehindu.com/news/national/lonar-lake-turned-pink-due-to-haloarchaea-microbes-probe/article32161619.ece>



According to the Agharkar Research Institute, the colour of Lonar lake water in Maharashtra's Buldhana district **turned pink due to a large presence of the salt loving 'Haloarchaea' microbes**. It has been assumed that the absence of rain, less human interference (owing to lockdown) and high temperature resulted in the evaporation of water which increased its salinity and pH. **The increased salinity and pH facilitated the growth of halophilic microbes, mainly Haloarchaea**

*Haloarchaea or halophilic archaea is a bacteria culture which produces pink pigment and is found in water saturated with salt. Nothing more to know now.*

### What happened before?

The oval shaped Lonar lake, formed after a meteorite hit the earth some 50,000 years ago, is a popular tourist hub. The colour of the **lake water recently turned pink**, which has not only surprised locals, but also nature enthusiasts and scientists.

OTHER STATES

## Maharashtra's Lonar lake colour changes to pink; experts, locals surprised



PTI

AURANGABAD, JUNE 11, 2020 10:04 IST  
UPDATED: JUNE 11, 2020 12:42 IST

SHARE ARTICLE



CA24. Mexican Cave Findings Suggest Humans Got to America Much Earlier Than Thought

Link: <https://science.thewire.in/the-sciences/mexican-cave-findings-suggest-humans-first-reached-america-much-earlier-than-thought/>





Researchers entering a cave in Zacatecas in central Mexico, which contained stone tools and other evidence of the presence of prehistoric human populations, are seen in this image released on July 22, 2020. Photo: Devlin A. Gandy/Handout via REUTERS

Humans settled in the Americas much earlier than previously thought, according to new finds from Mexico. **They suggest people were living there 33,000 years ago**, twice the widely accepted age for the earliest settlement of the Americas. The results are based on work at Chiquihuite Cave, a high-altitude rock shelter in central Mexico.

Scientists said they had found 1,930 limestone tools, including small flakes and fine blades that may have been used for cutting meat and small points that may have been used as spear tips, indicating human presence at the Chiquihuite Cave in a mountainous region of Mexico's Zacatecas state.

**Our species first appeared** about 300,000 years ago **in Africa**, later spreading worldwide. **The new findings contradict** the conventional view that the **first people arrived in the Americas around 13,000 years ago**, crossing the land bridge, and were associated with the "Clovis culture," known for distinctive stone tools.

Nothing much to know here. Just see the place of research and **new year is 30,000 years ago, NOT 13000 years ago.**

## Ca25. Committee on Government Assurances

**As we got some data recently from Lok Sabha website, we are discussing this topic. Very few important points. First, we will see what this committee is all about.**

### Introduction to Committee

The business conducted on the floor of both the houses of parliament is a key aspect of our democracy. Parliamentary proceedings include introduction and discussion on various



bills, debates on important public issues, questions raised by the members of parliament and the responses provided by the government etc. *While responding to the questions asked in the house and during debates, the government on various occasions makes assurances, undertakings, promises to consider, take action or furnish information on a later date.* Such responses by the Government are termed as Assurances in parliamentary parlance.

To ensure that these assurances are implemented within a reasonable timeframe, **both the Lok Sabha & the Rajya Sabha have constituted** – ‘Committee on Government Assurances’. Some of the following are examples of assurances made to the house:

- The matter is under consideration
- I shall look into it
- Enquiries are being made
- I shall inform the Hon'ble Member
- This is primarily the concern of State Government but I shall look into it
- I shall write to the State Governments
- I assure the House all suggestions by Hon'ble Member will be carefully considered
- I shall study the conditions on the spot during my tour
- I shall consider the matter
- I will consider it
- I will suggest to State Governments
- We will put the matter in the shape of a resolution
- I shall see what can be done about it
- I will look into the matter before I can say anything
- The suggestion will be taken into consideration

We will take one House, Lok Sabha to explain. Same is with Rajya Sabha. So, no worries.

### Organisation:-

The Committee consists of not more than 15 Members of Lok Sabha who are nominated by the Speaker. A Minister is not nominated as a Member of the Committee and if a Member, after his nomination to the Committee, is appointed a Minister, he ceases to be a Member of the Committee from the date of such appointment. The Chairman/Chairperson is appointed by the Speaker, Lok Sabha from amongst Members of the Committee. However, if the Deputy Speaker is a Member of the Committee, he shall be appointed Chairman of the Committee. The term of the Committee is one year, from the date of its constitution.

The broad process followed is described below. Read once.

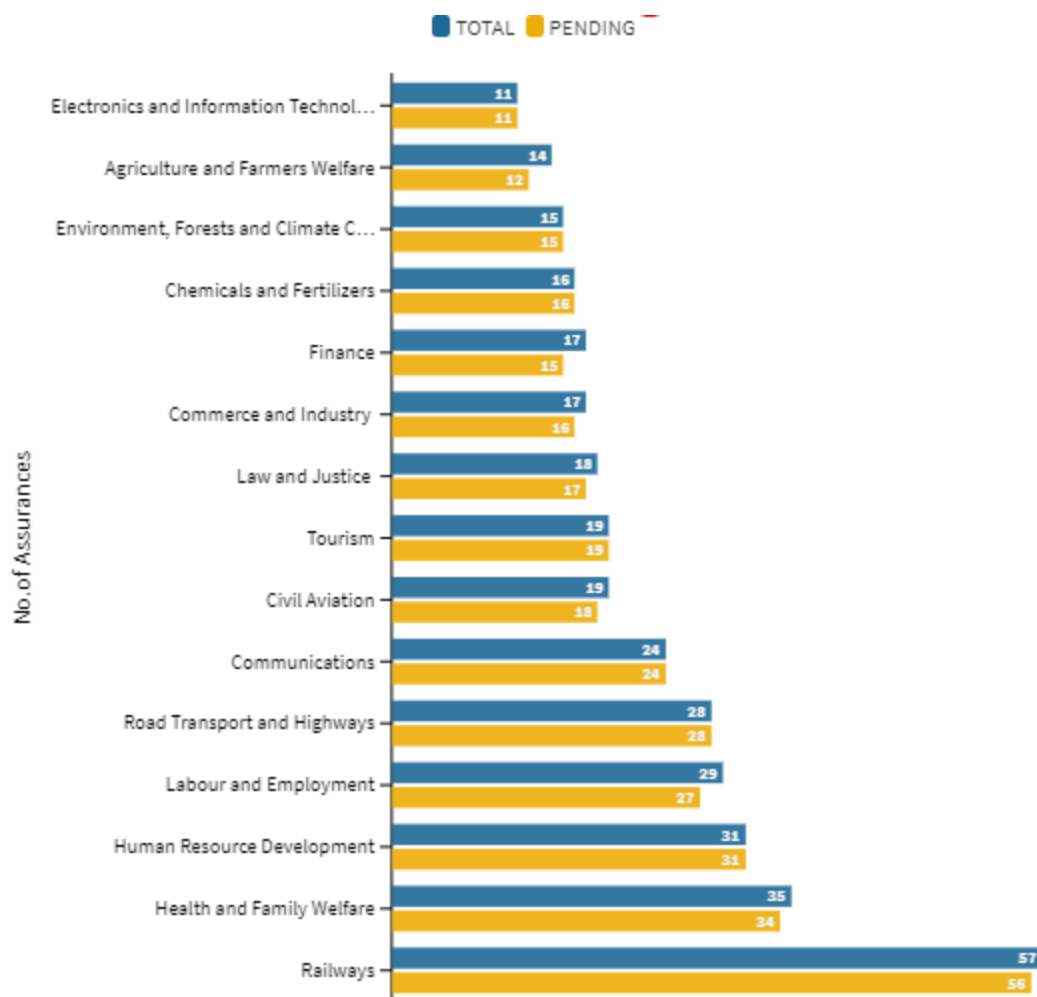
- ✓ The Lok Sabha Secretariat examines the Lok Sabha debates to mark the replies/statements of the Ministers which constitute assurances. Similar process is followed in the Rajya Sabha.
- ✓ This data is reconciled with the assurances culled out by the Ministry of Parliamentary Affairs.
- ✓ Once they are finalized, the relevant Ministries/Departments are apprised of these assurances.
- ✓ The parliamentary committee on Government Assurances has prescribed an outer limit of three months for the implementation of an assurance, to be calculated from the date of its being given in the House. However, if the Government foresees any genuine difficulty in implementing the assurance within the stipulated period, the Ministry may request for extension of time for the fulfillment of this assurance. In normal course, the committee accedes to such requests for extension unless it finds the request unreasonable.
- ✓ If the Government finds that the assurance is not feasible to implement, then it approaches the committee to drop the assurance with all relevant facts for the consideration of the committee. If the Committee concurs with the government, then it recommends dropping of the assurance in its reports to the house.

**One important thing is: The assurances made in the Lok Sabha do not lapse** even after the dissolution or expiry of the term in Lok Sabha.

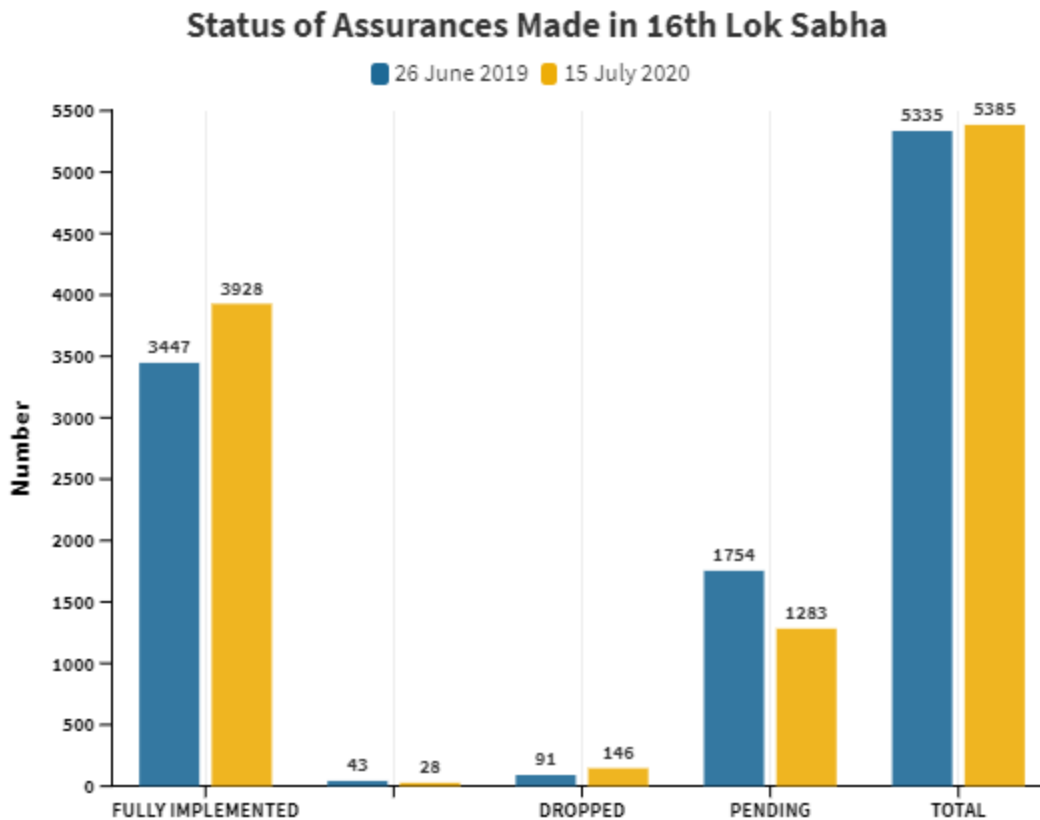
#### Status of Assurances after dissolution of the House

The assurance(s) do not lapse either on the dissolution or on the expiry of the term of the Lok Sabha. The assurances are pursued by ✓ Lok Sabha Secretariat as well as by the Ministry of Parliamentary Affairs until the assurance(s) are brought to logical end.

Status of Assurances in Lok Sabha:



Source: Lok Sabha Website



CA26. India among top 10 countries gaining forest area in the world:  
FAO

Link: <https://www.downtoearth.org.in/news/forests/india-among-top-10-countries-gaining-forest-area-in-the-world-fao-72454>

**Not to go in much deep. Useless to read full report. We have covered important points. Just read that.**

FAO has brought out this comprehensive assessment (Global Forest Resources Assessment 2020) **every five years since 1990**. This report assesses the state of forests, their conditions and management for all member countries.

**About India:**

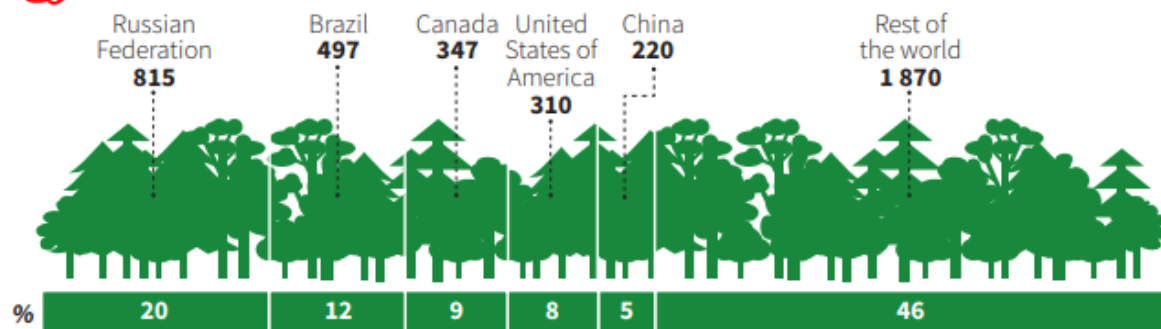
**India has ranked third among the top 10 countries that have gained in forest areas in the last decade, the latest Global Forest Resources Assessment (FRA)** brought out by the Food and Agriculture Organization (FAO) of the United Nations has said. During the decade under assessment, India reported 0.38 per cent annual gain in forest, or 266,000 ha of forest increase every year at an average. The FRA 2020 has credited the government's

Joint Forest Management programme for the significant increase in community-managed forest areas in the Asian continent.

### About world:

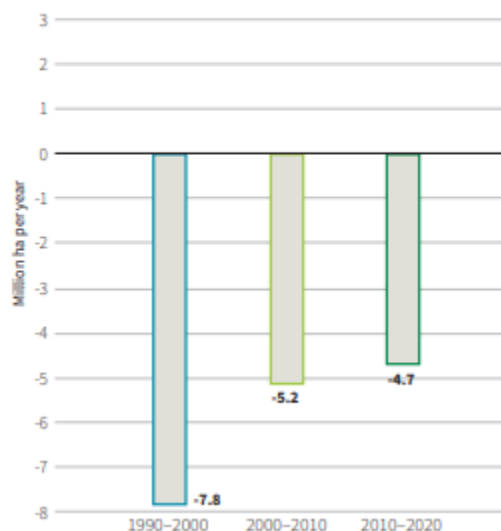
- The world has a total forest area of 4.06 billion hectares (ha), which is 31 percent of the total land area.
- More than half (54 percent) of the world's forests is in only five countries – the Russian Federation, Brazil, Canada, the United States of America and China.

Top five countries for forest area, 2020 (million ha)



- The world's forest area is decreasing, but the rate of loss has slowed.

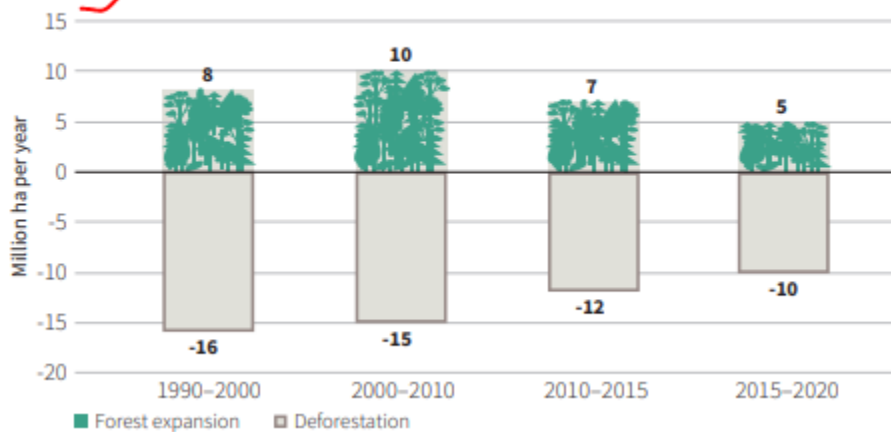
Global annual forest area net change, by decade, 1990–2020



- Africa had the largest annual rate of net forest loss in 2010–2020, at 3.9 million ha, followed by South America, at 2.6 million ha.
- Asia had the highest net gain of forest area in 2010–2020, followed by Oceania and Europe.

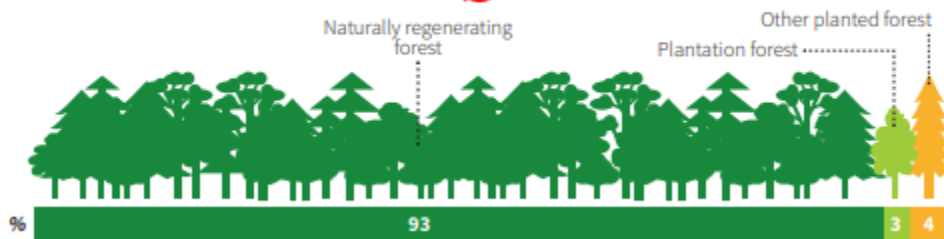
- f. An estimated 420 million ha of forest has been lost worldwide through deforestation since 1990, but the rate of forest loss has declined substantially. In the most recent five-year period (2015–2020), the annual rate of deforestation was estimated at 10 million ha, down from 12 million ha in 2010–2015.

Annual rate of forest expansion and deforestation, 1990–2020



- g. Ninety-three percent (3.75 billion ha) of the forest area worldwide is composed of naturally regenerating forests and 7 percent (290 million ha) is planted.

Naturally regenerating versus planted forests, 2020 (% of global forest area)



- h. About 98 million ha of forest were affected by fire in 2015; this was mainly in the tropical domain, where fire burned about 4 percent of the total forest area in that year.
- i. Seventy-three percent of the world's forests is under public ownership, 22 percent is privately owned.
- j. The total carbon stock in forests decreased from 668 gigatons in 1990 to 662 gigatons in 2020.



## CA27. Global tourism sector should continue fight against plastic pollution during and after COVID-19 – new UN recommendations

Link: <https://www.unenvironment.org/news-and-stories/press-release/global-tourism-sector-should-continue-fight-against-plastic>

The ongoing COVID-19 pandemic has hit the tourism sector hard, putting more than 100 million jobs at risk; as countries begin to recover, new UN recommendations advise that the tourism sector builds back better, continuing its push to fight plastic pollution.

The Recommendations for the Tourism Sector to Continue Taking Action on Plastic Pollution During COVID-19 Recovery were released today by the **Global Tourism Plastics Initiative, led by the United Nations Environment Programme (UNEP) and the World Tourism Organization (UNWTO)** in collaboration with the Ellen MacArthur Foundation, which unites the tourism sector behind a common vision to address the root causes of plastic pollution.

Tourism, one of the hardest hit economic sectors, representing **10% of global GDP**, may face a decline in international tourist arrivals of 58-78% during 2020, putting 100 to 120 million direct tourism jobs at risk. Additional impacts such as pollution and threats to the conservation of wildlife and biodiversity remain difficult to quantify.

The **following five recommendations are addressed to tourism stakeholders with the aim of supporting them to continue fighting plastic pollution** during the COVID-19 recovery:

- a. Remove unnecessary plastic packaging and items\to reduce cross contamination touch points.
- b. Develop robust cleaning and sanitization procedures that encourage the adoption of reuse models
- c. Evaluate the use of unavoidable plastic packaging and items, enquire about their recyclability and reassess needs on a regular basis
- d. Engage suppliers, waste management providers and local governments to improve
- e. the effectiveness of actions, coordination and resilience
- f. Ensure open and transparent communication with staff and client

### About the Global Tourism Plastics Initiative

The Global Tourism Plastics Initiative unites the tourism sector behind a common vision to address the root causes of plastic pollution. It enables businesses and governments to take concerted action, leading by example in the shift towards a circularity in the use of plastics. Developed within the framework of the Sustainable Tourism Programme of the One Planet network, a multi-stakeholder partnership to implement SDG 12 on Sustainable Consumption and Production, the **Global Tourism Plastics Initiative is led by the United Nations Environment Programme and the World Tourism Organisation**, in collaboration with the Ellen MacArthur Foundation.

Ok, can you tell me does India has any tourism policy operational now? **Yes, India has adopted India Tourism Policy 2002 which is still in operation. India is in the process of formulating new draft policy on Tourism. If it comes, we will update you.**

Ok one more news about India Tourism recently. See this also.

## India beats Maldives, Sri Lanka to become a favourite tourist spot in South Asia, finds study

A report by Brookings India reveals that tourism in India improved considerably since 2017, and added that India leverage its cultural similarities with neighbours to grow further.

TARAN DEOL 24 July, 2020 4:02 pm IST

**New Delhi:** In the past two decades, South Asia has emerged as a popular tourist destination due to its natural and cultural diversity, as well as price competitiveness, a new report by Brookings India, a nonprofit public policy organisation, reveals.

The study titled '*Travel South Asia: India's tourism connectivity with the region*' notes that South Asia has improved tremendously in terms of tourism, especially since 2017, and India is at the helm of the growth.

The report highlights that the economies of South Asian countries like Bhutan, Maldives, Nepal and Sri Lanka are sustained by tourism, and yet India has become the most preferred tourist destination in the region.

One of the reasons for this is the National Tourism Policy that India adopted in 2002 and the tourism ministry's 'Incredible India' campaign then. While India's share of global tourist arrivals stands at 1.2 per cent, it has seen a gradual growth in travellers from the South Asian region, who account for nearly a third of the total tourists.

CA28. Padmanabhaswamy Temple Judgment

Link: <https://indianexpress.com/article/explained/explained-the-padmanabhaswamy-temple-case-and-what-verdict-means-for-travancore-royal-family-6503543/>



First of all, you should be very clear that the **Supreme Court upheld the right of the Travancore royal family to manage the property of deity at Sree Padmanabha Swamy Temple** in Thiruvananthapuram. **The court held that** the constitutional abolition, did not in any way impact or affect the administration of the Temple, Sri Pandaravaga properties and the properties of the Temple, which **continued to be under the control and supervision of the Ruler of Travancore.**

**So, if we now want to go in details, we have to examine the history and scope of the Constitution (Twenty Sixth Amendment) Act, 1971. Its like a story. You will enjoy reading. So, don't stop in between. It is bit long story.**

### **The Failed Amendment Bill and Presidential Order of 1970**

On May 14, 1970, the then Finance Minister, Y.B. Chavan, introduced the Constitution (Twenty-fourth Amendment) Bill, 1970 **for abolition of privy purse, privileges etc.** conferred under Articles 291, 362 and 366(22). Though it was passed by Lok Sabha, the Bill failed in the Rajya Sabha to reach the requisite majority of not less than two-third members present as required by Article 368 and voting. The President of India, thereafter, invoking his powers under clause (22) of Article 366 of the Constitution, **signed an Order withdrawing recognition of all the Rulers in the country.**

This Presidential Order derecognizing the Rulers was struck down the Presidential Order being illegal, ultra vires and inoperative on the ground that it had been made in violation of the powers of the President of India under Article 366(22) of the Constitution and declared that the writ petitioners would be entitled to all their pre-existing rights and privileges including right to privy purses as if the impugned orders therein had not been passed.

### **The 26th Amendment**

The **amendment bill was moved by the then Prime Minister Indira Gandhi** and was passed by both the houses and became an Act later. In the Statement of Object and Reasons

of the Bill, it was stated that "**the concept of rulership, with privy purses and special privileges unrelated to any current functions and social purposes, *is incompatible with an egalitarian social order***". The amendment, in fact, made four changes to the then existing Constitution. **It deleted Articles 291 and 362 of the Constitution, inserted a new Article 363A and also amends Article 366. All these are discussed below. Continue reading.**

### **Deleted Articles 291 and 362**

Art.291 dealt with payment of Privy Purse sums of Rulers whereas **Article 362 with rights and Privileges of rulers of Indian States. Article 362 mandated** the executive and legislature **to give due regard to the guarantee or assurance** given under any such covenant or agreement as is referred to in Article 291 **with respect to the personal rights, privileges and dignities of the Ruler of an Indian State.** Both these Articles **ceased to exist** after 26th Amendment.

### **Amended Article (366(22))**

The 26th Amendment changed the definition of Ruler as follows:

**"Ruler" means** the Prince, Chief or other person **who, at any time before** the commencement of the Constitution (Twenty-sixth Amendment) Act, 1971, **was recognised by the President as the Ruler of an Indian State** or any person who, at any time before such commencement, was recognised by the President as the successor of such Ruler.

**Prior to this amendment, the definition of 'Ruler' included the successor of any person who was recognized as the Ruler.** The amendment deleted the 'successorship' of the status of ruler.

### **Insertion of Article 363A**

The 26th Amendment also inserted Article 363A **to terminate expressly the recognition already granted to such Rulers and to abolish privy purses** and extinguish all rights, liabilities and obligations in respect of privy purses.

### **SC Rejected Challenge Against 26th Amendment**

Sri Raghunathrao Raja, who was the Co-Ruler of Indian State of Kurundwad, challenged the constitutional validity of the Constitution (Twenty-sixth Amendment) Act of 1971 on the ground that it violates the basic structure and essential features of the Constitution of India and is, therefore, outside the scope and ambit of constituent powers of the Parliament to amend the Constitution as provided under Article 368 of the Constitution.

**The Court, while upholding the 26th Constitutional Amendment,** held that the **Amendment did not offend Article 14 or 19(g).** It further held that **no principle of justice, either economic, political or social is violated by the Twenty-sixth Amendment.** Political justice relates to the principle of rights of the people, i.e. right to

universal suffrage, right to democratic form of Government and right to participation in political affairs, the court said. *What is 19 (g)?? Try to recall. It should not take more than 2 mint to recall.*

### Padmanabhaswamy case

Coming back to the Padmanabhaswamy case, **one of the important legal issues** considered by the bench **was on the impact of the deletion of Article 362** on legislations enacted prior to it. The precise question was *whether the deletion by itself would result in cessation of every privilege or personal right with respect to which "due regard" was had while exercising legislative power in terms of Article 362 before its deletion.* (Article 362 had stated that while exercising legislative powers by Parliament or State Legislatures, **due regard** should be given to the guarantee or assurances given under the covenant of accessions with regard to the personal rights, privileges and dignities of the Ruler of an Indian State)

Answering this issue in negative, the Court held that, despite deletion of Article 362, if the concerned legislation -which had given due regard to the rights or the rulers as per the guarantees under the instruments of accession - continue to remain in operation, **the personal rights or privileges could still be enjoyed. Jai ho! Finally.**

Even after the 26th Constitution amendment, Section 18 of the Travancore Cochin Hindu Religious Institutions Act **continued to recognize the rights of the 'Ruler of Travancore' over the temple.**

### CA29. Consumer Protection (E-Commerce) Rules Comes into Force

The Central Government has notified Consumer Protection (E-Commerce) Rules, 2020 to prevent unfair trade practices in e-commerce, direct selling and also to protect the interest and rights of consumers.

**Section 94 of the Consumer Protection Act 2019 empowers** the Central Government to take measures to prevent unfair trade practices in e-commerce, direct selling and also to protect the interest and rights of consumers.

	CHAPTER VIII
	MISCELLANEOUS
Measures to prevent unfair trade practices in e-commerce, direct selling, etc.	94. For the purposes of preventing unfair trade practices in e-commerce, direct selling and also to protect the interest and rights of consumers, the Central Government may take such measures in the manner as may be prescribed.

**"E-commerce entity"** is defined in the Rules as any person who owns, operates or manages digital or electronic facility or platform for electronic commerce, but does not include a seller offering his goods or services for sale on a marketplace e-



commerce entity. "Seller" means the product seller as defined in the Act and includes any service provider.

**Provisions of new Rules: Just go through once.**

- a. According to the new rules, the **e-commerce players will have to display the total price of goods and services** offered for sale along with a break-up of other charges.
- b. They are also required to mention the '**expiry date**' of goods offered for sale and the '**country of origin**' of goods and services that are necessary for enabling the consumer to make an informed decision at the pre-purchase stage.
- c. E-commerce players have to **display details about return, refund, exchange, warranty and guarantee, delivery and shipment**, and any other information that may be required by consumers to make informed decisions.
- d. Under the new rules, **e-commerce entities should not impose "cancellation charges" on consumers cancelling orders after confirmation** unless sellers are ready to pay similar charges in case cancellation of orders are from their side.
- e. They are also **not allowed to "manipulate the price" of the goods and services** offered on their platforms to gain unreasonable profit and discriminate between consumers of the same class or make any arbitrary classification of consumers affecting their rights under the Act.
- f. **Further, e-commerce entities will have to provide information on available payment methods**, the security of those payment methods, any fees or charges payable by users, and the contact information, among other details, of the relevant payment service provider.
- g. That apart, e-commerce entities are **required to display** prominently to its users details **about the 'sellers' offering goods and services**, including the name of their business, whether registered or not.
- h. **They must also display sellers' geographic address, customer care number**, and any rating or other aggregated feedback about such sellers, among others, as per the new rules.
- i. They are also required to **provide a ticket number for each complaint lodged**, through which the consumer can track the status of the complaint.
- j. The new rules **do not permit any inventory e-commerce entity to "falsely represent itself as a consumer** and post reviews about goods and services or misrepresent the quality or the features of any goods and services".
- k. The inventory e-commerce entities will also have to ensure that the **advertisements for marketing of goods and services are consistent with the actual characteristics**, access and usage conditions of such goods or services.
- l. Under the new rules, **no inventory e-commerce entity will be allowed to refuse to take back goods** or withdraw or discontinue services purchased or agreed to be purchased, among others, subject to various conditions.

Link: [https://www.livelaw.in/pdf\\_upload/pdf\\_upload-378739.pdf](https://www.livelaw.in/pdf_upload/pdf_upload-378739.pdf)



## CA30. Madhubani Paintings



The Madhubani style of painting can be traced to the **Madhubani district in Bihar**, literally **meaning 'a forest of honey'**, where women spent a lot of time making these paintings on the walls of their homes. Mainly attributed to the upper caste in the beginning, this was later taken up by women across all castes. The women used their keen sense of beauty to create evocative paintings of gods and goddesses, animals and characters from mythology, using natural dyes and pigments and painted with the help of twigs, fingers and matchsticks.

**Madhubani painting has received GI (Geographical Indication) status.**

## CA31. Indian Bullfrog

Link: <https://www.thehindu.com/life-and-style/the-yellow-indian-bullfrog-croaks-in-the-rains/article32171913.ece>



Scientific Name: *Hoplobatrachus tigerinus*.

Common Names: Bullfrog, Golden Frog, Green Frog, Tiger Frog etc.

IUCN Red List: Least Concern.

Indian Wildlife Act 1972: Schedule IV.

It is one of the invasive species on the islands of Andaman and Nicobar.

## CA32. Seismicity Study of Arunachal Himalaya

Link:

<https://pib.gov.in/PressReleasePage.aspx?PRID=1641185#:~:text=A%20study%20by%20the%20Wadia,moderate%20earthquakes%20at%20two%20different>

### It was in news in PIB.

Recently, a study by the Wadia Institute of Himalayan Geology (WIHG), pertaining to the exploration of the elastic properties of rocks and seismicity in Arunachal Himalaya, has revealed that the area is generating moderate earthquakes at two different crustal depths.

### Why it is important to study Himalayas?

The exhumation and growth of the Himalaya is a continuous process that results predominantly from reverse faults in which the rocks on the lower surface of a fault plane move under relatively static rocks on the upper surface, a process called under thrusting of the Indian plate beneath its Eurasian counterpart. **This process keeps modifying the drainage patterns and landforms and is the pivotal reason for causing an immense seismic hazard in the Himalayan mountain belt and adjoining regions, necessitating assessment and characterization of earthquakes in terms of cause, depth and intensity before construction activities are initiated.**

### Which part of Himalayas was studied?

**The Tuting-Tidding Suture Zone (TTSZ) is a major part of the Eastern Himalaya,** where the Himalaya takes a sharp southward bend and connects with the Indo-Burma Range. This part of the Arunachal Himalaya has gained significant importance in recent times due to the growing need of constructing roads and hydropower projects, **making the need for understanding the pattern of seismicity in this region critical.**

#### **Who conducted study?**

A study by the Wadia Institute of Himalayan Geology (WIHG) **an autonomous institute of the Department of Science & Technology (DST), Government of India, exploring the elastic properties of rocks and seismicity in this easternmost part of India revealed that the area is generating moderate earthquakes at two different depths.**

- a. Low magnitude earthquakes are concentrated at 1-15 km depth, and slightly higher greater than 4.0 magnitude earthquakes are mostly generated from 25-35 km depth.
- b. The intermediate depth is devoid of seismicity and coincides with the zone of fluid/partial melts.

#### **What study reveals?**

It reveals the under-thrusting mechanism of Indian plate in the Tuting-Tidding Suture Zone. Extremely high Poisson's ratio was also obtained in the higher parts of the Lohit Valley, indicating the presence of fluid or partial melt at crustal depths. This detailed assessment of seismicity in this region **will be helpful for planning any largescale construction in this region in the future.**

**For prelims, remember the name of zones mentioned. It is from PIB, so don't miss. They won't go in deep, just any term they can put in question.**

### CA33. India's millets policy: is it headed in the right direction?

**Link:** <https://india.mongabay.com/2020/07/indias-millets-policy-is-it-headed-in-the-right-direction/>

**The year 2023** will be observed as the International Year of Millets, following India's proposal to the **Food and Agriculture Organization**, which was approved in at the 160th session of the FAO Council in December 2018. Through decades, the country has enjoyed a rich association with millets, though the Green Revolution favoured rice and wheat. Millets survived, thanks to cultural traditions, but came to be known as "**coarse grains.**"

#### **Why Millets are important?**

- a. Millets are found in diverse parts of the world and form the earliest family of cereals cultivated by humans. "What is exciting about them is their genetic diversity. They have a huge potential for meeting our food needs in the future.

- b. Millets are suitable for harsh, hot and dry environments. They can grow in arid regions, requiring only 350-400 mm of annual rainfall. Some varieties of pearl millet survive at temperatures up to 46 degrees Celsius. Besides, they require minimal inputs.
- c. In order to ensure that soil health is retained, we should focus on growing less extractive crops like millets. They are good for holding water and adding a lot of organic matter for soil health revival.

### Millet production in India

In the past six decades, India has witnessed a **decrease in the area** under millets. However, **the productivity (yield in kg/ha) of these crops has gone up** due to the adoption of high-yielding varieties and improved production technologies. *See the trend.*

<del>Year</del>	<del>Area</del>	<del>Production</del>
(1)	(2)	(3)
1950-51	37.67	15.38
1951-52	38.88	16.09
1952-53	42.45	19.61
<del>2011-12</del>	26.42	42.01
<del>2012-13</del>	24.76	40.04
<del>2013-14</del>	25.22	43.29
<del>2014-15*</del>	24.15	41.75

Among the states, **the maximum area under millets was in Rajasthan.**

Table-2: Area, Production &amp; Yield

Area - Million H

State	Area	% to All - India
(1)	(2)	(3)
Rajasthan	6.02	24.92
Karnataka	3.35	13.89
Andhra Pradesh	1.31	5.43
Maharashtra	4.33	17.92
Uttar Pradesh	2.01	8.30
Madhya Pradesh	1.75	7.25
Tamil Nadu	0.97	4.02
Bihar	0.74	3.06
Gujarat	1.01	4.16
Haryana	0.48	1.97
Himachal Pradesh	0.33	1.37
West Bengal	0.17	0.69
Punjab	0.14	0.57
Jharkhand	0.28	1.18
Jammu&Kashmir	0.35	1.45
Uttarakhand	0.22	0.92
Chhattisgarh	0.25	1.02
Odisha	0.17	0.72
Others	0.29	1.18
All India	24.15	100.00

Source: Directorate of Economics &amp; S

### Why decrease in area?

The main reasons behind the decline are *low remuneration, lack of input subsidies and price incentives, subsidised supply of fine cereals through the public distribution system (PDS) and change in consumer preferences*. These factors led to a **shift from the production of millets (jowar in particular) to soybean, maize, cotton, sugarcane and sunflower**.

### India's millet mission

- India is the largest producer of millets in the world.** The Centre declared **2018 as the year of millets**.
- The Government of India's **Millet Mission comes under the National Food Security Mission (NFSM), launched in October 2007**.
- NFSM-Coarse Cereals is divided into two parts and one of them is the sub-mission on nutri cereals to be implemented in 202 districts of 14 states. Before this, millets were being promoted under INSIMP (Nutritional Security through Intensive Millets Promotion) during 2011-12 to 2013-14.

- d. Currently, millets are being promoted through technology dissemination, quality seeds through millet seed hubs, awareness generation, minimum support price and inclusion in PDS.
- e. **Odisha Millets Mission (OMM)** has been facilitating production, processing, marketing and consumption of all millets.
- f. **Madhya Pradesh** is also promoting millets, especially *kodo and kutki*, under the Centre's nutri cereal scheme.
- g. **Telangana launched** a mini mission on millets in 2018 for a period of five years in six districts. The four main components of the project are promotion, consumption, processing and marketing of millets.

#### Problems on ground and way forward:

- a. There needs to be a strong **integration of the sub-mission on nutri cereals with the flagship Poshan Abhiyaan** of the Union government
- b. Apart from ragi and jowar, other types of millets have tough seed coats and need more processing. While little millets are difficult to process, this does not imply that they will be lost. There should be **more focus on the modification of current processing machines** to ensure the conversion of millet seeds into flour.
- c. There are current innovation centres in numerous institutions that are designing appropriate processors. These initiatives need to be scaled up and **made available at reasonable prices to farmers** to ensure that little millets can be produced commercially.
- d. Traditional varieties of millets cultivated in semi-arid conditions, and which do not use irrigation, are resistant to pest infestations. However, if there is a move to creation of improved varieties that have higher sugar or carbohydrate levels largely as a consequence of irrigating millets to increase yields, **locusts may become attracted to the plants**. Thus, there is a need to ensure that **only semi-arid methods rather than irrigated cultivation ones are promoted**.
- e. The promotion of ragi in Odisha, ragi and jowar in Karnataka and kodo and kutki in Madhya Pradesh **need not be at the cost small millets**.

#### CA34. Law and Regulations on Issuance/Grant of Degrees in India

Link: <https://www.livelaw.in/know-the-law/law-and-regulations-on-issuancegrant-of-degrees-in-india-160478>

The problem of timely issuance of degrees is a major cause of concern for various students across India. Many students are compelled to file cases against their own universities for timely issuance and grant of their own degrees. Many students have lost out on wonderful opportunities due to this non-issuance of degrees while applying abroad for further studies. In order to reduce and solve these problems for students and universities alike,



University Grant Commission drafted regulations in 2008 under the exercise of the power conferred by clause (f) of Sub-Section (1) of Section **26 of the UGC Act, 1956**.

26. (1) The Commission<sup>2</sup> [may, by notification in the Official Gazette, make regulations] consistent with this Act and the rules made thereunder—

(f) defining the minimum standards of instruction for the grant of any degree by any University;

The Regulations are titled "**UGC Regulation, 2008 for Grant of degrees and other awards by Universities**". These regulations govern the manner and issuance of degrees all across India.

**Which all universities the above regulation is applicable?**

These extant regulations are applicable to every University **established or incorporated under a Central Act, a Provincial Act, or a State/Union Territory Act**. It is also applicable to **all the institutions deemed to be Universities** under Section 3 of the UGC Act, 1956.

**Provision in UGC Regulation, 2008 for Grant of degrees and other awards by Universities" related to issuing degrees.**

The UGC Regulation, 2008 provides the definition of "Convocation" and "Graduation Ceremony" in Clause 2.5 and Clause 2.7 respectively.

2.5 "Convocation" means a ceremonial assembly of a University, normally held for conferring Degrees and other awards to its eligible candidates;

2.7 "Graduation Ceremony" means a ceremonial assembly of a College, normally held for distributing Degrees and other awards to its eligible students;

**The context of other awards has been referred to as "Academic Awards" that is certificates, diplomas, degrees, mark-sheets.**

**Objectives of the Regulations**

- a. The objective of this regulation is to streamline the manner in **which degree shall be awarded to students**. It also provides a time limit for universities in which a degree award to an eligible student shall be awarded.
- b. The Clause 3.1 makes it mandatory on each University to grant Degrees and other awards regularly every academic year.

3.1 To ensure that each University grants Degrees and other awards to its eligible students regularly in every academic year;

- c. The Clause 3.2 stipulates timely holding of a convocation for conferring the Degrees to each eligible student.

3.2 To facilitate timely holding of a convocation or adopting any other method, for conferring the Degrees/other awards to eligible students at each University;

- d. The onus of conferring timely degree awards to students is on the Universities.

**Procedure to be followed by the Universities: Read once.**

- a. The procedure of awarding of the degree is laid down in Clause 4 of the UGC Regulations, 2008. This clause has 12 sub clauses from 4.1 to 4.12
- b. It provides for announcement of academic calendar providing the schedule of all activities including mandatory date/s for award of Degree.
- c. It stipulates that the University may schedule "Degree awards" more than once a year. The context of "Degree awards" in this clause means convocation or graduation ceremony.
- d. It provides that the Degree award date shall be **within 180 days of the date/s by which the students are expected to qualify** and become eligible for them.
- e. It makes it mandatory on the university to notify a programme for Degree awards at least 30 days before the date/s so fixed, so that the candidates can apply for the same.
- f. It provides for the holding of convocation to confer degree, ceremonial aspects of it, provision in case the convocation is not held.
- g. It provides the Universities the power to assign conduction of the graduation ceremony to selected colleges and such colleges are bound by directions of the University for conducting the ceremony.

**Penalty for violation of these regulations**

- a. These regulations also provide a penalty clause in case the University does not comply with any of the provisions of these Regulations.
- b. It provides that the **Commission shall have the power to impose penalty on the University** in the form of fine and take such other action as it may deem fit.

Q35. Istanbul Convention

Link: <https://www.bbc.com/news/world-europe-53538205>



### News:

Poland is to withdraw from a European treaty aimed at preventing violence against women. ***Just read what we have mentioned. Nothing more is needed. It is also called as the Council of Europe Convention on preventing and combating violence against women and domestic violence.***

**The Council of Europe Convention on preventing and combating violence against women and domestic violence** *is based on the understanding that violence against women is a form of gender-based violence that is committed against women because they are women.* It is the obligation of the state to fully address it in all its forms and to take measures to prevent violence against women, protect its victims and prosecute the perpetrators.

When a government ratifies the Convention, they are legally bound to follow it.

Along with members, **non-members of European Union can also join this Convention.** **So, India have joined? NO. List of non-members:**

Canada	✓
Holy See	✓
Japan	✓
Kazakhstan	✓
Mexico	✓
Tunisia	✓
United States of America	✓

**Once look at the map also,**



CA36. Off-season flowering in poplar (*Populus deltoides*) Trees

Link: <https://india.mongabay.com/2020/07/reports-of-early-flowering-from-poplar-trees-in-punjab/>



*Off-season Poplar flowers from Kapurthala. Photo courtesy researchers*

A researcher spotted **off-season flowering in poplar (*Populus deltoides*) trees** in Kapurthala, Punjab in 2019. Digging into the weather data, the research team found unusually high rainfall in May 2019 in Kapurthala indicating that **there might be a correlation between the unusual rainfall and off-season flowering** and that their observations provide early clues of changing climate conditions.

The researchers have published their findings in the International Journal of Biometeorology where they say, their observations provide “**early clues of changing climatic conditions that have altered the flowering pattern of *Populus deltoides*.**”

### **Weather patterns and flowering**

Plants usually bear flowers only when the season is right. They have finely tuned internal mechanisms to sense the change in temperature, humidity and other external factors. “Our measurement devices, (thermometer, hygrometer) can go wrong but not plants. They are very-well attuned to changes in weather. This sort of off-season flowering is an “**open example**” of changing weather patterns.

**Other such example:**



- a. A 2014 study reported that Rhododendron – a key plant in the central Himalayan region – is now flowering months earlier than it used to a hundred-years-ago.
- b. A recent news report from southern India says important fruit-bearing trees, like mango, jackfruit, nutmeg, and cashew are experiencing a change in the flowering season.
- c. Another 2019 study from Mizoram in eastern India, reports phenological shifts in as many as six species of trees growing in the semi-evergreen forest of Mizoram University Campus in Aizawl.

Though several reports of changing **phenological** (defined below) behaviour in plants exist in the scientific literature, a nation-wide effort to study such changes over a long period of time is much needed.

**Phenology** refers to the timing of important events – flowering, fruiting, shedding and emergence of leaves – in a plant's life cycle. It is closely tied with the weather and climate conditions. When phenological shifts happen, there are consequences, not just for the affected plant but also for organisms that depend on that plant.

### CA37. New study provides valuable historical dataset for Yellow River water management

Link: <https://phys.org/news/2020-07-valuable-historical-dataset-yellow-river.html>

**Ok, here my purpose is more to make you learn map of Yellow Sea. But we will see news in brief.** *Don't worry about such news that it is not published in the Hindu.. Due to COVID-19, very a smaller number of important news are published. So, we are going through different magazines to find something important.*

#### News details:

- a. The Yellow River (YR) is the fifth-longest and the most sediment-laden river in the world. Although the YR accounts for only 3% of China's water resources, it irrigates 13% of its cropland.
- b. Since the 1960s, an increasing number of large-scale dams and reservoirs have been built in the main YR channel, and water consumption by agricultural irrigation along the YR middle course has risen sharply. **In recent decades, YR runoff and sediment load have fallen sharply.**
- c. This **reduced runoff has resulted in an estimated 58% reduction of the sediment load** in the upper reach of the YR and 29% reduction in the middle reach.
- d. **Human activities, mainly expansive agricultural irrigation in the upper course, have contributed** to reduced runoff and sediment load in the upper-middle course of the YR.



- e. If these human activities continue to intensify, future **YR runoff will be further reduced, and this will negatively impact agriculture**, human lives, and socioeconomic development in the middle and lower basins of the YR.
- f. **To reduce the risk of recurring cutoff of stream flow** in the YR lower basin, **water should be allocated judiciously. Policies should balance water allocation** among the needs of agriculture, industry and ecosystems.

Now map,



CA38. Centre launched 'Green-Ag Project'.

Link: <https://www.downtoearth.org.in/news/agriculture/centre-launches-pilot-project-to-reduce-emissions-from-agriculture-72528>

The Union government on July 28, 2020, launched the **Green-Ag Project in Mizoram**, to reduce emissions from agriculture and ensure sustainable agricultural practices. Mizoram is one of the five states where the project will be implemented. Other states include **Rajasthan, Madhya Pradesh, Odisha and Uttarakhand**.

#### Aims of Project:

- a. The project seeks to mainstream biodiversity, climate change and sustainable land management objectives and practices into Indian agriculture.
- b. The overall objective of the project is to catalyze transformative change of India's agricultural sector to support achievement of national and global environmental benefits and conservation of critical biodiversity and forest landscapes.

- c. The project will support harmonization between India's agricultural and environmental sector priorities and investments so that the achievement of national and global environmental benefits can be fully realized without compromising India's ability to strengthen rural livelihoods and meet its food and nutrition security.

#### Who is funding and implementing agencies?

**The Green-Ag Project is funded by the Global Environment Facility**, while the Department of Agriculture, Cooperation, and Farmers' Welfare is the national executing agency. Other key players involved in its implementation are Food and Agriculture Organization (FAO) and the Union Ministry of Environment, Forest and Climate Change (MoEF&CC).

Focal Areas	Climate Change, Biodiversity, Land Degradation
Funding Source	GEF Trust Fund
Implementing Agencies	Food and Agriculture Organization
Executing Agencies	Ministry of Agriculture (MoA); Ministry of Environment, Forests, and Climate Change (MoE&CC)
GEF Period:	GEF - 6
Approval Fiscal Year:	2016

**The pilot project is supposed to end on March 31, 2026. Nothing more than this is required for this project.**

CA39. Global Food insecurity due to COVID-19 based on State of Food Security and Nutrition in the World 2020 Report

Link: <http://www.fao.org/3/ca9692en/CA9692EN.pdf>

The State of Food Security and Nutrition in the World 2020 has been prepared by the FAO Agricultural Development Economics Division in collaboration with the Statistics Division

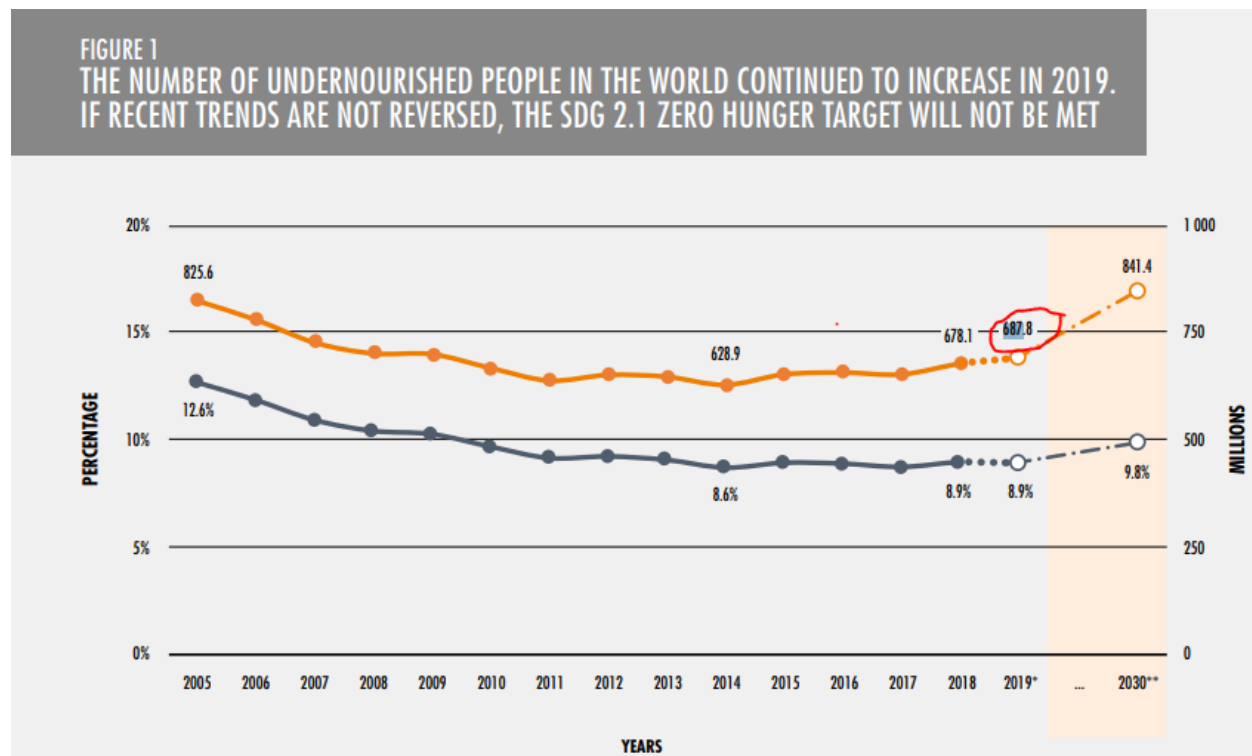
of the Economic and Social Development Department and a team of technical experts from FAO, IFAD, UNICEF, WFP and WHO.

### How you will introduce such topics:

In 2015, the member states of the United Nations accepted the 17 Sustainable Development Goals which act as a blueprint for achieving a better and more sustainable future for all. This is to be done by addressing the global challenges the world is faced with including poverty, malnutrition, and food security. **Despite such a goal in place, the number of hungry people globally has been increasing since 2014 even if slightly.**

### More than a quarter of world's population already faces some level of food insecurity

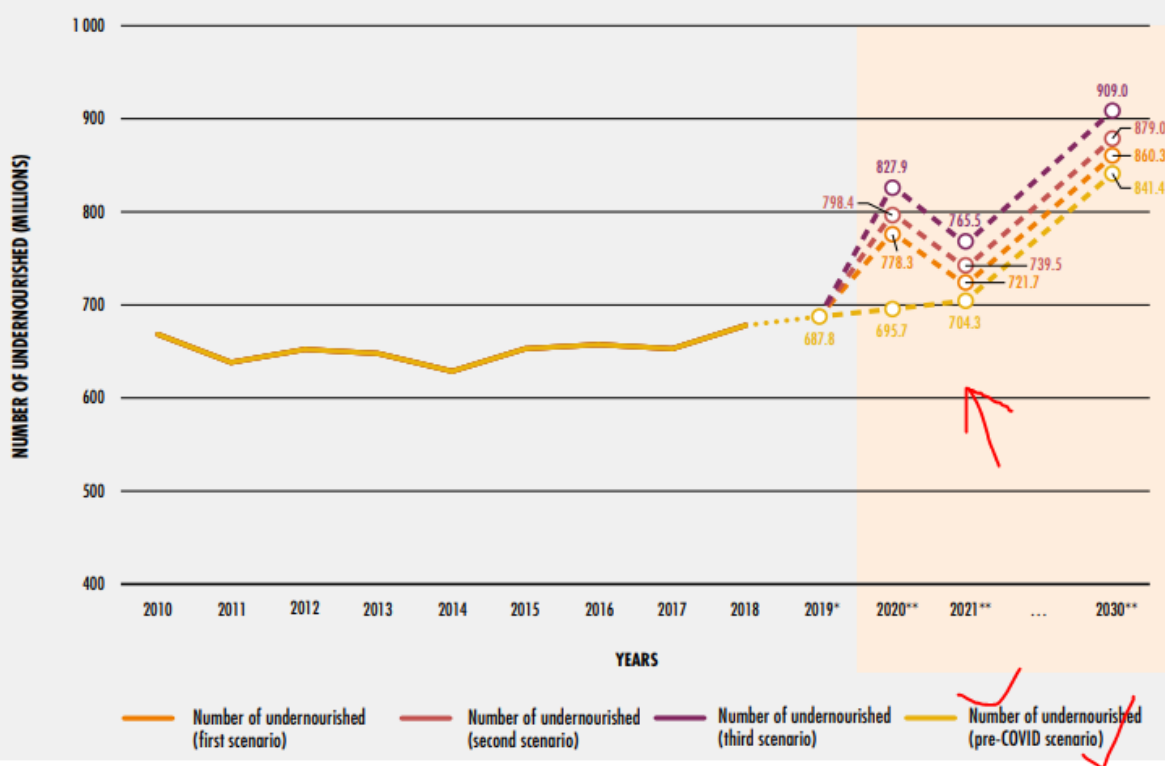
- The number of undernourished persons in the world rose to 687.8 million in 2019 which is 8.9% of the world population.
- The number is approximately 60 million more compared to 2014, reveals the State of Food Security and Nutrition report of 2020, released recently by the Food & Agriculture Organization of the United Nations (FAO).
- If this trend persists, the FAO has projected that by 2030, the number of undernourished persons would rise to over 841 million persons, which would be a number greater than that in 2005.
- It has to be noted that these projections were made without taking into consideration the setback caused by the COVID-19 pandemic.



### Acute food insecurity likely to double in 2020 due to COVID-19

- In 2020, COVID-19 coupled with the locust infestation is expected to exacerbate food insecurity. The pandemic has brought about a setback to the years of progress achieved in this area.
- Without doubt, COVID-19 will result in more people getting exposed to food insecurity. FAO's report projects that an additional 83 to 132 million persons will be pushed to the undernourished category because of COVID-19.
- Meanwhile, according to the UN World Food Programme, the number of people facing acute food insecurity is all set to rise to 265 million in 2020, up from 135 million in 2019, all due to COVID-19.
- Acute food insecurity refers to food insecurity as a consequence of unprecedented events. However, the severity and future of the pandemic is still uncertain, to make further projections.

### HOW THE COVID-19 PANDEMIC MAY AFFECT HUNGER IN THE WORLD: THREE SCENARIOS



### Disruption in demand and supply of food crops witnessed

- Both demand and supply of food have been disrupted because of the pandemic. The production of major food crops such as wheat, rice, maize, etc. is anticipated to be above average in 2020 by FAO.

- b. However, measures adopted to contain the coronavirus restricts labour mobility-affecting availability of migrant labour, access to markets, and transportation of the food produce.
- c. Access to food and economic problems due to lockdowns imposed across the world is expected to impede the demand. The economically backward and vulnerable groups will be most affected as per the report.
- d. The low- and middle-income countries which are already suffering will face a major blow to their food security. Even countries where food security was not a problem are likely to encounter food insecurity now.

### **Healthcare services for maternal and infant health hindered due to pandemic**

- a. **Healthcare centers have been overwhelmed because of the pandemic** and this has **affected their ability to extend childcare** and antenatal care. Moreover, in developing countries, infectious diseases such as malaria, diarrhoea, tuberculosis, etc. are still prevalent and quality nutrition intake is a must.
- b. **Lack of nutrient rich food further weakens their immunity** which will increase their vulnerability to contract the viral infection.
- c. In India, **school going children lack access to mid-day meals** since education institutions are closed. In many countries, community level activities intended to spread awareness on health and nutrition have also been suspended due to the pandemic.

### **Nutritional status of people to be affected**

- a. Due to limited mobility, women, children, and persons with disability will be more susceptible as they already lag behind in terms of accessing economic and financial resources.
- b. Nonetheless, the movement restriction will make it more difficult for persons to access food even if they are economically sound.
- c. Diet quality is also anticipated to deteriorate since people may tend to buy food with long shelf life which are generally processed and high in salt and sugar content.
- d. These myriad socio-economic factors are expected to result in a fall of the population's nutritional status.
- e. As of 2019, around 144 million (21.3%) children worldwide under five years of age were estimated to be stunted, 47 million (6.9%) wasted and 38.3 million (5.6%) were overweight, while a minimum of 340 million children suffered from micronutrient deficiencies.

### **Food prices are expected to increase compromising people's ability to afford nutritious food**

- a. Countries that are heavily dependent on imported food as staples will be at a higher risk due to border closures.

- b. The World Bank has forecasted the deepest recession since World War – II due to the pandemic. The decreased economic activity because of the pandemic will result in high variation of food prices across and within countries.
- c. In order to avert increase in food prices, it is necessary that timely corrective interventions are taken by governments. For this, it is necessary that trade channels be allowed to stay open.

### **Policy recommendations to prevent increase in food price and ensure access to healthy diet at affordable price**

In its report, the FAO has listed out a few policy recommendations to prevent increase in the cost of nutritious food and to ensure access to healthy affordable diet. These include

- a. Emergency food assistance and social protection programs to ensure access to nutritious food for the poor and the vulnerable.
- b. Provision of life saving humanitarian assistance to prevent famine
- c. Trade and tax policies should be such that global trade is open
- d. Focus on key logistics bottlenecks to avoid unnecessary price hikes
- e. Extend direct support to smallholders to help them enhance productivity- reducing pre and post-harvest losses, ensure access to food markets, and opening up e-commerce channels
- f. Taking up double duty actions to reduce the pandemic's impact on food security and nutrition, that is, addressing multiple aspects through common interventions. For example, breastfeeding promotion, maternal nutrition and antenatal care programs, etc.
- g. Initiate food fortification programs (ensure intake of micronutrients)
- h. Economic stimulus measures to help people cope with decreased purchasing power and unemployment
- i. Installation of Food Safety Management Systems in the food industry to prevent food contamination

### CA40. Setback in inter-state tiger relocation Project.

Link: <https://india.mongabay.com/2020/07/setback-in-inter-state-tiger-relocation-as-odisha-prepares-to-return-sundari-to-mp/>

Two years ago, the Odisha government welcomed a tiger and a tigress – Mahavir and Sundari – under India's first inter-state tiger relocation project. Now, only the tigress survives, **and the state is preparing to return her back to Madhya Pradesh.**

In the summer of 2018, the tiger Mahavir was relocated *from Panna Tiger Reserve in Madhya Pradesh (MP) to the Satkosia Tiger Reserve of Odisha. A few days later, tigress Sundari was also sent to Satkosia from MP's Bandhavgarh.*

Mahavir died some months later allegedly due to poaching. Tigress Sundari meanwhile, after roaming in the wild of Satkosia was kept in an enclosure as she attacked local villagers



from the periphery villages. Her attack triggered protests and resentment from the locals. Now, two years later, **the Odisha government is preparing to return Sundari to Madhya Pradesh.**

**Note:** *Also remember this was the first tiger relocation project in India.*

Whose approval is required to translocate tigers: **It National Tiger Conservation Authority. Also learn about National Tiger Conservation Authority.**

The National Tiger Conservation Authority **is a statutory body under the Ministry of Environment, Forests and Climate Change constituted under enabling provisions of the Wildlife (Protection) Act, 1972**, as amended in 2006, for strengthening tiger conservation, as per powers and functions assigned to it under the said Act.

### Organizational Structure



You will read the entire function of NTCA given below. Once you read entire functions, it will give you confidence while solving questions related to this.

## Power and Functions of the NTCA



Powers and functions of the National Tiger Conservation Authority as prescribed under section 38O of the Wildlife (Protection) Act, 1972, as amended in 2006 are as under:-

- to approve the tiger conservation plan prepared by the State Government under sub-section (3) of section 38V of this Act;
- ✓ ➤ evaluate and assess various aspects of sustainable ecology and disallow any ecologically unsustainable land use such as, mining, industry and other projects within the tiger reserves;
- ✓ ➤ lay down normative standards for tourism activities and guidelines for project tiger from time to time for tiger conservation in the buffer and core area of tiger reserves and ensure their due compliance;
- ✓ ➤ provide for management focus and measures for addressing conflicts of men and wild animal and to emphasize on co-existence in forest areas outside the National Parks, sanctuaries or tiger reserve, in the working plan code;
- ✓ ➤ provide information on protection measures including future conservation plan, estimation of population of tiger and its natural prey species, status of habitats, disease surveillance, mortality survey, patrolling, reports on untoward happenings and such other management aspects as it may deem fit including future plan conservation;
- ✓ ➤ approve, co-ordinate research and monitoring on tiger, co-predators, prey habitat, related ecological and socio-economic parameters and their evaluation;
- ✓ ➤ ensure that the tiger reserves and areas linking one protected area or tiger reserve with another protected area or tiger reserve are not diverted for ecologically unsustainable uses, except in public interest and with the approval of the National Board for Wild Life and on the advice of the Tiger Conservation Authority;
- ✓ ➤ facilitate and support the tiger reserve management in the State for biodiversity conservation initiatives through eco-development and people's participation as per approved management plans and to support similar initiatives in adjoining areas consistent with the Central and State laws;
- ✓ ➤ ensure critical support including scientific, information technology and legal support for better implementation of the tiger conservation plan;
- facilitate ongoing capacity building programme for skill development of officers and staff of tiger reserves, and
- perform such other functions as may be necessary to carry out the purposes of this Act with regard to conservation of tigers and their habitat.

CA41. Sample Registration System survey 2018 (released recently) shows the strong correlation between Education level & Fertility Rate

Link: [https://censusindia.gov.in/vital\\_statistics/SRS\\_Report\\_2018/10.%20Chap\\_3-Estimates%20of%20Fertility\\_Indicators-2018.pdf](https://censusindia.gov.in/vital_statistics/SRS_Report_2018/10.%20Chap_3-Estimates%20of%20Fertility_Indicators-2018.pdf)

*Ok, understand here that the report is very big. In this section we have only co-related the relation between Education and Fertility rate and development of women. Gradually, we will cover entire section.*

**The Sample Registration System survey is an annual demographic survey published by the Registrar General of India.** The survey gives an estimate of various demographic factors such as birth rates, death rates, fertility, and mortality rates, both at national level and state levels, indicating the progress in socio-economic development. **The SRS sample is revised every ten years based on the latest census frame. The present Report is the fifth in the series.**

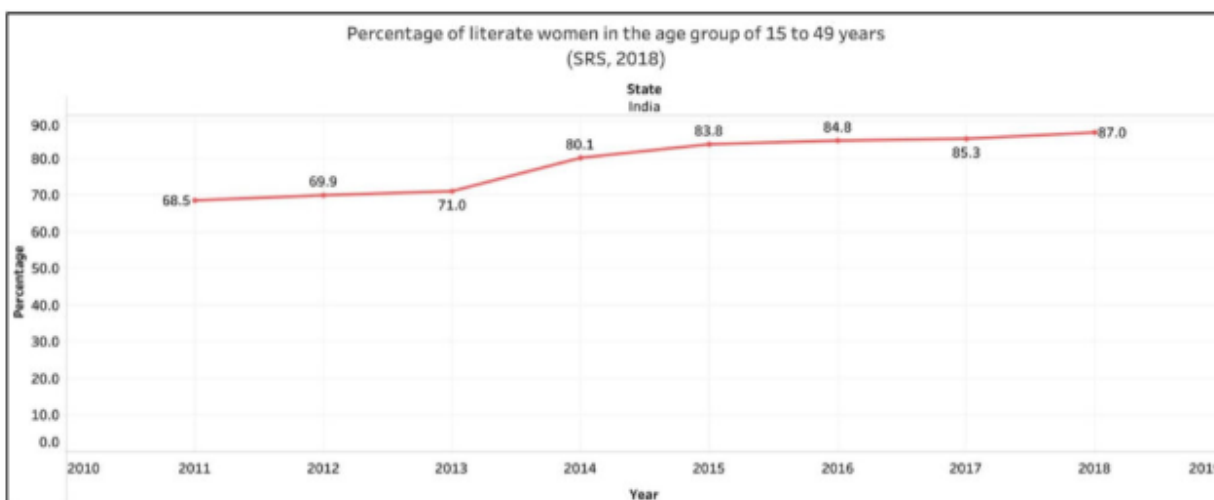
The sample unit for the survey in case of rural areas, is a village or a segment of the village if the population is more than 2000. In case of urban areas, the sampling unit is a census enumeration block with a population between 750 to 1000.

**People above the age of seven who can read and write in any language are considered literate**

- Those who are **aged above seven and can read and write with understanding in any language are considered literate**. Even those without any formal education who satisfy this criterion are considered literate.
- As of 2018, around 18.9% of the females had an education up to class X, 12.5% up to class XII, and only 9.8% had an education equivalent to graduate level and above. 4.9% of the females were literate but did not have any formal education.
- It is observed that the percentage of women who completed school education in **2018 was higher than that in 2017**.

**Female literacy rate among those aged between 15 to 49 years is increasing**

**Percentage of literate women in the age group of 15 to 49 years has been continuously increasing.** Since 2011, the average literacy rate of women in this age group has increased from 68.5% to 87% in 2018. 13% of the women in the said age group fall in the 'Illiterate' category.



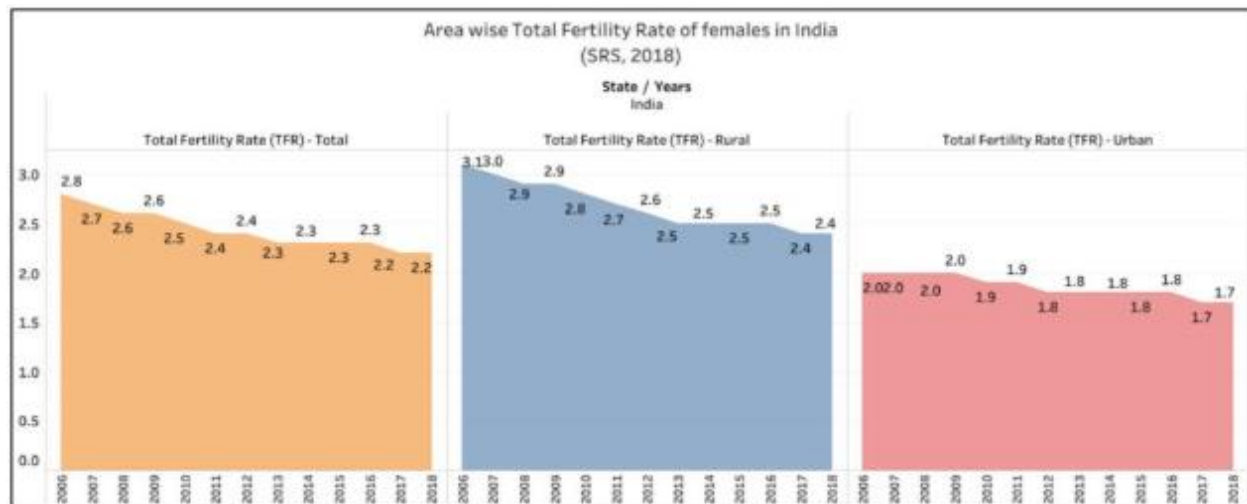
**Fertility level is influenced by literacy level**

- Female education has a direct impact on fertility level. Certain studies suggest that higher female literacy level is important for population stabilization and better infant health. The impact of female literacy is independent of male literacy.
- Total Fertility Rate, abbreviated as TFR, is defined** as the number of children born to a woman until the end of her child-bearing age. **Higher the TFR, more is the number of children a woman may give birth to.**

- c. Female literacy is expected to let women make more informed decisions. Not just that, women will also be able to support themselves and family, and will have more bargaining power, once educated.
- d. However, other parameters such as general health of population, government support programs, etc., also influence the fertility levels.

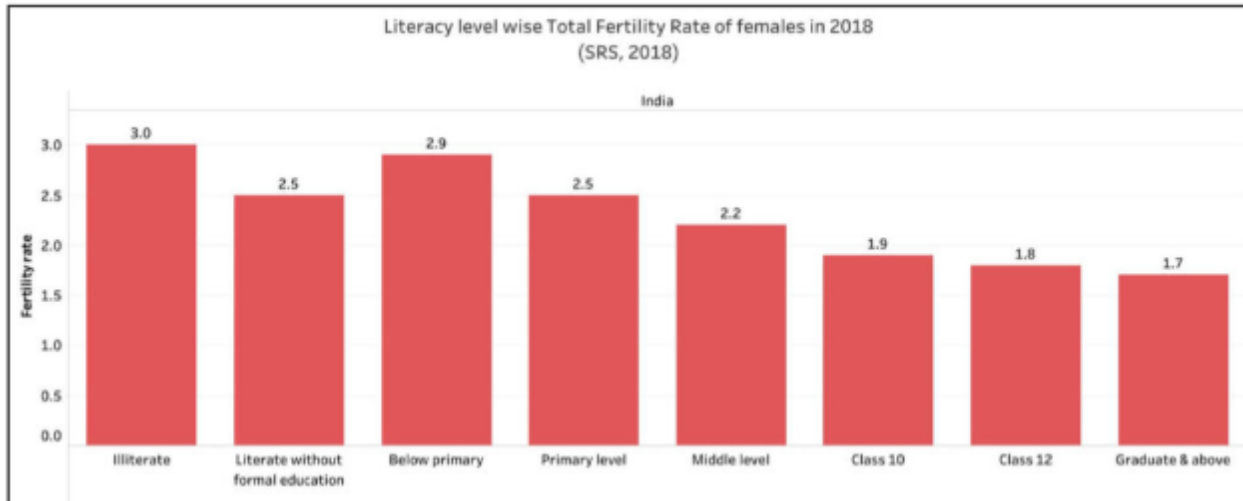
### Total fertility rate is declining over the years

- a. In India, as already seen above, the **literacy rate among women** in the 15-49 age group has been **increasing**.
- b. At the same time, **TFR has been decreasing** for the past few years. Traditionally, **Rural areas have always recorded a higher TFR compared to urban areas**.
- c. Between 2006 and 2018, the total TFR dropped from 2.8 to 2.2, implying that on average, a woman gave birth 3 children in 2006, and in 2018, it has reduced to 2. While the TFR in urban areas dropped from 2 to 1.7, the same in rural areas dropped from 3.1 to 2.4 during the 13 years.



### As education level among women increases, a decline in TFR is witnessed

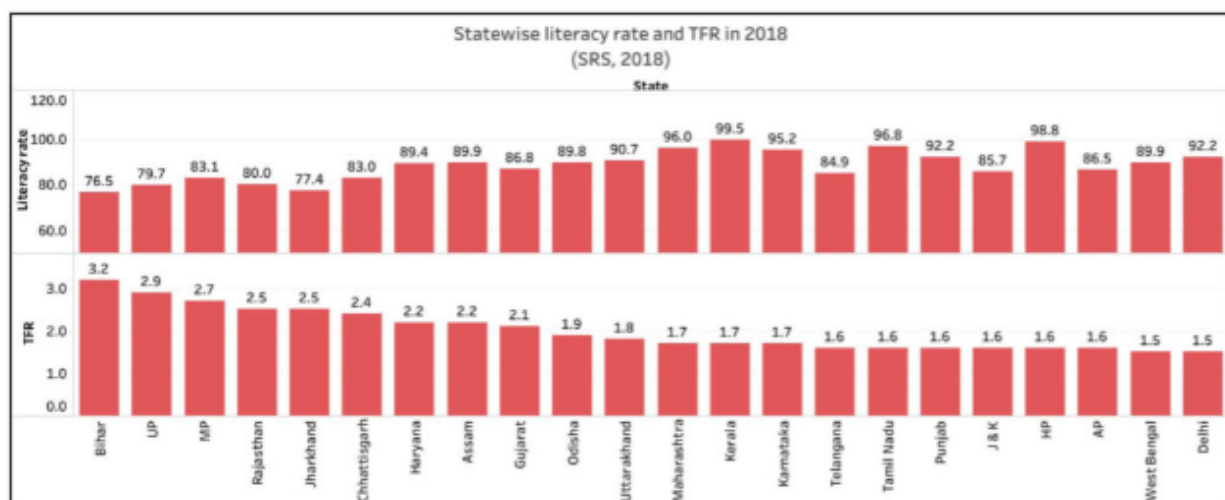
As demonstrated in the subsequent chart, the **TFR for women reduces with education**. The TFR among illiterate women stood at 3. This means that on an average, an illiterate woman had three children. The same among women who were literate and did not have any formal education was 2.5. Among those who had education, the overall fertility rate of women with education below primary level stood at 2.9 while those with primary level education had TFR of 2.5. Women with education up to middle level had a fertility rate of 2.2. and those educated beyond class X had TFR below 2.



### Kerala and Himachal Pradesh have higher female literacy levels and lower fertility rates

State-wise data reveals that eight (8) states among the larger states have female literacy rate more than 90%. **Kerala continues to record the highest female literacy rate.** In 2016, Kerala's female literacy rate was 99.2%, which increased to 99.3% in 2017 and 99.5% in 2018. **Meanwhile, Bihar, Jharkhand and Uttar Pradesh continue to record the worst female literacy rate** even though the states have reported a substantial improvement over the previous years. Bihar, Jharkhand, and Uttar Pradesh recorded female literacy rates of 76.5%, 77.4%, and 79.7% respectively as per SRS 2018.

**The same is also reflected in the TFR recorded in the states.** It is evident that states which have recorded lower female literacy rates have a higher TFR. Bihar, Jharkhand, and Uttar Pradesh have recorded a TFR of 3.2, 2.5, and 2.9 respectively while Kerala and Himachal Pradesh which have highest female literacy level of 99.5% and 98.8%, have a TFR of 1.7 and 1.6 respectively.



### Higher Fertility Rate & increasing population inhibit development

- Increasing population & higher population growth rate is a cause for concern for India.
- While some argue that increased population provides more working age population and creates a big consumer market, the disadvantages far outweigh the advantages.
- With increasing population & higher fertility rate**, health risks for children and their mothers increase. It is also seen that in countries with higher fertility rates, economic growth is stunted.
- The implications on the environment should not be neglected as well.

### Conclusion:

All this means that education of women which leads to low fertility rates is necessary for a healthy & prosperous nation. Only then, more women can take part in economic activities and make informed choices, leading to greater socio-economic development of country.

### CA42. Hurricane Hanna hits Texas

Link: <https://indianexpress.com/article/explained/hurricane-hanna-how-hurricanes-are-formed-named-6524528/>

Recently, **Hurricane Hanna** has made landfall (the point at which a hurricane reaches land) in Texas with life-threatening storm surge and strong winds. Hurricanes are large, swirling storms. They produce winds of 119 kilometers per hour (74 mph) or higher.



### How Does a Storm Become a Hurricane?

- A hurricane starts out as a **tropical disturbance**. This is an area over warm ocean waters where rain clouds are building.



- b. A **tropical disturbance sometimes grows into a tropical depression**. This is an area of rotating thunderstorms with winds of 62 km/hr (38 mph) or less.
- c. A **tropical depression becomes a tropical storm** if its winds reach 63 km/hr (39 mph).
- d. A **tropical storm becomes a hurricane** if its winds reach 119 km/hr (74 mph).

**Tropical cyclones are called hurricanes in the West Indian islands in the Caribbean Sea and Atlantic Ocean.**



### **What Makes Hurricanes Form?**

- a. Warm ocean waters provide the energy a storm needs to become a hurricane. Usually, the surface water temperature must be 26 degrees Celsius (79 degrees Fahrenheit) or higher for a hurricane to form.
- b. Winds that don't change much in speed or direction as they go up in the sky. Winds that change a lot with height can rip storms apart.

### **Saffir-Simpson Hurricane Wind Scale**

It is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage.

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	119-153 km/h	Very dangerous winds will produce some damage
2	154-177 km/h	Extremely dangerous winds will cause extensive damage
3 (major)	178-208 km/h	Devastating damage will occur
4 (major)	209-251 km/h	Catastrophic damage will occur
5 (major)	252 km/h or higher	Catastrophic damage will occur

CA43. Are actions taken by the governor of Rajasthan, right?

Link: <https://thewire.in/government/rajasthan-governor-kalraj-mishra-ashok-gehlot-cabinet-assembly-congress>

**A continuous tussle between Governor and Government. We will see here few constitutional provisions and SC judgements.**

*It's a paradox in Rajasthan. MLAs are neither in assembly nor in constituencies, but in resorts. Congress asks speaker to disqualify them. Pilot does not attend CLP (Congress Legislative Party) but goes to the High Court. High Court 'requests' Speaker to wait. Speaker wanted the Supreme Court to stay the High Court's 'request'. In return gets a direction from the Supreme Court to follow High Court. Supreme Court asked High Court to go-ahead but says its order will be under their purview. And High Court 'directs' Speaker for status quo. What a wonderful coordination!*

**There has, thus, arisen a question of great significance in relation to the powers and function of the governor vis-à-vis the elected government of a state and legislature. We will start now with Introduction:**

- a. **Article 174 of the constitution empowers the governor** to summon, prorogue and dissolve the house. These functions are performed by him **on the advice of his council of ministers**. The council of ministers is the creation of the elected assembly, **so, it is called an elected government whereas the governor is an appointee of the president of India.**
- b. Since we have adopted the Westminster system of cabinet form of government, the **executive power is vested in the council of ministers which is responsible to the legislature.**
- c. The **governor is a constitutional head**, which in simple term means that he exercises the executive functions only on the advice of the council of ministers.
- d. The **governor cannot exercise these powers without the aid and advice of the council of ministers**. It would simply mean that governor is a figurehead and the real power is exercised by the elected government. **So, the governor is not personally responsible for the consequences of the governmental action.**

Now, let us come to the question of summoning the assembly. Under Article 174, the **governor summons the assembly**. There is a well-established procedure for the summoning of the assembly. **Let us understand with parliament.**

- a. In the case of parliament, after the cabinet or prime minister has decided that parliament should meet on a certain date, the **Ministry of Parliamentary Affairs, writes to the speaker and enquires whether he is in agreement with the date.**
- b. **On the Speaker agreeing to the date,** the file containing the decision of the cabinet is **sent to the speaker's office for onward submission thereof to the president.**
- c. The **secretary general of the Lok Sabha sends the file to the office of the president along with an office note indicating the speaker's agreement to the date,** as well as a draft order of summons to be signed by the president
- d. **The president's office sends the file back with the president's signature on the summons order either the same day or the next day at the latest.**
- e. The **secretary general, thereafter, sends individual summons to the members which includes the president's order,** authenticated by the secretary general.

**This, in short, is the process and the procedure for summoning the houses of parliament.** *The same procedure is followed by the state legislatures and the governments.*

#### ***Now the case in Rajasthan:***

In the context of the political as well as the constitutional conundrum in Rajasthan, **the first question that needs to be clarified** is *who decides to call the session of the assembly on a particular date and whether the governor has any discretion in the matter.* In other words, can the governor ask the government to change the date and not sign the summons order till the government agrees?

The answers to these questions will be found in *Nabam Rabia and Banan Felix v. Deputy Speaker* (2016) decided by the Constitution Bench of the **Supreme Court**. In its judgment, the Supreme Court **has made two points clear,**

- a. one, the **governor has no discretion in the matter of summoning the house if the chief minister enjoys majority in the house** and, therefore, is bound to act on the advice of the cabinet.
- b. Two, in case the **governor has reason to believe that the chief minister has lost his majority,** the **governor can use his discretion** in fixing the date for summoning the assembly **where the chief minister has to test his majority.**

It may also be said here that the option of refusal to act on the advice of the council of ministers just does not exist. In *Shamsher Singh v. State of Punjab* (1974), a seven judge Constitution Bench of the Supreme Court said,

*"The Governor has no right to refuse to act on the advice of the Council of Ministers. Such a position is antithetical to the concept of responsible government."*

**From the above analysis**, it is clear that the actual decision to call the session of the assembly is taken by the government and the **governor performs the rather technical act** of summoning the house


**Now what is the issue of calling this 21-day period notice?**


- a. The 21 days' period for calling the session has become another subject of debate. What is the sanctity of 21 days and why should the governor suggest it? Twenty-one days used to be the notice period for questions in parliament long ago.
- b. **As per the recommendation of the Rules Committee of the Lok Sabha** in 1967, **the maximum period of notice for asking the starred questions was fixed at 21 clear days.**
- c. Accordingly, the date of the communication of session used to be fixed keeping in view the requirement of 21 clear days for asking questions.


In other words, the commencement of session would be on a date which would be more than 21 days later than the date of summons. Later, this was changed to 15 days in both houses of parliament.


But on a number of occasions, sessions of parliament and of assemblies were called within shorter period of notice. In such cases, either there was no question hour for a few days, or the speaker would decide to accept notices of questions at shorter notice period. Rules provide that the speaker can shorten the notice period.

In any case, **the notice period of questions was not an inhibiting factor for convening the house at short notice.** It always depended on the sense of urgency the government felt in a particular situation.

 On many occasions, parliament was convened at shorter notice than 21 days. Just a few examples:

Summons for in fifth session of  the ninth Lok Sabha were issued on November 12, 1990. The houses met on November 16.

Similarly, summons for the first  session of the 10th Lok Sabha which commenced on May 22 were issued on May 18, 1996.

Summons for the first session of the  12th Lok Sabha which started on March 23, 1998 were issued on March 21.

**So, as per the SC judgements and constitutional procedures, the Governor's discretionary actions do not seem to be satisfactory.**

If you read this full article, so many hidden prelims questions in it. That's we have covered this here. Read full.

## CA44. SC shuns IIT Bombay for Backing Out of Smog Tower Project

Link: <https://www.livelaw.in/news-updates/sc-threatens-to-initiate-contempt-proceedings-against-iit-bombay-for-backing-out-of-smog-tower-project-160701>



The Supreme Court recently expressed great displeasure upon learning that the **Indian Institute of Technology, Bombay (IIT Bombay)** had backed out from completing the **Smog Tower project** which would help Delhi fight its pollution crisis.

### Background:

In December 2019, a Supreme Court Bench headed by Justice Arun Mishra directed the Centre and Delhi Government to ensure that a **smog tower, essentially large air purifiers**, was set up in the Connaught Place area of New Delhi to tackle the annual problem faced by the national capital in winters. **This was to be done within 3 months, as a pilot project.**

The concept and technology involved was discussed with a professor of IIT Bombay, who was part of a High-Power Committee looking into various technologies and options to tackle air pollution. **Thereafter, the Judges gave IIT Bombay the responsibility to take up the project.**

### What court stated now?


As the hearing proceeded, it was further informed that **IIT Bombay had backed out** from going ahead with the project, **and the Government was now in talks with IIT Delhi and National Environmental Engineering Research Institute (NEERI).**

**But court is very angry on IIT Mumbai for backing out. It stated:**

*This is nonsense what IIT is saying. How can IIT get out? We will take strict action against them! How can IIT back out like this? Call the IIT fellow. This is utter nonsense what IIT is doing. This is contempt". They said they would do the job. How can they back out after 6 months? We will punish them. Wait for more update now.*

### Basic about National Environmental Engineering Research Institute (NEERI):

<a href="#">Vision &amp; Mission</a>	<a href="#">About CSIR</a>	<a href="#">About NEERI</a>	<a href="#">Quality Policy</a>	<a href="#">Director's Desk</a>
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The CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) is a research institute created and funded by Government of India. It was established in Nagpur in 1958 with focus on water supply, sewage disposal, communicable diseases and to some extent on industrial pollution and occupational diseases found common in post-independent India.

NEERI is a pioneer laboratory in the field of environmental science and engineering and is constituent laboratory of Council of Scientific and Industrial Research (CSIR). NEERI has five zonal laboratories at Chennai, Delhi, Hyderabad, Kolkata and Mumbai. NEERI comes under the Ministry of Science and Technology (India) of central government. The NEERI is an important partner organization in India's POPs National Implementation Plan (NIP).

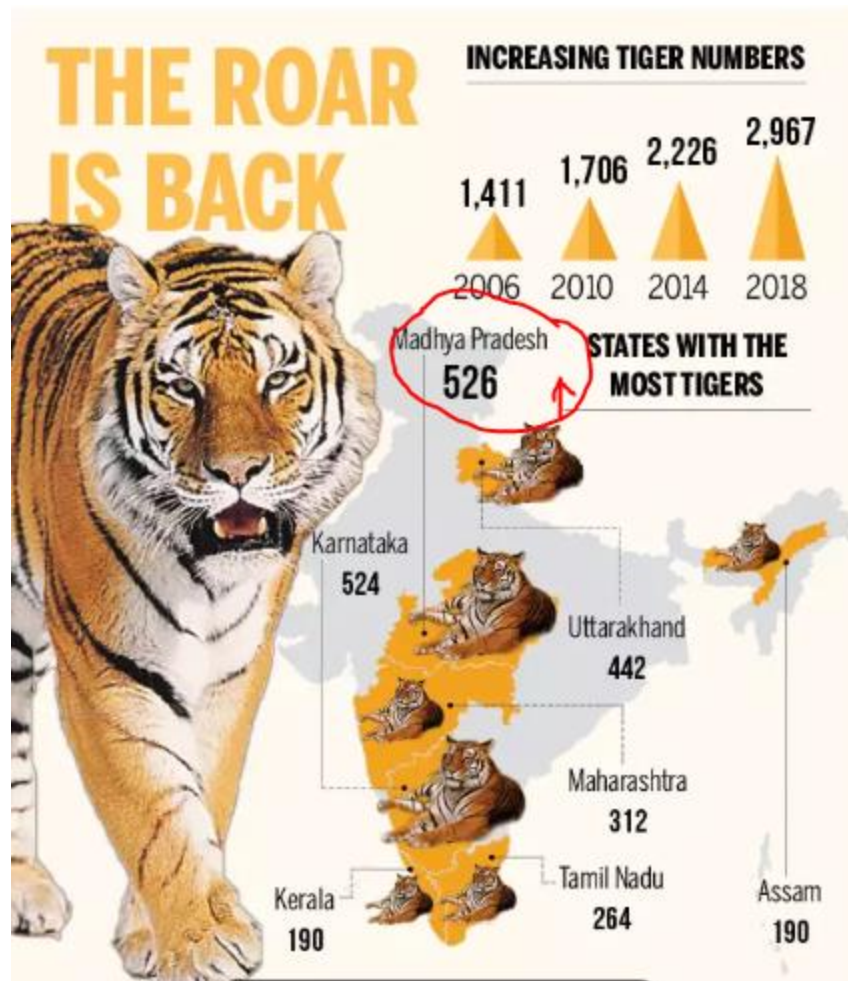
### CA45. Global Tiger Day

**July 29 is observed across the world as Global Tiger Day** every year to raise awareness about the declining population of the tigers and making efforts to save them from going extinct. **The Global Tiger Day came into existence in 2010 in Russia during the signing of Saint Petersburg declaration by 13 tiger range countries.** India is part of it.

On this occasion, the Union Environment Ministry has released an updated report on India's Tiger Survey from 2018. *It's the latest estimate about Tigers. So, any questions come in Prelims, you will answer according to this data only.*

### Highlights:





- Country's tiger population: 2,967 — unchanged from the government's estimate last year
- India has nearly 70% of the world's tigers.
- While Pench Tiger Reserve in Madhya Pradesh recorded the highest number of tigers, Sathyamangalam Tiger Reserve in Tamil Nadu registered the "maximum improvement" since 2014.
- Madhya Pradesh has the highest number of tigers at 526**, closely followed by Karnataka (524) and Uttarakhand (442).

State	Tiger Population			
	2006	2010	2014	2018
<b>Shivalik Hills and Gangetic Plains Landscape</b>				
Bihar	10 (7-13)	8	28(25-31)	31 (26 - 37)
Uttarakhand	178 (161-195)	227 (199-256)	340 (299-381)	442 (393 - 491)
<b>Western Ghats Landscape</b>				
Goa	-	-	5*	3
Karnataka	290 (241-339)	300 (280-320)	406 (360-452)	524 (475 - 573)
<b>Central Indian Landscape and Eastern Ghats</b>				
Andhra Pradesh	95 (84-107)	72 (65-79)	68 (58-78)	48 (40 - 56) #
Telangana	-	-	-	26 (23 - 30) #
Chhattisgarh	26 (23-28)	26 (24-27)	46 (39-53)*	19 (18 - 21)
Jharkhand	-	10 (6-14)	3*	5
Madhya Pradesh	300 (236-364)	257 (213-301)	308 (264-352)*	526 (441 - 621)

Now we will learn few global organizations related to Tiger.

1. The Project Tiger
2. Global Tiger Initiative (GTI) program
3. Global Tiger Initiative Council (GTIC)
4. Petersburg Tiger Summit in 2010
5. M-Stripes

#### The Project Tiger:

- a. The Government of India has taken a pioneering initiative for conserving its national animal, the tiger, by launching the '**Project Tiger**' in **1973**.
- b. From 9 tiger reserves since its formative years, the Project Tiger coverage has increased to 50 at present, spread out in 18 of our tiger range states.
- c. This amounts to around 2.21% of the geographical area of our country. The tiger reserves are constituted on a core/buffer strategy.
- d. The core areas have the legal status of a national park or a sanctuary, whereas the buffer or peripheral areas are a mix of forest and non-forest land, managed as a multiple use area.
- e. The Project Tiger aims to foster an exclusive tiger agenda in the core areas of tiger reserves, with an inclusive people-oriented agenda in the buffer.
- f. **Project Tiger is an ongoing Centrally Sponsored Scheme of the Ministry of Environment, Forests and Climate Change** providing central assistance to the tiger States for tiger conservation in designated tiger reserves.

Objectives of Project Tiger:

- ✓ A. To ensure that any factor leading to the reduction of tiger habitats is limited.
- ✓ B. Any damages done to these habitats should be repaired so that the ecosystem is balanced
- ✓ C. Maintain a viable tiger population.

### Global Tiger Initiative (GTI) program

The Global Tiger Initiative (GTI) was launched in 2008 as a global alliance of governments, international organizations, civil society, the conservation and scientific communities and the private sector, with the aim of working together to save wild tigers from extinction. **In 2013, the scope was broadened to include Snow Leopards.**

The GTI's founding partners included the World Bank, the Global Environment Facility (GEF), the Smithsonian Institution, Save the Tiger Fund, and International Tiger Coalition (representing more than 40 non-government organizations). **The initiative is led by the 13 tiger range countries (TRCs). India is a part of it.**

**The World Bank hosted the GTI Secretariat** until July 1 2015. Following the World Bank announcement in September 2014, that it would not support the GTI Secretariat after June 30, 2015, **governments of range countries agreed for transition of the program management functions from the World Bank to the Global Tiger Initiative Council.**

### Global Tiger Initiative Council (GTIC):

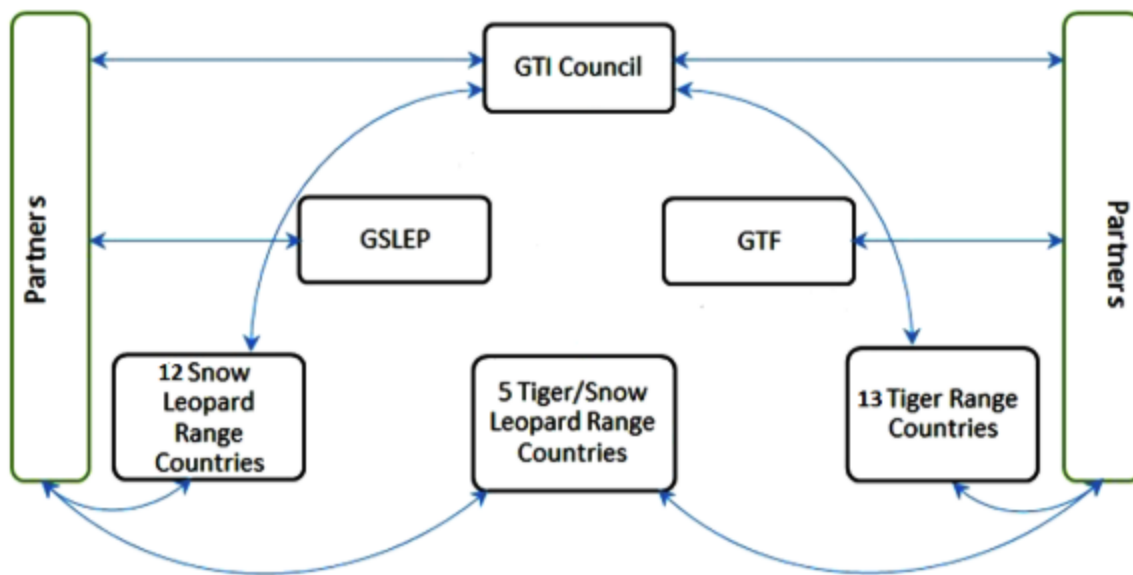
- ✓ ✓ GTIC was recreated with two arms for implementation- Global Tiger Forum (GTF) for tigers, in Delhi, and Global Snow Leopard Environmental Plan (GSLEP) for snow leopards at Bishkek. The implementation mechanisms defined under the St. Petersburg Declaration and the Bishkek Declaration will remain the guiding forces..

### STRUCTURE

Global Alliance

✓ 13 Tiger Range Countries, 12 Snow Leopard Range Countries, 20 in total (5 overlapping) plus partner organizations that constituted the GTF for GTRP and GSLEP Secretariat for GSLEP

### Petersburg Tiger Summit in 2010



### St. Petersburg Tiger Summit in 2010, Declaration.

The “Tiger Summit” took place in St. Petersburg in Russia on 21–24 November 2010 and brought together some 500 representatives of the 13 Tiger Range States, the partner organizations of the World Bank’s Global Tiger Initiative and further institutions important for the conservation of tigers. They declared here:

✓ Because it is our obligation to future generations, and because we must act now, we hereby declare the following:

✓ Strive to double the number of wild tigers across their range by 2022 by

1. Doing everything possible to effectively manage, preserve, protect, and enhance habitats, including:
  - a. Mainstreaming biodiversity conservation in planning and development processes in tiger habitat;
  - b. Making critical tiger breeding habitats inviolate areas within the larger tiger conservation landscapes where no economic or commercial infrastructure development or other adverse activities are permitted; and maintaining the landscapes and creating corridors around and between them where all permitted development activities are tiger- and biodiversity-compatible;

### M-STrIPES

The National Tiger Conservation Authority (NTCA) has launched the **M-STrIPES** (Monitoring System for Tigers – Intensive Protection and Ecological Status), a mobile monitoring system for forest guards.

CA46. New current that transports water to major 'waterfall' discovered in deep ocean

Link: <https://www.sciencedaily.com/releases/2020/07/200729204748.htm>

An international team discovered a previously unrecognized ocean current that transports water to one of the world's largest "waterfalls" in the North Atlantic Ocean: **the Faroe Bank Channel Overflow into the deep North Atlantic**. While investigating the pathways that water takes to feed this major waterfall, the research team identified a surprising path of the cold and dense water flowing at depth, which led to the discovery of this new ocean current.

**Let's read what scientists have to say. It will bring more clarity.**

"This new ocean current and the path it takes toward the Faroe Bank Channel are exciting findings," said Léon Chafik, the lead author of the paper published in *Nature Communications* and a research scientist at Stockholm University, Sweden.

"The two discoveries reported here, in one of the best studied areas of the world ocean, is a stark reminder that we still have much to learn about the Nordic Seas," said co-author Thomas Rossby, emeritus professor at the URI Graduate School of Oceanography. "This is crucial given the absolutely fundamental role they play in the major glacial-interglacial climate swings."

The study further reveals that much of the water that will end up in the Faroe Bank Channel is not in fact transported along the western side of the Faroe-Shetland Channel (the region the water flows through before reaching the Faroe Bank Channel), as previously thought. Instead, most of this water comes from the eastern side of the Faroe-Shetland Channel where it is transported by a jet-like and deep-reaching ocean current. "This was a curious but very exciting finding, especially since we are aware that a very similar flow structure exists in the Denmark Strait. We are pleased that we were able to identify this new ocean current both in observations and a high-resolution ocean general circulation model," said Chafik.

"Because this newly discovered flow path and ocean current play an important part in the ocean circulation at higher latitudes, its discovery adds to our limited understanding of the overturning circulation in the Atlantic Ocean," said Chafik. "This discovery would not have been possible without many institutional efforts over the years."

**The Faroe Bank Channel is the deepest passage for dense water leaving the Nordic Seas into the North Atlantic.**





Fig. 1: The Faroe Bank Channel is one of the few gaps in the Greenland-Scotland Ridge, a major barrier for deep water transport stretching from East Greenland to Iceland and the Faroe Islands, and across to Scotland.

#### CA47. New genealogy project allows astronomers to trace 'ancestors'

Link: <https://www.downtoearth.org.in/news/science-technology/new-genealogy-project-allows-astronomers-to-trace-ancestors--72531>

A genealogy project for academics — who earned doctorates on astronomy-related theses or supervised research for such dissertations — **was launched by the American Astronomical Society (AAS) and its Historical Astronomy Division July 25, 2020.**

- a. **The Astronomy Genealogy or AstroGen project** allows these academics to trace their 'ancestors'.
- b. The database — which goes back to 1766 — provides information on more than 33,000 astronomers, their advisors and universities and the links to their dissertations.
- c. Half the doctorates, however, were awarded since 2002, while two-thirds of the theses were online, according to a press release from AAS.
- d. More than 28,000 academics who earned astronomy-related doctorates, including 5,000 scientists who advised them — but whose own doctorates are yet to be recorded — are listed in the database.

- e. The project is nearly complete for 25 countries, according to AAS.

**There were two reasons to launch such a project, according to director of AstroGen:**

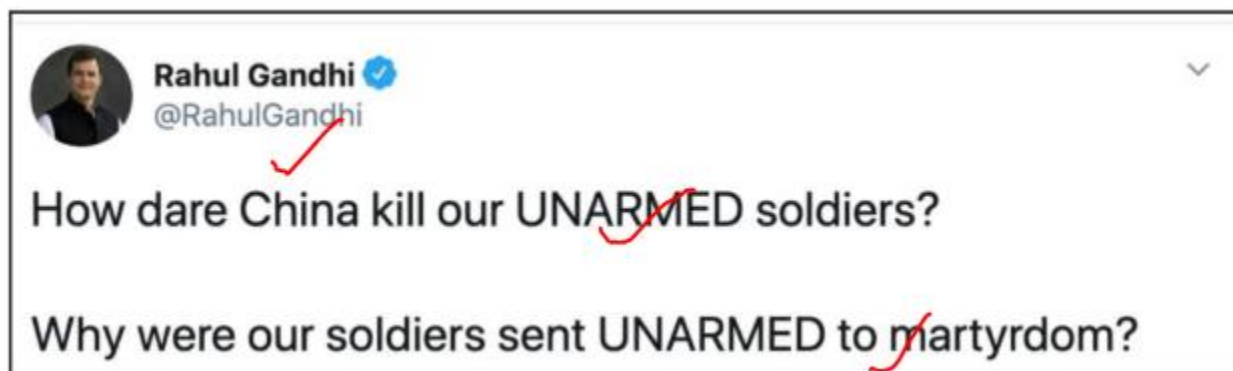
- a. First, many scholars enjoy tracing their academic ancestors and descendants.
- b. Second, AstroGen will facilitate studies of the astronomical community by historians and sociologists of science

CA48. What are the agreements between India-China that call for restraint in border face-offs along the LAC?

On 15 June 2020, Indian and Chinese troops engaged in a face-off in Galwan Valley across the Line of Actual Control (LAC). Indian Army sources stated that 20 Army personnel were killed in the clash, the worst such incident in the last few decades.

We have to go through two tweets to PROCEED THIS TOPIC.

Minister for External Affairs stated that Firearms not used as per India-China Agreements. **It raised a doubt, government on sending the army personnel on the mission without arming them. First tweet:**



Responding to his tweet, the Minister for External Affairs, Dr. S. Jaishankar has tweeted that troops were carrying arms as is the norm while leaving their post. However, they did not use them in adherence to the agreements made in **1996 & 2005 agreements**, which specify not to use firearms during face offs.



Dr. S. Jaishankar ✓  
@DrSJaishankar

Let us get the facts straight.

All troops on border duty always carry arms, especially when leaving post. Those at Galwan on 15 June did so. Long-standing practice (as per 1996 & 2005 agreements) not to use firearms during faceoffs.

**We will learn here what are these agreements.**

In 1996, India and China signed an agreement on '*Confidence-Building Measures in the Military Field along the Line of Actual Control in the India-China Border Areas*'. This agreement was in continuation of an earlier agreement, '*Maintenance of Peace and Tranquillity along the Line of Actual Control in the India-China Border Areas*', which both the countries signed on 07 September 1993.

The first agreement made in 1993, was aimed at maintaining peace along the Line of Actual Control (LAC) along India-China Border and to work towards peaceful resolution of the border disputes existing between the countries. **The 1996 agreement specifically laid out the protocols** to be followed by the military of the both the countries across the border.

(1) Neither side shall open fire, cause bio-degradation, use hazardous chemicals, conduct blast operations or hunt with guns or explosives within two kilometers from the line of actual control. This prohibition shall not apply to routine firing activities in small arms firing ranges.

**Article VI (1)** of the agreement, prevents either from opening fire, conduct blasts or hunt with guns or explosives within two Kilometres of the border, on either side.

**Article VI (4)** of the protocol in the agreement is relevant to the situation that emerged in Galwan Valley. As per this article, **the border personnel are supposed to exercise restraint by when a face-face situation arises** due to difference in the alignment of LAC or other reasons. Both the sides are required to enter into immediate consultations using diplomatic and other channels to review and prevent escalation of a situation.

**ARTICLE VI**

With a view to preventing dangerous military activities along the line of actual control in the India-China border areas, the two sides agree as follows:

(1) Neither side shall open fire, cause bio-degradation, use hazardous chemicals, conduct blast operations or hunt with guns or explosives within two kilometers from the line of actual control. This prohibition shall not apply to routine firing activities in small arms firing ranges.

(2) If there is a need to conduct blast operations within two kilometers of the line of actual control as part of developmental activities, the other side shall be informed through diplomatic channels or by convening a border personnel meeting, preferably five days in advance.

(3) While conducting exercises with live ammunition in areas close to the line of actual control, precaution shall be taken to ensure that a bullet or a missile does not accidentally fall on the other side across the line of actual control and causes harm to the personnel or property of the other side.

(4) If the border personnel of the two sides come in a face-to-face situation due to differences on the alignment of the line of actual control or any other reason, they shall exercise self-restraint and take all necessary steps to avoid an escalation of the situation. Both sides shall also enter into immediate consultations through diplomatic and/or other available channels to review the situation and prevent any escalation of tension.

**However, unlike the protocol states, the forces were involved in a fight instead of exercising restraint.** The protocols do not explicitly specify when to use firearms and what is to be done if either side does not exercise restraint and in face of provocation.

In 2003, Atal Bihari Vajpayee, the then Prime Minister of India made a visit to China. As part of the bilateral interactions, there was '***Declaration on Principles for Relations and Comprehensive Cooperation Between the Republic of India and the People's Republic of China***'.

The two sides exchanged views on the India-China boundary question and expounded their respective positions. They reiterated their readiness to seek a fair, reasonable and mutually acceptable solution through consultations on an equal footing. The two sides agreed that pending an ultimate solution, they should work together to maintain peace and tranquility in the border areas, and reiterated their commitment to continue implementation of the agreements signed for this purpose, including the clarification of the Line of Actual Control.

**Apart from 1996 agreement, Dr. Jaishankar also refers to 2005 agreement.**

**Article 1, of the agreement** states that neither side should use or threaten to use force by any means, and it further calls for the resolution of the boundary dispute through peaceful resolution.

## ✓ Article I

The differences on the boundary question should not be allowed to affect the overall development of bilateral relations. The two sides will resolve the boundary question through peaceful and friendly consultations. Neither side shall use or threaten to use force against the other by any means. The final solution of the boundary question will significantly promote good neighbourly and friendly relations between India and China.

Apart from this, Article VII and VIII of Border Defence Cooperation Agreement-2013, reiterate the aspects highlighted in 1996 agreement regarding the response in cases of face-face situation regarding the non-agreement on border alignment i.e. to practice restraint and to explore diplomatic route for resolution.

## ✓ Article VII

In case a doubtful situation arises with reference to any activity by either side in border areas where there is no common understanding of the line of actual control, either side has the right to seek a clarification from the other side. In such cases, the clarification shall be sought and replies to them shall be conveyed through any of the mechanisms established under Article III of this Agreement.

## ✓ Article VIII

The two sides agree that if the border defence forces of the two sides come to a face-to-face situation in areas where there is no common understanding of the line of actual control, both sides shall exercise maximum self-restraint, refrain from any provocative actions, not use force or threaten to use force against the other side, treat each other with courtesy and prevent exchange of fire or armed conflict.

**Conclusion: In this context, the External Affairs Minister's statement of not using firearms as a long-standing practice stands ground, as multiple agreements signed over the period of time reinforce this practice of exercising restraint.**

**Also, one more thing:**

Responding to a question in Lok Sabha on 27 November 2019, the government stated that there were more than 1000 transgressions on the Indo-China border between 2016 & 2018 with no casualty.

✓ Year	✓ No. of Transgressions
2016	273
2017	426
2018	326

CA49.Stoneflowers in northeast India

Link: <https://india.mongabay.com/2020/07/discoveries-and-rediscoveries-stoneflowers-in-northeast-india/>





Closely related to the ornamental African violets and Episcias, plants of the genus *Didymocarpus* – also called “stoneflowers” probably because **they often grow on wet rocks and stones** – are distributed across south Asia’s wet forests. China is home to 34 species, while **India comes a close second with 25, with most of them distributed in the northeastern states**. Many are ‘narrow endemics’: species that have very small distributions and are found nowhere else in the world.

The Indian and Chinese teams’ find of *Didymocarpus sinoindicus* **is the latest in a string of new *Didymocarpus* species discoveries in India.**

Earlier in 2016, scientists from Kerala described *Didymocarpus moelleri* from Arunachal Pradesh, a species that bursts into flamboyant orange blooms and grows only in one location in the state. A team from the Botanical Survey of India also recorded *Didymocarpus bhutanicus*, previously known only from Bhutan, for the first time in India (in Sikkim) this February. **What researchers have to say:**



These discoveries are thanks to a renewed interest in *Didymocarpus* in recent times, said Prasanna.

"It used to be rather neglected genus before," said Prasanna, who is currently studying the phylogeny and biogeography of *Didymocarpus* for his doctoral research.

The discoveries are also a pan-Asian trend: over the last five years, more than six species of stone flowers have been described from southeast Asia. Cai's team, for instance, discovered the mauve-blossomed *Didymocarpus anningensis* from Yunnan in China in 2016 (three years later another team discovered *D. brevipedunculatus*, a new species of stoneflower that grows on rocky surfaces near seasonal waterfalls, from this very province).

Scientists have also described four other species of *Didymocarpus* from Cambodia and Vietnam. In 2019, scientists recorded the genus *Didymocarpus* for the first time in Laos (*Didymocarpus middletonii*, a new species), followed by the another (*Didymocarpus albiflorus*, which bears snow-white flowers) this year.

### Few Prelims Question will be?

- Why they are called stoneflowers?
- They are found in which part of India?
- They are endemic to which part of world?

## CA50. India-China Trade relations

This topic is very much important for your exam, either it is Prelims or Mains. So, we will cover this in bit detail. Like if anyone says you that ban china for all products, we don't need China, etc. you should have this explanation in mind, what is the current status of India-China Trade Relations.

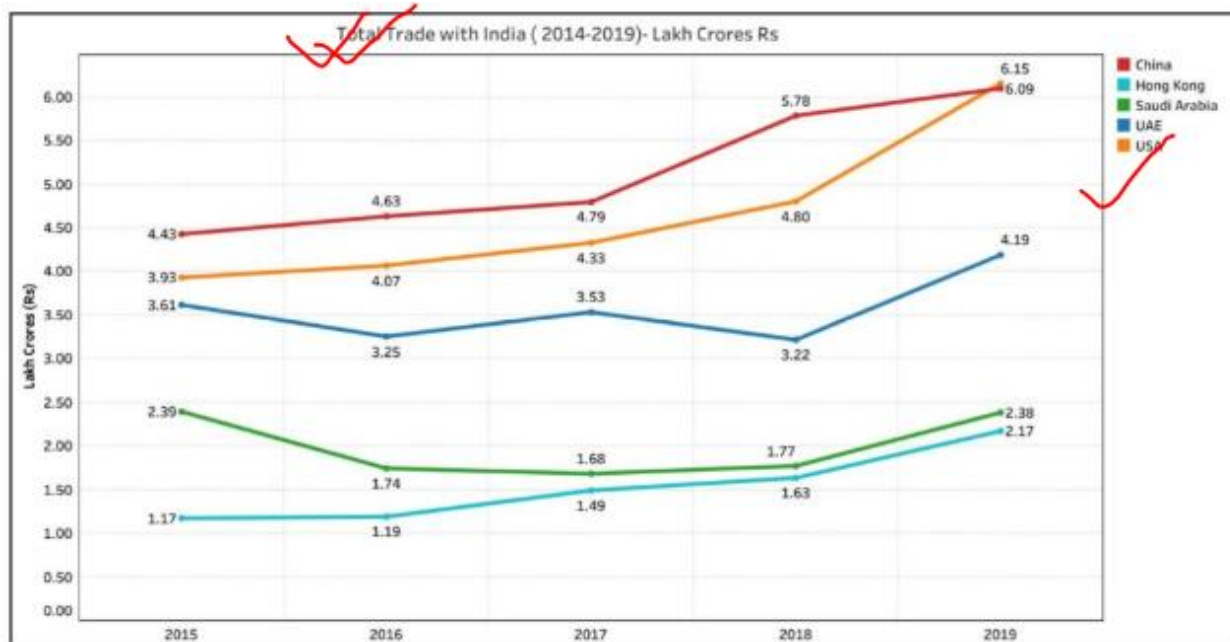
This explanation is entirely based on the recent report released by Commerce Ministry. So, you can this latest data whenever you explain India-China Trade. **Coming back to explanations.**

**What is the value of trade with China, especially the imports? What are the products that are imported from China? How much is India reliant on China as a trading partner? In this story we take a deeper look at all these questions.**

### Before 2018-19, India's highest trade value was with China

As per the data on Export-Import Data Bank of the Commerce Ministry, the USA emerged as the leading trade partner for India in 2018-19 with ₹ 6.15 lakh crores. It has managed to just overtake China, with which the value of India's trade in that year was ₹6.09 lakh crores.

Prior to 2018-19, China was India's leading trade partner. However, in 2018-19, value of trade with USA witnessed a significant increase, enabling it to overtake China. However, a major portion of it is due to the increase in India's exports to USA.



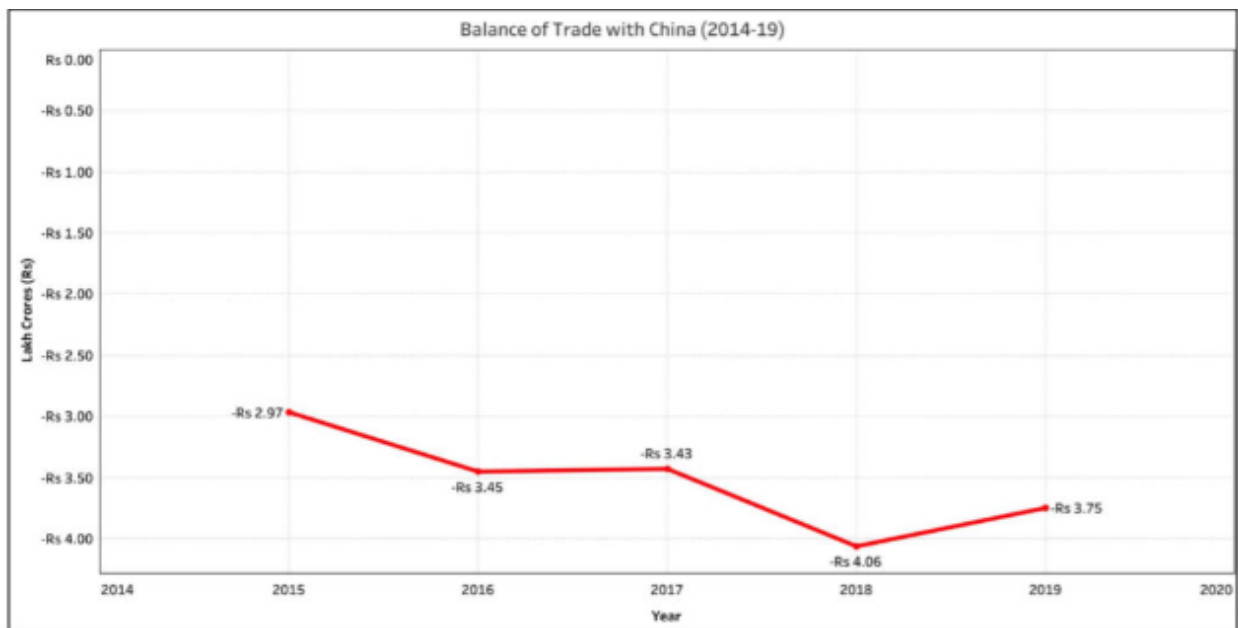
### China's share in India's total imports back to 2014-15 levels

- China's share in overall trade with India is 10.32% in 2018-19.** This is a **slight decrease from the previous year (2017-19) when it was 11.66%**. This fall in the share of total trade can be attributed to the **fall in the share of imports from China**.
- While **China continues to hold the top position in value of Imports into India**, its **share in total imports has fallen** in 2018-19 to 13.69% from the high of 16.4% in 2017-18.
- The share of Chinese imports in 2018-19 are back to the 2014-15 levels when it was 13.5% of India's total imports.
- Meanwhile, the share of exports to China in India's total exports has increased in 2018-19. **It increased to 5.08% from 4.4% in the previous year**. There is a consistent increase in share of exports to China in recent years.



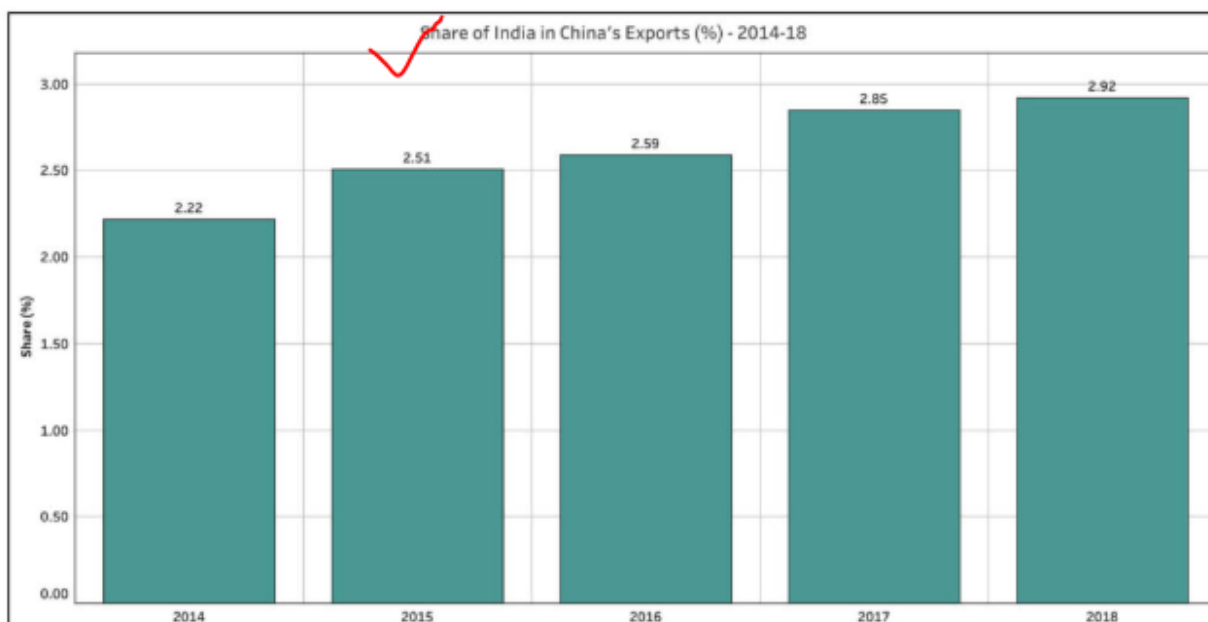
### Slight improvement in Balance of Trade with China

- In 2018-19, the total Imports from China amounted to ₹ 4.92 lakh crores, whereas the exports to China were only ₹ 1.17 Lakh crores i.e. **the imports are more than 4 times more than the exports to China.**
- India has a deficit Balance of Trade with China** i.e. the Imports are more than the exports. The increase in exports to China and the fall in Imports in 2018-19, is reflected in the improved BoT (Balance of Trade) in 2018-19, which is a trade deficit of ₹ 3.75 lakh crores.
- The deficit has comparatively reduced compared to the previous year when it was Rs 4.06 lakh crores. However, **the reduced deficit in 2018-19 is still higher than the deficit in each of the previous years from 2014-15 to 2016-17.**



### India's share in China's overall exports is less than 3%

- a. While the imports from China constitute a major share of India's total imports, the same cannot be said with respect India's share in China's total exports.
- b. **The value of goods which China exports to India is only 2.92% of their total exports in the year 2018.**
- c. Further, India ranks 7th in 2018, among the countries which have the largest share of exports from China. USA with 19.3% of the exports has a significant share while the next largest export destination is Hongkong with 10.9% of the exports.
- d. Even though India's share in China's overall exports is less than 3%, this has been consistently increasing in the last few years. **In 2014, India's share was 2.22% which increased to 2.93% in 2018.**



### Electrical Machinery & Equipment form the major part of Imports from China

Out of the ₹ 4.92 lakh crores worth of imports from China in 2018-19, ₹ 1.44 lakh crores worth of imports is under the category '**Electrical Machinery & Equipment**' i.e. **nearly 30 %**.

Second highest category of imports by value are under 'Nuclear Reactors, Boilers etc.' which account for ₹ 0.94 lakh crores in 2018-19. Organic Chemicals also account for a major portion of the total imports from China. The import of Iron & Steel fell over the last five years, but there is a slight increase in import of 'Articles of Iron and Steel'.

✓ <b>Top Ten Categories of Imports from China by Value ( Rs. Lakh Crores)</b>					
<b>Commodity</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Electrical Machinery &amp; Equipment etc.</b>	1.02	1.29	1.47	1.85	1.44
<b>Nuclear Reactors, Boilers etc.</b>	0.62	0.69	0.75	0.87	0.94
<b>Organic Chemicals</b>	0.39	0.40	0.38	0.46	0.60
<b>Plastic &amp; Articles etc.</b>	0.10	0.11	0.12	0.15	0.19
<b>Fertilisers</b>	0.19	0.21	0.08	0.07	0.14
<b>Articles of Iron/Steel</b>	0.09	0.08	0.08	0.09	0.12
<b>Opticals</b>	0.07	0.08	0.09	0.11	0.11
<b>Vehicles other than Railway</b>	0.07	0.07	0.07	0.09	0.11
<b>Iron &amp; Steel</b>	0.17	0.15	0.09	0.10	0.10
<b>Chemical Products (Misc.)</b>	0.05	0.05	0.06	0.09	0.09

### Conclusion:

#### India is more reliant on imports from China

As the data suggests, **the imports from China form not just a major share of overall imports but are critical to certain sectors.** A significant portion of these imports form the inputs and raw materials for various industries. Although there is fall in imports for certain commodities in 2018-19, it cannot be concluded if this is a one-off case or something that would continue.

**There are around 1100 subcategories of commodities imported under 96 high level import categories. Many of these commodities are integral to Indian economy.** Any decision on ban of such imports from China should consider various factors like their *penetration at various levels, suitable substitutes to such products or raw material either internally or other countries.* Otherwise, it could be catastrophic to our economy, specially at a time when we are **fighting another crisis in the form of COVID-19.**

It also needs to be noted that while **India is heavily reliant on imports from China**, the same is **not true in the case of China.** Even if India bans imports of many commodities, its impact is not going to be felt by China as exports to India form a meagre share of China's total exports.

### CA51. International Covenant on Civil and Political Rights (ICCPR)

Link: <https://www.thehindu.com/news/international/protesting-is-a-fundamental-right-un/article32225267.ece>

Recently, **Recently, the United Nations (UN) Human Rights Committee has reaffirmed that protesting peacefully, online or in person, is a fundamental human right.**

*This statement has come in the backdrop of increasing demonstrations over issues like political rights and racial justice.*

#### **Latest Interpretation of the Right to Peaceful Assembly:**

- a. Fundamental Human Right for People: To gather to celebrate or to air grievances in public and in private spaces, outdoors, indoors and online is a fundamental human right.
- b. Protesters: Everyone, including children, foreign nationals, women, migrant workers, asylum seekers and refugees, can exercise the right of peaceful assembly.
- c. Protection: Protesters have the right to wear masks or hoods to cover their face and that Governments should not collect personal data to harass or intimidate participants.
- d. Role of Journalists and Human Rights Observers: They have the right to monitor and document any assembly, including violent and unlawful ones.
- e. **Government Obligations:**
  - Governments could not prohibit protests by making “generalized references to public order or public safety, or an unspecified risk of potential violence”.
  - Governments cannot block internet networks or close down any website because of their roles in organizing or soliciting a peaceful assembly.

#### **About International Covenant on Civil and Political Rights (ICCPR)**

- a. The International Covenant on Civil and Political Rights (ICCPR) was adopted by the United Nations General Assembly on 16 December 1966.
- b. The ICCPR is a key international human rights treaty, providing a range of protections for civil and political rights.
- c. The ICCPR, together with the Universal Declaration of Human Rights and the International Covenant on Economic Social and Cultural Rights, are considered the International Bill of Human Rights.
- d. The ICCPR obligates countries that have ratified the treaty to protect and preserve basic human rights, such as: *the right to life and human dignity; equality before the law; freedom of speech, assembly, and association; religious freedom and privacy; freedom from torture, ill-treatment, and arbitrary detention; gender equality; the right to a fair trial; right family life and family unity; and minority rights.*



### What is the Human Rights Committee?

The Human Rights Committee was established to monitor the implementation of the ICCPR. It is composed of 18 independent experts with recognized competence in the field of human rights. Committee members are elected for a term of four years and must be from countries that have ratified the Covenant. As of January 2019, members of the Committee come from: Albania, Canada, Chile, Egypt, France, Germany, Greece, Guyana, Israel, Japan, Latvia, Mauritania, Paraguay, Portugal, Slovenia, South Africa, Tunisia, and Uganda.

### What is the function of the Human Rights Committee?

The Human Rights Committee meets three times a year for sessions lasting three weeks at the United Nations Office in Geneva, Switzerland. Countries that have ratified the ICCPR are obliged to report to the Committee every four years. Three to five countries are invited to present their reports at each session which is open to the public and is usually live streamed. The Committee examines the report and addresses its concerns and recommendations to the country in the form of "concluding observations." The Committee also publishes general comments which are its interpretation of the content of the treaty's human rights provisions.

International Covenant on Civil and Political Rights (ICCPR), 1966	India acceded to the Convention on 10 April 1979
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### CA52. What are pre-packs under IBC?

Link: <https://indianexpress.com/article/explained/insolvency-and-bankruptcy-code-pre-packs-explained-6527116/>

The Ministry of Corporate Affairs (MCA) has set up a committee to look into the possibility of including “**pre-packs**” under the current insolvency regime to offer faster insolvency resolution under the Insolvency and Bankruptcy Code (IBC), while maintaining business continuity and thereby preserving asset value and jobs.

#### Introduction:

- a. The Insolvency & Bankruptcy Code, 2016 (hereinafter referred to as Code) was enacted **to provide timely and efficient resolution to the ever-growing stress assets in India.**
- b. The main essence of the present code **is a speedy procedure and its time-bound process.** Therefore, the Code provides for strict timelines for completion of CIRP: if a corporate debtor is not resolved within this timeframe, it would have to be compulsorily liquidated.
- c. However, by way of judicial interpretation, certain periods, including the time taken during legal proceedings, have been excluded from the mandatory timelines prescribed under the Code.
- d. As a result, in most of the cases, the time limit prescribed by the code for completion Corporate Insolvency Resolution Process (CIRP) is exceeded. For example, as per the data available till December 2019, it took, on average, 394 days to successfully resolve 190 cases, which far exceeds the timeline of 330 days currently provided under the Code.
- e. It is pertinent to note that delay in resolution can cause serious detriment to the on-going concern of the corporate debtor impacting the realizing value of the assets. **The need of the hour is the speedy and effective resolution which can be achieved by pre-pack.**

### Now, what is this Pre-Pack?

In a pre-pack, “a troubled company and its creditors conclude an agreement in advance of statutory administration procedures” which “allows statutory procedures to be implemented at maximum speed. “In other words, pre-pack means a corporate rescue of the business of corporate debtor i.e. its trade and enterprise value. Therefore, the purpose of pre-pack is **to strike down a balance between safeguarding the interest of the creditor(s) and maintaining the business and assets of the corporate debtor by facilitating a swift transition of such assets and business.**

**Now, don't go for anything else. This is enough. Once the committee publish its report about Pre-Pack, we will learn more.**

### CA53. SRS 2018 report on Infant Mortality Rate (IMR)

[Sample Registration System survey 2018 report](#) was released recently. It has many chapters. We will cover gradually every chapter. *We have already covered correlation between Education level & Fertility Rate as per 2018 Sample Registration System Survey Report in our previous daily current affairs section.* Today we will see Infant Mortality Rate of Rural and Urban Areas.

The recently released SRS 2018 data indicates that the Infant Mortality Rate (IMR) in Rural areas is 1.5 times the rate in Urban areas. Now see in detail.

**Many of you might still don't remember definition.**

*The 'Infant Mortality Rate (IMR)' is used to measure the death rate among infants or children less than one year old. IMR is defined as the number of deaths per 1,000 live births of children under one year of age.*

**Why it is important to know the Infant Mortality Rate?**

Child mortality is an indicator of the overall physical health, social, economic, and environmental conditions in a community where a child is born. It is also indicative of the health facilities available, water and sanitation, nutrition, education, immunization, and even the health of the mother and is therefore, used widely as an important indicator in health planning. **Such data is used by policy makers, demographers, epidemiologists, social scientists, etc. to better understand the issues and arrive at measures to address the same.**

**Deaths of Children in the 0-4 age group account for more than 11% of all the deaths**

At the National level, such percentage is 11.5 and it varies from 12.8 in rural areas to 8.2 in urban areas. Among the bigger States/UTs, the variation is from 2.0 in Kerala to 20.0 in Madhya Pradesh. In rural areas, it varies from 2.1 in Kerala to 21.9 in Madhya Pradesh, and in urban areas, it is 1.9 in Kerala to 15.7 in Uttar Pradesh.

Percentage of Deaths in the age group 0-4 years to total Deaths  
by residence, India and bigger States/UTs, 2018

India and bigger States/UTs	Total	Rural	Urban
<b>India</b>	<b>11.5</b>	<b>12.8</b>	<b>8.2</b>
Andhra Pradesh	7.7	7.9	7.0
Assam	15.3	16.5	6.3
Bihar	16.1	16.4	13.7
Chhattisgarh	12.5	12.9	10.7
Delhi	7.9	6.9	8.0
Gujarat	10.1	12.2	6.9
Haryana	12.0	12.5	10.8
Himachal Pradesh	5.2	5.3	4.7
Jammu & Kashmir	7.3	7.9	5.5
Jharkhand	14.0	14.6	11.4
Karnataka	7.5	7.4	7.8
<b>Kerala</b>	<b>2.0</b>	2.1	1.9
<b>Madhya Pradesh</b>	<b>20.0</b>	21.9	13.4
Maharashtra	6.2	7.0	4.8
Odisha	10.7	11.1	7.8
Punjab	5.0	4.5	5.9
Rajasthan	16.2	17.2	12.7
Tamil Nadu	3.9	4.1	3.7
Telangana	7.7	7.5	8.3
Uttar Pradesh	17.7	18.2	15.7
Uttarakhand	9.1	8.7	10.4
West Bengal	6.9	7.8	5.1

**IMR in India has reduced from 129 in 1971 to 32 in 2018, as per SRS report**

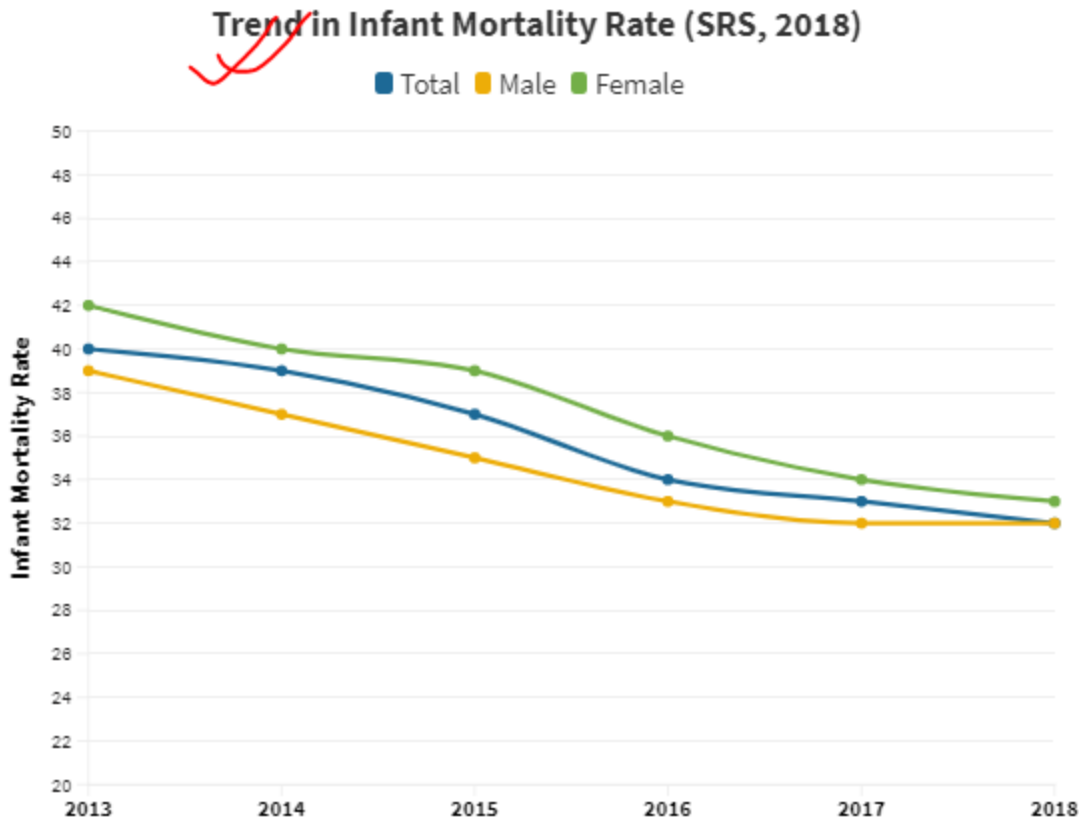
At the National level, IMR is reported to be 32 and varies from 36 in rural areas to 23 in urban areas. Among the bigger States/UTs, it varies from 7 in Kerala to 48 in Madhya Pradesh.

Infant Mortality Rates by sex and residence, India and bigger States/UTs, 2018

India and bigger States/UTs	Total			Rural			Urban		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>India</b>	<b>32</b>	<b>32</b>	<b>33</b>	<b>36</b>	<b>36</b>	<b>36</b>	<b>23</b>	<b>22</b>	<b>23</b>
Andhra Pradesh	29	30	29	33	34	32	21	20	22
Assam	41	40	44	44	42	46	20	20	21
Bihar	32	30	35	32	30	35	30	26	34
Chhattisgarh	41	42	39	42	44	40	35	34	36
Delhi	13	14	12	8	16	0	13	14	12
Gujarat	28	29	27	33	34	32	20	21	19
Haryana	30	31	29	33	34	31	25	24	25
Himachal Pradesh*	19	19	20	20	19	20	14	15	12
Jammu & Kashmir	22	22	23	23	23	24	20	19	20
Jharkhand	30	27	34	31	28	35	26	24	28
Karnataka	23	21	25	25	23	26	20	18	22
Kerala	7	9	5	9	8	10	5	11	0
Madhya Pradesh	48	51	46	52	54	49	36	37	35
Maharashtra	19	19	19	24	23	25	14	14	13
Odisha	40	40	39	41	41	40	31	31	30
Punjab	20	21	20	21	21	21	19	20	19
Rajasthan	37	37	38	41	40	41	26	24	28
Tamil Nadu	15	16	14	18	19	17	12	13	12
Telangana	27	27	26	30	31	29	21	19	23
Uttar Pradesh	43	43	44	46	45	46	35	32	38
Uttarakhand	31	33	28	31	34	28	29	29	30
West Bengal	22	22	22	22	23	22	20	18	22

### Female IMR is higher than that of Male infants

Gender wise data reveals that the IMR of female infants has always been higher than that of male infants. While in 2013, IMR for female infants was recorded as 42, the same for male infants was 39. The latest 2018 data shows that male IMR dropped to 32, and that for female infants is 33 indicating that the gap between the two has reduced over the years.

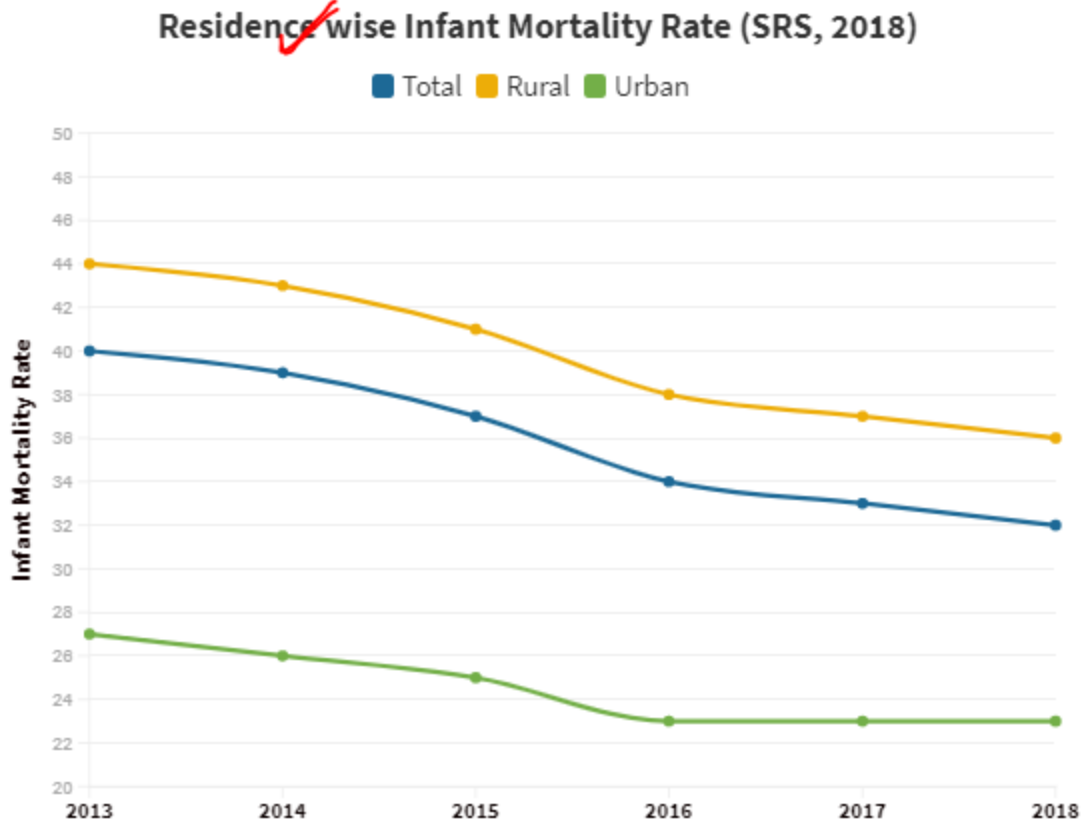


### **IMR in Rural areas is 50% more than the rate in Urban areas**

**Analysis of the infant mortality rates by residence**, that is, in urban and rural areas also shows a decreasing trend in both urban and rural areas. While the rate has dropped from 27 to 23 in urban areas in six years between 2013 & 2018, the same in rural areas has decreased from 44 in 2013 to 36 in 2018.

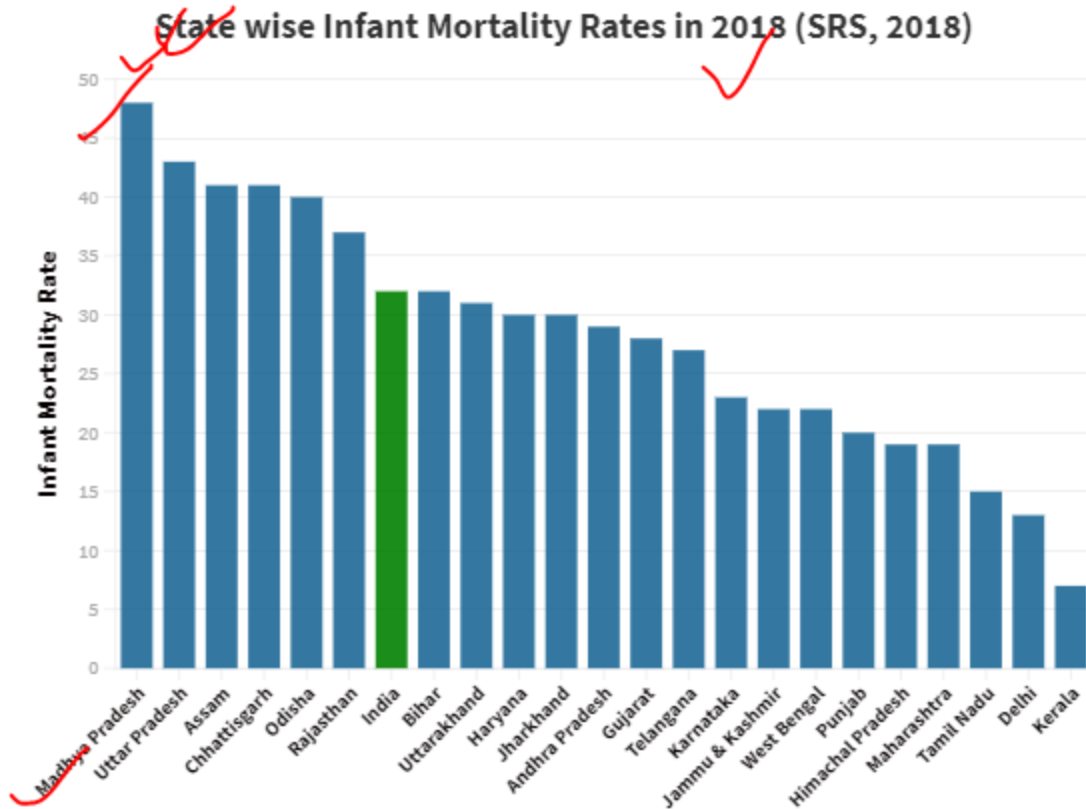
**The IMR in rural areas is 50% more than the rate in urban areas.** *This stark difference in IMR in the urban & rural areas is indicative of the difference in healthcare facilities, education, and other socio-economic factors.*





### Madhya Pradesh has the worst IMR of 48

State wise data shows that Madhya Pradesh continues to report the worst IMR among all the states. The IMR in Madhya Pradesh was recorded as 48 in 2018.



### Implementation of child health schemes needs to be monitored

**The data clearly indicates that IMR is higher in states with poor development.**

Further, the IMR is significantly higher in rural areas compared to urban areas. Despite multiple children & maternal health programs, the gap between states & rural/urban areas hasn't decreased as expected. There needs to be a targeted mission mode approach to close this gap with special emphasis on the laggard states & regions.

### UNICEF data reveals that India's IMR is much higher than the global average

Even though India has made significant progress in reducing IMR over the last few decades, the number is still high. **According to UNICEF data updated in September 2019**, India's IMR is higher than the global average. India ranks 141 out of 198 countries.

### Conclusion:

India still has a long way to go to improve on the global rankings. The sustainable development goals call for reducing the preventable deaths of new-born and children under 5 years of age, by bringing down neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births.

### The goals within a goal: Health targets for SDG 3

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100 000 live births.

~~3.2~~ By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births.

Targeted approach coupled with better healthcare facilities, immunization, education & awareness, water and sanitation, and other socio-economic development programs are a must if India is to reach these goals.

### CA54. Maharashtra Government Approves ADB Funded Project for development of Agriculture in the State

Link: <https://krishijagran.com/agriculture-world/maharashtra-government-approves-adb-funded-project-for-development-of-agriculture-in-the-state/>

The Maharashtra government has approved a project that will boost fruit and vegetable production in the state. The project will be funded by the Manila-based Asian Development Bank (ADB). The project is estimated to be worth Rs. 1000 crore out of which 700 crores will be provided by the ADB and the rest will be covered by the government of Maharashtra. **The article also talks about two ordinances** recently passed to ensure barrier-free trade for Agri products.

**News is fine. But here, we will cover two very important topics in bit detail.**

1. Asian Development Bank
2. Two ordinances recently passed by state to ensure barrier-free trade for Agri products.

#### Asian Development Bank:

Its very important to cover origin and History. In recent years, questions are asked about the origin directly or indirectly.

Origin:

1. **ADB was conceived in the early 1960s as a financial institution** that would be Asian in character and foster economic growth and cooperation in one of the poorest regions in the world.
2. **A resolution passed at the first Ministerial Conference on Asian Economic Cooperation held by the United Nations Economic Commission for Asia and the Far East in 1963 set that vision** on the way to becoming reality.

3. **The Philippines capital of Manila was chosen to host the new institution**, which **opened on 19 December 1966**, with 31 members that came together to serve a predominantly agricultural region.
4. **When the world suffered its first oil price shock**, ADB increased its support for energy projects, especially those promoting the development of domestic energy sources in member countries.
5. A major **landmark** was the establishment in 1974 of the **Asian Development Fund** to provide low-interest loans to ADB's poorest members.

### HQ: Manila, Philippines

#### Members:

From 31 members at its establishment in 1966, ADB has grown to encompass 68 members—of which **49 are from within Asia and the Pacific and 19 outside**. India is one of the members.

#### India and ADB

### ✓ ADB's Work in India

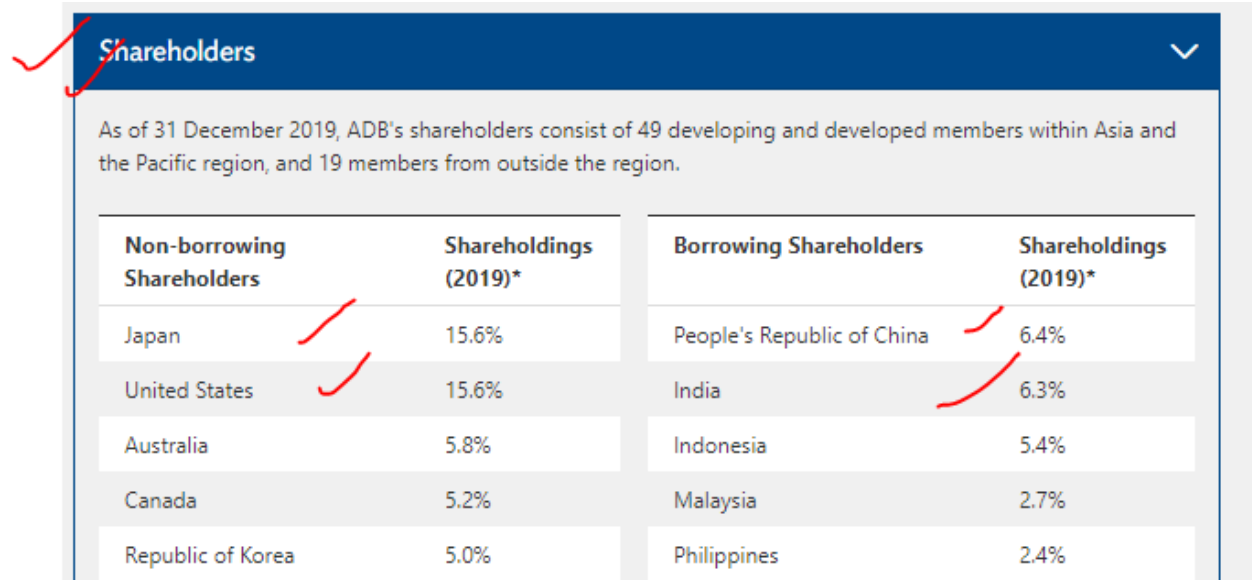
<b>ADB Membership</b> Joined 1966
<b>Shareholding and Voting Power</b>
<b>Number of shares held:</b> 672,030 (6.317% of total shares)
<b>Votes:</b> 711,144 (5.347% of total membership, 8.211% of total regional membership)

**India was a founding member of ADB in 1966** and is now the **bank's fourth-largest shareholder**. ADB's operations in India commenced in 1986, and the bank remains committed to helping the country achieve its aspiration of becoming a \$5 trillion economy by 2025. India has been ADB's top borrower since 2010.

**ADB's country partnership strategy, 2018–2022 for India aims to accelerate the country's inclusive economic transformation.** The strategy focuses on building industrial competitiveness to create more jobs, extending infrastructure and services to low-income states, and addressing environmental and climate change concerns.

As of 31 December 2019, ADB's shareholders consist of 49 developing and developed members within Asia and the Pacific region, and 19 members from outside the region.

**Don't get into confusion about Borrowing and Non-Borrowing shareholders from below image.** Just remember in sequence, Japan and US, China, then India.



**Shareholders**

As of 31 December 2019, ADB's shareholders consist of 49 developing and developed members within Asia and the Pacific region, and 19 members from outside the region.

Non-borrowing Shareholders	Shareholdings (2019)*	Borrowing Shareholders	Shareholdings (2019)*
Japan	15.6%	People's Republic of China	6.4%
United States	15.6%	India	6.3%
Australia	5.8%	Indonesia	5.4%
Canada	5.2%	Malaysia	2.7%
Republic of Korea	5.0%	Philippines	2.4%

**Now, we will learn ordinances:**

The President of India promulgated two ordinances related to Agriculture on 05 June 2020. These were earlier approved by the Union Cabinet on 03 June 2020. The government has highlighted that the aim of these ordinances is to provide a boost to rural India for farmers engaged in Agriculture and allied activities. **These are part of the reforms announced under 'Aatmanirbhar Bharat Abhiyan'.**

**The two ordinances promulgated are:**

- The Farmers' Produce Trade and Commerce (Promotion & Facilitation) Ordinance 2020
- The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance 2020



### **The Farmers' Produce Trade and Commerce (Promotion & Facilitation) Ordinance 2020:**

**The purpose of this ordinance** as per the government is to create an ecosystem where:



- a. The farmers and traders have the freedom of choice in terms of sale and purchase of agricultural produce.
- b. Facilitates better remunerative prices through the creation of alternative trading channels.
- c. Promote efficient, transparent and barrier-free, Inter-state and Intra-State trade beyond the existing physical marketplaces.
- d. Provide framework for electronic trading of the produce.
- e. The ordinance also provides the framework for resolution of any dispute which may arise between the farmer and the trader.

### **The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance 2020**

**This ordinance** provides for the farmers to get into agreements with others like agri-business firms, processors, wholesalers, exporters, retailers etc. for any of the farm services or future farming produce. A national framework is laid out to safeguard the farmers' interest and enable them to get into these contracts.

The ordinance lays down the provision for Dispute Settlement. *Detail not needed, just simply we have given image below.*



 <b>Process of Dispute Resolution between parties getting into Farming agreement</b> 	Farming agreement needs to contain the details of formation of Conciliatory board with members of both the parties.
	Any dispute needs to be first referred to Conciliatory board.
	A memorandum of settlement needs to be drawn upon with both the parties signing it. It would be binding on them.
	In case the agreement does not have a conciliatory process or does not reach a resolution, the dispute can be referred to Sub-divisional magistrate.
	Any order by Sub-divisional magistrate would have the same force of Supreme Court decree.
	There is a provision to appeal the case to appellate authority in case any party is aggrieved with the order of Sub-divisional magistrate.

## CA55. The Bank Nationalization Ordinance: A Remembrance on Its 51st Anniversary

Link: <https://www.livelaw.in/know-the-law/the-bank-nationalization-ordinance-a-remembrance-on-its-51st-anniversary-160135>

It was 51 years ago, on 19th July, 1969, that the nation heard the news of an unanticipated ordinance that nationalised the entire banking sector of India.

**India at that time was ruled by Indira Gandhi** and she presented the ***Banking Companies (Acquisition and Transfer of Undertaking) Ordinance 1969 (whenever Act is used below, remember this Act only)*** to the public through a radio broadcast. The ordinance ensured unmatched **dominance of state's control in the entire banking sector of the nation**. *Promulgation of the Banking Ordinance invited severe criticisms.*

*According to Sorabjee, "The ordinance was a closely guarded secret and, at one stroke, more than 75% of the banking sector came under state control. The entire paid-up capital, all assets and liabilities, contracts, and agreements were to vest with the central government. All directors of the fourteen nationalised banks would vacate their respective offices but services of other employees were to continue with the nationalised banks. The most shocking part of the ordinance was the second schedule which spelt out the compensation that was to be paid."*

The "tricky" conditions that determines the compensation under the ordinance acted as a matter of suspicion and disbelief to many. The ordinance had fixed two major conditions for the calculation of the compensation and they are:

1. There must be an agreement to fix the amount of compensation.
2. In the absence of any such agreement, the central government is under the duty to refer the matter before a tribunal within a period of three months from the date on

which the central government and the existing bank failed to reach an agreement regarding the amount of compensation.

The aspect of compensation and its fixation invited serious criticisms. The ordinance prescribed for an atypical mode of calculation and distribution of compensation to the aggrieved person. **The ordinance prescribed that the compensation** will be determined through an agreement and shall be distributed in the form of marketable central government securities and the tenure for such payments will be ten years.

### **Birth of R.C. Cooper V. Union of India: Bank Nationalization Case.**

The unexpected move of nationalization resulted in the extreme loss of position and investments for the shareholders of the banks, which are nationalized. **R.C. Cooper, who was the director of the Central Bank of Indian, Ltd. approached the Apex Court and challenged the validity of the Banking Companies (Acquisition and Transfer of Undertaking) Ordinance 1969.**

### **What R.C. Cooper challenged?**

**R.C Cooper filed the challenge before the court as a shareholder of the bank**, which was subsequently nationalized by the ordinance. Cooper took the stand that *he has every right to approach the court as the impugned ordinance had stopped his right to receive the profit and dividend of the shares that he held as a share holder of the bank*. The impugned ordinance acted created a grave violation of his rights to carry on business as the shareholder of the bank, contended by Cooper. **The Constitutional provision that the petitioner had utilized in establishing his case was under Article 31. Article 31 was later repealed.**

Article 31(2), prior to its repeal, stated that, *"No property shall be compulsorily acquired or requisitioned save for a public purpose and save by authority of a law which provides for acquisition or requisitioning of the property for an amount which may be fixed by such law or which may be determined in accordance with such principles and given in such manner as may be specified in such law; and no such law shall be called in question in any court on the ground that the amount so fixed or determined is not adequate or that the whole or any part of such amount is to be given otherwise than in cash."*

The central government, though the Attorney General opposed this contention of Cooper by stating that there is no locus standi for Cooper since a shareholder, depositor or director was not entitled to approach the court for the violation of the rights of a company.

### **The other major Challenges involved were:**

- a. Whether the parliament possesses adequate competence to promulgate the Banking Companies (Acquisition and Transfer of Undertaking) Act 1969?
- b. The legal rationale behind the compensation scheme as fixed under the act and its validity.

- c. The Violation of Constitutional Provisions, especially the violations of the rights mentioned under Article 19(1)(f), 31(2) of the Constitution.

### **Nationalization legally sustained.**

The final outcome of the decision in R. Cooper was a partial relief to the government. The **court upheld the rights of the government** to nationalize banks. **But in full context, the decision never fully favors the government.** *The court struck down the scheme of the compensation laid under the Act on the ground that, the compensation is not provided based on relevant principles.* The Court held that

- a. the Constitution guarantees the right to compensation, that is, the equivalent money of the property compulsorily acquired.
- b. The Court also held that a law which seeks to acquire or requisition property for public purposes must satisfy the requirement of Article 19(1)(f).

***To overcome this limitation imposed by judgement, government brought out an amendment "the 25th Amendment" which sought to overcome those restrictions as imposed by the judgement.***

**In the aftermath of the R.C.Cooper decision,** the 25th Constitutional (Amendment) Act, 1971 came in to force **which cut down the right to property under Article 31 and justified the acquisition of private assets and property under the label of "public use"**. The amendment replaced the word 'compensation' under article 31(2) with "amount" and this favoured the government to fix an "amount" based on their vested agendas.

Later, Article 31 itself was repealed by 44th Constitution Amendment.

### **To conclude:**

1. Cooper challenged the court invoking Article 31.
2. The court allowed nationalization but said compensation to be paid and should fulfil criteria to acquire property.
3. The government liked decision of SC on nationalization but doesn't like that acquisition of property should be based on some criteria.
4. It brought new amendment to overcome judgement, which allowed government to acquire land for public interest.
5. Later Article 31 was also repealed by 44<sup>th</sup> CAA.

## CA56. Operation Breathing Space: India-Israel

Link: <https://www.thehindu.com/news/national/israeli-team-arrives-for-trials-of-four-rapid-covid-19-tests-brings-high-tech-equipment/article32206292.ece>

Recently, an Israeli team arrived in India with a multi-pronged mission, codenamed **Operation Breathing Space** to work with Indian authorities on the Covid-19 response.

India's Defence Research and Development Organisation (DRDO) and Israel's defence ministry research and development team are working together to develop four different kinds of rapid testing kit for Covid-19 which can give the **result within 30 seconds**.

The tests that the Israeli teams will be conducting trials for include an audio test, *a breath test, thermal testing, and a polyamino test* which seeks to isolate proteins related to COVID-19. What scientists have to say:

✓ "If even one of the tests proves to be effective in **testing for coronavirus** in 30-40 seconds, this could be a game changer for the whole world and how we behave, at least until we have a **vaccine**," Israeli Ambassador Ron Malka, who also flew to Delhi by the special flight from Tel Aviv with the team and medical equipment aid, told *The Hindu* on Monday. "Imagine how much easier it will be to operate flights, schedule conferences and meetings, if we can test so easily and quickly," he explained.

### Ca57. Initiative Under Gramodyog Vikas Yojana

Link: <https://www.financialexpress.com/industry/gramodyog-vikas-yojana-govt-launches-programme-for-artisans-involved-in-manufacturing-of-agarbatti/2041464/>

Recently, the Ministry of Micro, Small and Medium Enterprises has approved a programme for the benefit of artisans involved in manufacturing of *Agarbatti under the Gramodyog Vikas Yojana*.

Key points:

- a. Initially four Pilot Projects will be started, including one in North Eastern part of the country.
- b. Each targeted cluster of artisans will be supported with about 50 Automatic Agarbatti making machines and 10 Mixing machines.
- c. **Khadi and Village Industries Commission (KVIC)** will provide training, and assist artisans working in this area.

### Significance:

The programme aims to enhance the production of 'Agarbatti' in the country and create sustainable employment for the traditional Artisans, by providing them regular employment and increase in their wages. This will give a boost to the domestic Agarbatti Industry in the country and will reduce imports of Agarbatti.

