



**Goaltide**  
A Prelims IAS Academy

**September 2020**

**part - I**

# **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. SC Issues Directions for Protection of Shivlinga At Ujjain's Mahakaleshwar Temple

Link: <https://www.livelaw.in/top-stories/sc-issues-directions-for-protection-of-shivlinga-at-ujjains-mahakaleshwar-temple-read-order-162258>



**This is an example of Judicial Activism.**

The Supreme Court on Tuesday issued directions to the Temple Management Committee for the preservation of Shivling in the Mahakaleshwar Temple at Ujjain.

### **A bit history:**

It is pertinent to note that even though the top court had refused to interfere with the rituals being observed at the historic Mahakaleshwar Temple in Ujjain while dealing with the issue of protecting the 'Jyotirlingam' at the ancient temple, the apex court had **constituted an expert committee** to survey and analyze the Jyotirlingam and prepare a report stating the rate at which the deterioration in its size was taking place and measures to prevent it. This Expert Team visited Ujjain on January 19, 2019, after which its report indicated that there was erosion of Shivalinga after which the aforementioned directions were given by SC.

A bench issued the following directions for the preservation of the Lingam after taking into account the circumstances of the Report elaborated by Expert Committee:

- a. No rubbing should be done
- b. No devotees to be allowed to rub the Shivling
- c. Rubbing of Curd, Ghee & Honey should also be stopped & only pure milk should be allowed to be poured on Shivling.
- d. It would be appropriate that only pouring of a limited quantity of pure milk is allowed by the Committee. Whereas in the traditional puja to be done on behalf of the temple, all pure materials can be used" - Supreme Court
- e. If any violations are found to be done by the Pujari's or Purohit, Temple Committee shall take action against them
- f. Temple committee shall provide pure milk from its own resources & pure water and maintain the required pH value
- g. The Temple Committee to ensure that the pH value of Bhasma during the Bhasma Aarti is improved and Shiva lingam is preserved from further deterioration and to implement the best methodology to prevent further damage to the Lingam
- h. Weight of Mund Mala and Serpakarnahas is further reduced to preserve the Shivalingam from mechanical abrasion.

### About Mahakaleshwar Temple

- a. Situated on the **banks of the holy river Shipra in Ujjain**, the Mahakaleshwar Temple dedicated **to Lord Shiva** is one of the most famous shrines in the country.
- b. The presiding deity of this ancient temple **is the Mahakaleshwar Jyotirlinga**, a **Swayambhu**, meaning a self-originated Linga. It derives strength from itself, and the need to infuse powers by performing the mantra shakti is not necessary.
- c. Interestingly, the **Mahakaleshwar Jyotirlinga is Dakshinamukhi**, meaning it faces the south, unlike the rest of the Jyotirlingas. Temple idols usually don't face the southern direction, and hence the speciality.
- d. The main temple complex is a three-storeyed structure with the Lingas of Mahakaleshwar, Omkareshwar and Nagchandreshwar installed in lower, middle and upper tiers respectively.
- e. One can also find a Kunda named Koti Teertha inside the temple complex. For the unversed, the presence of a kunda (a small water body or a pond) is a common feature in the ancient temple complexes.

### CA2. Physicists Detect Gravitational Waves from Heaviest Black-Hole Merger

Link: <https://science.thewire.in/the-sciences/gw190521-ligo-virgo-gravitational-waves-heaviest-black-holes-mass-gap-mystery/>

Astronomers have primarily observed two flavours of black holes. The stellar-mass black holes are up to a **few tens of times the mass of our Sun**. And the supermassive black holes present at the centres of galaxies like our own are between hundreds of thousands and a **billion times as massive as the Sun**. Between them lies a **barren region where black holes are conspicuous by their absence**.

That is, we haven't observed any black holes whose mass is more than that comparable to hundreds of stars but less than that of billions of stars.

- a. Astronomers have long been puzzled by this perceived mass gap in the evolution of black holes. They have theorized the existence of intermediate-mass black holes with masses between 100 and 100,000 solar masses, but we have never observed them. The latest gravitational waves announcement from the LIGO-Virgo collaborations could change this.
- b. On September 2, physicists from the collaborations announced that they had detected the most massive black hole merger ever observed using gravitational waves.
- c. **The event has been designated GW190521.** The two initial black holes, around 85 and 66 solar masses, collided to form a black hole around 142 times as massive as our Sun. **This is the first ever observation** of a black hole in a range between stellar mass and supermassive black holes.

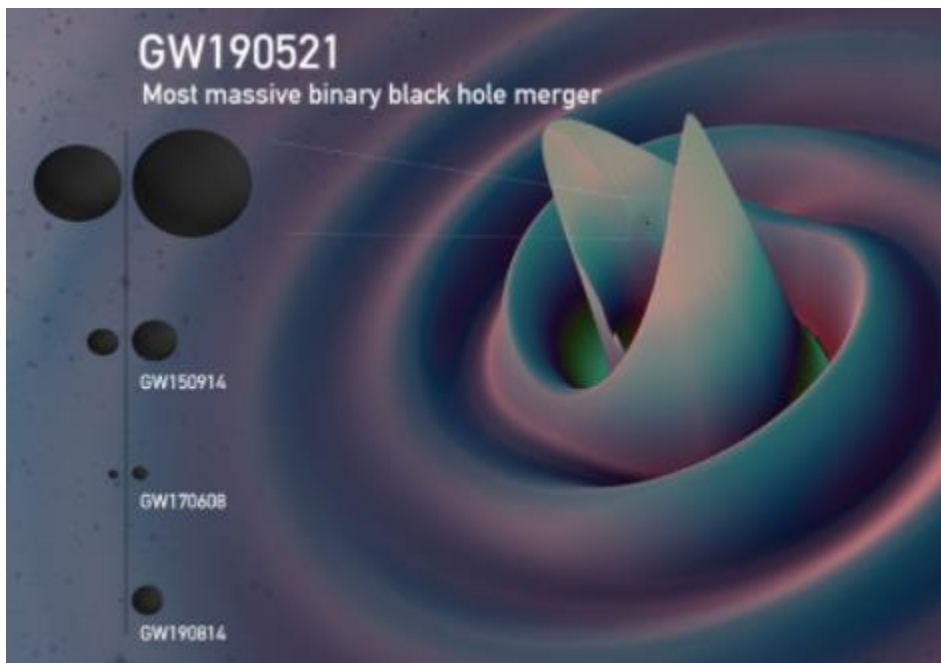


Image: Deborah Ferguson, Karan Jani, Deirdre Shoemaker, Pabla Laguna/LIGO-Virgo

**“Ringdown” method has helped to detect**



### ✓ Ringdown

A typical binary black-hole merger goes through three phases: an initial spiralling-in of the two objects, a merger and finally the ringdown, where the newly formed black hole settles into a single, stable rotating black hole. During the ringdown, the final black hole emits gravitational waves that might resemble the noise from a bell that's just been struck and is 'ringing down'.

Because of the mass, the GW190521 signal was almost entirely dominated by merger ringdown, which allowed us to measure the ringdown frequencies with a high precision. The measurements were consistent with predictions of the general theory of relativity, and also validated early work in the field by C.V. Vishveshwara.

**LIGO stands for Laser Interferometer Gravitational-wave Observatory.** It consists of two detectors located in Washington and Louisiana, in the US. Virgo is a gravitational-wave observatory in the Cascina commune of Italy.

### CA3. Char Dham Yatra

News was:

ENVIRONMENT, GOVERNMENT

## ✓ The Char Dham Road Project Is Indeed a Himalayan Blunder

02/09/2020


Before proceeding why, it is Himalayan Bunder, get a brief introduction about this Project.




**48** MONTHS OF TRANSFORMING INDIA


**Enhancing the Pilgrimage Experience with**  
Char Dham Mahamarg Vikas Pariyojna

**Saaf Niyat Sahi Vikas**





Launched in 2016 to improve connectivity to the Char Dham pilgrimage centres to make journey safer, faster and more convenient



Developing around 900 km of national highways at an approximate cost of ₹12,000 crore

Char Dham All Weather Road Project is a two-lane expressway project currently being executed in Himalayan state Uttarakhand. The project proposes widening of single lane roads into double lane by up to 10 meters. The stated aim of the project is to **improve the accessibility to Char Dham (shrines) namely Yamunotri, Gangotri, Badrinath and Kedar Nath**. The project also proposes creation of 889 km long national highways to connect whole of Uttarakhand state. It has been divided into 7 packages comprising of 9 destinations including Tanakpur to Pithoragarh stretch.



### Tourist Destination.

Uttarakhand, one of the most visited tourist destinations in the country, has four prominent pilgrim-destinations namely **Yamunotri, Gangotri, Kedarnath, and Badrinath**, collectively known as **Char Dham**, Nestled among the serene heights of the great Himalayas. These pilgrimage centers draw the maximum numbers of pilgrims each year, thus becoming the most important hubs of religious travel in the whole of Northern India. Traditionally, the pilgrimage begins from the West and ends in the East. Thus, the Char Dham Yatra commences from Yamunotri, then proceeding to Gangotri and finally to Kedarnath and Badrinath.

These are considered the major centres of Hindu faith as It is believed that visiting these shrines helps to attain „moksha“. The importance of this yatra can be cited from the fact that tourist inflow has increased on year to year not just for the locals but for the foreigners too. **Tourists are increasing every year.**

**TABLE 1: Tourist data (Individuals in lakhs) from 2008-2018.**

YEAR	KEDARNATH			BADRINATH			GANGOTRI			YAMUNOTRI		
	Indian	Foreigner	Total	Indian	Foreigner	Total	Indian	Foreigner	Total	Indian	Foreigner	Total
2008	0.46	0.11	4.70	10.75	0.002	10.75	3.26	0.0029	3.26	3.27	0.0019	3.28
2009	4.02	0.10	40.36	7.98	0.001	7.98	3.79	0.0048	3.80	3.22	0.0024	3.22
2010	4.003	0.0026	4.01	9.21	0.002	9.22	3.10	0.0031	3.11	3.09	0.0018	3.09
2011	5.69	0.0073	5.71	9.36	0.005	9.36	4.85	0.0031	4.85	4.48	0.0019	5.59
2012	5.72	0.0059	5.73	10.46	0.0032	10.47	4.35	0.0033	4.36	4.13	0.0025	4.14
2013	3.34	0.0008	3.341	4.76	0.002	4.76	2.09	0.0032	2.10	2.53	0.0008	2.53
2014	0.41	0.0023	0.412	1.59	0.0017	1.59	0.52	0.0014	0.52	0.38	0.0008	0.38
2015	1.54	0.0061	1.544	3.66	0.0015	3.66	1.59	0.0051	1.60	1.23	0.0022	1.23
2016	3.11	0.0069	3.098	6.54	0.0022	6.54	2.84	0.0111	2.85	1.55	0.0057	1.55
2017	4.76	0.0072	4.712	9.20	0.0039	9.20	4.08	0.0046	4.08	1.23	0.0048	3.92
2018	7.30	0.016	7.32	10.47	0.011	10.48	4.48	0.0061	4.47	3.94	0.0048	3.94

Source: Uttarakhand Tourist Development Board (Department of Tourism, Govt of Uttarakhand, India)

## Why it is Blunder?

The National Environment Policy 2006 envisages several measures to conserve mountain ecosystems. The proposals include appropriate land-use planning, watershed management, farming methods and promotion of eco-friendly and sustainable tourism. Perhaps most importantly, it advocates “best practice” norms for infrastructure construction in mountain regions to minimize or avoid damage to sensitive ecosystems and despoiling of mountain landscapes **(Use this statement in every infrastructure projects anywhere, one marks extra)**. Char Dham Projects, as per the author is against this principle.

## Importance of Himalayas:

- a. The Indian Himalayan region hosts about 8,000 species of flowering plants, which is about 50% of all flowering plants of India. Of this, nearly 30% are endemic to the region. There are over 816 tree species, 675 edibles and nearly 1,740 species of medicinal value here.
- b. The Himalaya, with its vast green cover, is also a major sink of carbon dioxide. Annual carbon sequestration by the forests of western and northeastern Himalaya and protective cover for the catchments of the Bhagirathi, Alaknanda and Mandakini valleys – a first line of defence against erosion – are just two important ecosystem services rendered by Himalayan forests.
- c. We must remember that the unique Himalayan landscape – with steep slopes and sharp gradients – are not inherently amenable to human engineering. They are dynamically heterogeneous and change in their properties, in terms of climatic variables, hydrological processes and biodiversity, at every turn.
- d. Any human-induced changes to these local ecological parameters will have their overall impact on stream run-offs and erosional or depositional processes.
- e. Considering the vulnerability of the biological and physical features of the Himalayan ecosystems, we must think of how we can reduce the scale of human-induced disturbances at the community and local levels.

The Char Dham project **goes against just such an environmental outlook** and ethos. Almost **50,000 trees are to be felled for the Char Dham project**. These include slow-growing, high-altitude trees like deodar (Himalayan cedar), birch and oak. Two experts of the **committee formed by the Supreme Court have also submitted a critical rejoinder on the Char Dham Project** and defined this road construction work as **an act of irresponsibility** and disregard towards a **highly fragile ecology**.

**Also, you can add that**, realizing the nuances of Himalayan ecology, the mission document on sustaining the Himalayan ecosystem, released by the **Ministry of Science and Technology in June 2010, highlights** that the concerned state governments should consider promulgating, as soon as possible, the following guidelines for road construction in hilly areas:

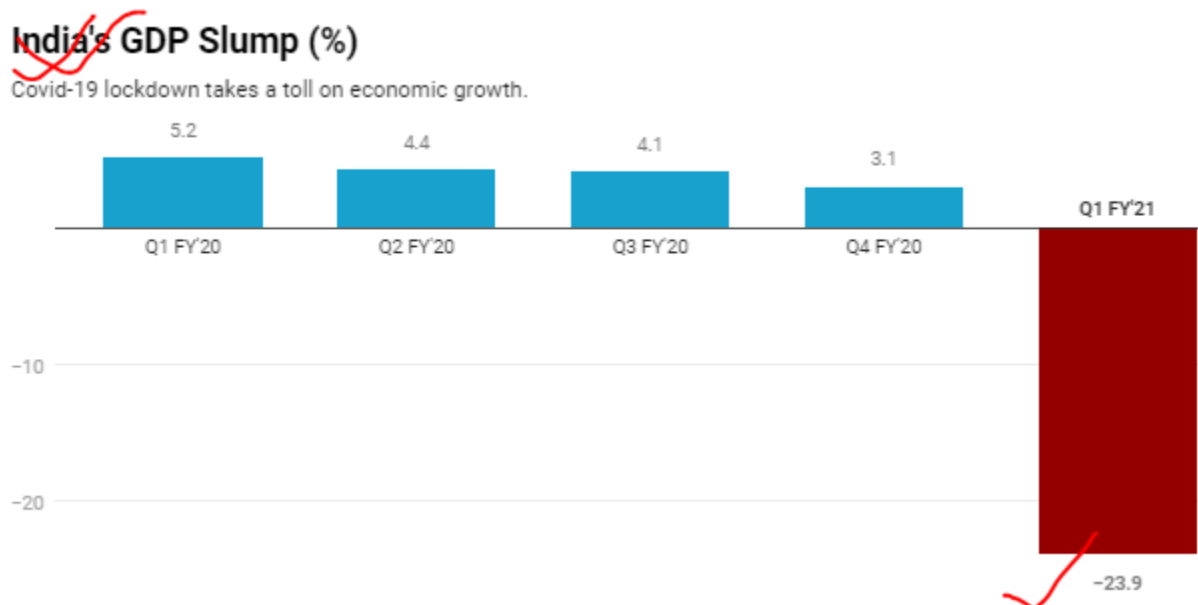
- a. Environmental impact assessment to be made mandatory for the construction of all state and national roads and expressways of more than 5 km length, including in the extension and widening of existing roads and excluding inter-village roads
- b. Road construction should provide for the treatment of hill-slope instabilities resulting from road-cutting, cross drainage work and culverts, using bio-engineering and other appropriate technologies. **None has been followed.**

**It's a debate of Development versus Sustainable Development. Let's see what happens. Don't get emotional while reading such article. You are an aspirant, think practically.**

#### CA4. India's GDP Shrinks a Record 23.9% in First Quarter of FY'21

**For analyzing and much detail study, read Daily news section of last two days, in which we have given link of important news article. Here just basic few points you read.**

India's economy contracted by a whopping 23.9% in the first quarter of the 2021 financial year, in what is the latest sign of the toll that the COVID-19 lockdown has taken on economic activity. According to data released by the statistics ministry on Monday evening, real GDP for the April-June 2021 quarter fell by 23.9% in comparison to the same quarter a year ago.



Though agriculture output grew by 3.4% in Q1, it was hardly enough to make up for the devastation in services (-27%) and manufacturing (-39.3%) sectors. Within services, construction is a large component which is also employment-intensive, and this showed a 50% decline.



India has become the worst performing economy among the G20 nations in April to June quarter.



Why is India impacted far more than other G20 countries? Economists say,



- a. First, **the lockdown was not properly implemented**, so the benefit of lockdown could not be obtained. The lockdown is being eased while the number of cases is rising rapidly. The first round of attack is proliferating, and the number of infections is increasing creating huge uncertainty. Repeated local lockdowns have had to be ordered, which disrupts production.
- b. Second, as mentioned above, **there is a very large unorganized sector** unlike other big economies. People in this sector are poor and cannot cope with a crisis. The authorities have ignored this factor.
- c. Third, a large number of people are alienated from the system and lack faith in the authorities. So, they flout official pronouncements. **They didn't followed rules.** Some people believe that this is a manufactured crisis and the authorities are fooling them. Often, one sees people going around without masks and not maintaining physical distancing. **This enables the virus to proliferate.** This is also the lesson from countries that have been successful in controlling the spread of the disease – the moment there is laxity, the disease starts proliferating again.

#### **Any good results can be expected in future? According to economists:**

Thus, there are long-term factors which make India's situation worse than that of other major economies. Even if one accepts the official data, the Indian economy is in depression and not just recession. **It will take a long time to get out of it** – till expectations change. For that, the government needs to change its stance from cautious to bold.

The chief economic advisor in the finance ministry has argued that some of the high frequency indicators for August show a possible V-shaped recovery. But he is still not sure whether India will have a positive GDP growth for the next two quarters. **This is worrisome.**

#### CA5. Indra 2020 to be held in Andaman Sea

**Link:** <https://www.thehindu.com/news/national/india-russia-to-hold-naval-drills-in-andaman-sea/article32496756.ece>

India and Russia are scheduled to hold Indra 2020 in the Andaman Sea, **close to the Strait of Malacca instead of the Indian Ocean Region (IOR).** The Strait of Malacca connects Indian Ocean to the South China Sea and is 900 km in length and is also a prominent trade route between East Asia and West Asia-Europe.



The **Indra series of exercises began in 2003** and was conducted as a bilateral naval exercise alternately between the two countries. Indra 2020 will be the first bilateral naval exercise since all such engagements were suspended due to Covid-19 pandemic.

Recently, India has withdrawn from the Kavkaz-2020 multinational exercise in Russia due to the restrictions posed by the pandemic.

## CA6. Global Innovation Index (GII) 2020

**For any index:**

- a. Who publish it?
- b. Who are toppers (first two, three)?
- c. What is rank of India with respect to last release?
- d. What are indicators? (learn indicators when it is 10 or less than 10, 20- 30 indicators *waala* Index will never be asked)

The Global Innovation Index 2020: Who Will Finance Innovation? is the result of a collaboration between **Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO)** as co-publishers, and their Knowledge Partners.



We are pleased to present the 13th edition of the Global Innovation Index (GII) while commemorating a decade long partnership between the Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO).

For more than 10 years, the GI has fostered innovation debates and policies. Again, the GI 2020 report presents global innovation trends and the innovation performance of 131 economies.

**Switzerland is the world's most-innovative economy** followed by Sweden, the United States of America (U.S.), the United Kingdom (U.K.) and the Netherlands, according to the GI 2020.

High-income economies (49 in total)	
1	Switzerland (1)
2	Sweden (2)
3	United States of America (3)
4	United Kingdom (4)
5	Netherlands (5)
6	Denmark (6)
7	Finland (7)
8	Singapore (8)
9	Germany (9)
10	Republic of Korea (10)

**Now, with respect to India. A small Paragraph with respect to India is given under Index:**

India has embarked on a journey towards creating an enabling environment by putting in place an ecosystem that breeds innovation. **The Government of India has launched several significant initiatives** for propelling innovation, such as the *Start-up India initiative, Accelerating Growth of New India's Innovations (AGNIi), Atal Tinkering Labs, new intellectual property rights (IPR) policy, Smart City Mission, Uchchatar Avishkaar Yojana, etc.* All these initiatives, coupled with phenomenal research and innovation from the institutions, industry, and society, are cementing India's position as an innovation and knowledge hub.

India has been categorized in Low -middle income countries.

<b>✓✓ Lower middle-income economies (29 in total)</b>	
1	Viet Nam (42)
2	Ukraine (45)
3	India (48)



\***Market sophistication** in above indicators means: Credit, Investment, Trade, competition, and market scale.

**\*Business Sophistication means:** Knowledge-intensive employment, Innovation Linkages (like University/industry research collaboration), Knowledge absorption (like High-tech imports, FDI Inflows, etc.)

### Comparing India and Switzerland (Rank 1):

Country/Economy	Overall GI rank	Institutions	Human capital & research	Infrastructure	Market sophistication	Business sophistication	Knowledge & technology outputs	Creative outputs
Switzerland ✓	1	13	6	3	6	2	1	2
India	48	61	60	75	31	55	27	64

## CA7. Draft National Health Data Management Policy

Link: [https://ndhm.gov.in/health\\_management\\_policy](https://ndhm.gov.in/health_management_policy)

The National Health Authority (NHA) released the Draft National Health Data Management Policy on 26 August 2020 for comments and feedback from the public. It is available for comments till 03 September 2020. *We don't know when action will be taken, and final policy will be formulated. Just few important points to remember for now. Detail can only be shared after final draft.*

### Principle of this draft policy:

Dr. Indu Bhushan, Chief Executive Officer, **National Health Authority** said, “*The Draft Health Data Management Policy is the maiden step in realizing NDHM's guiding principle of “Security and Privacy by Design” for the protection of individuals' data privacy. It encompasses various aspects pertaining to health data like data privacy, consent management, data sharing & protection etc.*”

### It all started with....

While addressing the nation on the 74th Independence Day of India, 2020 Prime Minister Narendra Modi **launched the National Digital Health Mission (NDHM)** under which a digital health ID would be created for all Indians. As per the stated objective, *the health ID would work like a health account, containing details of every test, every disease, doctors visited, medicines taken, and diagnosis, he said. The ID card would be linked to the Aadhar or mobile number.*

### So, what is National Health Authority (NHA)

**The National Health Authority (NHA)** is the apex agency of the Government of India responsible for the design, roll- out, implementation and management of Ayushman Bharat- Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) and the National Digital Health Mission across the country. NHA functions as an attached office of the Ministry of Health

and Family welfare and is governed by a Governing Board chaired by the Union Minister of Health & Family Welfare

### What draft policy says?

#### All health records of an individual would be stacked at one place

NDHM is a project of the Government of India which emanates from the National Health Policy of 2017 that proposed to digitize the entire healthcare system of India to overcome inefficiencies. **Under this mission**, the government also intends to put all health-related information of an individual at one place in addition to other objectives. As per the stated objectives, **instead of restricting the health records of a person to just the health facility** where they undergo treatment, **electronic health records of individuals can now be accessed from anywhere in the country digitally**. Additionally, a repository for doctors and health facilities will also be available in the scheme of things.



#### The draft policy talks about collection, processing, and management of health information under NDHM

To achieve the stated objectives, confidential health data will be collected from individuals across the country and stored at multiple levels- Central, State/Union Territory, and at the health facility level. To ensure that the data is protected, and privacy is maintained, the government has formulated the draft health data management policy which lays down guidelines on how to collect, maintain, process, and utilize the information of patients collected under NDHM for the health IDs.

## Policy permits storage of sensitive data

The policy permits hospitals, diagnostic centres, and other entities, known as data fiduciaries, to collect personal or sensitive personal data as specified in the policy. Sensitive personal data, among others, include a person's physical, physiological, and mental health data, financial information such as bank account or card details, sex life, sexual orientation, medical records and history, biometric data, and genetic data.

"sensitive personal data" means such personal data, which may reveal or be related to, but shall not be limited to,

- (i) financial information such as bank account or credit card or debit card or other payment instrument details;
- (ii) physical, physiological and mental health data;
- (iii) sex life;
- (iv) sexual orientation;
- (v) medical records and history;
- (vi) biometric data;
- (vii) genetic data;
- (viii) transgender status;
- (ix) intersex status;
- (x) caste or tribe; and
- (xi) religious or political belief or affiliation.

## Enrolment in the mission is voluntary and consent is must

According to the draft policy, those who opt to avail the health ID card, also referred to as data principals in the document, are given the complete control and decision-making power over how their personal data is collected and processed. Any personal data or sensitive personal data can be collected only after the consent of the individual. Individuals also have the right to revoke the consent or restrict sharing of any personal data at any time.

- (c) to create a system of digital personal and medical health records which is easily accessible to individuals and health service providers and is purely voluntary in nature, based on the consent of individuals, and in compliance with international standards such as ISO/TS 17975:2015 (defines the set of frameworks of consent for the collection and processing of health data by healthcare practitioners and other entities) and other relevant standards related to data interoperability and data sharing as may be notified for the implementation of NDHM from time to time;

**Restrictions on sharing, circulating or publishing of personal or sensitive personal data:** Any personal data or sensitive personal data of the data principal shall not be published, displayed or posted publicly by any person or entity.



### **Data Protection Officer should be appointed for individuals**

**Those institutions with access to the data** under NDHM must have a **designated Data Protection Officer (DPO)** whose details should be put up on the website. Individuals who have queries must be able to approach the DPO.

The **data fiduciaries are expected to formulate and implement a ‘personal data breach management mechanism’** to make sure that any instances of violation or non-compliance, including unauthorized or accidental disclosure, sharing, alteration, destruction or use of personal data get promptly reported to the NHA and other relevant entities. NHA should formulate and implement procedures to ‘identify, track, review and investigate’ such incidents and maintain a record of these instances along with the action taken.

The draft policy has been criticized by multiple sections. While some feel that the policy is about more about data than about health, others feel that this could be a step towards greater privatization of health care. **We will wait for new updates.**

### CA8. Political Parties must disclose ‘reasons’ for selecting candidates

**We have connected dots from beginning till end. It will be easy to understand. Read.**

On 13 February 2020, the Supreme Court (SC) delivered a judgement directing all political parties to upload details of pending criminal cases against candidates contesting on the party ticket, on their website. The reason for selection of the candidate along with details of pending criminal cases should also be made public by the political party.

We have also noted that the political parties offer no explanation as to why candidates with pending criminal cases are selected as candidates in the first place. We therefore issue the following directions in exercise of our constitutional powers under Articles 129 and 142 of the Constitution of India:

- 1) It shall be mandatory for political parties [at the Central and State election level] to upload on their website detailed information regarding individuals with pending criminal cases (including the nature of the offences, and relevant particulars such as whether charges have been framed, the concerned Court, the case number etc.) who have been selected as candidates, along with the reasons for such selection, as also as to why other individuals without criminal antecedents could not be selected as candidates.

Even Election Commission is ready to implement the decision of SC: SEE BELOW.

Dated: 14<sup>th</sup> February, 2020

### PRESS NOTE

Commission to implement the directions of Hon'ble Supreme Court concerning criminal antecedents of candidates by reiterating its existing instructions with suitable modifications.

Election Commission has consistently espoused rigorous and loftiest normative standards in public life. Hon'ble Supreme Court on 13 February, 2020 in Contempt Pet. (C) No. 2192 of 2018 of W.P. (C) No. 536 of 2011 invoking Article 129 and Article 142 of the Constitution of India directed as under,

"1) It shall be mandatory for political parties [at the Central and State election level] to upload on their website detailed information regarding individuals with pending criminal cases (including the nature of the offences, and relevant particulars such as whether charges have been framed, the concerned Court, the case number etc.) who have been selected as candidates, along with the reasons for such selection, as also as to why other individuals without criminal antecedents could not be selected as candidates.

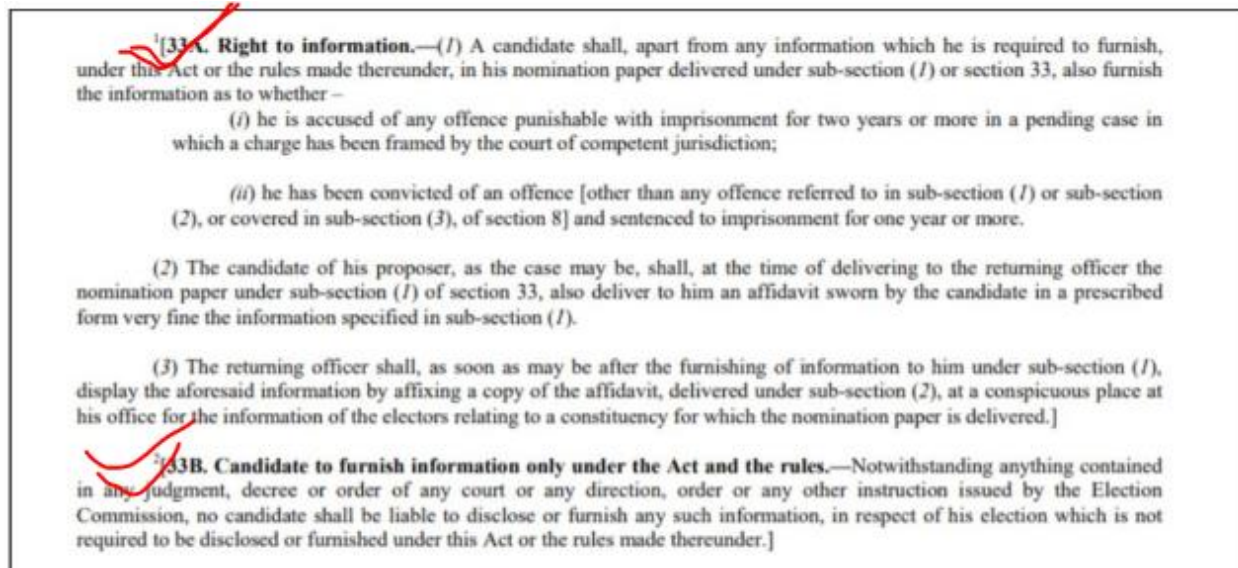
### Something important we need to know:

In *Union of India Vs Association for Democratic Reforms and another; with People's Union for Civil Liberties v. Union of India and another*, **the Supreme Court in 2002 held that the citizens have a right to know about public functionaries**. The court maintained that **'right to know' contesting candidate's antecedents was a fundamental right guaranteed under Article 19 (1)(a)** since such rights include the right to hold opinions and acquire information for citizens to be adequately informed in order to form those opinions.

Sections 33A and 33B were inserted in 'The Representation of the People Act, 1951 (RPA 1951)', in 2002 following the SC judgement.



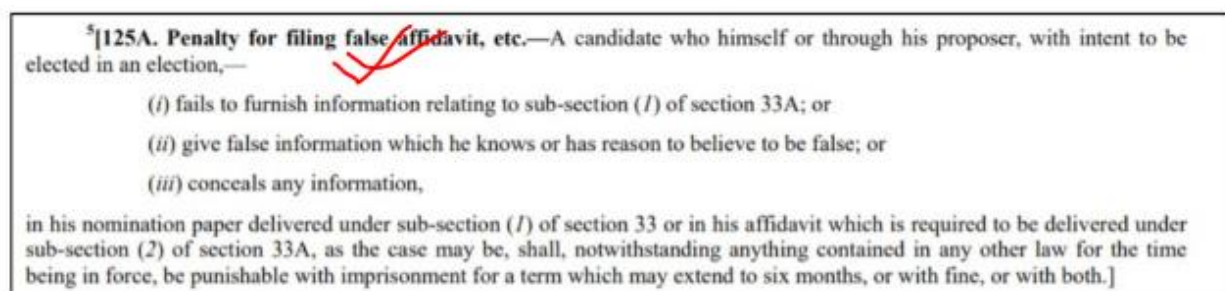
- a. Section 33A states that **information regarding criminal antecedents of contesting candidates** such as if he has been accused of any offence with two years' imprisonment or more, or if he has been convicted in any other offence and sent to prison for at least one year, **should be disclosed**.
- b. Section 33B of the RPA 1951 stated that the **candidates could not be forced or compelled to disclose any information about themselves** except what is required under the act.



**Later in March 2003**, in *People's Union for Civil Liberties v. Union of India* and another, **Section 33B** was found to be problematic on several grounds. **It was struck down.**

**Filing false information, concealing information or not filling information does not result in disqualification of candidate**

Under **Section 125A** of RPA also inserted in 2002, **a candidate who does not furnish information regarding pending criminal cases, conceals it, or gives false information, will be liable for imprisonment** up to six months and/or a penalty. The offence under Section 125A **does not fall in the ambit of Section 8 of the RPA which lists out criteria for disqualification of contesting candidates**. This implies that those filing false information or concealing information **cannot be disqualified**.



**Finally, in Resurgence v. ECI, the SC stated** that if an affidavit is filed with blank particulars, it renders the entire exercise of filing affidavits futile, and **infringes the fundamental rights of citizens under Article 19 (1)**. The Returning Officer should remind the candidate to fill the blanks. **Yet, if the blanks are left unattended, the nomination is fit to be rejected.**

**Again, Directions given by SC in 2018 to promote transparency and flow of information.**

**In Public Interest Foundation v. Union of India**, while dealing with **disqualification under section 8**, the SC gave directives:

- a. SC decided not to debar candidates with pending criminal cases from contesting elections.
- b. If the candidate is contesting election on the ticket of a party, they should inform the party about the pending criminal cases against them
- c. Concerned party must publish information of candidates with pending criminal cases in website and at least thrice in television channels and newspapers before election.

**Finally,**

**In Rambabu Singh Thakur v. Sunil Arora, the [SC in February 2020](#)** gave a series of directions to check the criminalization of politics. The Court had observed that in 2004, 24% of MPs had pending criminal cases against them. In 2009, the same was 30% and in 2014, it went up to 34%. In 2019, around 43% of the MPs had pending criminal cases against them. Therefore, the Court directed that:

*Political parties must publish on their website detailed information regarding pending criminal cases of their candidates (nature of offence, whether charges have been framed, concerned Court, case number, etc.) along with reasons for selection, and also why other candidates without criminal antecedents were not selected. The reasons to be given must be based on qualifications, achievements, and merit of candidate, and not mere 'winnability' at the polls.*

**Conclusion:**

To summarize, since 2002, candidates have been obliged to submit the details of the pending criminal records to the ECI. The SC's judgement in 2018 made it mandatory for these details to be published in the concerned political party website and in newspapers and television channels. This has been further extended in the 2020 judgement. **Strict implementation is need of the hour.**

## CA9. Adjusted gross revenue (AGR)

Why in News?

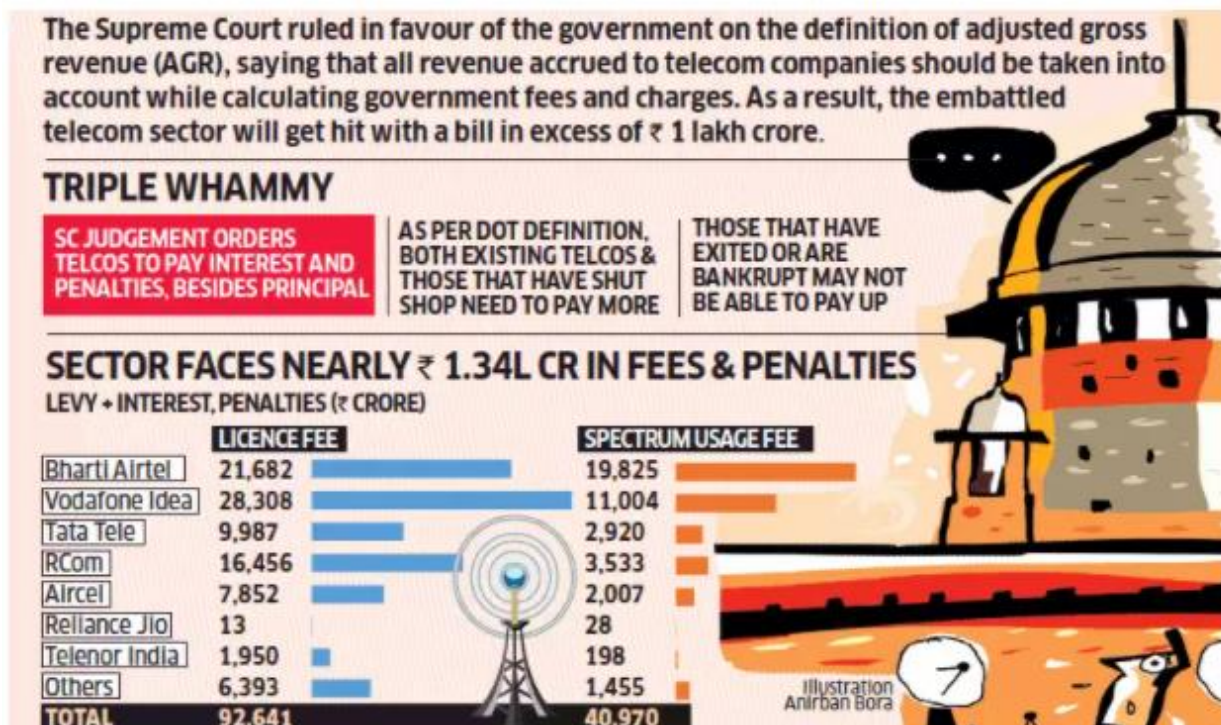
The Supreme Court has allowed telecom companies 10 years' time to pay their adjusted gross revenue (AGR) dues to the government. You read below document or not, but watch this [small video](#) to understand everything.

### The judgment:

- The National Company Law Tribunal (NCLT) should decide whether or not spectrum can be sold under the Insolvency and Bankruptcy Code.
- Due to the current Covid-19 situation, telcos should pay 10 per cent of the total dues by March 31, 2021.
- Telecom companies would also have to make payments on or before February 7 every year. The non-payment of dues in any year would lead to accrual of interest and invite contempt of court proceedings against such companies.

### What's the issue?

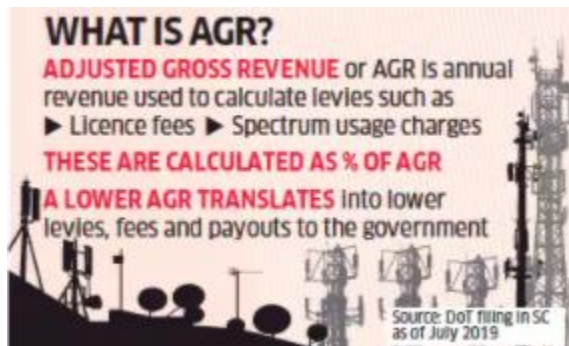
An October 2019 judgment of the court in the AGR issue originally wanted the Telco's to make the repayments in three months. The court had concluded that the private telecom sector had long reaped the fruits of the Centre's liberalized mode of payment by revenue sharing regime. **Below is the image of 2019 judgement:**



Later, the government had proposed in court a 20-year “formula” for Telcom’s to make staggered payments of the dues. But the court observed that the period of 20 years fixed for payment is excessive. Even after part payment, the dues still run to ₹1.43 lakh crore.

### What is AGR?

**AGR is a fee-sharing mechanism between government and the telcos who shifted to 'revenue-sharing fee' model in 1999, from the 'fixed license fee' model. In this course, telcos are supposed to share a percentage of AGR with the government.**



### How is it calculated?

As per DoT, the charges are calculated based on all revenues earned by a telco – including non-telecom related sources such as deposit interests and asset sales.

### What are issues associated? When it all began?

- The telecom sector was liberalized under the National Telecom Policy, 1994 after which licenses were issued to companies in return for a fixed license fee.
- However, to provide relief from the steep fixed license fee, the government in 1999 gave an option to the licensees to migrate to the revenue sharing fee model.
- Under this, mobile telephone operators were required to share a percentage of their AGR with the government as annual license fee (LF) and spectrum usage charges (SUC). License agreements between the Department of Telecommunications (DoT) and the telecom companies define the gross revenues of the latter.
- The dispute between DoT and the mobile operators was mainly on the definition of AGR.
- The DoT argued that AGR includes all revenues (before discounts) from both telecom and non-telecom services. The companies claimed that AGR should comprise just the revenue accrued from core services and not dividend, interest income or profit on sale of any investment or fixed assets.

### CA10. Kalasa-Banduri dam project

Link: <https://www.downtoearth.org.in/blog/water/tale-of-transboundary-river-conflict-understanding-kalasa-banduri-dam-project-73203>



Few important points only we have covered:

- a. **About the Project.**
- b. **About the River**

**Construction of Kalasa-Banduri canals over Mahadayi/Mandovi River** has been a point of contention between the Goa and Karnataka governments.

The **Kalasa-Banduri Project undertaken by the Karnataka government** proposes to divert Mandovi river water from Kalasa and Banduri canals into the Malaprabha river in the state to facilitate drinking water to 13 towns of Dharwad, Belagavi, Bagalkote and Gadag.

The entire project aims to construct a total of 11 dams on the river Mandovi. The diversion of water from Kalasa and Banduri nullahs, however, **has been the point of contention between Karnataka and Goa**, with the latter claiming it would strip the state of its flora and fauna.

#### **About River:**



Mahadayi or Mhadei, the west-flowing river, originates in **Bhimgad Wildlife Sanctuary** (Western Ghats), Belagavi district of Karnataka. The Mandovi river basin falls into the states of Goa, Karnataka and Maharashtra. The river is 81 kilometres (km) in length; 35 km of which flows in Karnataka, 1 km in Maharashtra and 45 km in Goa.

**The Mahadayi Water Dispute Tribunal was set up in 2010 to look into the issue. It delivered its judgement in 2018, but the dispute still exists.**

#### **CA11. US-India Strategic Partnership Forum (USISPF)**

Link: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1651145>

Recently, the Prime Minister of India delivered the keynote address at the 3rd Annual Leadership Summit of US-India Strategic Partnership Forum (USISPF).

The **US-India Strategic Partnership Forum (USISPF)** is a **non-profit organization established in 2017**, with the primary objective of strengthening the U.S.-India bilateral and strategic partnership. **Theme for 2020: US-India Navigating New Challenges.**

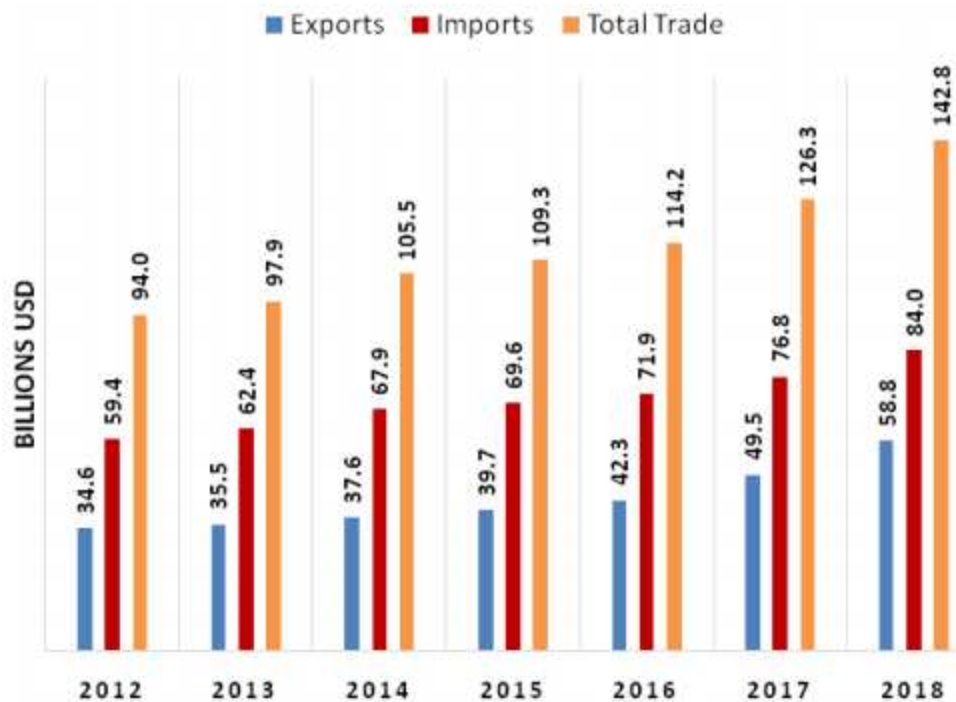
The US-India Strategic Partnership Forum (USISPF) is committed to creating the most powerful strategic partnership between the U.S. and India.



So, when you are talking about USISPF, a current affairs section will be incomplete, if it **doesn't talk about current trade of India-US**. We have taken the reference of [USISPF Report](#):

U.S. total bilateral trade (goods and services) with India was **\$142.8 billion in 2018**, up 13.2% from \$126.2 billion level in 2017. Bilateral trade witnessed an average 7.4% annual growth rate for 2012 and 2018. **U.S. exports of goods and services to India totaled \$58.8 billion in 2018**, registering a robust 19.1% increase from the 2017 level of \$49.3 billion; **total U.S. imports from India, at \$84 billion**, rose 9.4% from \$76.8 billion in 2017.

### US-INDIA GOODS AND SERVICES TRADE: EXPORTS, IMPORTS AND TOTAL TRADE (2012-18)



In 2019, overall USA-India bilateral trade in goods and services reached USD 149 billion.  
**So, India has trade surplus with US for last few years.**

#### U.S. Exports to India

1. India was 13th largest goods export market for U.S. exporters in 2018.
2. The U.S. exports were \$33.6 billion in 2018, up 30.7% from the 2017 level of \$25.7 billion. This is the highest annual growth rate on record in U.S. exports to India for more than a decade. However, U.S. merchandise exports to India accounted for only 2% of overall U.S. global exports in 2018.
3. The top U.S. export categories (2-digit HS) to India in 2018 were: precious metal and stone (diamonds) (\$7.9 billion), mineral fuels (\$6.2 billion), aerospace (\$3 billion),

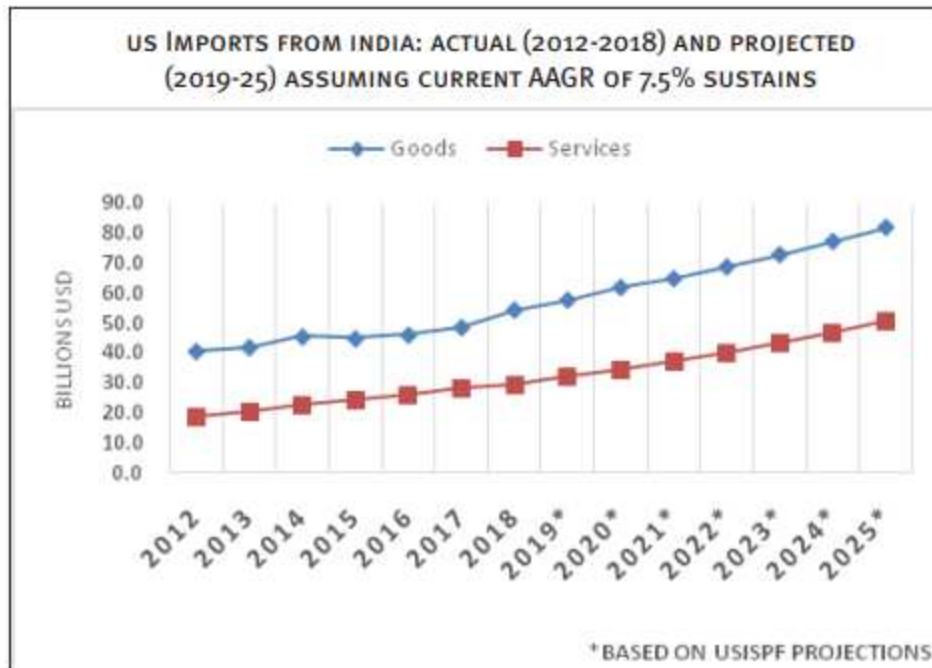


machinery (\$2.2 billion), and optical and medical instruments (\$1.6 billion).



### U.S. Imports from India

- a. **India was the United States' 10th largest source of goods imports in 2018.**
- b. U.S. goods imports from India totaled \$54.5 billion in 2019, up 12% from 2017.
- c. U.S. imports from India accounted for 2.1% of overall U.S. global imports in 2018.
- d. The top U.S. import categories from India in 2018 were: **precious metal and stone (diamonds) (\$11.6 billion), pharmaceuticals (\$6.5 billion), machinery (\$3.5 billion), mineral fuels (\$3.3 billion), and vehicles (\$2.9 billion).**
- e. U.S. imports of services from India were \$29.6 billion in 2018, 4.9% more than the 2017 level.



## CA12. Zero-budget natural farming and Thotlakonda Buddhist complex: Two important news from Andhra Pradesh

### Zero-budget natural farming [benefit for Paddy](#):

Researchers at Bengaluru-based technology-policy think-tank Center for Study of Science, Technology and Policy conducted an exploratory study in Andhra Pradesh **to compare ZBNF and non-ZBNF techniques in paddy, groundnut, Chilli, cotton and maize farming**. The comparison was made on six parameters: Water, electricity, energy consumption, greenhouse gas emissions, yield and net revenue.

The study — published February 2020 — was conducted in Andhra Pradesh's Anantapuramu, Prakasam, Vizianagaram and West Godavari districts during kharif season, ensuring variation in agro-climatic zones, farming techniques, production and social aspects. **It found maximum benefits of ZBNF in paddy farming**, with a saving of 1,400 to 3,500 cubic metres of water per acre per paddy cropping period (one acre equals 0.4 hectare).

Water consumption in paddy cultivation depended on the frequency and depth of irrigation. Paddy farms under ZBNF were irrigated with only 2.54-5.7 centimetres-deep water, while those under non-ZBNF were watered up to 12.7 cm.

### The report states:

- ZBNF can **avoid the current drawing of groundwater by 50-60 per cent**, ensure adequate groundwater reserve, improve water table and reduce financial and labour stress on farmers.

- b. ZBNF farming can also **solve disputes between farming communities** where upstream farmers employ canal irrigation and end up guzzling more water, leaving downstream farms with insufficient volume.
- c. ZBNF does show **water-saving potential and can address India's food and security in the long run**, but deep investigation is required to ascertain if it can be replicated in the various agro-climatic zones across the country.

**Andhra Pradesh has played a leading role in promoting agroecological farming in the past two decades.** The Community Managed Sustainable Agriculture (CMSA) initiative of the state is often cited as a major intervention which encouraged farmers to gradually move away from chemical-intensive farming. **The Andhra Pradesh government's unique initiative to improve farmers' livelihood through zero budget natural farming (ZBNF) can be seen as the right solution to fight climate change.**

### Thotlakonda Buddhist complex

#### News:

The relocation of executive capital to Visakhapatnam as part of its agenda to create three capitals can be seen as a serious threat to the steel city's heritage sites.



Thotlakonda Buddhist complex near Visakhapatnam. From flipboard.com

**The Thotlakonda Buddhist complex**, spread over nearly 48 hectares on a hill overlooking the Bay of Bengal, some 15 km from **Visakhapatnam**, is believed to have flourished between the second century BCE and the second century CE.

Thotlakonda emerged alongside the other Buddhist complexes, such as **Bavikonda and Pavurallakonda**. The Buddhist relics fell within the influence of the ancient region of Kalinga, which played a pivotal role in disseminating Buddhism within India and also to Sri Lanka and Southeast Asian regions.

**The word Thotlakonda in Telugu** is derived from the rock-cut water cisterns found in the local bedrock. Since the discovery of the site in 1976, it has been declared a protected monument by the state government. Notable excavations at the site include a maha stupa, a stone pillared congregation hall, three circular prayer halls, 10 viharas, a kitchen complex, and a refectory. Silver Roman coins and other evidence of international commerce have also been found at the site.

### CA13. Dead' coral reefs as important as 'live' ones, shows new study



Link: <https://www.downtoearth.org.in/news/wildlife-biodiversity/-dead-coral-reefs-as-important-as-live-ones-shows-new-study-73178>

According to a recent study by researchers from University of Queensland (UQ), Australia, **more life can be supported by dead coral remains than live corals**. Dead' coral reefs supported 'cryptic' animals, hidden sea creatures, including fishes, snails, tiny crabs and worms who hide under this rubble to save themselves from predation.

#### Important findings:

- a. The researchers **designed three-dimensional-printed coral stacks called Rubble Biodiversity Samplers (RUBS) to survey cryptic organisms**. The 3D-printed coral mimicked surrounding reef rubble and invited unwitting reef organisms to be monitored. By sampling the RUBS' structures over time, the team were able to identify changes in the cryptic population.
- b. The **researchers found the missing link in the coral reef food webs**. This data fills important knowledge gaps, such as how small cryptic animals support coral reefs from the bottom of the food chain, all the way up to bigger predators.

- c. This also helped to know the importance of dead coral reef rubble to the ocean ecosystem.

### Recent threats to corals in news:

Three mass bleaching events in 1998, 2010 and 2016 impacted five major coral reef regions in Andaman, Nicobar, Lakshadweep, Gulf of Mannar and Gulf of Kutch, all under the Indian Ocean itself. Similarly, a recent oil spill in Mauritius that leaked more than 1,000 tonnes of fuel oil can be responsible for the devastation of coral reefs around the island as well.

This technology by UQ researchers, thus, provides **a new opportunity for reef management, particularly for reef education and awareness.**

CA14. Hurricane Nana (For map purpose)

Link: <https://indianexpress.com/article/world/hurricane-nana-hits-belize-drives-across-guatemala/lite/>



Atlantic Hurricane Nana has made a landfall on the coast of **Belize**. The country Belize is located on the **northeast coast of Central America**. Few days back, Hurricane Laura made landfall in southwestern Louisiana (South Central United States).



Let's see the map of Central America also:



## CA15. Merchandise Exports from India Scheme (MEIS)

**Just have a brief idea about MEIS**

MEIS was introduced in the **Foreign Trade Policy (FTP)** for the period **2015-2020**. The MEIS was launched as an incentive scheme for the export of goods. The rewards are given by way of duty credit scrips to exporters. The MEIS is notified by the DGFT (Directorate General of Foreign Trade) and implemented by the Ministry of Commerce and Industry.

Under the FTP 2015-20, MEIS intends to incentivize **exports of goods manufactured in India or produced in India**. The incentives are for goods widely exported from India, industries producing or manufacturing such goods with a view to making Indian exports competitive. The MEIS covers goods notified for the purpose of the scheme.

**MEIS replaced the following five other similar incentive schemes present in the earlier Foreign Trade Policy 2009-14:**

MEIS replaced the various export incentive schemes which gave different types of duty credit scrips namely, Focus Market Scheme (FMS), Focus Product Scheme (FPS), Vishesh Krishi Gramin Udyog Yojana (VKGUY), Market Linked Focus Product Scheme (MLFPS) and

Agri Infrastructure incentive scheme. All duty credit scrips issued under the earlier incentive schemes were transferred to the MEIS.

## CA16. Prison Statistics of India 2019 Report

**A big report. So many unnecessary things. But we will cover only few important headings important for exam.**

Recently, the **National Crime Records Bureau** [released](#) the **25th edition of the annual Prisons Statistics India (PSI) for 2019** which provides comprehensive statistical information on various aspects of prison administration in India.

**Table – 1.2**  
**Capacity, Inmate Population and Occupancy Rate of Jails as on 31<sup>st</sup> December, 2019**

Sl. No	State/UT	Available Capacity			Inmate Population			Occupancy Rate (in %)		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	<b>TOTAL (UTs)</b>	11182	883	12065	18444	693	19137	164.9	78.5	158.6
	<b>TOTAL (ALL-INDIA)</b>	376036	27703	403739	458687	19913	478600	122.0	71.9	118.5

# Occupancy Rate = Inmate Population / Available Capacity

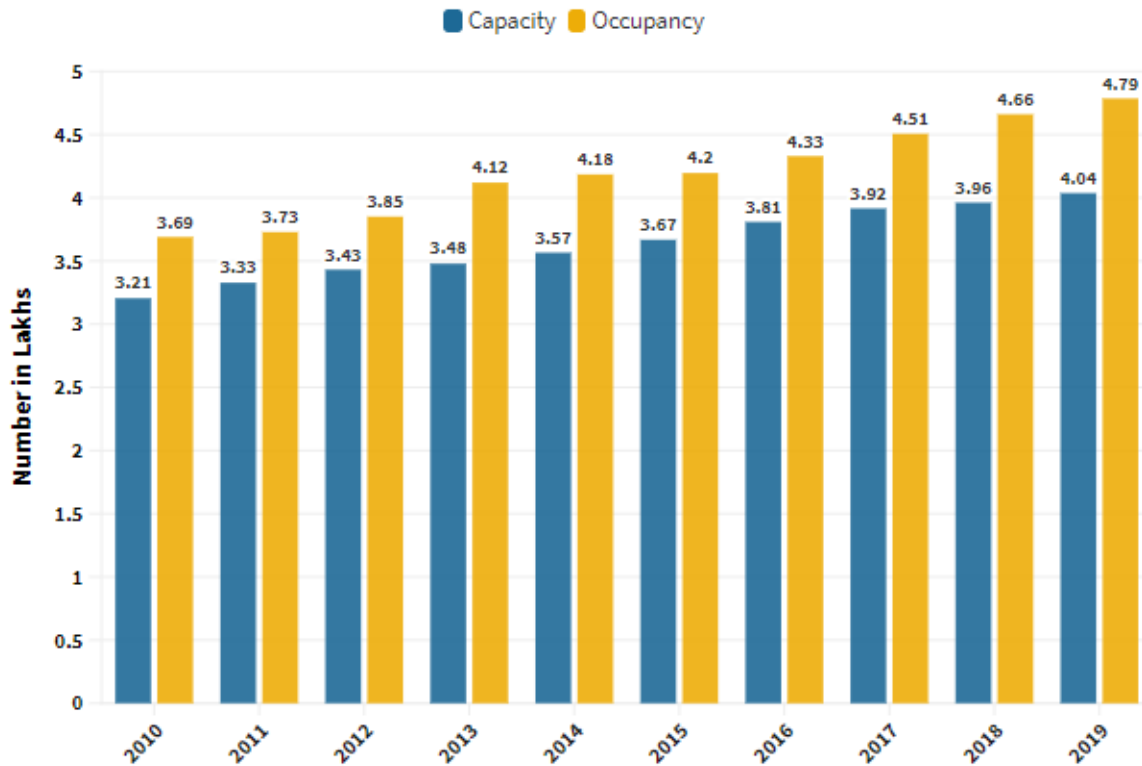
An occupancy ratio of more than 100% implies that the prisons are overcrowded and if it is below 100%, it means that the prisons are not yet filled to their capacity. The occupancy ratio of prisons in India was **118.5% in the end of 2019 (see above)**. In simpler terms, what it means is, in a space where 100 persons could be accommodated, close to 119 persons were accommodated on average. The occupancy ratio of males in prisons was 122% while that of women was only 71.9%, clearly indicating that overcrowding is an acute problem for male prisoners.

### **The increase in inmates and prison space are not proportional**

Data indicates that the accommodation capacity of Indian prisons has increased from over 3.2 Lakh persons in 2010 to around 4.04 Lakh persons in 2019. Nonetheless, the population of inmates in the prisons across India has increased from over 3.69 Lakh persons to 4.79 Lakh persons during the same period.

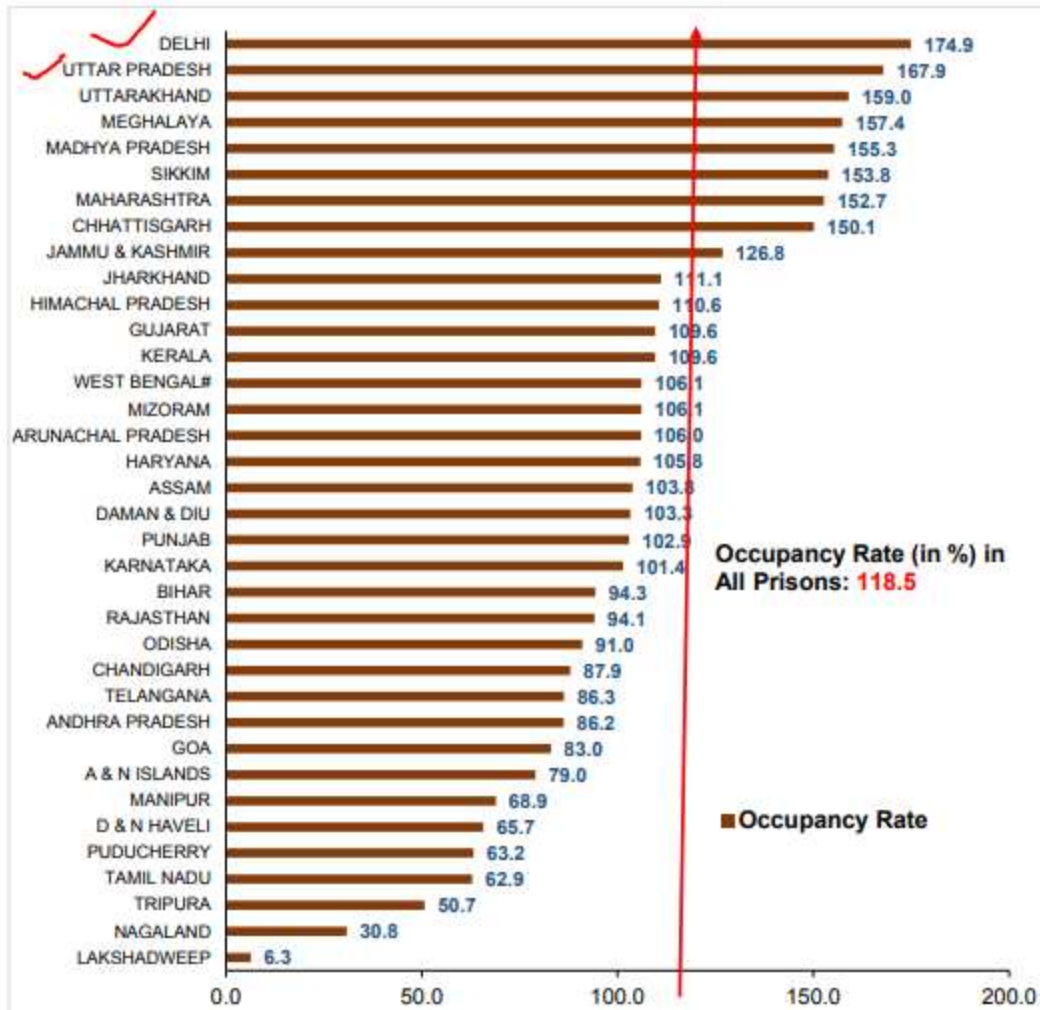


## Trend in Capacity and Occupancy in Indian Prisons (2010 to 2019 in Lakhs)



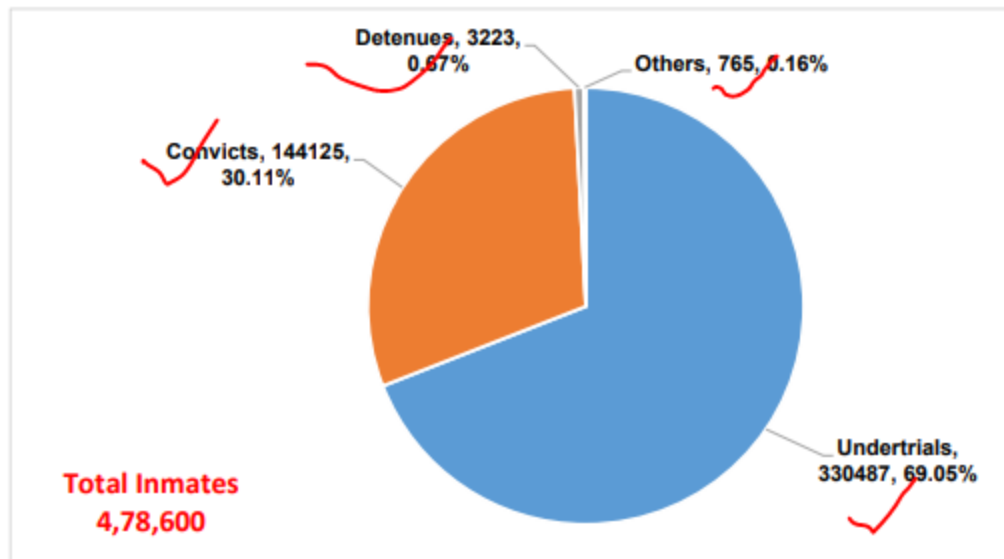
### Prisons in 19 states were overcrowded

There is wide variation in prison occupancy ratio across different states. The prisons in 19 States were overcrowded by the end of 2019 and in seven of these, the occupancy ratio was above 150%. Delhi had reported the highest occupancy ratio in 2019 with close to 175% followed by Uttar Pradesh with 168% and Uttarakhand with 159%.



### Almost 70% of the inmates in Indian prisons are under trials

What is alarming is that majority of the prison inmates in India are undertrials. As on 31 December 2019, over 3.27 lakh persons out of the 4.78 lakh persons lodged in prisons in India, accounting for 69.2% of the inmates, were undertrials. Only 30% of the inmates were convicts and 0.67% were detainees.



• As per data provided by States/UTs.

**Share of Different Types of Prisoners as on 31st December 2019**

Undertrials are those who are being held in custody while the trial for the crime is pending. In the last decade, there has been a marginal increase in the percentage of undertrials being held in prisons, from 65% in 2010 to 69% in 2019.

### Conclusion:

According to the latest response in the Lok Sabha in July 2019 regarding the overcrowding of prisons, the Ministry of Home Affairs (MHA) stated that administration and management of prisons falls under the purview of the States. Further, MHA stated that it has issued advisories to the States and UTs for taking steps to provide free legal aid to undertrials and setting up Lok Adalats/Special courts in prisons for reviewing their cases.

### GOVERNMENT OF INDIA MINISTRY OF HOME AFFAIRS

### LOK SABHA UNSTARRED QUESTION NO. 4909

### TO BE ANSWERED ON THE 23<sup>rd</sup> JULY, 2019/ SHRAVANA 01, 1941 (SAKA) OVERCROWDING IN JAILS

(d) : 'Prisons' and 'persons detained therein' are State subjects as per Entry 4 of List II of Seventh Schedule to the Constitution of India. Administration and management of prisons is the responsibility of State Governments. However, the Ministry of Home Affairs (MHA) has issued advisories to States & UTs for steps to be taken by them for providing free legal aid to undertrials and for setting up Lok Adalats / Special courts in prisons for expediting the review of cases of undertrials.

**As per the report**, it is conformed that various initiatives, such as *legal defence, interviews with lawyers, etc.* National Legal Services Authority free legal services to undertrial prisoners through legal service clinics **failed to decongest the prison.**

**Needs a complete overhaul of existing laws to prosecute prisoners and infrastructure change in prisoners.** Even **United Nations** has devised strategies for **reducing overcrowding in prisons**, as this is a global issue and not limited to India. These measures include:

- a. looking for non-custodial alternatives to detention before trial takes place and even after sentencing.
- b. Faster disposal of cases involving undertrials
- c. rehabilitation program for those involved in minor crimes
- d. adopting long term measures to reduce recidivism, are some of the strategies suggested by the UN.

**Let's wait for changes.**

CA17. Draft Data Empowerment and Protection Architecture: NITI Aayog

Link: [https://niti.gov.in/sites/default/files/2020-09/DEPA-Book\\_0.pdf](https://niti.gov.in/sites/default/files/2020-09/DEPA-Book_0.pdf)

**Now, since it is a draft, just know basics about this. Don't go in unnecessary details.**

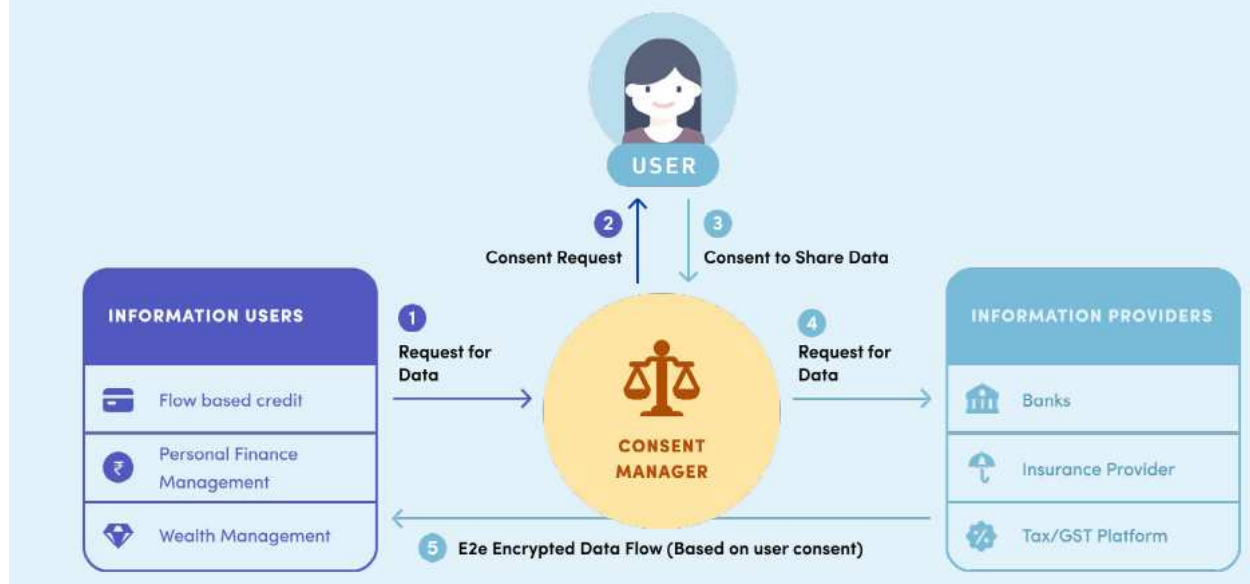
Recently, the NITI Aayog has released draft **Data Empowerment and Protection Architecture (DEPA)** which aims to promote greater user control on data sharing.

**Introduction is very important:**

In an evolving and fast paced digital landscape, headlines world-over have squarely placed data protection, privacy, and unauthorised data sharing or misuse in the limelight. Yet this lens is incomplete. In India, we not only need stronger data protection, but also data empowerment: everyday Indians need control over their own personal data to improve their lives. They should be able to leverage their digital history to access growth opportunities offered by different institutions. Imagine if a small business could use business invoices submitted to GST to digitally prove capacity to repay a working capital loan, and thus access cheaper credit.

With the Data Empowerment and Protection Architecture, India will be taking a historic step towards empowering individuals with control over their personal data, by operationalising an evolvable regulatory, institutional, and technology design for secure data sharing. Just as

## The Data Empowerment and Protection Architecture



Implementation: RBI, SEBI, IRDAI, PFRDA and the Ministry of Finance will implement this model.

DEPA is going **live in the financial sector** in 2020 under the joint leadership of the Ministry of Finance, RBI, PFRDA, IRDAI, and SEBI.

### Application of DEPA

#### Financial sector:

- Using DEPA, individuals and Micro, Small and Medium Enterprises (MSMEs) can use their digital footprints to access not just affordable loans, but also insurance, savings, and better financial management products.
- The framework is expected to become functional for the financial sector starting fall 2020.
- It will help in greater financial inclusion and economic growth.

#### Flow based lending:

If portability and control of data could allow an MSME owner to digitally share proof of the business' regular tax (GST) payments or receivables invoices easily, **a bank could design and offer working capital loans based on demonstrated ability to repay** (known as flow based lending) rather than only offering bank loans backed by assets or collateral.

#### Telecom Sector:



DEPA is also being launched in the telecom sector following a Telecom Regulatory Authority of India (TRAI) consultation report on privacy released in July 2018.

### Government Departments:

The first major government department to become a Government Information Provider will be **Goods and Services Tax (GST)**. In future, departments with data on individuals and MSMEs could adopt the specifications to improve the ease of doing business or create greater data portability of individual education, jobs, or transaction data.

### Healthcare:

National Health Authority which has been tasked with implementing the National Digital Health Mission, is piloting the DEPA architecture for healthcare data.

### Skilling:

The Ministry of Skill Development and Entrepreneurship is encouraging adoption of a digital skill credential that could be used to address low data portability in employment by sharing verified information on work experience or educational training.

## CA18. A new species of blind, underground ant from Goa

Link: <https://india.mongabay.com/2020/09/a-new-species-of-blind-underground-ant-from-go/>



A **new species of ant** has emerged from the leaf litter at **Netravali Wildlife Sanctuary in Goa**. This underground-dwelling species turned up as part of a statewide survey of ants in the state.

The new species, Vaibhav's Protanilla (*Protanilla flamma*) belongs to the genus *Protanilla*, a rare group of ants of which only 12 species are known worldwide. This discovery from Goa is the 13th species.

The species **Vaibhav's Protanilla is very small**, measuring just 2.5 mm in length, **yellow in colour, and is completely blind**. The ant uses just chemical signals and touch response

for navigation in their dark subterranean world. These ants are presumed to live in small-sized colonies and being exclusive predators of other smaller insects.

### Ants as ecosystem engineers:

Ants play an important role in a forest **by maintaining soil fertility, decomposition of organic matter, soil aeration, improving water percolation, and maintaining the population of other insects.** A lot of such activities are done by hypogene ants, the group to which this newly described ant belongs. *Hypogene ants are a group about which we know very less, so much so that we still do not know what all species comprise this group.*

### Importance of study:

Himender Bharti, Head of Department of Zoology and Environmental Sciences, Ant Systematics and Molecular Biology Lab, at [Punjabi University](#), Patiala, who himself has discovered many species of ants, said "It's incredible To find such a rare species is always a treat for a biologist. Such discoveries would surely add to a better understanding of evolution, ecology, and biogeography of ants."

Researcher Parag Rangnekar, who is a member of the Goa State Biodiversity Board and has discovered new species of dragonflies along with others, explains that the discovery of such species is important in a place like [Goa](#). "It is uniquely positioned at the transition between the Northern and Southern Western Ghats, he said.

Watch this: [Butterfly-Ant relationship](#). Not from exam purpose.

## CA19. International Atomic Energy Agency (IAEA)

Iran signed the nuclear deal in 2015 with the United States, Germany, France, Britain, China and Russia. Known as the Joint Comprehensive Plan of Action, or JCPOA, it allows Iran only to keep a stockpile of 202.8 kilograms (447 pounds). However, as per IAEA reports, Iran continues to increase its stockpile of enriched uranium in violation of limitations set in the deal.

### Why this oversight is necessary?

- a. The suspected work on a uranium metal disk, which could be used as a nuclear weapon component, and on neutrons—which are used to trigger a nuclear implosion—point to Iranian work on a neutron initiator for a nuclear weapons test or nuclear weapons device.
- b. Iran's stockpile of enriched uranium has grown by around 50% since February to 1,572 kilograms. That puts Iran's stockpile of the nuclear fuel far above the limit of 202.8 kilograms stipulated in the 2015 nuclear accord.
- c. With 1,000 kilograms of low-enriched uranium, Iran would likely have enough material to fuel a single bomb once the material is further enriched, a process some experts believe could take as little as three months.

## About IAEA

Now, what we will write below is the only thing you have to read about IAEA. Everything will be covered.

Question can be whether it is inter-governmental forum or non-governmental forum. So, you will say:

The **International Atomic Energy Agency** is the world's central **intergovernmental forum** for scientific and technical co-operation in the nuclear field. It works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.

The Statute of the IAEA was approved on 23 October 1956 by the Conference on the Statute of the International Atomic Energy Agency, which was held at the Headquarters of the United Nations. It came into force on 29 July 1957.

The IAEA was created in 1957 in response to the deep fears and expectations generated by the discoveries and diverse uses of nuclear technology. **The Agency's genesis was U.S. President Eisenhower's "Atoms for Peace" address to the General Assembly of the United Nations on 8 December 1953.**

## Function of this Agency:

The Agency was set up as the world's "Atoms for Peace" organization within the United Nations family. From the beginning, it was given the mandate to work with its Member States and multiple partners worldwide to promote safe, secure and peaceful nuclear technologies. The objectives of the IAEA's dual mission – to promote and control the Atom – are defined in Article II of the IAEA Statute.

"The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose."

## Governance:

The IAEA's policy-making bodies decide on the Agency's programmes and budgets. They comprise the General Conference of all Member States and the **35-member Board of Governors.**

- a. The **General Conference consisting** of representatives of the IAEA Member States meets in a regular annual session, usually in September, to consider and approve the IAEA's budget and to decide on other issues raised by the Board of Governors.
- b. The Board examines and makes recommendations to the General Conference on the IAEA's financial statements, programme and budget. *Currently Board members: They won't ask in exam, just to bring clarity that there are 35 members as mentioned above.*

## Board Members for 2019-2020

The 35 Board Members for 2019-2020 are Argentina, Australia, Azerbaijan, Belgium, Brazil, Canada, China, Ecuador, Egypt, Estonia, France, Germany, Ghana, Greece, Hungary, India, Italy, Japan, Kuwait, Mongolia, Morocco, Niger, Nigeria, Norway, Pakistan, Panama, Paraguay, the Russian Federation, Saudi Arabia, South Africa, Sweden, Thailand, the United Kingdom of Great Britain and Northern Ireland, the United States of America and Uruguay.

**So, India is a member? Yes.**

## List of Member States

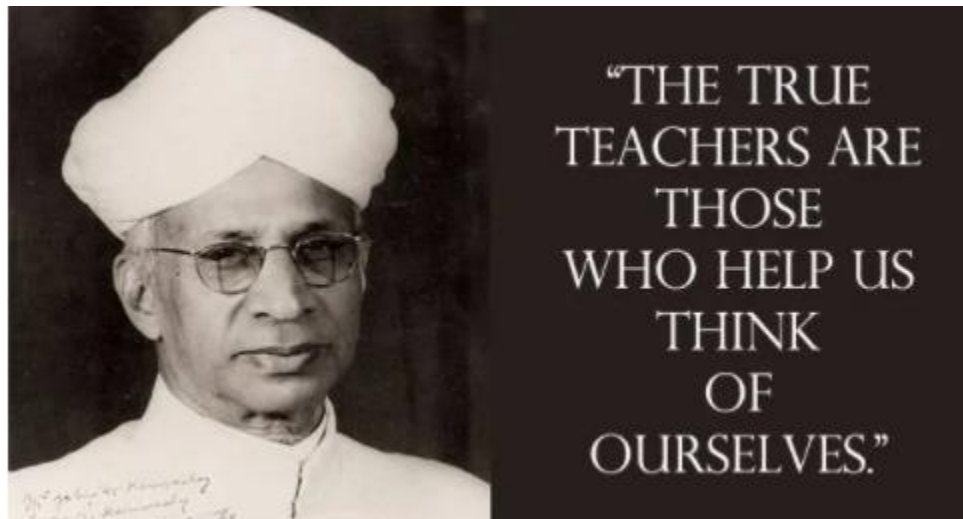
Total Membership: 171 (as of 5 February 2019)

Eighteen ratifications were required to bring the IAEA's Statute into force on 29 July 1957.

In the list below, the year denotes year of membership. The names of States are not necessarily their historical designations.

- 1957: Afghanistan, Albania, Argentina, Australia, Austria, Belarus, Brazil, Bulgaria, Canada, Cuba, Denmark, Dominican Republic, Egypt, El Salvador, Ethiopia, France, Germany, Greece, Guatemala, Haiti, Holy See, Hungary, Iceland, India, Indonesia, Israel, Italy, Japan, Republic of Korea, Monaco, Morocco, Myanmar, Netherlands, New Zealand, Norway, Pakistan, Paraguay, Peru, Poland, Portugal, Romania, Russian Federation, Socialist Federal Rep. of Yugoslavia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Tunisia, Turkey, Ukraine, United Kingdom, United States, Venezuela, Viet Nam

## CA20. About Dr Sarvepalli Radhakrishnan



- a. He was born on September 5, 1888 in Thiruthani, Tamil Nadu.
- b. He was India's first Vice President and second President.

### His Philosophy and Literary works:

- a. His book, 'The Philosophy of Rabindranath Tagore' attracted global attention to Indian philosophy.
- b. His philosophy was grounded in Advaita Vedanta.
- c. He defended Hinduism against "uninformed Western criticism" and played a major role in the formation of contemporary Hindu identity.
- d. His other works include Indian Philosophy, (1923-27), The Philosophy of the Upanishads (1924), An Idealist View of Life (1932), Eastern Religions and Western Thought (1939), and East and West: Some Reflections (1955).

### Positions held, Awards and honours:

- a. He was awarded the **Bharat Ratna**, India's highest civilian award, in 1954.
- b. He received a knighthood in 1931 and honorary membership of the British Royal Order of Merit in 1963.
- c. In 1930, he was appointed Haskell lecturer in Comparative Religion at the University of Chicago.
- d. He won the **Templeton Prize in 1975**, for promoting the notion of "a universal reality of God that embraced love and wisdom for all people". He donated all the award money to Oxford University
- e. Oxford University, in the memory of the loving teacher of India, set up a scholarship by his name, known as "**Radhakrishnan Chevening Scholarships**"
- f. In 1939, Radhakrishnan served as the Vice Chancellor of **Banaras Hindu University**



- g. After independence, Sarvepalli Radhakrishnan **represented India at the United Nations Educational, Social and Cultural Organisation (UNESCO)** and later, he also served as the **Ambassador of India to the Soviet Union.**

### CA21. Business Reform Action Plan (BRAP) ranking of states

Link: <https://www.hindustantimes.com/india-news/ap-tops-the-list-of-states-in-business-reforms-action-plan-brap-telangana-on-third-spot/story-nL6ylra8zdITH007ZrsJBJ.html>

India announced the **4th edition** of Business Reform Action Plan (BRAP) ranking of states. **So, this is not first edition remember this.** The ranking is based on the implementation of the business reform action plan 2019 by States and UTs. Andhra Pradesh has bagged the first rank among all the states in the country in the state business reforms action plan-2019 (BRAP-2019), representing ease of doing business for Atmanirbhar Bharat.

- a. Till date, State Rankings have been released for the years 2015, 2016 and 2017-18.
- b. The **DPIIT in collaboration with the World Bank** conducts an annual reform exercise for all States/UTs under the Business Reform Action Plan (BRAP).
- c. **The Business Reform Action Plan 2019 includes 180 reform points** covering 12 business regulatory areas such as Access to Information, Single Window System, Labour, Environment, etc.
- d. The larger objective of attracting investments and increasing Ease of Doing Business in each State was sought to be achieved by introducing an element of healthy competition through a system of ranking states based on their performance in the implementation of Business Reform Action Plan.
- e. **The ranking this time gives full weightage to the feedback from over thirty thousand respondents at the ground level**, who gave their opinion about the effectiveness of the reforms.
- f. **State rankings will help attract investments, foster healthy competition and increase Ease of Doing Business in each State.**

**Ranking:**

S. No.	State/UT	Rank 2019
1	Andhra Pradesh	1
2	Uttar Pradesh	2
3	Telangana	3
4	Madhya Pradesh	4
5	Jharkhand	5
6	Chhattisgarh	6
7	Himachal Pradesh	7
8	Rajasthan	8
9	West Bengal	9
10	Gujarat	10
11	Uttarakhand	11
12	Delhi	12
13	Maharashtra	13
14	Tamil Nadu	14
15	Lakshadweep	15
16	Haryana	16
17	Karnataka	17
18	Daman and Diu	18
19	Punjab	19

S. No.	State/UT	Rank 2019
18	Daman and Diu	18
19	Punjab	19
20	Assam	20
21	Jammu and Kashmir	21
22	Andaman & Nicobar	22
23	Dadra & N. Haveli	23
24	Goa	24
25	Mizoram	25
26	Bihar	26
27	Puducherry	27
28	Kerala	28
29	Arunachal Pradesh	29
30	Chandigarh	29
31	Manipur	29
32	Meghalaya	29
33	Nagaland	29
34	Odisha	29
35	Sikkim	29
36	Tripura	29

Since ranking has been announced recently by the Department of Industrial Promotion and Internal Trade (DPIIT), **we will see DPIIT:**



## Department for Promotion of Industry and Internal Trade

Department for Promotion of Industry and Internal Trade was established in the year 1995, and in the year 2000 Department of Industrial Development was merged with it. It is working under the Ministry of Commerce and Industry, Government of India. This department is responsible for formulation and implementation of promotional and developmental measures for growth of the industrial sector, keeping in view the national priorities and socio-economic objectives.

### CA22. Low ozone found over Brahmaputra river valley

Link: <https://www.hindustantimes.com/environment/air-pollution-low-ozone-layer-found-over-brahmaputra-river-valley/story-GRC0DyHjIUXvZPoTZwggwJ.html>

**The only prelims question which can appear in exam from here is:**

*Recent study over valley in India suggested low concentration of ozone as compared to other regions. Which region has been talked about? Its **Brahmaputra Valley**.*

**Scientists at the Aryabhata Research Institute of Observational Sciences (ARIES), Nainital** an autonomous research institute under the Department of Science and Technology (DST) Government of India have evaluated the **near-surface ozone in the Brahmaputra**

**River Valley (BRV) and found a relatively low concentration of Ozone over Guwahati compared to the other urban locations in India.**

**What is the normal case?**

Tropospheric, or ground-level ozone, is created by chemical reactions between oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC). **It usually increases** when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight, impacting human health.

The study also assessed seasonal, day of week, and characteristics of ozone to identify the emission source of ozone and its precursors, especially methane (CH<sub>4</sub>) and NMHCs, along with studying the relationships between the meteorological parameters, ozone and its precursors in a tropical setting.

**Reasons cited for such different condition over Brahmaputra:**

The examination of nitric oxide, nitrogen dioxide, and ozone concentrations in this study suggested **that this site is well influenced by local sources such as adjacent major national highway. During the daylight hours, the site is in or nearly in a photo-stationary state, indicating a low impact of organic species on the ozone concentrations.**

*Their present work has been published recently in the journal 'Atmospheric Pollution Research'.*

CA23. Kamath Committee's parameters accepted

Link: <https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11961&Mode=0>



The **Reserve Bank had, on August 7, 2020, announced the constitution of an Expert Committee under the chairmanship of Shri K.V. Kamath to make recommendations on the required financial parameters to be factored in the resolution plans under the 'Resolution Framework for Covid19-related Stress' along with sector specific benchmark ranges for such parameters.**

The Committee has since submitted its report to the Reserve Bank on September 4, 2020. The recommendations of the **Committee have been broadly accepted by the Reserve Bank.**

**Recommendations:** *Very tough recommendations. You can skip too if you are not able to understand for now. But read once.*

**Before reading recommendations, read this: These definitions you will see once. Difficult too. Basic idea of terms. No worries.**

Key Ratio	Definition
Total Outside Liabilities / Adjusted Tangible Net Worth (TOL/ATNW)	Addition of long-term debt, short term debt, current liabilities and provisions along with deferred tax liability divided by tangible net worth net of the investments and loans in the group and outside entities.
Total Debt / EBITDA	Addition of short term and long-term debt divided by addition of profit before tax, interest and finance charges along with depreciation and amortisation.
Current Ratio	Current assets divided by current liabilities
Debt Service Coverage Ratio (DSCR)	For the relevant year addition of net cash accruals along with interest and finance charges divided by addition of current portion of long term debt with interest and finance charges.
Average Debt Service Coverage Ratio (ADSCR)	Over the period of the loan addition of net cash accruals along with interest and finance charges divided by addition of current portion of long term debt with interest and finance charges.

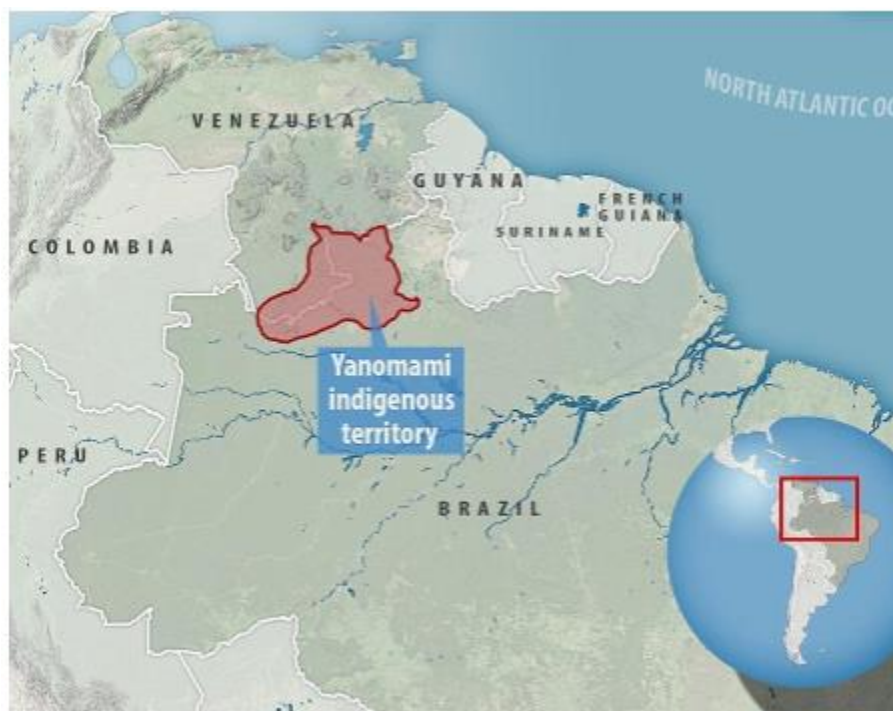
- The committee has recommended financial ratios for 26 sectors, which could be factored by lending institutions while finalizing a resolution plan for a borrower.
- RBI also issued a circular specifying five specific financial ratios and the sector-specific thresholds for each ratio in respect of 26 sectors to be taken into account while finalizing the resolution plans.
- These five ratios are: **Total outside liabilities/adjusted tangible net worth (TOL/ATNW), total debt/EBITDA, current ratio, debt service coverage ratio (DSCR), average debt service coverage ratio (ADSCR).**
- The current ratio and DSCR in all cases shall be 1.0 and above, and ADSCR shall be 1.2 and above, the central bank specified.
- While these ratios are intended as floors or ceilings, as the case may be, the resolution plans should take into account the pre-Covid-19 operating and financial performance of the borrower and impact of Covid-19 on its operating and financial performance at the time of finalizing the resolution plan, to assess the cash flows in subsequent years, while stipulating appropriate ratios in each case.
- It added that lending institutions are free to consider other financial parameters as well while finalizing the resolution assumptions in respect of eligible borrowers apart from the prescribed mandatory key ratios and sector-specific thresholds.
- RBI said that given the differential impact of the pandemic on various sectors/entities, the lending institutions may adopt a graded approach depending on the severity of the impact on the borrowers, while preparing or implementing the resolution plan.
- Such graded approach may also entail classification of the impact on the borrowers into mild, moderate and severe, as recommended by the committee.

## CA24. Yanomami Tribe of South America

Link: <https://indianexpress.com/article/explained/yanomami-blood-gold-explained-6583794/#:~:text=From%20the%20remote%20rainforests%20of,the%20cost%20of%20indigenous%20blood.&text=Buying%20Blood%20Gold%20is%20not%20good.>

**Name of Tribe and Where such incident has taken place. These two things become important.**

**The Yanomami tribe** has launched a global campaign to expel 20,000 gold miners from their land amid the coronavirus pandemic. The Yanomami Park covers 37,000 square miles in the Brazilian Amazon on the Venezuelan border; it is inhabited by 27,000 Yanomami. **Soaring gold prices have resulted in a massive ongoing invasion** of the indigenous territory by gold miners who are well supported with monetary backing, heavy equipment and aircraft.







MONGABAY

© mapbox. Basemap images from February 2020. Basemap by Planet, © Mapbox, © OpenStreetMap

*This satellite image shows clearly the extent of the environmental damage caused by mining beside the Uraricoera River. The conflict between miners and indigenous people in June resulting in the death of two Yanomami occurred in this region. Image by Planet Labs.*

## CA25. National Guidance for Plastic Pollution Hot spotting and Shaping Action

Link: <https://www.unenvironment.org/resources/report/national-guidance-plastic-pollution-hotspotting-and-shaping-action#:~:text=The%20'National%20Guidance%20for%20Plastic,prioritising%20actions%20once%20these%20hotspots>

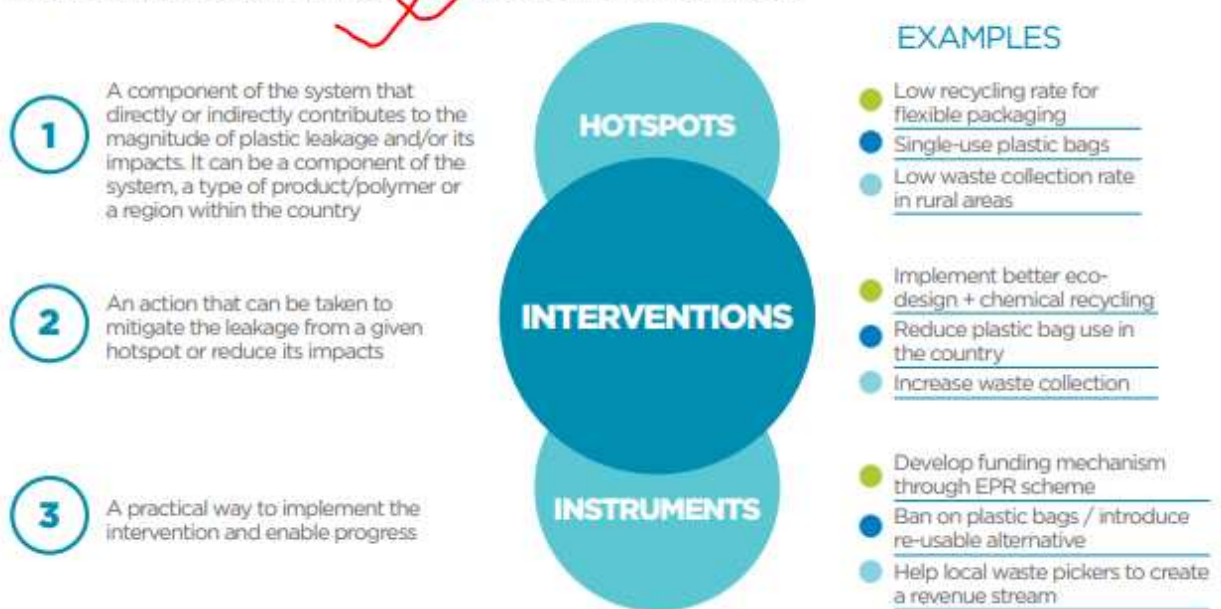
This report was somewhere in July 2020. Covering it today as we have missed it.

**Just remember the name of two organizations involved and two images below.**

Plastic pollution is a key environmental challenge that has received significant public attention in recent years. While it is often attributed to a “take-make-dispose” economic model, plastic leakage is a complex issue with multiple sources and actors involved. Addressing this challenge requires all stakeholders joining forces to intervene at various levels.

Co-developed by the **United Nations Environment Programme (UNEP)** and the **International Union for Conservation of Nature (IUCN)**, the *National Guidance for Plastic Pollution Hotspotting and Shaping Action* contributes to filling this gap. The Guidance provides a methodological framework and practical tools applicable at different geographical scales.

## Relationship between hotspots, interventions and instruments



The three key stages of the Guidance (Hotspots/Interventions/Instruments), comprised of nine modules split into technical and strategic streams



## CA26. Moplah rioters' not freedom fighters

Link: <https://www.thehindu.com/news/cities/Kochi/moplah-rioters-not-freedom-fighters-report/article32537886.ece?homepage=true>

### What's the issue?

In the 'Dictionary of Martyrs', published by the Union Ministry of Culture in collaboration with the Indian Council of Historical Research, Variankunnath Kunhamad Haji and Ali Musliyar, the chief architects of the Moplah Massacre, **were deemed to be martyrs**. The book was published in 2019. However, a report by the ICHR-constituted committee **has sought the removal of names** of 387 'Moplah rioters' (Including leaders Ali Musliyar and Variamkunnath Ahmad Haji) from the list of martyrs.

The Indian Council of Historical Research (ICHR) is an autonomous body of the Ministry of Education (Earlier called Ministry of Human Resource Development). The body has provided financial assistance to historians and scholars through fellowships, grants, and symposia.

### Why?

The report describes Haji as the “notorious Moplah Riot leader” and a “hardcore criminal,” who “killed innumerable innocent Hindu men, women, and children during the 1921 Moplah Riot, and deposited their bodies in a well, locally known as Thoovoor Kinar”. It also noted that almost all the Moplah outrages were communal. They were against Hindu society and done out of sheer intolerance. **Thus, their names should be deleted.**

### Mopillah Rebellion

**The Mapilla rebellion or Moplah Rebellion (Moplah Riots) of 1921 was the culmination of a series of riots by Moplahs (Muslims of Malabar) in the 19th and early 20th centuries against the British and the Hindu landlords in Malabar (Northern Kerala).**

### CA27. Ground water in India

Link: <https://science.thewire.in/environment/india-groundwater-extraction-replenishment-ngt-cgwa-industrial-growth-sustainability/>

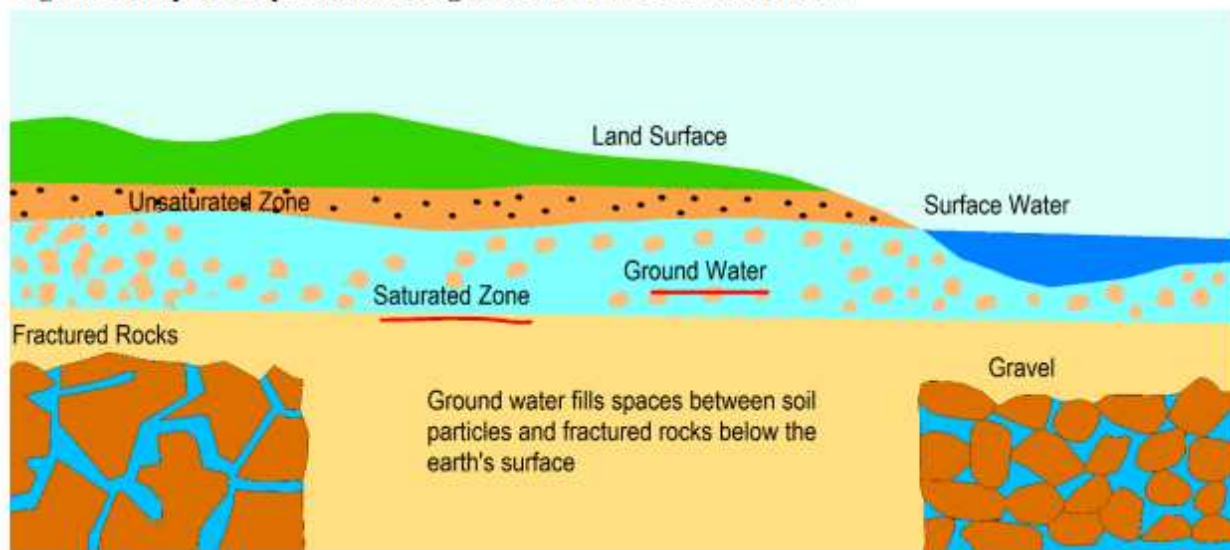


## Overview of ground water in India

### Introduction

Ground water is the water that seeps through rocks and soil and is stored below the ground. The rocks in which ground water is stored are called aquifers. Aquifers are typically made up of gravel, sand, sandstone or limestone. Water moves through these rocks because they have large connected spaces that make them permeable. The area where water fills the aquifer is called the saturated zone. The depth from the surface at which ground water is found is called the water table. The water table can be as shallow as a foot below the ground or it can be a few hundred meters deep. Heavy rains can cause the water table to rise and conversely, continuous extraction of ground water can cause the level to fall. Figure 1 illustrates the major definitions used in the context of groundwater.

**Figure 1: Graphical representation of ground water and associated terms**



### Major central level water institutions responsible for ground water management

#### Central Water Commission

- Central Water Commission is a premier Technical Organization of India in the field of Water Resources and is presently functioning as an attached office of the **Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Government of India.**
- The Commission is entrusted with the general responsibilities of *initiating, coordinating and furthering in consultation of the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Water Power Development.*
- It also undertakes the investigations, construction and execution of any such schemes as required.
- Central Water Commission CWC is headed by a Chairman, with the status of Ex-Officio Secretary to the Government of India.**



## Central Ground Water Board

- a. Central Ground Water Board (CGWB), is a multi-disciplinary scientific organization of the **Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India.**
- b. The mandate of Central Ground Water Board is to "*Develop and disseminate technologies and monitor and implement national policies for the scientific and sustainable development and management of India's ground water resources, including their exploration, assessment, conservation, augmentation, protection from pollution, and distribution, based on principles of economic and ecological efficiency and equity*".

## Central Ground Water Authority

Central Ground Water Authority has been constituted under Section 3 (3) of the Environment (Protection) Act, 1986 to regulate and control development and management of ground water resources in the country.

(3) The Central Government may, if it considers it necessary or expedient so to do for the purposes of this Act, by order, published in the Official Gazette, constitute an authority or authorities by such name or names as may be specified in the order for the purpose of exercising and performing such of the powers and functions (including the power to issue directions under section 5) of the Central Government under this Act and for taking measures with respect to such of the matters referred to in sub-section (2) as may be mentioned in the order and subject to the supervision and control of the Central Government and the provisions of such order, such authority or authorities may exercise the powers or perform the functions or take the measures so mentioned in the order as if such authority or authorities had been empowered by this Act to exercise those powers or perform those functions or take such measures.

The Authority has been conferred with the following powers:

- a. Exercise of powers under section 5 of the Environment (Protection) Act, 1986 for issuing directions and taking such measures in respect of all the matters referred to in sub-section (2) of section 3 of the said Act. **Section 5 is given below.**

**5. Power to give directions.**—Notwithstanding anything contained in any other law but subject to the provisions of this Act, the Central Government may, in the exercise of its powers and performance of its functions under this Act, issue directions in writing to any person, officer or any authority and such person, officer or authority shall be bound to comply with such directions.

*Explanation.*—For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct—

- (a) the closure, prohibition or regulation of any industry, operation or process; or
- (b) stoppage or regulation of the supply of electricity or water or any other service.

- b. To regulate and control, management and development of ground water in the country and to issue necessary regulatory directions for the purpose.
- c. The Central Ground Water Authority is regulating withdrawal of ground water by industries/ projects.

### Central Pollution Control Board

The Central Pollution Control Board (CPCB), statutory organisation, was constituted in September 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Further, CPCB was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.

### Read bot history of CPCB. It is an important body.

The Water (Prevention and Control of Pollution) Act, 1974 has been enacted for the purpose of prevention and control of water pollution. "It came into being at a time when the country had already prepared itself for industrialization and urbanization. The need was keenly felt for the treatment of domestic and industrial effluents, before they were discharged into rivers and streams." The availability of clean drinking water was becoming a rare phenomenon due to unrestricted and ever growing pollution of streams, rivers and other water sources. It was therefore, expedient to provide for the prevention and control of water pollution and the maintaining or restoring of the wholesomeness of water. In order to achieve this object the Water (Prevention and Control of Pollution) Act, 1974 provides for the establishment of Central and State Pollution Control Boards and enumerates the powers and functions of such Boards.<sup>1</sup>

The Water (Prevention and Control of Pollution) Act, 1974 represents India's first real attempt to comprehensively deal with an environmental issue. Water is a subject mentioned in Entry 17, List II of the Seventh Schedule, i.e. a State subject. Thus the Union Government had to enact the Water (Prevention and Control of Pollution) Act, 1974 under the provisions of article 252(1) of the Constitution, which permits the Central Government to enact laws on subjects exclusively within state domain, if it can garner consent from two or more states.<sup>2</sup>

The ~~Water~~ (Prevention and Control of Pollution) Act, 1974 states:

*An act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.*

Chapter II of the Water (Prevention and Control of Pollution) Act, 1974 deals with the constitution of Central board, State Boards and their functions. According to Section 3 of the Water (Prevention and Control of Pollution) Act, 1974, **the Central Board is constituted by the Central Government and is called Central Pollution Control Board.**

According to Section 4, the State Boards shall be constituted by the State Government and it shall be called as **State Pollution Control Board.**

**According to Section 4(4) of the Water (Prevention and Control of Pollution) Act, 1974,** no State Board shall be constituted for a Union Territory. In relation to a Union Territory, the Central Board shall exercise the powers and perform the functions of a State Board for the Union Territory.

~~(4)~~ Notwithstanding anything contained in this section, no State Board shall be constituted for a Union territory and in relation to a Union territory, the Central Board shall exercise the powers and perform the functions of a State Board for that Union territory:

Provided that in relation to any Union territory the Central Board may delegate all or any of its powers and functions under this sub-section to such person or body of persons as the Central Government may specify.

### **Powers of The Central Pollution Control Board**

The Central Pollution Control Board is vested with the following powers:

- a. The Central Pollution Control Board is empowered by Section 18 of the Water (Prevention and Control of Pollution) Act, 1974 **to give directions to the State Pollution Control Boards.**
- b. The Central Pollution Control Board has powers **to perform any of the functions of the State Pollution Control Board in case of non-compliance** of any directions given by the Central Pollution Control Board.
- c. The Central Pollution Control Board is empowered to issue directions under section 33A of Water (Prevention and Control of Pollution) Act, 1974 **to direct the closure,**



**prohibition or regulation of any industry, operation or process or the stoppage or regulation of supply of electricity, water or any other service.**

### **Functions of Central Pollution Control Board:**

According to section 16 of the Water (Prevention and Control of Pollution) Act, 1974, the Central Board has been assigned to discharge the functions as follows:

#### **1. Advise the Central Government**

The Central Pollution Control Board can advise the Central Government on any matter concerning the prevention and control of water pollution.

#### **2. Co-Ordination with State Board**

Central Pollution Control Board is to Co-ordinate the activities of the State Boards and resolve dispute among them.

#### **3. Technical Assistance/Guidance to State Boards**

Central Pollution Control Board is to provide technical assistance and guidance to the State Boards, carry out and sponsor investigations and research relating to problem of water pollution and prevention, control or abatement of water pollution.

#### **4. Training Programme**

Central Pollution Control Board is to plan and organize the training of persons engaged or to be engaged in programmes for the prevention, control or abatement of water pollution.

#### **5. Organizing Comprehensive Programme**

Central Pollution Control Board is to organize through mass media a comprehensive programme regarding the prevention and control of water pollution.

#### **6. Functions as State Board**

By the Amending Act, 1988, the Central Board can perform such of the functions of any State Board as may be specified in an order made under section 18(2) of the Water (Prevention and Control of Pollution) Act, 1974 i.e., “power to give directions”-“every State Board shall be bound by such directions in writing as the Central Government or the State Government may give to it.

#### **7. Publication of Statistical/Technical Data**

Central Pollution Control Board is to Collect, compile and publish technical and statistical relating to water pollution and the measures devised for its effective prevention and control and prepare manuals, codes or guides relating to treatment and disposal of sewage and trade effluents and disseminate information connected therewith.

#### **8. Laying Down Standard for A Stream/Well**

Central Pollution Control Board is to lay down, modify or annul, in consultation with the State Government concerned the standards for a stream or well.

### 9. Execution of Programme at National Level

Central Pollution Control Board is to plan and cause to be executed by a nationwide programme for the prevention, control or abatement of water pollution.

### Status and Role of Household savings in Indian Economy

The Household sector is the major contributor towards the gross savings in the Indian economy, and thus is the major supplier of financial resources for investments. Hence the dynamics of assets and liabilities of households can offer insights into the prevailing situation of the Indian economy.

In this story, we take a look at the trends in financial savings of the household sector based on RBI annual reports and other relevant data, to ascertain the trajectory of India's economic growth.

## CA28. Increase in the Net Financial Savings of Household sector in 2019-20

Link:

<https://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/0RBIAR201920DA64F97C6E7B48848E6DEA06D531BADF.PDF#page=42>

**Table II.1.2: Financial Saving of the Household Sector**

(Per cent of GNDI)

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20#
1	2	3	4	5	6	7	8	9	10
<b>A. Gross financial saving</b>	<b>10.4</b>	<b>10.5</b>	<b>10.4</b>	<b>9.9</b>	<b>10.7</b>	<b>10.4</b>	<b>11.9</b>	<b>10.4</b>	<b>10.5</b>
of which:									
1. Currency	1.2	1.1	0.9	1.0	1.4	-2.1	2.8	1.5	1.4
2. Deposits	6.0	6.0	5.8	4.8	4.6	6.3	3.1	4.1	3.6
3. Shares and Debentures	0.2	0.2	0.2	0.2	0.2	1.1	1.0	0.4	0.4
4. Claims on Government	-0.2	-0.1	0.2	0.0	0.5	0.7	0.9	1.0	0.0
5. Insurance Funds	2.2	1.8	1.8	2.4	1.9	2.3	2.0	1.3	1.7
6. Provident and Pension funds	1.1	1.5	1.5	1.5	2.1	2.1	2.1	2.1	2.1
<b>B. Financial Liabilities</b>	<b>3.2</b>	<b>3.2</b>	<b>3.1</b>	<b>3.0</b>	<b>2.7</b>	<b>3.0</b>	<b>4.3</b>	<b>4.0</b>	<b>2.9</b>
<b>C. Net Financial Saving (A-B)</b>	<b>7.2</b>	<b>7.2</b>	<b>7.2</b>	<b>6.9</b>	<b>7.9</b>	<b>7.3</b>	<b>7.6</b>	<b>6.4</b>	<b>7.6</b>

GNDI: Gross National Disposable Income.

#: As per the preliminary estimate of the Reserve Bank. The NSO will release the financial saving of the household sector on January 29, 2021 based on the latest information, as part of the 'First Revised Estimate of National Income, Consumption Expenditure, Saving and Capital Formation for 2019-20'.

Note: Figures may not add up to total due to rounding off.

Source: NSO.



As per [data provided in RBI](#) Annual Reports, **the Net Financial Savings (NFS) in 2019-20 as per preliminary estimates is 7.6%** of the Gross National Disposable Income (GNDI). This is a substantial increase compared to previous financial year, where in Household NFS was 6.4% of GNDI.

- A. In fact, **the savings in 2018-19 was the lowest** recorded during in the current GDP series (i.e. from 2011-12). The earlier lowest was in 2014-15 when Household NFS was 6.8% of GNDI.
- B. The preliminary estimate for **2019-20 at 7.6%** will place it at par with 2017-18, which also happens to be the **second-best year** in terms of savings in the current GDP series after 2015-16's NFS at **7.9% of GNDI**.

### House Holds' Net Financial Savings

House Holds' Net Financial Savings is derived as a difference of the Household **Gross Financial Savings (GFS)** during the year and Household **Gross Financial Liabilities**. Hence the NFS is the result of two dynamics i.e. Gross savings and Gross liabilities.

As per RBI's data, Household GFS for 2019-20 is **10.5% of GNDI**. **This is a marginal improvement over last year when it was 10.4 % of GNDI**. See below

**Table II.1.2: Financial Saving of the Household Sector** (Per cent of GNDI)

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20#
1	2	3	4	5	6	7	8	9	10
<b>A. Gross financial saving</b>	<b>10.4</b>	<b>10.5</b>	<b>10.4</b>	<b>9.9</b>	<b>10.7</b>	<b>10.4</b>	<b>11.9</b>	<b>10.4</b>	<b>10.5</b>
of which:									
1. Currency	1.2	1.1	0.9	1.0	1.4	-2.1	2.8	1.5	1.4
2. Deposits	6.0	6.0	5.8	4.8	4.6	6.3	3.1	4.1	3.6
3. Shares and Debentures	0.2	0.2	0.2	0.2	0.2	1.1	1.0	0.4	0.4
4. Claims on Government	-0.2	-0.1	0.2	0.0	0.5	0.7	0.9	1.0	0.0
5. Insurance Funds	2.2	1.8	1.8	2.4	1.9	2.3	2.0	1.3	1.7
6. Provident and Pension funds	1.1	1.5	1.5	1.5	2.1	2.1	2.1	2.1	2.1
<b>B. Financial Liabilities</b>	<b>3.2</b>	<b>3.2</b>	<b>3.1</b>	<b>3.0</b>	<b>2.7</b>	<b>3.0</b>	<b>4.3</b>	<b>4.0</b>	<b>2.9</b>
<b>C. Net Financial Saving (A-B)</b>	<b>7.2</b>	<b>7.2</b>	<b>7.2</b>	<b>6.9</b>	<b>7.9</b>	<b>7.3</b>	<b>7.6</b>	<b>6.4</b>	<b>7.6</b>

GNDI: Gross National Disposable Income.  
 #: As per the preliminary estimate of the Reserve Bank. The NSO will release the financial saving of the household sector on January 29, 2021 based on the latest information, as part of the 'First Revised Estimate of National Income, Consumption Expenditure, Saving and Capital Formation for 2019-20'.  
 Note: Figures may not add up to total due to rounding off.  
 Source: NSO.

**The increase in NFS is due to the fall in Household Financial Liabilities. See above.**

As the data indicates, the increase in Household Net Financial Savings is not due to a relative increase in the Gross financial savings for 2019-20. The increase is the result of a major shift in the other factor i.e. Household Financial liabilities. **A sharp fall from 4 to 2.9 is observed.**

**What does decline in financial liabilities mean?**

According to RBI, a significant decline in the share of borrowings from the banking sector in total liabilities during 2019-20 reflected the economic slowdown and risk aversion of banks. Economists say that since there is an economic slowdown and income levels of individuals are either going down or not increasing, the financial sector will practice higher caution in extending loan and that is what is leading to a decline in financial liabilities of households. It is reflective of a slowdown in the economy.

### Conclusion:

The recently released GDP figures for Q1 of 2020-21 indicate a severe contraction of the economy.



In this context, **the impact on COVID-19 on the household sector is yet to be seen.** With the fall in incomes, there could be a fall in the financial assets being created. We could also witness a scenario where in people are forced to go for borrowings in view of the COVID-19 related hardships. Decrease in savings and increase in liabilities **could result in a fall in net financial savings for 2020-21.**

CA29. First World Solar Technology Summit

Link: <https://www.downtoearth.org.in/news/energy/four-agreements-signed-at-meet-organised-by-international-solar-alliance-73274>

It's the first summit, so we have to give respect. Learn.



**The International Solar Alliance hosted the First World Solar Technology Summit on a virtual platform, with a focus on new Technologies and Innovations** in the field of Solar, on 8 September 2020. The Hon'ble Prime Minister of India Shri Narendra Modi inaugurated the First World Solar Technology Summit. **The Federation of Indian Chambers of Commerce and Industry (FICCI), as the convenor of ISA Global Leadership Task Force on Innovation**, worked with the International Solar Alliance (ISA) in organizing the summit.

**The conference saw ISA signing four agreements**, signaling its intent to focus on key areas of the solar energy sector.

- a. A partnership agreement between the Union Ministry of Renewable Energy, the World Bank and ISA on One World, One Sun, One Grid.
- b. A partnership between the Global Green Growth Institute and ISA on the promotion of a million solar pumps.
- c. A Memorandum of Understanding with the International Institute for Refrigeration, Paris and ISA.
- d. Partnership agreements on the implementation of 47 projects between ISA and NTPC.

### Objective of Summit

The objective of the ISA First World Solar Technology Summit (WSTS) will be to bring the spotlight on state-of-the-art technologies as well as next-generation technologies which will provide impetus to the growth and propagation of Solar Energy globally. The Summit will provide a global platform for stakeholders to engage on innovations in technology that will catapult the world towards a high Solar growth trajectory.

### About International Solar Alliance:

### When it was launched? Never forget.

The launch of the International Solar Alliance (ISA) was announced by H.E. Mr. Narendra Modi, the Hon'ble Prime Minister of India and H.E. Mr. Francois Hollande, former Hon'ble President of France on **30th November 2015, at the 21st session of United Nations Climate Change Conference of the Parties (COP-21) in Paris, France.**

Few points: **UPSC takes statements directly from website, so it's important to read website once.**

- a. The International Solar Alliance (ISA) was conceived **as a coalition of solar-resource-rich countries (which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn)** to address their special energy needs.
- b. The ISA will provide a dedicated platform for cooperation among solar-resource-rich countries, through which the global community, including governments, bilateral and multilateral organizations, corporates, industry, and other stakeholders, can contribute to help achieve the common goal of increasing the use and quality of solar energy in meeting energy needs of prospective ISA member countries in a safe, convenient, affordable, equitable and sustainable manner.
- c. **ISA will not duplicate or replicate the efforts** that others (like International Renewable Energy Agency (IRENA), Renewable Energy and Energy Efficiency Partnership (REEEP), International Energy Agency (IEA), Renewable Energy Policy Network for the 21st Century (REN21), United Nations bodies, bilateral organizations etc.) are currently engaged in, **but will establish networks and develop synergies with them and supplement their efforts in a sustainable and focused manner.**

### When it entered into force?

When the ISA Framework Agreement entered into force on **December 6th, 2017**, ISA formally became a de-jure treaty based International Intergovernmental Organization, **headquartered at Gurugram, India.**

### Membership:

As on 30 July 2020, 87 Countries have signed the Framework Agreement of the ISA and of these **68 have deposited their instruments of ratification.**

**Only members between Tropic of Cancer and Capricorn can join ISA? No, all members of the United Nations can join the International Solar Alliance (ISA)** under the recently amended ISA Framework Agreement. See below.

## Universalization of the Membership of the International Solar Alliance (ISA)

July 31, 2020

2. In pursuance of the vision of the Hon'ble Prime Minister of India for achieving the universalization of the membership of the International Solar Alliance beyond the Tropics, the First General Assembly of the ISA, held on 3 October 2018, adopted the amendment of the Framework Agreement on the establishment of the International Solar Alliance to expand the scope of Membership of the ISA to all Member States of the United Nations.

3. After the necessary ratifications/ approvals/ acceptances were obtained from the requisite number of ISA Member countries as mandated by the Framework Agreement of the ISA, the said amendment has entered into force on 15 July 2020. The coming into force of the amendment of the ISA Framework Agreement will now allow all the Member States of the United Nations to join the International Solar Alliance, including those beyond the Tropics.

### Solar Energy related Schemes:

- a. Solar energy has taken a central place in India's National Action Plan on Climate Change with the National Solar Mission as one of the key Missions.
  - **National Solar Mission (NSM)** was launched on 11th January 2010 and is in line with India's Intended Nationally Determined Contributions (INDCs).
  - Its objective is to establish India as a global leader in solar energy by creating the policy conditions for solar technology diffusion across the country as quickly as possible.
- b. **One Sun, One World, One Grid (OSOWOG):** India's ambitious cross-border power grid plan which seeks to transfer solar power generated in one region to feed the electricity demands of others.
- c. **KUSUM Scheme:** It aims to replace the use of diesel in the farm sector with solar energy with the target of solarization of 2.8 million irrigation pumps.
- d. **Solar Charkha Mission:** It is an enterprise driven scheme and envisages setting up of 'Solar Charkha Clusters' which will have 200 to 2042 beneficiaries. These solar charkhas are operated using solar power, keeping the environment clean and generating sustainable employment for the artisans.
- e. 750 megawatt (MW) solar project which has been inaugurated in Rewa, Madhya Pradesh.

**Enough. Can we move to next topic? Obviously.**

### CA30. India, U.S. and Israel collaborating in 5G

<https://www.thehindu.com/business/india-us-and-israel-collaborating-in-5g-tech-official/article32548545.ece>



**India, Israel and the United States** have begun collaboration in developmental area, and in next generation of emerging technologies, including a transparent, open, reliable and **secure 5G communication network**.

The branching out of this trilateral initiative in development and technological arena is a result of the people-to-people collaboration, in particular those by Indian diaspora in the US and Israel, that was initiated by Prime Minister Narendra Modi during his historic visit to Israel three years ago in July 2017, community leaders said.

A collaboration in 5G is a just tip of the iceberg and a first step, according to US Agency for International Development (USAID) Deputy Administrator Bonnie Glick.

**This much is enough for news, but we will learn about 5G also. Vey important.**

5G is the next generation of mobile broadband that will eventually replace, or at least augment, your 4G LTE connection. With 5G, you'll see exponentially faster download and upload speeds. Latency, or the time it takes devices to communicate with wireless networks, will also drastically decrease.

Unlike LTE, **5G operates on three (low-mid-high) different spectrum bands**. While this may not seem important, it will have a dramatic effect on your everyday use.

What can 5G do?

### **Improve broadband**

The shift to 5G will undoubtedly change the way we interact with technology on a day-to-day basis, but it's also an absolute necessity if we want to continue using mobile broadband. Carriers are running out of LTE capacity in many major metropolitan areas. In some cities, users are already experiencing slowdowns during busy times of the day.

**5G adds huge amounts of spectrum in bands that haven't been used for commercial broadband traffic.**

### **Autonomous vehicles**

Expect to see **autonomous vehicles rise at the same rate that 5G is deployed** across the U.S. In the future, *your vehicle will communicate with other vehicles on the road, provide information to other cars about road conditions, and offer performance information to drivers and automakers*. If a car brakes quickly up ahead, yours may learn about it immediately and preemptively brake as well, preventing a collision. This kind of vehicle-to-vehicle communication could ultimately save thousands of lives.

### Public safety and infrastructure

5G will allow cities and other municipalities to **operate more efficiently**. Utility companies will be able to easily track usage remotely, sensors can notify public works departments when drains flood or streetlights go out, and municipalities will be able to quickly and inexpensively install surveillance cameras.

### Remote device control

Since 5G has remarkably low latency, **remote control of heavy machinery will become a reality**. While the primary aim is to reduce risk in hazardous environments, it will also allow technicians with specialized skills to control machinery from anywhere in the world.

### Health care

The ultra-reliable low latency communications (URLLC) component of 5G could fundamentally **change health care**. Since URLLC reduces 5G latency even further than what you'll see with enhanced mobile broadband, a world of new possibilities opens up. Expect to see improvements in telemedicine, remote recovery, and physical therapy via AR, precision surgery, and even remote surgery in the coming years

### IoT

One of the most exciting and crucial aspects of 5G is its **effect on the Internet of Things**. While we currently have sensors that can communicate with each other, they tend to require a lot of resources and are quickly depleting LTE data capacity.

With 5G speeds and low latencies, the IoT will be powered by communications among sensors and smart devices. Compared to current smart devices on the market, these devices will require fewer resources, since huge numbers of these devices can connect to a single base station, making them much more efficient.

## CA31. China launches initiative for global data security issues

Link: <https://www.indiatoday.in/world/story/to-counter-us-china-launches-initiative-for-global-data-security-issues-1719827-2020-09-08>

China has launched an initiative to address global data security issues, **a countermove to the US "clean network"** program that is aimed at discouraging other countries from using Chinese technology.

The move comes amid a deterioration in US-China relations encompassing trade tensions and competition in telecommunications and artificial intelligence technologies, with the US accusing Chinese technology companies of threatening American national security.

"Bent on unilateral acts, a certain country keeps making groundless accusations against others in the name of 'clean' networks and used security as a pretext to prey on enterprises of other countries who have a competitive edge," Wang said, according to a transcript of his speech released by the ministry. "Such blatant acts of bullying must be opposed and rejected."

Wang said that it was important to develop international rules on data security that will "reflect the will and respect the interests of all countries through broad-based participation."

US Secretary of State Mike Pompeo last month unveiled the "Clean Network" program, saying it is aimed at protecting citizens' privacy and sensitive information from "malign actors, such as the Chinese Communist Party."

More than 30 countries and territories such as Australia and Britain are participating in that initiative, which seeks to exclude Chinese telecommunications companies like Huawei and ZTE, as well as apps, cloud service providers and undersea cables from their internet networks.

## CA32. National Mineral Policy 2019

Link: <https://india.mongabay.com/2020/09/whose-minerals-are-they-anyway/>

**You will be able to answer:**

- Regulatory framework of mining
- Provisions mentioned in NMP 2019
- Minor and Major minerals
- District Mineral Foundation
- Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)
- Concept of inter-generational equity is mentioned in which Acts/Rules? UPSC will ask like this.**

**First see regulatory framework, then we will proceed towards policy.**

India's mineral and mining sector operates under a federal structure where the powers and responsibilities for regulation of the sector are divided between the central government and the respective State governments. Management of mineral resources is the responsibility of both the central and state governments in terms of **entry 54 of the Union List (List I) and entry 23 of the State List (List II)** of the Seventh Schedule of the Constitution of India.

Further to its powers under entry 54 of the Union List, **the central government has framed the Mines & Minerals (Development and Regulation) Act 1957 (MMDR Act)**, which is the principal legislation governing the mineral sector (other than petroleum and natural gas) in India.

The MMDR Act sets out the legal framework for the development of all minerals and for the regulation of mines. **Under the MMDR Act, minerals are classified into minor minerals and major minerals.** Minor minerals include building stones, gravel, ordinary clay, ordinary sand and other minerals that the central government declares to be a minor mineral.

(e) "minor minerals" means building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette, declare to be a minor mineral;

**Minerals that cannot be categorized as minor minerals are considered to be major minerals** and include coal, manganese ore and iron ore, as well as other minerals used for industrial purposes.

### Background:

- a. **National Mineral Policy 2019 replaces the extant National Mineral Policy 2008** ("NMP 2008") which was announced in year 2008. The impetus to review NMP 2008 came about by way of a direction from the Supreme Court vide its judgment dated 02.08.2017 in Writ Petition entitled Common Cause v/s Union of India & Others.
- b. In compliance of the directions of the apex Court, **the Ministry of Mines constituted a committee on 14.08.2017 under the chairmanship of Dr. K Rajeswara Rao**, Additional Secretary, Ministry of Mines **to review NMP 2008.**
- c. The Committee had members from Central Ministries/ Departments, State Governments, Industry Associations and Subordinate offices of Ministry of Mines.
- d. The Committee also invited concerned **NGOs and Institutional Bodies** to take part in the deliberation of the Committee meetings.
- e. Based on the deliberations held at Committee meetings and stakeholders' comments/ suggestions, Committee **Report was prepared and submitted to the Ministry of Mines.**
- f. The Ministry of Mines accepted the committee Report and **finalized the National Mineral Policy 2019.**

**Government of India**  
**Ministry of Mines**  
**NATIONAL MINERAL POLICY, 2019**  
**(For non-fuel and non-coal minerals)**

**Objective: -**

The **aim of National Mineral Policy 2019** is to have a more effective, meaningful and implementable policy that brings in further transparency, better regulation and enforcement, balanced social and economic growth as well as sustainable mining practices.

**The National Mineral Policy 2019 includes provisions which will give boost to mining sector such as: Need to know this [definition](#) of RP/PL/ML before moving to points:**

There are three kinds of mineral concessions, viz Reconnaissance Permit (RP), Prospecting License (PL) and Mining Lease (ML). RP is granted for preliminary prospecting of a mineral through regional, aerial, geophysical or geochemical surveys and geological mapping. PL means a lease granted for the purpose of undertaking mining operations, and includes a sub-lease granted for such purpose. ML is granted for undertaking operations for winning any mineral.

- a. introduction of **Right of First Refusal for RP/PL holders**,
- b. **encouraging the private sector** to take up exploration,
- c. auctioning in virgin areas for composite RP cum PL cum ML on revenue share basis,
- d. encouragement of merger and acquisition of mining entities and
- e. transfer of mining leases and **creation of dedicated mineral corridors** to boost private sector mining areas.
- f. The 2019 Policy proposes to **grant status of industry to mining activity** to boost financing of mining for private sector and for acquisitions of mineral assets in other countries by private sector
- g. It also mentions **that Long-term import-export policy for mineral** will help private sector in better planning and stability in business
- h. The Policy also mentions **rationalize reserved areas given to PSUs** which have not been used and to put these areas to auction, which will give more opportunity to private sector for participation
- i. The Policy also mentions to make efforts **to harmonize taxes, levies & royalty with world benchmarks to help private sector**

Among the changes introduced in the National Mineral Policy, 2019 include the focus on **make in India initiative and Gender sensitivity in terms of the vision**. *Gender sensitivity" is the way service providers treat male or female clients in service delivery facilities and thus affects client willingness to seek services, continue to use services, and carry out the health behaviors advocated by the services.*

- a. In so far as the regulation in Minerals is concerned, **E-Governance, IT enabled systems, awareness and Information campaigns have been incorporated.**



- b. Regarding the role of state in mineral development online public portal with provision **for generating triggers at higher level in the event of delay of clearances** has been put in place.
- c. NMP 2019 aims to **attract private investment through incentives** while the efforts would be made to maintain a database of mineral resources and tenements under mining tenement systems.
- d. The new policy **focusses on use coastal waterways and inland shipping for evacuation and transportation of minerals** and encourages dedicated mineral corridors to facilitate the transportation of minerals.
- e. The utilization of the **district mineral fund for equitable development of project affected persons and areas**.
- f. NMP 2019 proposes a long-term export-import policy for the mineral sector to provide stability and as an incentive for investing in large scale commercial mining activity.
- g. The 2019 Policy **also introduces the concept of Inter-Generational Equity** that deals with the **well-being not only of the present generation but also of the generations to come** and also proposes to constitute an inter-ministerial body to institutionalize the mechanism for ensuring sustainable development in mining.

#### **We will see now, District Mineral Foundation:**

To address the **ironic inequality** of India's mining districts, where the richest lands are inhabited by some of the country's poorest and most deprived, **District Mineral Foundation (DMF)** was instituted in 2015 through an amendment under India's central mining law—the **Mines and Minerals (Development and Regulation) Act 1957 (MMDR Act)**. The law requires DMF to be developed as a Trust that would function as a non-profit body in every mining district. Here we will cover, District Mineral Foundation in detail as it is important for your Prelims Exam.

- a. The law MMDR Amendment Act (2015)—defines precisely that the DMF objective is to **'work for the interest and benefit of persons and areas affected by mining related operations**.
- b. Sections 9B (1) (2) and (3) of the MMDR Amendment Act (2015), makes it clear that **DMF should be established as a non-profit 'trust' in every mining district**. As a statutory trust, DMFs entail certain institutional obligations to function and serve its intended beneficiaries. The obligations have been particularly reviewed in terms of two key factors:
- c. **Establishment of DMF Trusts** (including elaboration on its composition and functions): In any district affected by mining-related operations, DMF should be established as a Trust through a state government notification.

- d. **Identification of beneficiaries** of the DMF Trust: For DMF Trusts, 'mining-affected people' are the beneficiaries, as defined under the state DMF Rules and PMKKKY (we will deal with this PMKKKY later in this part, nothing in it. Simply scaring you).
- e. Now comes the most important part: ***Composing of this District Mineral Foundation***. The administrative structure of the DMF Trust (as laid down by Central Government) comprises of a Governing Council and a Managing Committee.

**But the composition and Function of DMF are as per the State Government notifications. See below:**

“9B. (1) In any district affected by mining related operations, the State Government shall, by notification, establish a trust, as a non-profit body, to be called the District Mineral Foundation.

(2) The object of the District Mineral Foundation shall be to work for the interest and benefit of persons, and areas affected by mining related operations in such manner as may be prescribed by the State Government.

(3) The **composition** and functions of the District Mineral Foundation shall be such as may be prescribed by the State Government.

What was the problem?

- a. **Both Governing Council and a Managing Committee are dominated by bureaucrats and political representatives district officials.** There is practically **no representation of mining-affected people in the administrative bodies.**
- b. The state DMF Rules and the Pradhan Mantri Khanij Kshetra Kalyan Yojana (as aligned to DMF), **clearly mentions the power and role of the Gram Sabha in mining-affected areas for identification of beneficiaries**, DMF planning, and review of works and schemes. However, there is practically **no scope of representation of Gram Sabha members in the DMF body of any state.**

**Now, Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)**

Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) is a programme launched on 17 September 2015 **to provide for the welfare of areas and people affected by mining related operations.**

The Pradhan Mantri Khanij Kshetra Kalyan Yojana (**PMKKKY**) will be implemented by the District Mineral Foundations (**DMFs**) of the respective districts using the funds accruing to the DMF. The overall objective of PMKKKY scheme will be (a) to implement various developmental and welfare projects/programs in mining affected areas, and these projects/programs will be complementing the existing ongoing schemes/projects of State and Central Government; (b) to minimize/mitigate the adverse impacts, during and after mining, on the environment, health and socio-economics of people in mining districts; and (c) to ensure long-term sustainable livelihoods for the affected people in mining areas.

**Why PMKKKY was necessary, if already District Mineral Foundations (DMFs) was established to take care of mining affected people?**

AND WHEREAS the Central Government, on a careful consideration of the matter, is of the opinion that the national interest requires that all District Mineral Foundations should implement a development programme for the mining affected areas that includes a certain minimum provision for the social and infrastructure needs of the population and area, and the Central Government has, accordingly, framed the Pradhan Mantri Khanij Kshetra Kalyan Yojana to be implemented by the District Mineral Foundations from the funds accruing to them in terms of the MMDR Act, 1957.

CA33. The tigers that live in a thermal power plant

Link: <https://india.mongabay.com/2020/09/the-tigers-that-live-in-a-thermal-power-plant/>

Such questions are very important for Prelims Exam. Even you can site examples in Mains Answer writing too when you talk about Human-Animal conflict, etc.

**In October 2019, there was a similar news:**

Clearing the final hurdle in the expansion of the capacity of the Kaiga Atomic power plant in Karwar area of Karnataka, an expert wildlife panel led by the Indian government's environment minister Prakash Javadekar has **recommended wildlife clearance** to it.

The project related to setting up of pressurised heavy water reactor-based nuclear power plant with installed capacity of 1,400 megawatt (MW) comprising of two units of 700 MW each in the existing premises of 54.09 hectares at Kaiga plant located 1.30 kilometres away from the boundary of the Kali Tiger Reserve got the go-ahead in the meeting of the Standing Committee of the National Board for Wildlife (SC-NBWL) on August 29, 2019.

Nuclear Power Corporation of India Limited's (NPCIL) **Kaiga nuclear power plant** is operational in the Karwar area of Uttara Kannada district in Karnataka. In 1992, it received environmental clearance from the Ministry of Environment, Forest and Climate Change (MoEFCC) for setting up six units of 220-megawatt capacity each. At present, the units 1-4 (of 220 MW capacity each) are operational.

**Today, the powerplant is:** The **Chandrapur Super Thermal Power Station (CSTPS)** is connected to famous **Tadoba-Andhari Tiger Reserve (TATR)** through a corridor of coal mines that is thickly covered with **Prosopis plant species**.

### **Favourable conditions to live**

The Chandrapur Super Thermal Power Station (CSTPS) is connected to famous Tadoba-Andhari Tiger Reserve (TATR) through a corridor of coal mines that is thickly covered with Prosopis plant species. Adequate prey base in the form of stray cattle and wild boars, substantial tree cover and a perennial nullah passing through the CSTPS help meet all the basic needs of these resident tigers, point out experts.

### **What forest scientists say?**

While factors such as increasing number of tigers and shrinking forest areas are some of the major drivers, some behavioural changes in tigers may also be responsible for these developments, said V. S. Ramarao, Chief Conservator of Forest of Chandrapur Circle, who has recently been transferred to Yavatmal in the same capacity.

"We have observed the food habits and the living habits of tigers have changed. In the CSTPS, stray cattle and wild boars take care of food while Prosopis trees offer them cover to hide. These tigers are trying to adjust themselves in the new conditions (as there is no space for them to live in the protected areas)," he said.

CA34. Pradhan Mantri Matsya Sampada Yojana

Link: <https://indianexpress.com/article/india/eyes-on-bihar-election-pm-modi-launches-rs-20050-crore-scheme-for-fisheries-sector-6590444/>



**First read Background.** *Believe me even if you don't remember points, this introduction/background will help you lot in exam.*

## 1. **BACKGROUND**

- 1.1 Fisheries and aquaculture are an important source of food, nutrition, employment and income in India. The sector provides livelihood to more than 25 million fishers and fish farmers at the primary level and twice the number along the value chain. Fish being an affordable and rich source of animal protein, is one of the healthiest options to mitigate hunger and malnutrition.
- 1.2 Fisheries sector in India has shown impressive growth with an average annual growth rate of 10.88% during the year from 2014-15 to 2018-19. The fish production in India has registered an average annual growth of 7.53% during last 5 years and stood at an all-time high of 137.58 lakh metric tons during 2018-19. The export of marine products stood at 13.93 lakh metric tons and valued at Rs. 46,589 crores (USD 6.73 billion) during 2018-19.
- 1.3 The Gross Value Added (GVA) of fisheries sector in the national economy during 2018-19 stood at Rs 2,12,915 crores (current basic prices) which constituted 1.24% of the total National GVA and 7.28% share of Agricultural GVA. The sector has immense potential to double the fishers and fish farmers' incomes as envisioned by government and usher in economic prosperity.
- 1.4 Foreseeing the immense potential for development of fisheries and for providing focused attention to the sector, the Government in its Union Budget, 2019-20 has announced a new scheme, the Pradhan Mantri Matsya Sampada Yojana (PMMSY).



The PMMSY is an umbrella scheme with two separate Components namely (a) Central Sector Scheme (CS) and (b) Centrally Sponsored Scheme (CSS). The Centrally Sponsored Scheme (CSS) Component is further segregated into Non-beneficiary oriented and beneficiary orientated sub-components/activities under the following three broad heads:

- (i) Enhancement of Production and Productivity
- (ii) Infrastructure and Post-harvest Management
- (iii) Fisheries Management and Regulatory Framework

Pradhan Mantri Matsya Sampada has been approved at a total estimated investment of Rs. 20,050 crores comprising of Central share of Rs. 9407 crore, State share of Rs 4880 crore and Beneficiaries contribution of Rs. 5763 crore.

PMMSY will be implemented in all the States and Union Territories for a period of 5 (five) years from FY 2020-21 to FY 2024-25.

### Now Aims and Objectives: Very important

3.1 The Aims and Objectives of the Pradhan Mantri Matsya Sampada Yojana (PMMSY) are:

- (a) Harnessing of fisheries potential in a sustainable, responsible, inclusive and equitable manner
- (b) Enhancing of fish production and productivity through expansion, intensification, diversification and productive utilization of land and water
- (c) Modernizing and strengthening of value chain - post-harvest management and quality improvement
- (d) Doubling fishers and fish farmers incomes and generation of employment
- (e) Enhancing contribution to Agriculture GVA and exports

### Two separate components:

#### 4. FUNDING PATTERN

##### 4.1 Central Sector Scheme (CS)

- (a) The entire project/unit cost will be borne by the Central government (i.e. 100% central funding).
- (b) Wherever direct beneficiary oriented i.e. individual/group activities are undertaken by the entities of central government including National Fisheries Development Board (NFDB), the central assistance will be up to 40% of the unit/project cost for General category and 60% for SC/ST/Women category.

##### 4.2 Centrally Sponsored Scheme (CSS)

4.2.1 For the **Non-beneficiary orientated** sub-components/activities under CSS component to be implemented by the States/UTs, the entire project/unit cost will be shared between Centre and State as detailed below:

- (a) North Eastern & Himalayan States : 90% Central share and 10% State share.
- (b) Other States : 60% Central share and 40% State share.
- (c) Union Territories (with legislature and without legislature): 100% Central share.

**Who all are beneficiaries?? Simple stuff but important.**

#### 6. BENEFICIARIES

6.1 The intended beneficiaries under the Pradhan Mantri Matsya Sampada Yojana are:

- (i) Fishers
- (ii) Fish farmers
- (iii) Fish workers and Fish vendors
- (iv) Fisheries Development corporations
- (v) Self Help Groups (SHGs)/Joint Liability Groups (JLGs) in fisheries sector
- (vi) Fisheries cooperatives
- (vii) Fisheries Federations
- (viii) Entrepreneurs and private firms

- (ix) Fish Farmers Producer Organisations/Companies (FFPOs/Cs)
- (x) SCs/STs/Women/Differently abled persons
- (xi) State Governments/UTs and their entities including
- (xii) State Fisheries Development Boards (SFDB)
- (xiii) Central Government and its entities

**At least for now, nothing is more important than this.**

### CA35. First trilateral dialogue on Indo-Pacific

**Link:** <https://thewire.in/diplomacy/india-france-australia-trilateral-meeting-indo-pacific-focus>

India, Australia and France on Wednesday held talks for the first time under a trilateral framework with focus on enhancing cooperation in the Indo-Pacific, a region that has been witnessing increasing Chinese military assertiveness.

**Ok, before going to know what this dialogue is all about, at least know what comprises Indo-Pacific Region. Watch in free time importance of this region. Link given below.**



**What our External Ministry said?** *That will be enough to know about this dialogue. By reading, you will be able to know why this dialogue is important.*

✓ “The focus of the dialogue was on enhancing cooperation in the Indo-Pacific Region,” the external affairs ministry said in a statement.

It said the “outcome-oriented” meeting was held with the objective of building on the strong bilateral ties that the three countries share with each other and synergise their respective strengths to ensure a peaceful, secure, prosperous and rules-based Indo-Pacific Region.

The MEA said that the three sides have agreed to hold the dialogue on an annual basis.

It said the three sides discussed economic and geo-strategic challenges and cooperation in the Indo-Pacific, particularly in the context of the COVID-19 pandemic and domestic responses to the crisis.

“The three countries also had an exchange on the priorities, challenges and trends in regional and global multilateral institutions, including the best ways to strengthen and reform multilateralism,” the MEA said.

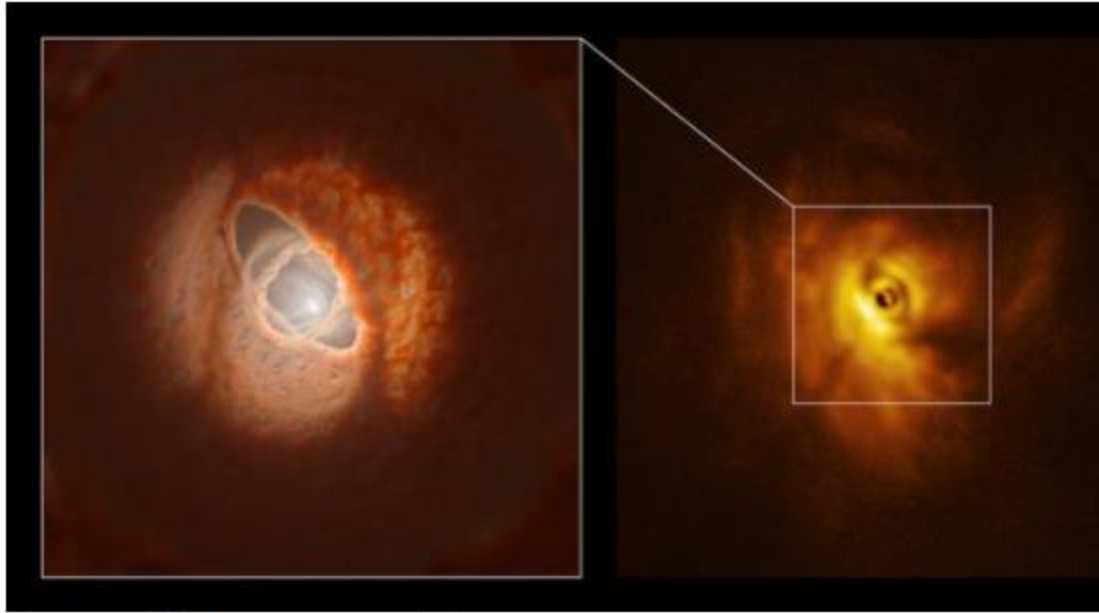
The MEA said cooperation on marine global commons and potential areas for practical partnership at the trilateral and regional level were also discussed, including through regional organisations such as ASEAN, Indian Ocean Rim Association (IORA) and the Indian Ocean Commission.

Watch a small video on [Why Indo-Pacific region is strategic important?](#)

CA36. Scientists discover three stars ripping apart their planet-forming disc

Link: <https://theprint.in/science/scientists-discover-three-stars-ripping-apart-their-planet-forming-disc/495700/>





*The inner ring of the GW Orionis star system | Photo: eso.org*

Astronomers have observed, for the first time, a group of stars tearing apart their planet-forming disc. The force of these stars leaves behind material in the form of twisted rings, and the astronomers suggest that this could potentially produce planets with multiple star systems.

The study was a collaboration between researchers from the UK, Belgium, Chile, France and the US, who studied the three newborn stars in the GW Orionis system using the AMBER (Astronomical Multi-BEam combineR) and GRAVITY instruments on the European Southern Observatory's (ESO) Very Large Telescope (VLT) in Chile.



## ✓ Star and planet formation

Young stars and star systems form when a cloud of dust and gas collapses under its own gravity, leading to spinning material that eventually forms a disc-like shape. This material surrounding the increasingly gravitationally powerful core, which will eventually become a star, is called the circumstellar disc. This will eventually form planets and other bodies such as asteroids and comets.

When there is only one star in a system, such as our own solar system, the plane of the disc eventually becomes the plane of the star system. But in some star systems, multiple nuclei of stars form, which leads to gravitational confusion and structural disruption of the disc.

Astronomers had never observed such a process occurring before (although we've observed plenty of multi-star systems). Theoretical modelling suggests that when multiple gravitationally powerful stars form from the same material, the disc should bend and twist, eventually breaking into concentric, misaligned rings.

The observation of the newly forming GW Orionis system in the constellation of Orion confirms these theories. **The star system has three stars and a deformed disc around them, which holds a misaligned ring in the middle, closer to the stars.** The research also shows that the inner ring contains material, primarily dust, worth 30 times the mass of Earth. Astronomers think that this **gives the system ample opportunity to produce at least one planet.**

## CA37. Aichi biodiversity target

Link: <https://www.downtoearth.org.in/news/wildlife-biodiversity/world-hasn-t-met-a-single-aichi-biodiversity-target-leaked-un-report-73314>

### We all know Earth Summit.

The Earth Summit was not the first international conference to address environmental issues. **In 1972 the United Nations convened the United Nations Conference on the Human Environment** in Stockholm, Sweden. This conference, often called the Stockholm Conference, was the first international conference to address environmental problems directly.

**The Earth Summit produced a number of outcomes including:**

- a. The Convention on Biological Diversity.
- b. The Framework Convention on Climate Change.
- c. Principles of Forest Management.

- d. The Rio Declaration on Environment and Development; and
- e. Agenda 21

**Aichi Targets later adopted under Convention on Biological Diversity. See below.**



The 'Aichi Target' adopted by the **Convention on Biological Diversity (CBD)** at its Nagoya conference. **In the COP-10 meeting**, the parties agreed that previous biodiversity protection targets are not achieved, So we need to do come up with new plans and targets The short term plan provides a set of 20 ambitious yet achievable targets, **collectively known as the Aichi Targets**.

In decision X/2, the tenth meeting of the Conference of the Parties, held from 18 to 29 October 2010, in Nagoya, Aichi Prefecture, Japan, adopted a revised and updated Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets, for the 2011-2020 period.

This Plan provided an overarching framework on biodiversity, not only for the biodiversity-related conventions, but for the entire United Nations system and all other partners engaged in biodiversity management and policy development.

**Aichi Targets= 20 targets divided into 5 sections (A to E).**

### **Strategic goal A**

#### **Address the causes of biodiversity loss**

1. Make people aware about the values of biodiversity
2. Integrated biodiversity values in development + poverty reduction plan
3. Subsidies which are harmful to biodiversity and eliminate them, phase them out or reform them
4. Sustainable production and consumption.

### **Strategic Goal B:**

#### **Reduce the direct pressure on biodiversity and promote sustainable use**

5. Reduce the rate of natural habitat loss + forest loss by at least 50%
6. Reduce overfishing
7. Agriculture, aquaculture and forestry in sustainable manner
8. Reduce pollution and excessive use of fertiliser
9. Prevent invasive alien species (non-native)
10. Minimize the coral reef destruction, ocean acidification

### **Strategic Goal C**

#### **Safeguard ecosystems, species and genetic diversity**

11. Conserve terrestrial and inland water, coastal – marine areas
12. Prevent extinction of threatened species
13. Maintain genetic diversity of agro-plants, domesticated animals and minimizing genetic erosion

### **Strategic Goal D**

## Biodiversity benefits to all

14. Safeguard ecosystems for women, tribals, and poor.
15. Combat desertification and restore the degraded ecosystem
16. Operationalize the Nagoya protocol on genetic resources, via national legislations

## Strategic Goal E

### Participatory planning, capacity building

17. National biodiversity strategy and action plans – update for participation
18. Integrate the knowledge of tribal communities
19. Scientific and technological knowledge sharing application
20. Financial resources mobilization

## CA38. Ranking of States on Support to Startup Ecosystems: DPIIT

Link: [https://www.startupindia.gov.in/content/dam/invest-india/compendium/National\\_Report\\_09092020-Final.pdf](https://www.startupindia.gov.in/content/dam/invest-india/compendium/National_Report_09092020-Final.pdf)

The Results of the **2nd edition of Ranking of States on Support to Startup Ecosystems** were released by the **Department for Promotion of Industry and Internal Trade (Ministry of Commerce & Industry)**. DPIIT has recently **released the Ease of Doing Business Rankings** of the States-2019 based on the State Business Reform Action Plan, which we have already covered.



## STATES' STARTUP RANKING 2019

Before starting the Report, **see the startup landscape in India:**





**Definition of Start-up in India:**

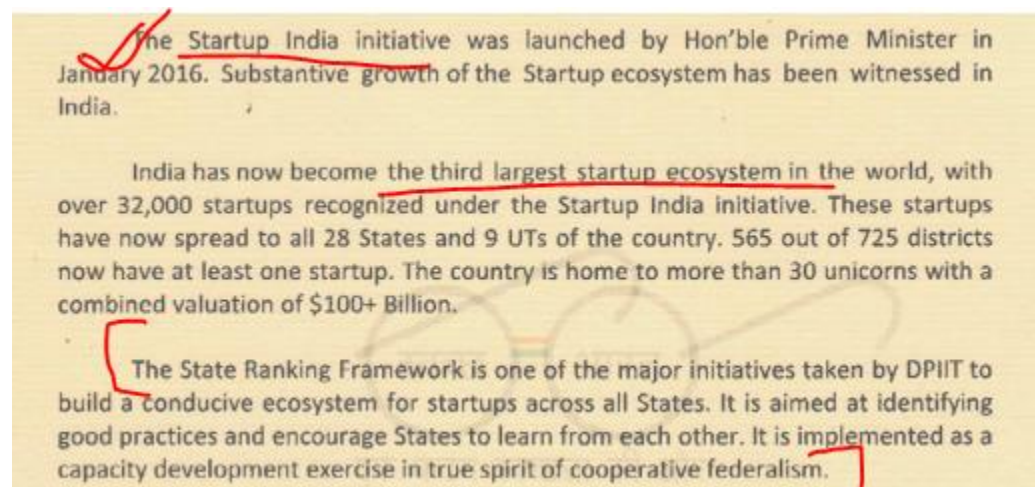


## 2.2 DEFINITION OF A STARTUP

The definition of a startup in India is rooted not only in the turnover or size of an organisation but simultaneously in the type of business carried out. An entity will be considered a startup if it fulfils three overarching conditions mentioned below:

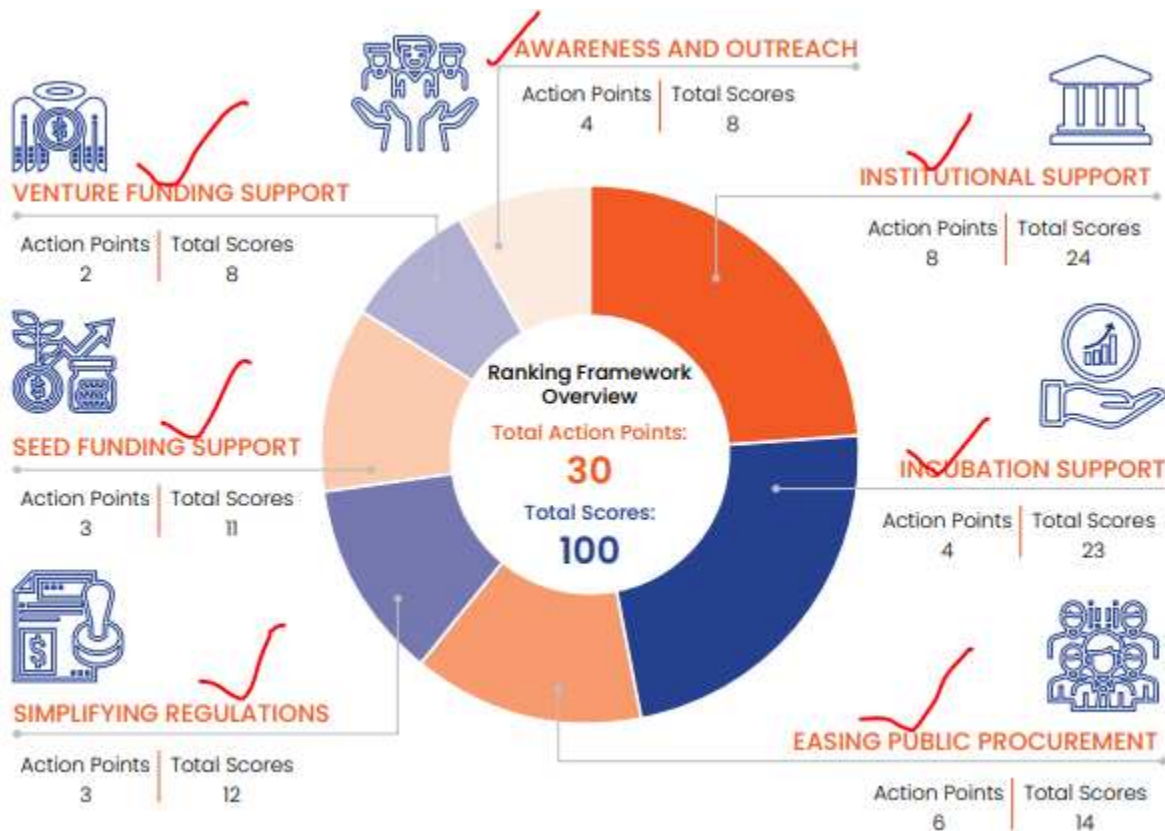


**So, we will start with Introduction.** *If we will write in paragraph such report, you will never remember, nor you will read. So, we have covered the report through images:*



Under the visionary and dynamic leadership of Hon'ble Prime Minister Shri Narendra Modi ji, Government conceived the States Startup Ranking Framework in 2018 to encourage States and Union Territories (UTs) to promote good business practices for startups. The Second Edition of the rankings was launched in 2019 and has been completed with active participation of 22 States and 3 UTs.

The framework is spread across 7 areas of intervention with a total of 30 action points, as compared to the 38 action points in previous years' Ranking Framework. See 7 Framework.



### Results of the Report:

- Gujarat was the Best performer in Category X** followed by Karnataka and Kerala. Uttar Pradesh and Tamil Nadu occupied the lowest positions.
- Andaman and Nicobar Islands was the Best performer in Category Y.** Sikkim secured the bottom place.
- Gujarat had secured the Best Performer position previous year as well.

## 5.1 PARTICIPATION OF STATES/UTS

States and UTs from all parts of the country have shown ardent participation in the second edition of the State/UT Startup Ranking Exercise.

A total of 22 states and 3 Union Territories participated in the exercise, including four states from North East India.

To establish uniformity and ensure standardization in the ranking process, States and UTs were divided into Category-X and Category-Y. Category-X entails states and UTs with a well-established startup ecosystem. Category-Y includes all UTs, except Delhi, and all states in North East India, except Assam. All the participating States and UTs have been outlined below:

## 5.4 OVERVIEW OF PERFORMANCE OF STATES/UTs

### 5.4.1 CATEGORY-X

BEST PERFORMER	GUJARAT			
TOP PERFORMERS	KARNATAKA	KERALA		
LEADERS	BIHAR	MAHARASHTRA	ODISHA	RAJASTHAN
ASPIRING LEADERS	HARYANA	JHARKHAND	PUNJAB	TELANGANA
EMERGING STARTUP ECOSYSTEMS	ANDHRA PRADESH	ASSAM	CHHATTISGARH	DELHI
	HIMACHAL PRADESH	MADHYA PRADESH	TAMIL NADU	UTTAR PRADESH

5.4.2 CATEGORY-Y ✓

BEST PERFORMER	ANDAMAN AND NICOBAR ISLANDS	
TOP PERFORMERS	-----	
LEADERS	CHANDIGARH	
ASPIRING LEADERS	NAGALAND	
EMERGING STARTUP ECOSYSTEMS	MIZORAM	SIKKIM

#### Few Government Initiatives regarding Start-ups:

- Start Up India Fund:** Under the Startup India program, the Government created the 'Fund of Funds for Startups (FFS) with a corpus of INR 10,000 crore.
- Policy Reforms for Startups:** These include requirement of distributable profits for three years for a company to be eligible to issue shares with differential voting rights.
- Start-up Cells:** The Cell will work towards redressal of grievances & tax-related issues of Startups with respect to the administration of the Income-tax Act, 1961.
- National Startup Advisory Council:** To advise the Centre on measures needed to build a strong ecosystem for nurturing innovation and start-ups in the country.
- Aatmanirbhar Bharat ARISE-Atal New India Challenge:** It is a national initiative to promote research & innovation and increase competitiveness of Indian startups and Micro, Small and Medium Enterprises (MSMEs).
- AIM-iCREST:** It is an Incubator Capabilities Enhancement program launched by NITI Aayog for a Robust Ecosystem focused on creating high performing Startups.

#### CA39. Climate Smart Cities Assessment Framework (CSCAF) 2.0

Link: <https://pib.gov.in/PressReleasePage.aspx?PRID=1653293>

**Be precise and read relevant contents with clarity here.**

The Climate Centre for Cities under National Institute of Urban Affairs (NIUA) is supporting **Ministry of Housing and Urban Affairs in implementation of CSCAF.**





# CLIMATESMART CITIES

## Assessment Framework 2.0

**We have two CSCAF 1.0 and CSCAF 2.0 TILL NOW:**

**What is CSCAF?**

### ClimateSmart Cities Assessment Framework

The ClimateSmart Cities Assessment Framework is a first-of-its-kind assessment framework on climate relevant parameters. Launched in 2019 by MoHUA, the objective is to provide a clear roadmap for Indian cities towards combating climate change while planning their actions within the city including investments.

Based on a background study of internal climate assessment models and frameworks along with consultation with several organizations and city representatives, the CSCAF 1.0 was formulated with focus on indicators across 5 sectors (i) Energy and Green Buildings; (ii) Urban Planning, Biodiversity and Green Cover; (iii) Mobility and Air; (vi) Water Resource Management and (v) Waste Management.



## ClimateSmart Cities Assessment Framework 2.0

### An Overview

The CSCAF 2.0 has been revised based on the experience of phase 1 implementation and feedback received from cities. A thorough review of the indicators, progression levels and data inputs have been conducted with cities and further validated and approved by the expert committee and the thematic sub group committee.

Improved indicators with feedback from cities and thematic experts

Simplified for easy understanding

Alignment with Swachh Survekshan & Ease of Living

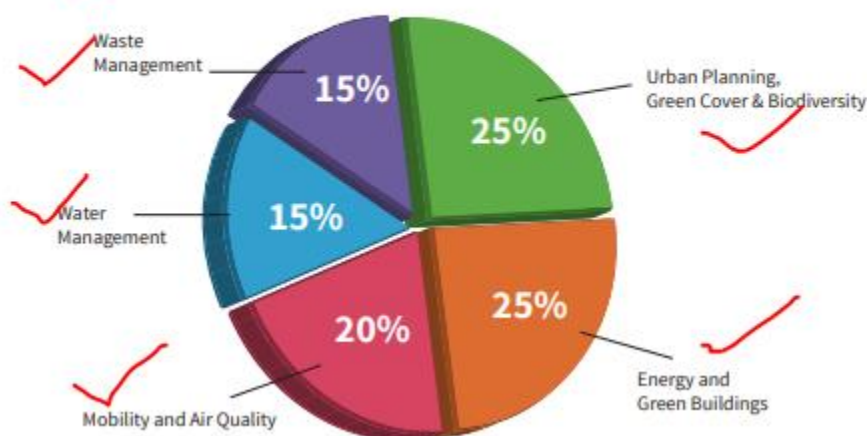
Standard evidence templates and data input templates to support in data collection

Centralized portal for data entry with dashboard to view real time updates

The framework has 28 indicators across five categories namely:

- Energy and Green Buildings.
- Urban Planning, Green Cover & Biodiversity.
- Mobility and Air Quality.
- Water Management.
- Waste Management.

Figure 2.1. Sector-wise weightage for ClimateSmart Cities Assessment 2.0



You can watch 2 minute [video](#) on Climate Smart Cities Assessment Framework (CSCAF) 2.0

Here, also see in brief Smart Cities Mission:

## Smart Cities Mission

It is an innovative initiative under the **Ministry of Housing and Urban Affairs**, to drive economic growth and improve the quality of life of people by enabling local development and harnessing technology as a means to create smart outcomes for citizens.

**It was launched in the year 2015 as a Centrally Sponsored Scheme.**

**Objective:** To promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of Smart Solutions.

Develop areas step-by-step with the help of these three models: **Retrofitting, Redevelopment, Greenfield.**

CA40. 13-million-year-old tooth found in Uttarakhand leads to discovery of new ape species



*Newly-discovered species is the earliest-known ancestor of modern-day gibbon (representative image) | Credits: Pixfuel*

**Link:** <https://theprint.in/science/13-million-year-old-tooth-found-in-uttarakhand-leads-to-discovery-of-new-ape-species/500669/>

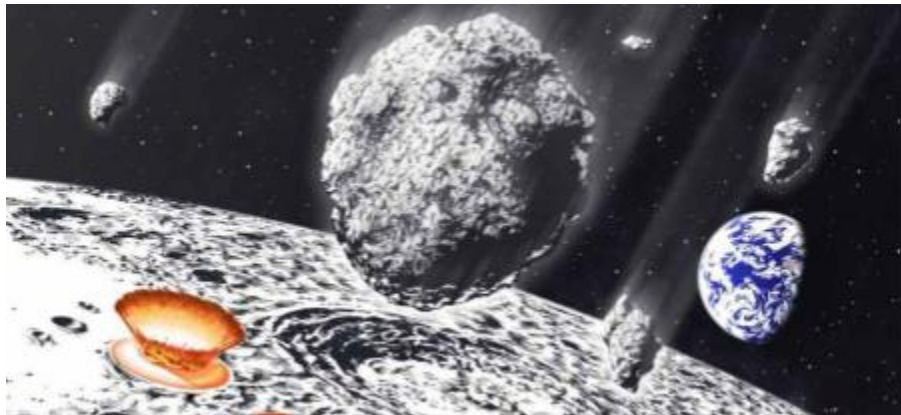
A 13-million-old fossil from **Uttarakhand's Ramnagar** has led to the **discovery of a new species of ape**, also the earliest-known ancestor of the modern-day gibbon, a primate species found in tropical forests of Southeast Asia, according to researchers.

The fossil is a complete lower molar tooth and belongs to a previously unknown genus and species, which has now been classified as ***Kapi ramnagarensis***. It is the first ape species

discovered at the location in nearly a century. It predates the oldest-known fossil record of gibbons by at least five million years.

**The findings were published in the journal Proceedings of the Royal Society.**

#### CA41. The Moon is rusting



Link: <https://theprint.in/science/the-moon-is-rusting-and-that-shows-how-much-we-still-dont-know-about-it/501104/>

Earlier this month, researchers published evidence of hematite at the Moon's higher latitudes, and hematite — or  $\text{Fe}_2\text{O}_3$  — is an oxide of iron that turns red when it begins to rust. **But the question is:**

*Why would there be rust on the lunar surface? We know there are trace amounts of water, and we know there's plenty of iron, but where's the oxygen coming from? And why is the rust heavily on the side of the moon facing us — that is, the side where the water isn't?*

- a. **Usually the Moon, like the rest of the solar system, is bathed in solar wind.**
- b. But for five days out of every lunar orbit, the Moon is shielded from solar wind ... by the Earth.
- c. In 2017, researchers studying the observations from Japan's Kagura spacecraft announced that **during the periods when the Earth shielded the Moon, a high concentration of oxygen ions was found in the lunar soil.**
- d. The simplest answer: an "Earth wind" effect, in which solar activity peels tiny particles from the atmosphere, many of which strike the lunar surface.
- e. The researchers suggest that this transfer of ions, including biogenic oxygen, might have been going on for over two billion years. That's a truly exciting hypothesis. If true,
- f. **it would mean that by studying the Moon's crust, we'd be able to better map the physical and biological history of our own planet.**

But there's a considerable gap between stray water molecules and enough oxygen ions to cause visible rust. Does the "Earth wind" theory seem plausible enough to explain the

phenomenon? Perhaps rust on the Moon is best seen as a reminder of how much we still don't know about our closest neighbor. **Wait for more revelation about this study.**

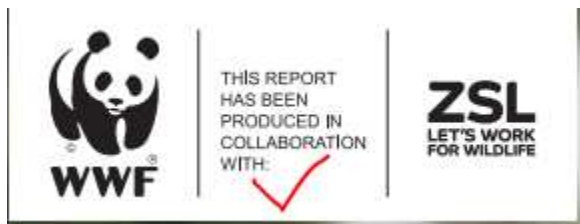
## CA42. The Living Planet Report 2020

Link: <https://f.hubspotusercontent20.net/hubfs/4783129/LPR/PDFs/ENGLISH-FULL.pdf>

***Report is too big, but we will try to cover this report through few images and basics. More is not required.***

The **Living Planet Report**, WWF's flagship publication released every two years, is a comprehensive study of trends in global biodiversity and the health of the planet.

The **Living Planet Report 2020 is the 13th edition of the report** and provides the scientific evidence to back what nature has been demonstrating repeatedly: unsustainable human activity is pushing the planet's natural systems that support life on Earth to the edge.



### **WWF**

WWF is one of the world's largest and most experienced independent conservation organizations, with over 5 million supporters and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

### **Living Planet Index is important:**

It is a measure of the state of the world's biological diversity based on population trends of vertebrate species in terrestrial, freshwater and marine habitats.

- a. In 2020, the LPI shows an average rate of decline in population size of 68% between 1970 and 2016.
- b. The LPI now tracks the abundance of almost 21,000 populations of mammals, birds, fish, reptiles and amphibians around the world.



## What the LPI does not tell us

- The LPI doesn't show numbers of species lost or extinctions.
- It does not mean that X% of species or populations are declining.
- Or that X% of populations or individuals have been lost.

## Threats to biodiversity

### Changes in land and sea use, including habitat loss and degradation



This refers to the modification of the environment where a species lives, by complete removal, fragmentation or reduction in quality of key habitat. Common changes in use are caused by unsustainable agriculture, logging, transportation, residential or commercial development, energy production and mining. For freshwater habitats, fragmentation of rivers and streams and abstraction of water are common threats.

### Species overexploitation



There are both direct and indirect forms of overexploitation. Direct overexploitation refers to unsustainable hunting and poaching or harvesting, whether for subsistence or for trade. Indirect overexploitation occurs when non-target species are killed unintentionally, for example as bycatch in fisheries.

### Invasive species and disease



Invasive species can compete with native species for space, food and other resources, can turn out to be a predator for native species, or spread diseases that were not previously present in the environment. Humans also transport new diseases from one area of the globe to another.

### Pollution



Pollution can directly affect a species by making the environment unsuitable for its survival (this is what happens, for example, in the case of an oil spill). It can also affect a species indirectly, by affecting food availability or reproductive performance, thus reducing population numbers over time.

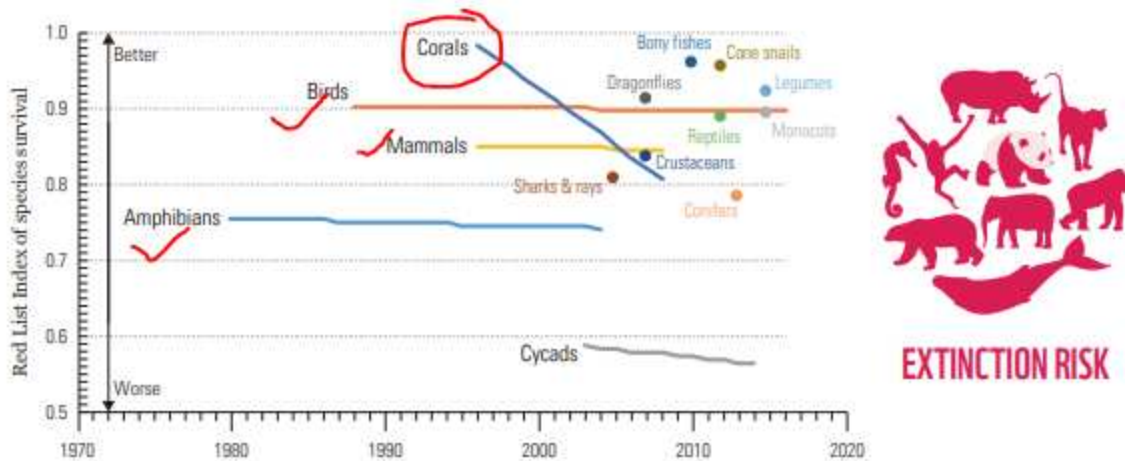
### Climate change



As temperatures change, some species will need to adapt by shifting their range to track a suitable climate. The effects of climate change on species are often indirect. Changes in temperature can confound the signals that trigger seasonal events such as migration and reproduction, causing these events to happen at the wrong time (for example misaligning reproduction and the period of greater food availability in a specific habitat).

**Use this Coral waala map given below whenever asked about corals in Mains, it will fetch you extra marks:**





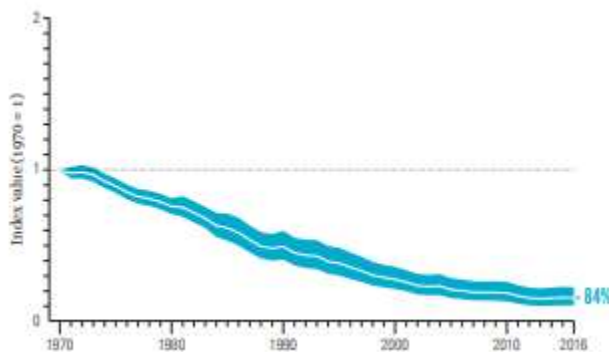
### Red List Index

The Red List Index, based on data from the IUCN Red List of Threatened Species<sup>25</sup>, shows trends in survival probability (the inverse of extinction risk) over time<sup>26</sup>. A Red List Index value of 1.0 equates to all species within a group qualifying as Least Concern (i.e. not expected to become Extinct in the near

future<sup>27</sup>). An index value of 0 equates to all species having gone Extinct. A constant value over time indicates that the overall extinction risk for the group is unchanged. If the rate of biodiversity loss were reducing, the index would show an upward trend. A decline in the index means that species are being driven towards extinction at an accelerating rate.

**Just remember few findings to mention in any answer writing.**

- The 2020 global Living Planet Index shows an average 68% fall in monitored populations of **mammals, birds, amphibians, reptiles** and fish between 1970 and 2016.
- The average abundance of 3,741 freshwater populations, representing 944 species monitored across the globe, declined by 84% on average.



- 75 per cent of earth's ice-free land has been significantly altered, most of the oceans polluted and over 85 per cent area of wetlands lost ~ all due to human activity.
- One in five plants is threatened with extinction.
- Pollinators such as bees, butterflies on declining trend.

## The first mammal extinction from climate change



The Bramble Cay melomys (*Melomys rubicola*), the first mammal to become extinct as a direct result of climate change, Bramble Cay, Torres Strait Islands, Australia.

## Temperatures rise, bats fall



A spectacled flying fox (*Pteropus conspicillatus*) colony leaving roost at sunset, Australia. Flying foxes roost en masse, making detection of population-level impacts of extreme events easier than for solitary species.

### India's scenario:

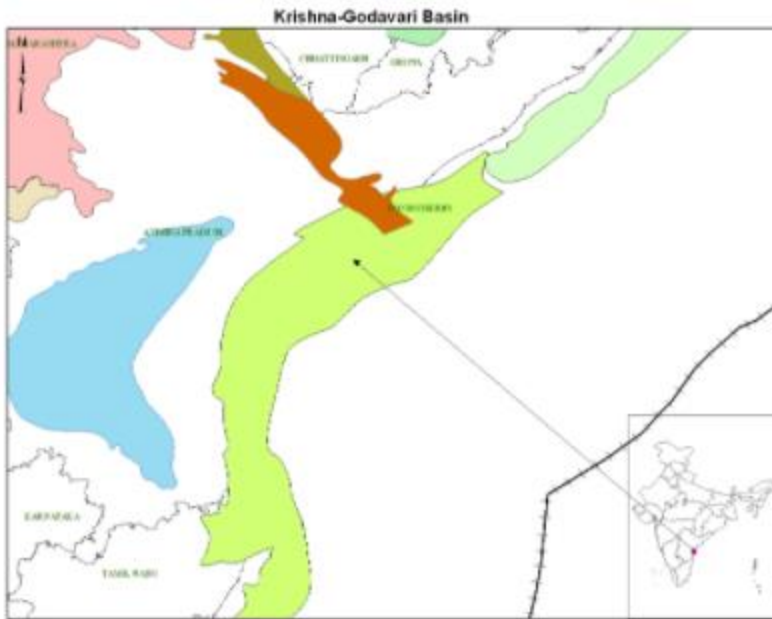
- India has 2.4 per cent global land share, about eight per cent global biodiversity and around 16 per cent global population
- However, it has lost 12 per cent of its wild mammals, 19 per cent amphibians and 3 per cent birds over last five decades.
- India's ecological footprint per person is less than 1.6 global hectares (gha) / person (smaller than that of many large countries). But its high population size has made the gross footprint significantly high.

### CA43. KG Basin an excellent source of methane fuel

Link: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1653545>

### First of all, you know about Krishna Godavari Basin.

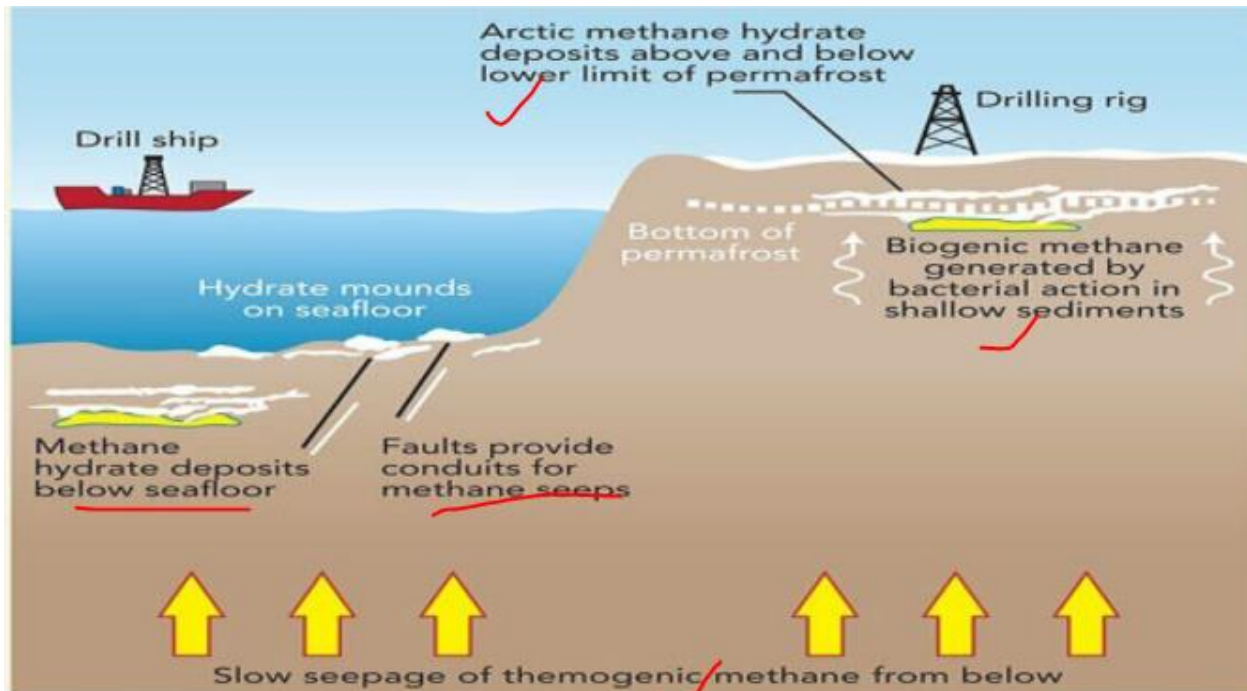
Extensive deltaic plain formed by two large east coast rivers, Krishna and Godavari in the state of Andhra Pradesh and the 16 adjoining areas of Bay of Bengal in which these rivers discharge their water is **known as Krishna Godavari Basin**.



The Krishna-Godavari (KG) Basin **holds a massive reserve of methane hydrate**, a rich source of clean fuel, **according to a recent study conducted at the Agharkar Research Institute, which works under the government's Department of Science and Technology**. This study using molecular and culturing techniques **revealed maximum methanogenic diversity in the KG basin**, which is one of the prominent reasons to confirm it to be the **extreme source of biogenic methane** in comparison to the Andaman and Mahanadi basins.

**Two small definition: Just to simplify**

- a. Methanogenesis is the process of generation of methane by methanogens, which are strictly anaerobic microorganisms.
- b. **A biogenic substance** is a product made by or of life forms.



The study was conducted as a part of the DST-SERB (Science and Engineering Research Board) young scientist project titled '*Elucidating the community structure of methanogenic archaea in methane hydrate*'.

Now see what scientists have to say:

According to the study, the ARI team has further identified the methanogens that produced the biogenic methane trapped as methane hydrate, which can be a significant source of energy.

Methane hydrate is formed when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures in oceans.

"The massive methane hydrate deposits of biogenic origin in the Krishna-Godavari (KG) basin and near the coast of Andaman and Mahanadi make it necessary to study the associated methanogenic community," said Vikram B Lanjekar, the principal investigator of the study.

According to the ARI team, until recently, there have been only a few investigations of the methanogenic communities associated with methane hydrate-bearing sediments.

This study has shown that methanogens under these elevated pressure and temperature conditions are well adapted to these conditions and are different in methane-producing activities.

**Methane hydrate is formed when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures in oceans.**

Learn Serb also:

What is SERB?



The Science and Engineering Research Board (SERB) **is a statutory body established through an Act of Parliament.** Supporting basic research in emerging areas of Science & Engineering are the primary and distinctive mandate of the Board. The Board structure, with both financial and administrative powers vested in the Board, would enable quicker decisions on research issues, greatly improving thereby our responsiveness to the genuine needs of the research scientists and the S&T system.



CA44. Great Indian Bustards close to be extinct in Peninsular India

Link: <https://india.mongabay.com/2020/09/peninsular-india-close-to-losing-its-last-remaining-great-indian-bustards/>

**India has the only population of the Great Indian Bustard** in the world. There are two breeding grounds in the country, **one in Rajasthan and the second in the Ballari district of Karnataka.** However, *there have been no recent sightings of the eight GIBs found in Ballari.*

**What are the reasons they are disappearing in Peninsular India?**

Explaining the disturbance, S.K. Arun, honorary wildlife warden of Ballari said, "GIBs being low flying birds with poor frontal vision, prefer open grassland or farmland. A large number of their deaths have been reported for colliding with windmills, power lines or high rise intrusions during their flight. So they leave the area after it gets disturbed with such infrastructure. Being shy, they also avoid human presence."

He said that water-holes created on the GIB habitat might attract unnecessary attention of shepherds and local people, thus adding to the disturbance and perils of trampling upon eggs of the GIB, which are laid on the ground. He pointed at a river nearby as an alternative to providing water for wildlife.

**Learn more about Great Indian Bustard:**

The great Indian bustard inhabits **dry grasslands and scrublands** on the Indian subcontinent; its largest populations are **found in the Indian state of Rajasthan.**





It is listed in **Schedule I of the Indian Wildlife (Protection) Act, 1972** and in the Convention on Migratory Species (CMS) Convention and in Appendix I of CITES.

#### CA45. Community Conserved Areas in Arunachal Pradesh

Link: <https://india.mongabay.com/2020/09/community-conservation-model-in-western-arunachal-pradesh-protects-wildlife-habitats/>

Please students. Such topics will hardly be covered by institutions. These topics are very important for UPSC Prelims Exam.

**WWF-India had introduced the concept of community conserved area (CCA) in 2004** since most of the forest land is owned by local communities in this landscape with the focus on strengthening community-based conservation initiatives.

#### Community Conserved Areas (CCAs):

In 2004, WWF-India introduced the concept of Community Conserved Areas (CCAs) by issuing a declaration of the first CCA covering an area of 312 sq km in Thembang village of West Kameng district. A CCA Management Committee comprising local villagers responsible for the conservation of natural resources as well as socio-economic development of the village was also set up. Encouraged by the

Three features can be taken as defining characteristics of ICCAs:

1. A community is closely connected to a well defined ecosystem (or to a species and its habitat) culturally and/or because of survival and dependence for livelihood;
2. The community management decisions and efforts lead to the conservation of the ecosystem's habitats, species, ecological services and associated cultural values [even when the conscious objective of such management may be different than conservation *per se*, and be, for instance, related to material livelihood, water security, safeguarding of cultural and spiritual places, etc.];
3. The community is the major player in decision-making (governance) and implementation regarding the management of the site, implying that community institutions have the capacity to enforce regulations; in many situations there may be other stakeholders in collaboration or partnership, but primary decision-making rests with the concerned community.

**Community Conserved Area (CCA) model followed in Western Arunachal Pradesh** has helped in involving the villagers in conservation initiatives in forests that lie outside protected areas by ensuring security to their traditional custodianship and user rights over the natural resources.

Communities in Arunachal Pradesh have voluntarily declared nine community conserved areas over 15 years which cover roughly 1500 sq km of forests. These cover significant habitat of forests which are home to the red panda, Himalayan goral, serow, takin, small cats and contains high altitude lakes.

#### **What CCA comprises of: in context of Arunachal Pradesh**

The community conserved area **comprises panchayat members, village elders and youth** who work for the conservation and management of their forests, to secure the habitats of red pandas, musk deer, serow, goral, Himalayan black bear, Siberian weasel, leopard and wild dogs.

The model is being implemented in Western Arunachal Landscape (WAL) which is **predominantly occupied by the Monpa tribe**, who are highly dependent on forest and natural resources for their livelihood needs. The communities share strong religious ties and cultural values with their natural surroundings. They exercise their traditional rights of collection of fuelwoods, pole (timber), non-timber forest products (NTFPs) and medicinal plants in these forests.

#### **What spaces are available for CCAs in Indian law?**

There is **no national-level policy to recognize conservation efforts by communities**, though there are references to such a need in documents such as the National Wildlife Action Plan, the draft National Biodiversity Strategy and Action Plan and some other. **Neither is there a law specifically focused on providing support to CCAs.** However, there are limited spaces available in some laws—limited because they do not take into account the ground reality of CCAs, their local contexts and local institutions. As far as we know, very few CCAs have yet taken support from any of the laws and policies mentioned below (except in the case of Nagaland, where the state-specific law on village councils has been used).

What is the [difference between](#) CCA and Conservation and Community Reserves?

### Conservation Reserves:

**Conservation reserves and community reserves in India are terms denoting protected areas of India which typically act as buffer zones to or connectors and migration corridors between established national parks, wildlife sanctuaries and reserved and protected forests of India.**

**Such areas are designated as conservation areas** if they are uninhabited and **completely owned by the Government of India** but used for subsistence by communities and community areas if part of the lands is privately owned.

**These protected area categories were first introduced in the Wildlife (Protection) Amendment Act of 2002** – the amendment to the Wildlife Protection Act of 1972. These categories were added because of reduced protection in and around existing or proposed protected areas due to private ownership of land, and land use.

### Comparison with CCA:

This category **does open up some space in the law for people's participation in wildlife conservation. Consultations with local people before declaring an area a conservation reserve is mandatory**, as opposed to the situation in other protected areas such as national parks and sanctuaries. **BUT CCAs are on government lands but they have their own well worked-out management and regulation** institutions, and a high degree of **de facto control**. It is unlikely that these well-established institutions would agree to become part of a conservation reserve **where their only role in decision-making would be to advise the chief wildlife warden (CWW) of the state**, who may or may not agree to the suggestions.

### Similar with Community Reserve:

These protected area categories were first introduced in the Wildlife (Protection) Amendment Act of 2002 – the amendment to the Wildlife Protection Act of 1972. These can only be declared by the government on private or community lands by the government, **which is against the basic principle of CCA where community hold the de facto control. Finally, there are no guidelines on how these areas are to be declared.** For all these reasons, **community reserves is an inappropriate category for most CCAs.**

CA46. In Venus' clouds, scientists find gas that suggests life

Link: <https://theprint.in/science/in-venus-clouds-scientists-find-gas-that-suggests-life-but-say-its-hint-not-evidence/502724/>



The researchers behind the finding, from US, UK and Japan, claim to have **detected the gas phosphine** in Venus atmosphere. The study has been published in Nature Astronomy.

Phosphine is synthesized on Earth by anaerobic lifeforms (those that exist without oxygen) and decaying organic matter. It can also be produced in the laboratory and is highly flammable. The detection was made using the Atacama (ALMA) array in Chile and the James Clerk Maxwell telescope in Hawaii.

What scientists have to say:

✓ The scientists have made it clear that although their finding offers life as an argument to explain the presence of the gas, it is not evidence of life.

✓ "What we have found is a possible sign of life, but it is not certain that the phosphine is produced by life," study co-author David L. Clements, a physicist at Imperial College London, told ThePrint. "There may be unusual chemical pathways for its production that we have not found despite examining many thousands of reactions that could produce it," Clements said.

Findings and implications

- a. Scientists have studied planetary atmospheres for decades, including those of exoplanets. Studying rocky planets' atmospheres provides valuable insights into how the gases react with surfaces and sub-surfaces. Emissions, for example, could indicate life or water vapour, which is why scientists keep an avid watch on methane spikes in the Martian atmosphere.
- b. Just like methane, **the presence of phosphine can be interpreted as a biosignature**, or an indicator of past/present life.

- c. **Phosphine is produced on Earth by human activity or by microbes**, both of which are capable of maintaining a certain concentration of the gas in the oxygen-filled atmosphere.
- d. **But such gases can also be produced by other mechanisms.**
- e. **It is found in the atmospheres** of giant gaseous planets like **Jupiter and Saturn because these environments lack oxygen** and are at high temperatures and pressures, causing the same chemical reactions as in labs. **But rocky planets do not have environments conducive to the natural production of phosphine**, making it a potentially good indicator for life.

#### About Venus and some missions related to it:

Venus is the **hottest planet in the solar system** — even though Mercury is closer to the Sun with an average surface temperature of 450°C. This is because of its dense atmosphere the thickest of the four rocky planets is 96 per cent carbon dioxide.

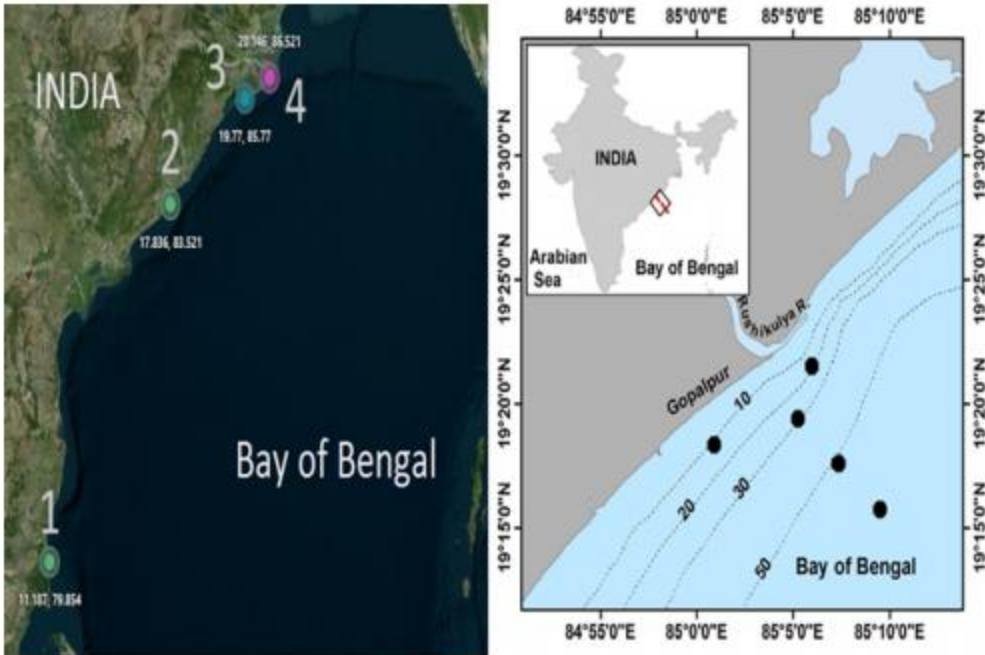
Currently, only **Japan's Akatsuki probe is in orbit around Venus**, although more missions are planned. Both Russia and India are planning to send missions to the planet to study the atmosphere. Neither mission is approved yet.

**India's proposed project, Shukrayaan-1, is said to be slated for 2023.** The orbiter will carry a balloon probe that, according to plans, will settle at a height of 55 km above the Venusian surface, around where phosphine has been detected.

CA47. New study helps monitor trends in phytoplankton biomass in Bay of Bengal

Link: <https://www.downtoearth.org.in/news/wildlife-biodiversity/new-study-helps-monitor-trends-in-phytoplankton-biomass-in-bay-of-bengal-73377>





Researchers **have discovered way to measure the quantity of chlorophyll-a in the Bay of Bengal** — a dominant pigment found in phytoplankton cell and present in a few areas of the ocean — in real-time. The research was carried out by a team of scientists from the Indian **National Centre for Ocean Information Services (INCOIS)**.

#### Importance of Phytoplankton:

- Phytoplanktons are tiny microscopic plants found in the ocean. They are important ecological indicators that regulate life in ocean.
- They have chlorophyll to capture sunlight and use photosynthesis to turn it into chemical energy.
- They consume carbon dioxide and release oxygen.
- All phytoplankton photosynthesize, but some get additional energy by consuming other organisms.
- Phytoplanktons contribute to more than half of the oxygen that we breathe. That apart, they influence our climate by absorbing human-induced carbon dioxide, a heat-trapping greenhouse gas.
- They also serve as the foundation of the aquatic food web.

#### Study:

- The team of **scientists closely tracked** the long-term trends of **chlorophyll-a in the northwestern Bay of Bengal**. They also studied the co-existing factors that affected the increasing pattern of chlorophyll.
- The **study was based on in-situ** and satellite data spanning over the last 16 years. They observed significant **increase of chlorophyll-a concentration during pre-southwest monsoon seasons**.

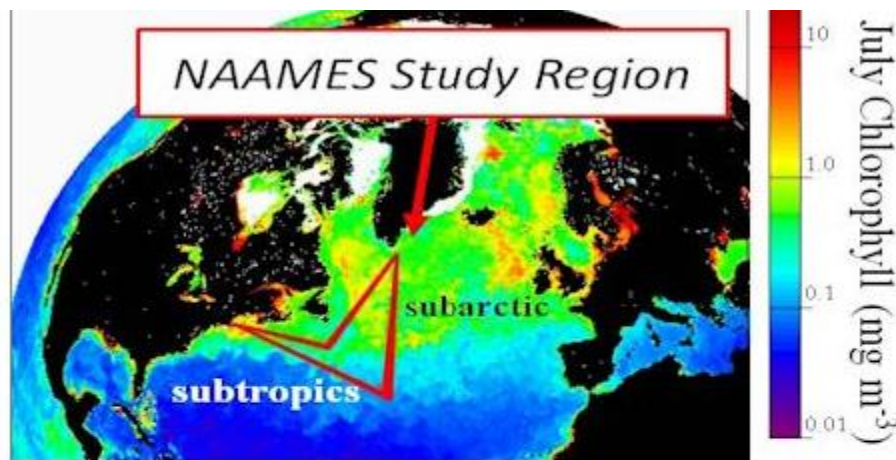
- c. The other parameters studied were **total suspended matter (TSM) and coloured dissolved organic matter (CDOM)**, which are optically active substances in water.
- d. **Apart from phytoplankton bloom contributing to this increase of chlorophyll-a** in nearshore waters, the study found physical forces such as *upwelling, wind-induced vertical mixing, convective overturn and local circulation pattern* influenced the peaks by supplying dissolved chemical input from various sources including river / terrigenous runoff.

The information on marine environmental parameters has become increasingly important as they serve as a basis for monitoring climate change, river discharge, and impact of pollution in the ocean.

### One NASA Mission related to Phytoplankton:

#### North Atlantic Aerosols and Marine Ecosystems Study (NAAMES)

The North Atlantic Aerosols and Marine Ecosystems Study (NAAMES) is a five-year investigation to resolve key processes controlling ocean system function, their influences on atmospheric aerosols and clouds and their implications for climate.



Mouseover slide to pause.

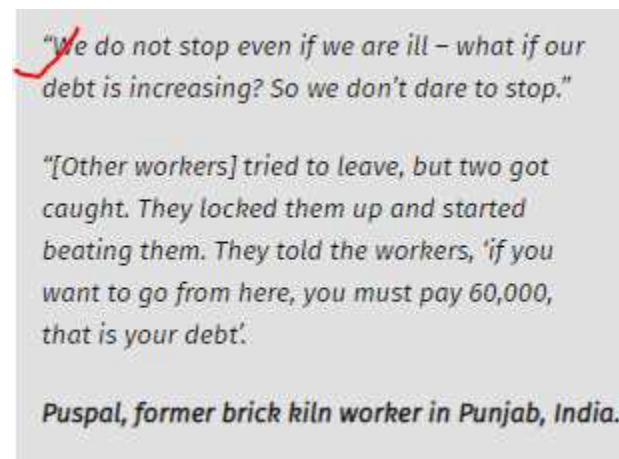
The NAAMES study area in the North Atlantic captures both the seasonal variability as well as the meridional gradient of phytoplankton productivity as shown in the figure above, where the ship cruise track in red is superimposed over a map of the ocean chlorophyll concentration. It is this wide range in both temporal and spatial ecosystem variability that makes the North Atlantic an ideal place to study how changes in ocean ecosystems affect the annual phytoplankton cycle as well as the sea-air exchange of aerosols and trace gases that may influence clouds and climate.

## CA48. Bonded Labour in India

**Swami Agnivesh an activist, and crusader against bonded labour is no more. But we will see few provisions of bonded labour in respect to India.**

We will learn about **Bonded Labour in India**

Also known as debt bondage, *bonded labor is a specific form of forced labor in which compulsion into servitude is derived from debt.* Wait you will understand more clearly through image given below:



### Constitutional provisions on forced labour:

- a. **Article 23 of the 1949 Constitution** of India outlaws both the trafficking of human beings and forced labor, **but the legislation defining and banning bonded labor was only approved by Parliament in 1976.**
- b. Also, under the Constitution of India, **Labour is a subject in the Concurrent List** where **both the Central & State Governments** are competent to enact legislation subject to certain matters being reserved for the Centre.

**Learn the background of bonded labour. It might help you with Prelims exam and even mains exam.**

The issue of '**bonded labour**' came to the list of national priority when it was included **in the old 20-Point Programme in 1975.** The Bonded Labour System (Abolition) Ordinance was promulgated on 25th October 1975. This was later on replaced by the Bonded Labour System (Abolition) Act, 1976. **This Act provides for the abolition of the system of bonded labour with simultaneous liquidation of their debts.**

Since the **subject is included in the Concurrent List**, the Union Government stepped in to assist the State Governments in their task of rehabilitation of released bonded labourers.

Accordingly, Ministry of Labour & Employment launched a Centrally Sponsored Scheme for rehabilitation of bonded labourers in May 1978.

The Centrally Sponsored Scheme for Rehabilitation of Bonded Labourers 1978 was last revised in May 2000. **It was realized that the scheme was not effective in elimination of Bonded Labour System** and a revamp was necessary in the larger public interest. In 2016, a revamped scheme was launched as: **Central Sector Scheme for Rehabilitation of Bonded Labourer – 2016**. Under this scheme financial assistance to the extent of Rs. 3 lakhs provided to released bonded labourers along with other non-cash assistance for their livelihood.

### **Any ILO ratification on Forced labour?**

The Government of India has ratified **the ILO Convention C029 on 30th November 1954** which inter alia defines forced labour as "all work or service which is exacted from any person under the menace of penalty and for which the said person has not offered himself voluntarily".

**A small learning. Basics. Remember this.**

### CA49. Swadesh Darshan Scheme

**Link:**

<https://pib.gov.in/PressReleaseframePage.aspx?PRID=1654149#:~:text=Ministry%20of%20Tourism%20has%20undertaken,schemes%20of%20Swadesh%20Darshan%20%26%20PRASHAD.&text=Ministry%20of%20Tourism%20has%20also,developed%20as%20Iconic%20Tourist%20Sites.>

Ministry of Tourism has undertaken development of tourism related infrastructure and facilities at various Buddhist Sites in the country under its flagship schemes of **Swadesh Darshan & PRASHAD**.



## 1. Introduction

India's rich cultural, historical, religious and natural heritage provides a huge potential for development of tourism and job creation in the country. There is a great scope and need to develop tourist circuits on specific themes to attract the tourists having special interest in visiting such places. This can be achieved only through an integrated approach by providing engaging experiences for distinct categories of tourists i.e. Domestic and International. Various themes which are unique and specific to the area can include beaches, culture, heritage, wildlife etc. Such theme based tourist circuits should be developed in a manner that supports communities, provides employment and fosters social integration without comprising upon the environmental concerns and provides unique experiences to the tourists. .

In due recognition to this the Government of India, **Ministry of Tourism launched the Swadesh Darshan Scheme (Central Sector Scheme)**– for integrated development of theme-based **tourist circuits** in the country in 2014-15. **It is under the aegis of Ministry of Tourism.**

## Scheme Objectives

- To position tourism as a major engine of economic growth and job creation;
- Develop circuits having tourist potential in a planned and prioritized manner;
- Promote cultural and heritage value of the country to generate livelihoods in the identified regions;
- Enhancing the tourist attractiveness in a sustainable manner by developing world class infrastructure in the circuit / destinations;
- Follow community based development and pro-poor tourism approach;
- Creating awareness among the local communities about the importance of tourism for them in terms of increased sources of income, improved living standards and overall development of the area.
- To create employment through active involvement of local communities;

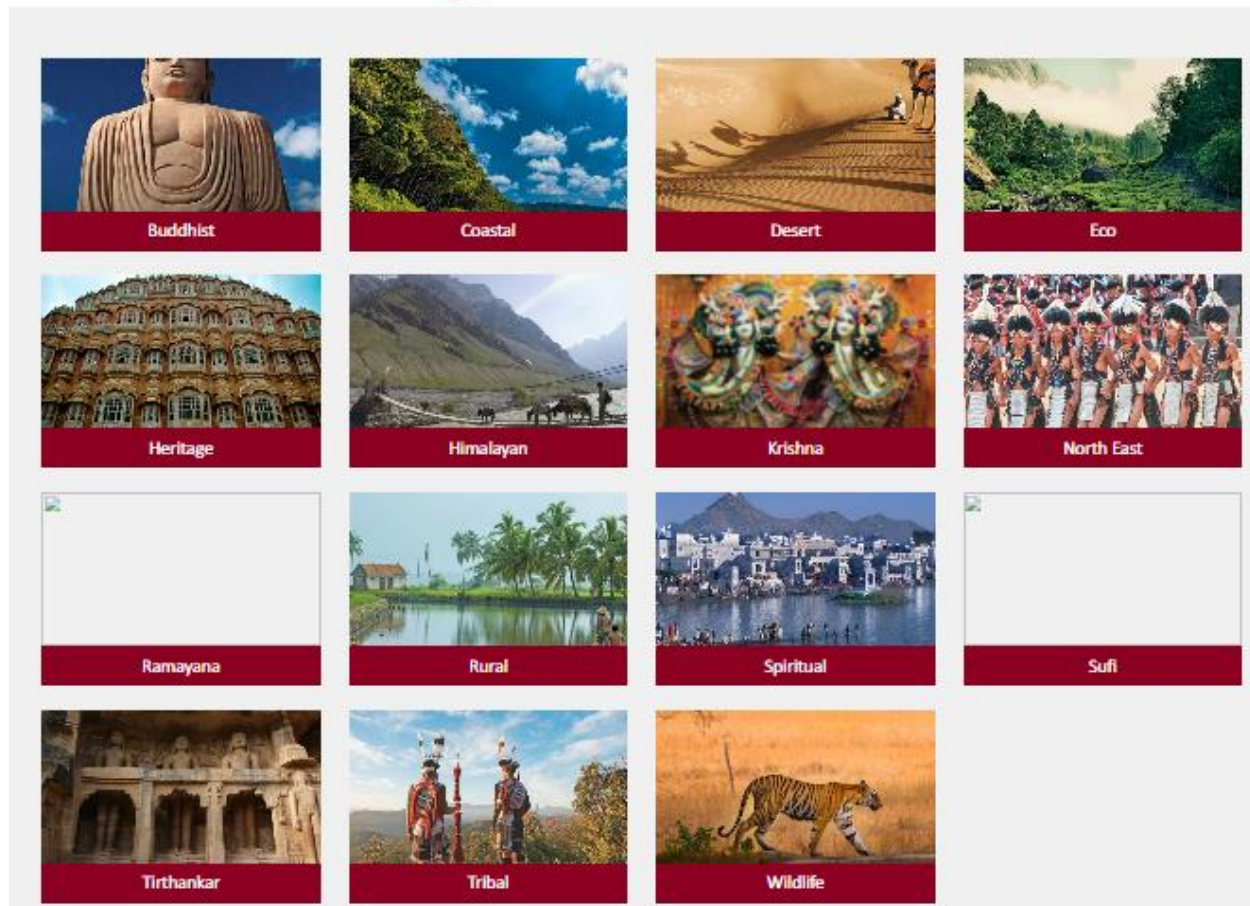
## Definition of Tourist Circuit

- Tourist Circuit is defined as a route having at least three major tourist destinations which are distinct and apart.
- Circuits should have well defined entry and exit points. A tourist who enters should get motivated to visit most of the places identified in the circuit.
- A Circuit could be confined to a State or could be a regional circuit covering more than one State/Union Territory. These circuits may have one dominant theme and other sub-themes.



Remember these circuits themes.

### Theme Based Circuits



### Funding pattern

- The Scheme is 100% centrally funded and efforts are made to achieve convergence with other schemes of Central and State Governments and also to leverage the voluntary funding available for Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and Corporate Sector.
- Suitable Public Private Partnerships to be taken up for improved sustainability of the projects.

CA50. Deputy Chairman of Rajya Sabha.

Link: <https://www.thehindu.com/news/national/nda-candidate-harivansh-narayan-singh-re-elected-as-rajya-sabha-deputy-chairman/article32601308.ece>

**Harivansh Narayan Singh re-elected as Rajya Sabha Deputy Chairman. We will see some important provisions related to Deputy Chairman – including Constitutional and by Convention.**

**He is most confused personality for UPSC Aspirant.** His appointment, tenure, removal, functions, etc., everything we will learn today. Full clarity in Learning.

Rajya Sabha elects a Deputy Chairman to perform the functions of the Chairman in case of a vacancy in the office of the Chairman or when the Vice-President is acting as or discharging the functions of the President.

#### *Officers of Parliament*

✓ **89. The Chairman and Deputy Chairman of the Council of States.**—(1) The Vice-President of India shall be *ex officio* Chairman of the Council of States.

(2) The Council of States shall, as soon as may be, choose a member of the Council to be Deputy Chairman thereof and, so often as the office of Deputy Chairman becomes vacant, the Council shall choose another member to be Deputy Chairman thereof.

#### **Removal of Deputy Chairman:**

✓ **90. Vacation and resignation of, and removal from, the office of Deputy Chairman.**—A member holding office as Deputy Chairman of the Council of States—

✓ (a) shall vacate his office if he ceases to be a member of the Council;

(b) may at any time, by writing under his hand addressed to the Chairman, resign his office; and

(c) may be removed from his office by a resolution of the Council passed by a majority of all the then members of the Council:

Provided that no resolution for the purpose of clause (c) shall be moved unless at least fourteen days' notice has been given of the intention to move the resolution.

#### **Order of Precedence**

The Deputy Chairman occupies the **tenth place in the order of precedence** along with **Ministers of State of the Union, Members of the Planning Commission and the Deputy Speaker of the Lok Sabha.**

#### **Power of Deputy Chairman:**

During the absence of the Chairman from any sitting of the House, **the Deputy Chairman acts as Chairman.** He/She has the same powers as the Chairman when presiding over a sitting of the House and all references to the Chairman in the Rules of Procedure and Conduct of Business in the Rajya Sabha **are deemed to be references to the Deputy Chairman when he/she so presides.** See below also the difference between '*when seat is vacant and when there is absence*'.



**91. Power of the Deputy Chairman or other person to perform the duties of the office of, or to act as, Chairman.**—(1) While the office of Chairman is vacant, or during any period when the Vice-President is acting as, or discharging the functions of, President, the duties of the office shall be performed by the Deputy Chairman, or, if the office of Deputy Chairman is also vacant, by such member of the Council of States as the President may appoint for the purpose.

(2) During the absence of the Chairman from any sitting of the Council of States the Deputy Chairman, or, if he is also absent, such person as may be determined by the rules of procedure of the Council, or, if no such person is present, such other person as may be determined by the Council, shall act as Chairman.

**Can Deputy Chairman Preside while a resolution for his removal is under consideration? NO. See below Article 92.**

**92. The Chairman or the Deputy Chairman not to preside while a resolution for his removal from office is under consideration.**—(1) At any sitting of the Council of States, while any resolution for the removal of the Vice-President from his office is under consideration, the Chairman, or while any resolution for the removal of the Deputy Chairman from his office is under consideration, the Deputy Chairman, shall not, though he is present, preside, and the provisions of clause (2) of article 91 shall apply in relation to every such sitting as they apply in relation to a sitting from which the Chairman, or, as the case may be, the Deputy Chairman, is absent.

**Does Deputy Speaker have right to speak or vote in the House?**

The Deputy Chairman **can speak in the House, take part in its deliberations and vote as a member on any question before the House, but he/she can do so only when the Chairman is presiding.** When the Deputy Chairman himself/herself is in the Chair, he/she cannot vote except in the event of equality of votes.

**Second schedule lists the emoluments for holders of constitutional offices. Does Deputy Speaker find his name under it? YES.**

## **SECOND SCHEDULE**

PART A— Provisions as to the President and the Governors of States.

PART B— [*Omitted.*]

PART C— Provisions as to the Speaker and the Deputy Speaker of the House of the People and the Chairman and the Deputy Chairman of the Council of States and the Speaker and the Deputy Speaker of the Legislative Assembly and the Chairman and the Deputy Chairman of the Legislative Council of a State.

PART D— Provisions as to the Judges of the Supreme Court and of the High Courts.

PART E— Provisions as to the Comptroller and Auditor-General of India.

**Deputy Chairman does not sponsor Bills, resolutions**

**As per convention**, the Deputy Chairman does not sponsor Bills, resolutions, etc., nor does he/she table questions.

Dr. (Smt.) Najma Heptulla, a member introduced the Delhi Rent Control (Amendment) Bill, 1983, on 29 April 1983. She was elected Deputy Chairman on 25 January 1985. The Bill was thereafter removed from the list of pending private members' Bills.<sup>102</sup>

### Panel of Vice-Chairmen:

The Chairman, from time to time, nominates from amongst the members of the House, a panel of not more than **six Vice-Chairmen**. **In the absence of the Chairman and the Deputy Chairman, one of them presides over the House.**

Until the end of 1981, the panel of Vice-Chairmen consisted of four members. The Rules Committee recommended that the strength of the panel should be increased to six and in so recommending, the Committee observed: "It has been brought to the notice of the Committee that the present strength of the panel of four Vice-Chairmen is not sufficient as sometimes, especially when the House has prolonged sittings, none of the four Vice-Chairmen is available for presiding."<sup>117</sup> The Committee on Rules presented its third Report to the House on 2 December 1981 and the Report was adopted by the House on 24 December 1981.

- a. In nominating members to the panel of Vice-Chairmen, the Chairman gives consideration to the strength of various parties in the House and as per convention selects **some members from the opposition parties/groups** for nomination to the panel.
- b. The Vice-Chairman, when presiding over a sitting of the House, **has the same powers as the Chairman when so presiding.**
- c. A Vice-Chairman while presiding **cannot vote in the first instance** and has to exercise a casting vote in the case of an equality of votes.
- d. A Vice-Chairman holds office until a new panel of Vice-Chairmen is nominated. **The same member may also be re-nominated.** If a Vice-Chairman resigns his office, another member may be nominated in his place.

**When neither the Chairman nor the Deputy Chairman nor a Vice-Chairman is present to preside**, such other member as may be **determined by the House** acts as the Chairman. The practice is that the outgoing Presiding Officer requests a member to take the Chair with the approval of the House. Such a member continues to preside temporarily until the Deputy Chairman, or a Vice-Chairman becomes available to preside. **In other words, such a member cannot preside when a Vice-Chairman is present in the Chamber.**

Recourse to the provision contained in article 91(2) of the Constitution was taken for the first time on 18 March 1987, when the Deputy Chairman said, "Before we take up the next item, I have an announcement to make. If the House agrees, I will request Shri Sukul to preside in my absence, as none of the members of the panel is present in the House just now." A member responded by saying, "We welcome it."<sup>133</sup>

### No appeal against the decision of Deputy Chairman/Vice-Chairman

As already stated, the Deputy Chairman or a member of the panel of Vice-Chairmen when **presiding has the same powers as the Chairman** when presiding over the sitting of the House. It has been consistently held **that no appeal lies to the Chairman against a ruling given by the Deputy Chairman or any other member presiding over a sitting of the House in the absence of the Chairman.** The ruling given from the Chair settles the matter then before the House and cannot be reopened.

On 22 December 1980, the House continued to sit beyond mid-night and a point of order against the continued sitting was ruled out by the Deputy Chairman then presiding.<sup>141</sup> At the next sitting on 23 December 1980, when some members sought to raise the matter, the Chairman observed, "When the Deputy Chairman sits in this Chair he is 'me' and I cannot sit in judgment over his action; otherwise everyday I will have to be hearing appeals, revisions, reviews and what not."<sup>142</sup>

However, whenever a point raised in the House needs some consideration or involves application of precedents or study, **it is open to the Deputy Chairman or the Vice-Chairman to reserve the matter for the consideration and decision of the Chairman.**

### Chairmen of Parliamentary Committees

**The Chairman of a Parliamentary Committee is appointed by the Chairman** from amongst the members of the Committee. **In the Rajya Sabha, the offices of Committee Chairmen are shared by ruling and opposition parties** by informal arrangement and consultations. This facilitates the Chairman's task of appointing Committee Presiding Officers and Parliamentary Functionaries.

**The Chairman is the Chairman of three Committees—Business Advisory, Rules and General Purposes.** If the **Deputy Chairman is a member of any other Committee, he/she is invariably appointed the Chairman** of that Committee, for instance, the Committee of Privileges. In the case of Joint/Select Committees on Bills initiated in the Rajya Sabha, **the Chairman may be a member who does not belong to the ruling party.** The following are the instances of members not belonging to the ruling party who were appointed Chairmen of various Committees:



Shri Yogendra Sharma (CPI)—Chairman, Joint Committee on the Indian Penal Code (Amendment) Bill, 1970;

Shri Prakash Veer Shastri (Ind.)—Chairman, Joint Committee on the Central and other Societies (Regulation) Bill, 1972;

Prof. A.R. Wadia (Nom.)—Chairman, Joint Committee on the Delhi Primary Education Bill, 1960;

Shri Jairamdas Daulatram (Nom.)—Chairman, Joint Committee on the Banaras Hindu University (Amendment) Bill, 1964

Dr. M.S. Adisesiah (Nom.)—Chairman, Joint Committee on the Visva Bharati (Amendment) Bill, 1978;

Shri Era Sezhiyan (Janata Party)—Chairman, Select Committee on the Chit Funds Bill, 1982.

***Why I have given various examples after each provision is: It helps you to believe the document and also helps in remembering.***

CA51. India elected member of UN Commission on Status of Women

**Link:** <https://scroll.in/latest/973128/india-elected-member-of-un-commission-on-status-of-women-pips-china-to-the-post>



**PR UN Tirumurti** @ambtstirumurti · Sep 15

India wins seat in prestigious #ECOSOC body!

India elected Member of Commission on Status of Women #CSW. It's a ringing endorsement of our commitment to promote gender equality and women's empowerment in all our endeavours.

We thank member states for their support. @MEAIndia

**India got elected as Member of the UN Commission on the Status of Women**, the principal global body focussed on gender equality and women empowerment.

### **About the UN Commission**

The Commission on the Status of Women (CSW) is the **principal global intergovernmental body** exclusively dedicated to the promotion of gender equality and the empowerment of women.

The CSW is instrumental *in promoting women's rights, documenting the reality of women's lives throughout the world, and shaping global standards on gender equality and the empowerment of women.*

The Commission adopts **multi-year programmes of work** to appraise progress and make further recommendations to accelerate the implementation of the Platform for Action. These recommendations take the form of negotiated agreed conclusions on a priority theme. The Commission also contributes to the follow-up to the **2030 Agenda for Sustainable Development** so as to accelerate the realization of gender equality and the empowerment of women.

**The Commission on the Status of Women (CSW) is a functional commission of the UN Economic and Social Council (ECOSOC).**

**Forty-five Member States of the United Nations** serve as **members of the Commission** at any one time. The Commission consists of one representative from each of the 45 Member States elected by the Economic and Social Council on the basis of equitable geographical distribution:

- a. 13 members from Africa
- b. 11 from Asia**
- c. nine from Latin America and Caribbean
- d. eight from Western Europe and other States
- e. four from Eastern Europe

**Members are elected for a period of four years.**

**One thing you remember, in UPSC Prelims they have asked one question:**

**“Beijing Declaration and Platform for Action” is related to: Empowering of Women Rights.**