



**VAJIRAM & RAVI**  
Institute for IAS Examination

# The Analyst

**CURRENT AFFAIRS Handout**

**29th June 2025**

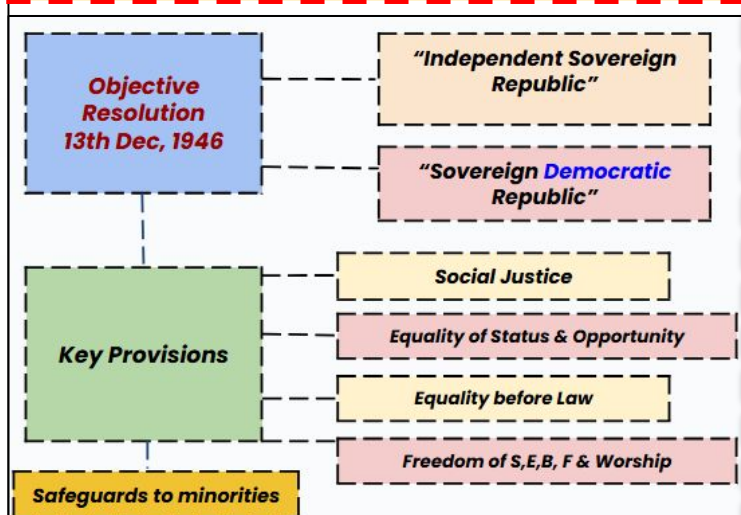


# Socialism & Secularism in Preamble



**CONTEXT:** The article highlights the ongoing debate related to amendments made in the Preamble by 42nd CA 1976 and the implicit "Secular" & "Socialist" Principles in the Constitution.

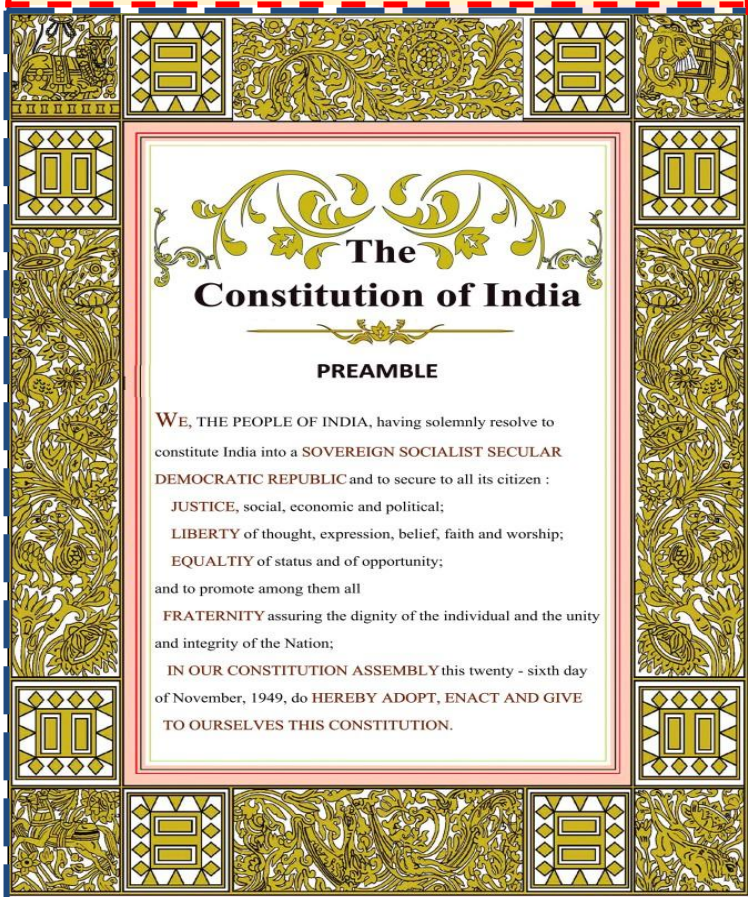
## "Preamble : The Identity card of Constitution":



## Prelims 2021:

93. What was the exact constitutional status of India on 26th January, 1950?
- A Democratic Republic
  - A Sovereign Democratic Republic
  - A Sovereign Secular Democratic Republic
  - A Sovereign Socialist Secular Democratic Republic

## "Preamble : The Identity card of Constitution":



## "Nature of Constitution : The Debate":

### "In favour of Addition of "Secular":

**KT Shah**  
(15th Nov, 1948)

**"Guard against any possibility of misunderstandings between communities"**

**Brajeshwar Prasad**

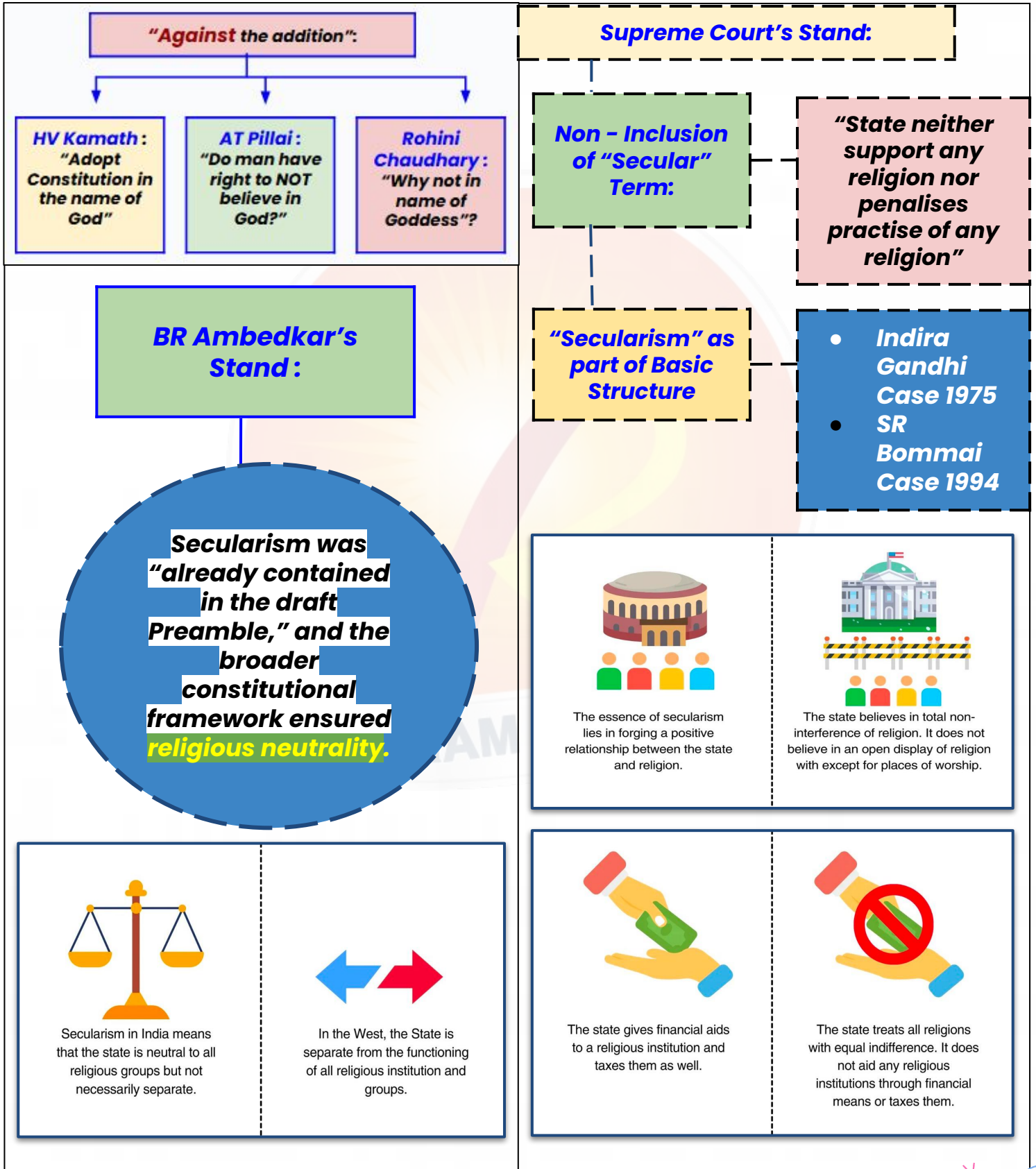
**"To tone morale of minorities"**





# Socialism & Secularism in Preamble

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# Socialism & Secularism in Preamble

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## Personal Laws



There is no uniform civil code instead it is administered by personal laws in many cases.

## uniform code of law



A single uniform code of law is used to dispense justice regardless of religious background.

## Indian Brand of Secularism:

- **State control**  
**Political, economical & financial aspects of religious practice**
- **Social welfare & reforms in religious practice**

## Government of India's Initiative:

Idea of "**Sabka Sath, Sabka Vikas**"

"**Ek Bharat, Shreshtha Bharat**"

"**National Foundation for Communal Harmony**"

"**Religious Institutions Act 1988**"

**Places of Worship Act 1991**

## Socialistic Provisions in the Constitution:

- **Article 38** : Establish India as "**Welfare state**"
- **Article 38** : Minimise inequalities in income, status, facilities & opportunities
- **Article 39 (b)** : Equitable distribution of material resources
- **Article 39 (c)** : Prevention of concentration of wealth & means of production
- **Article 43** : Secure living wage and decent standard of life for workers

"**Imbided in the Provisions of the Constitution**"

**Article 14**

**Article 15**

**Article 25**

**Article 26**

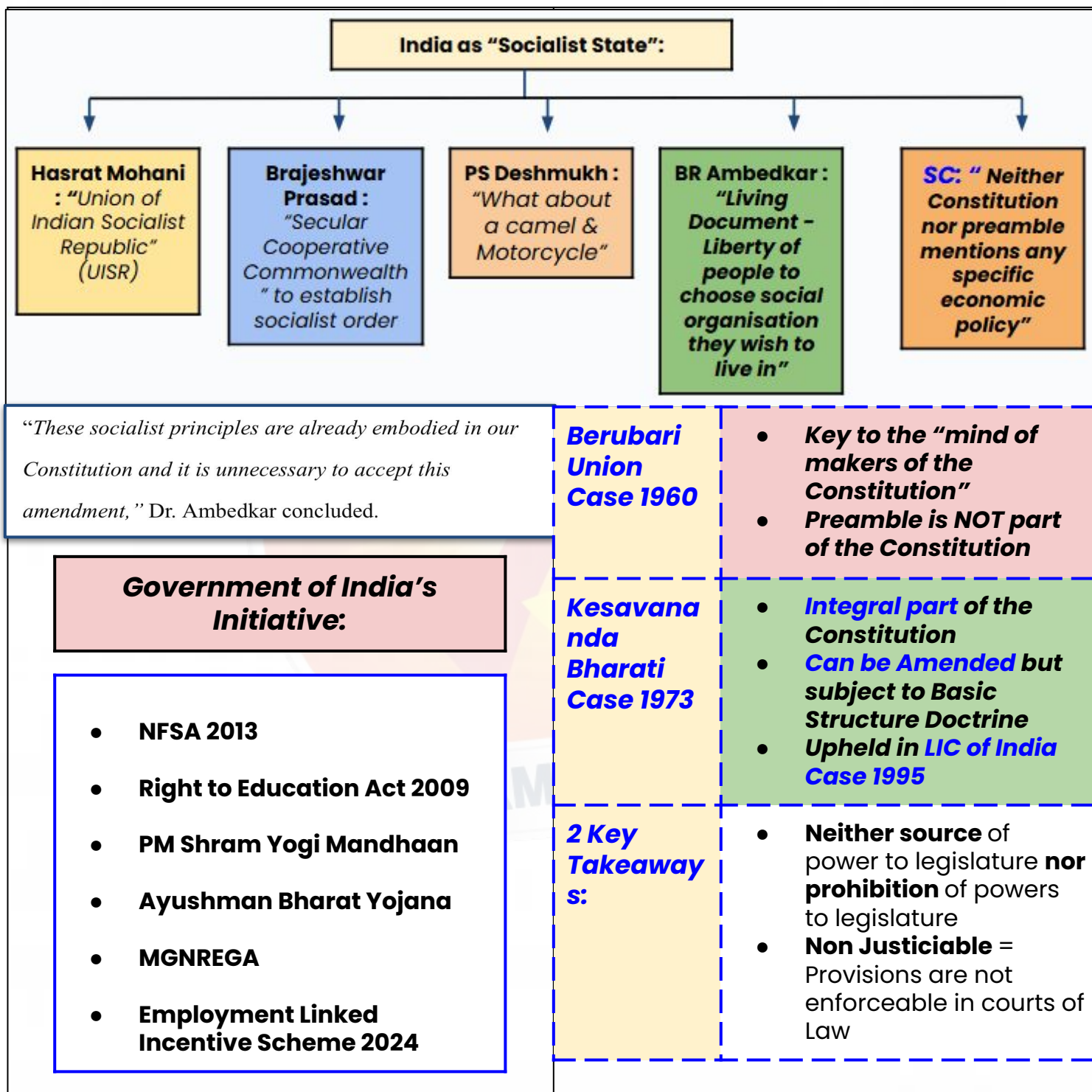
**Article 51 A**



# Socialism & Secularism in Preamble



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# Socialism & Secularism in Preamble



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## Prelims 2020 Question

16. The Preamble to the Constitution of India is
- (a) a part of the Constitution but has no legal effect
  - (b) not a part of the Constitution and has no legal effect either
  - (c) a part of the Constitution and has the same legal effect as any other part
  - (d) a part of the Constitution but has no legal effect independently of other parts

## Mains Practise Question

**Question :** "The provisions of "Secularism" & "Socialism" were implicit in the Constitution itself before their inclusion in the Constitution by amendment."  
**Critically analyse.**  
(15 Marks, 250 words)

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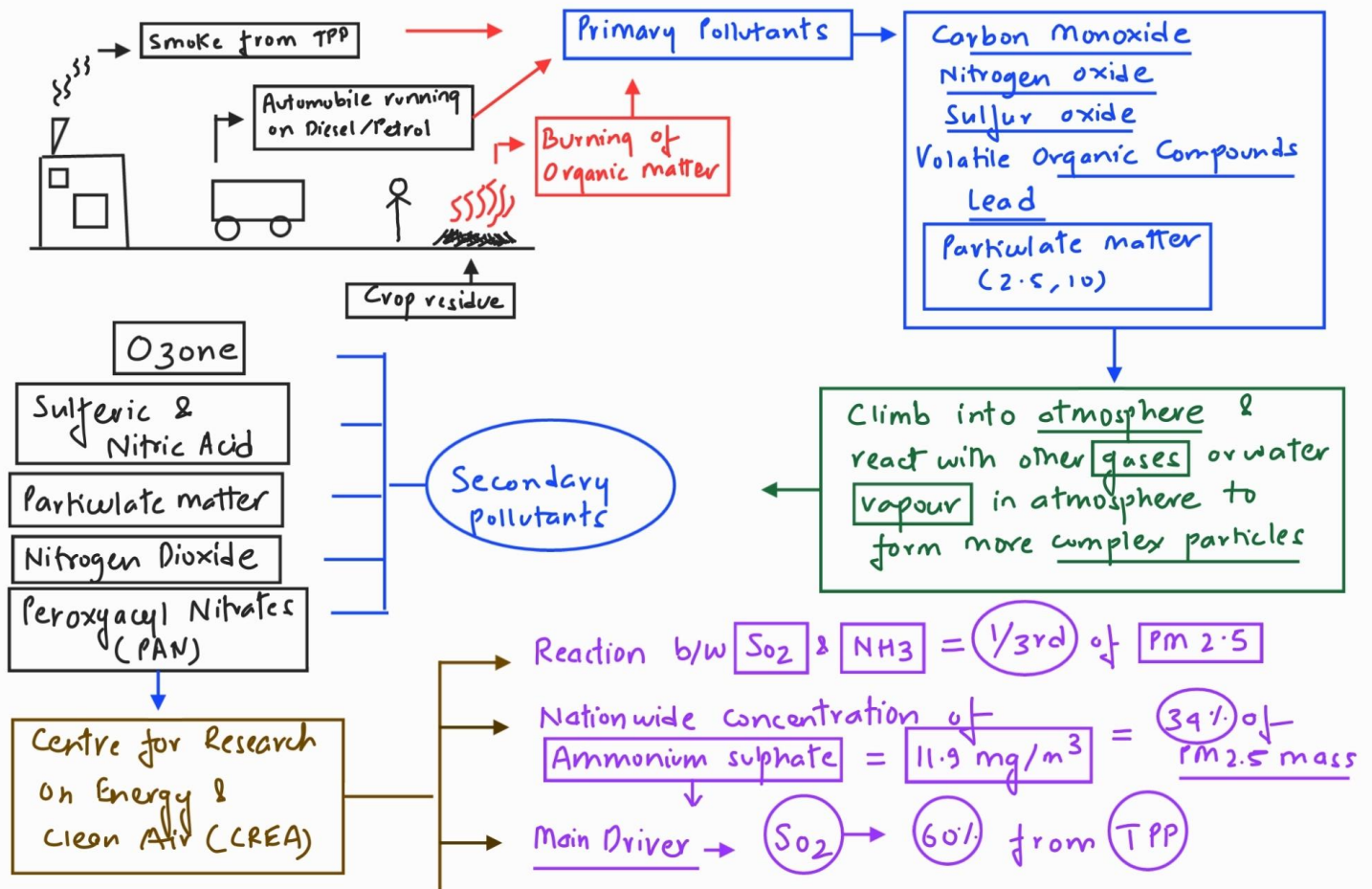




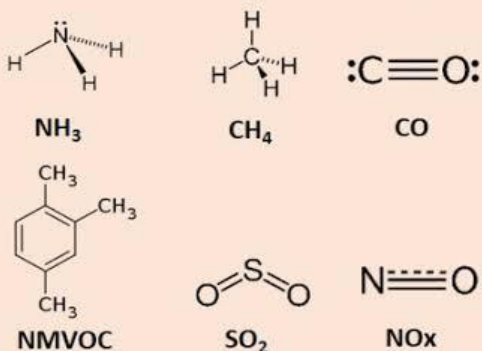
# Controlling PM 2.5 pollution

**CONTEXT:** The article highlights the challenges of controlling SO<sub>2</sub> Emissions which contribute to the PM 2.5 Pollution in the country.

## Pillar 1: What are Primary & Secondary Pollutants?

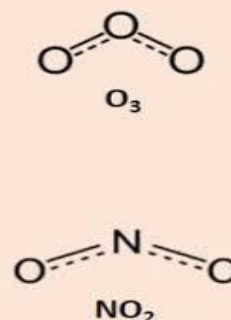


### Primary pollutants



Can also include: PM or Black carbon

### Secondary pollutants



Can also include: PM; Oxidized VOC



# Controlling PM 2.5 pollution

**CONTEXT:** The article highlights the challenges of controlling SO<sub>2</sub> Emissions which contribute to the PM 2.5 Pollution in the country.

## Pillar 2: Reliance on Thermal Power Generation:

### Over Reliance on Thermal Power:

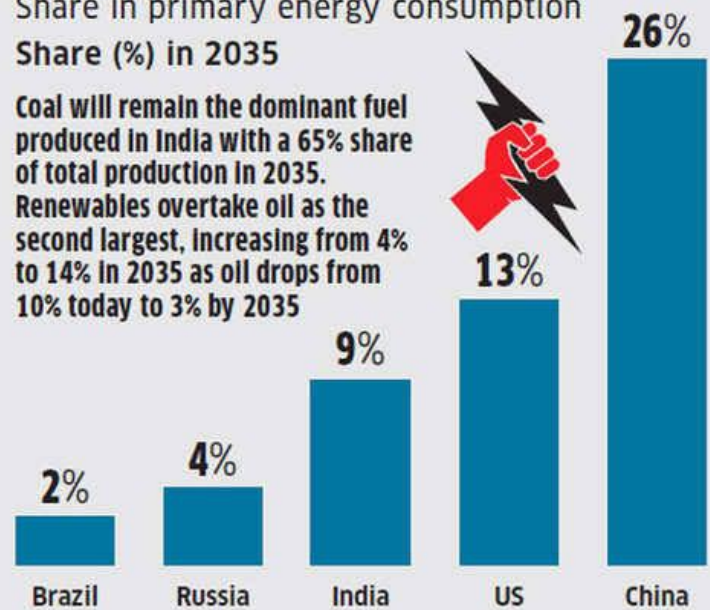
- Total Installed Power Capacity = **456 GW** (Nov, 2024)
- Coal Based TPP = **217 GW**
- **47%** of Total capacity
- **71%** Power generation

## BP Energy Outlook 2024:

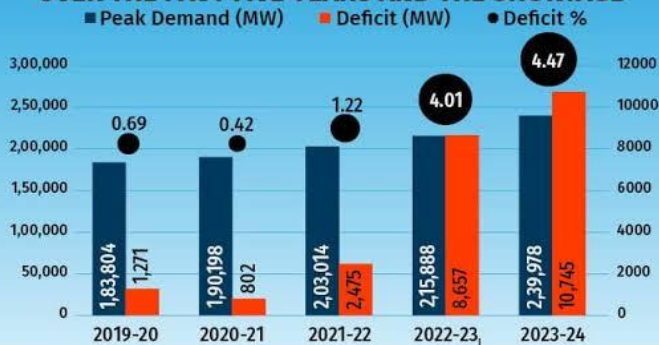
India's share of global energy demand to rise to 9% by 2035

Share in primary energy consumption  
Share (%) in 2035

Coal will remain the dominant fuel produced in India with a 65% share of total production in 2035. Renewables overtake oil as the second largest, increasing from 4% to 14% in 2035 as oil drops from 10% today to 3% by 2035



## INDIA'S PEAK POWER DEMAND OVER THE PAST FIVE YEARS AND THE SHORTAGE



Source: Central Electricity Authority (CEA)

moneycontrol

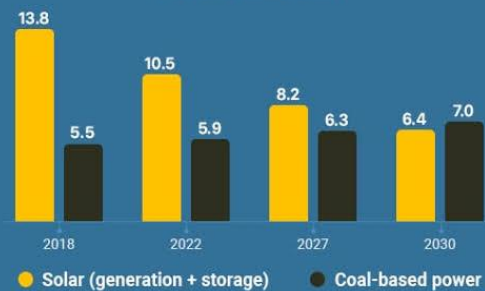
## Issues with Renewable Energy:

#BanegaSwasthIndia

ndtv.com/swasthIndia

### SOLAR ENERGY vs THERMAL ENERGY A COST COMPARISON

(In Rs. Per Kilowatt-Hour)



Source: The Energy and Resources Institute (TERI)

NDTV.com





# Controlling PM 2.5 pollution

**CONTEXT:** The article highlights the challenges of controlling SO<sub>2</sub> Emissions which contribute to the PM 2.5 Pollution in the country.

## Pillar 3 : Reliance on TPP leads to "Air Pollution":

### WHO Report 2024 :

- **1 out of 9 Deaths**
- **7 Million** Premature deaths worldwide
- **What about India?**
  - **3rd most** polluted country globally
  - Annual PM 2.5 Concentration = **54.4 Ug/M3**
  - **96% Population** = exposed to PM 2.5
  - **LANCET Report** = **11.5%** per annum deaths in Delhi

Nation

## Delhi world's most polluted capital city again, India has third worst air quality out of 134 countries: Report

Delhi's PM<sub>2.5</sub> levels worsened from 89.1 micrograms per cubic metre in 2022 to 92.7 micrograms per cubic metre in 2023.

**Table 3.26.** Recommended 2021 AQG levels and 2005 air quality guidelines

Pollutant	Averaging time	2005 air quality guideline	2021 AQG level
PM <sub>2.5</sub> , µg/m <sup>3</sup>	Annual	10	5
	24-hour <sup>a</sup>	25	15
PM <sub>10</sub> , µg/m <sup>3</sup>	Annual	20	15
	24-hour <sup>a</sup>	50	45

## Pillar 4 : What was Government's Response?

### CREA Report 2024 :

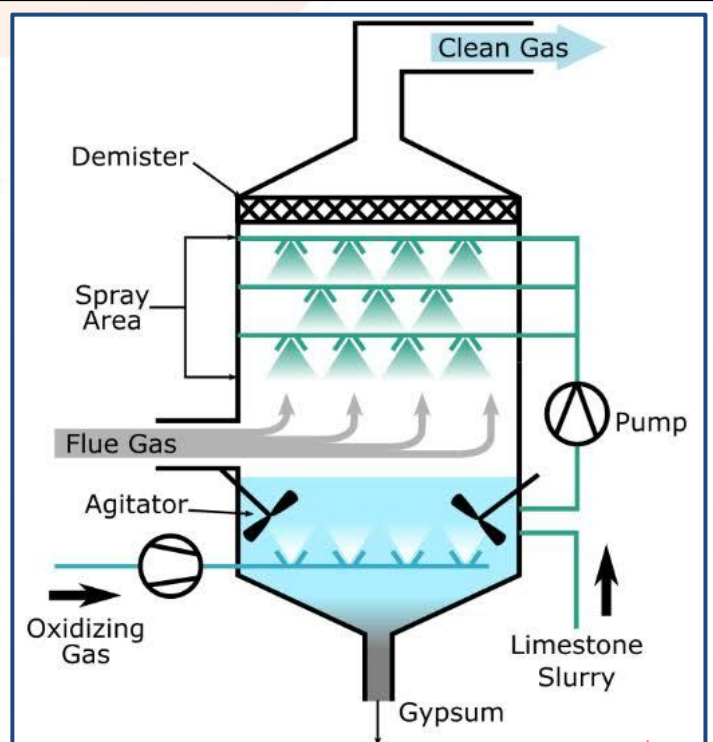
**SO<sub>2</sub> = Toxic gas** with pungent smell

**PM 2.5** combined with Ammonia (NH<sub>3</sub>)

World's **Top emitter**

**TPP : 240 times** greater SO<sub>2</sub> emission than Stubble Burning

### Flue Gas Desulfurization (FGD):



# Controlling PM 2.5 pollution

**CONTEXT:** The article highlights the challenges of controlling SO<sub>2</sub> Emissions which contribute to the PM 2.5 Pollution in the country.

## Categorisation of TPPs:

### Category A :

- TPPs **within 10 km** radius of the National Capital Region (NCR)
- Cities with a **million plus population**

**Category B :** within a 10 km radius of **critically polluted areas** or **non-attainment cities**.

**Category C :** **Remaining Plants throughout the country**

### PENALTIES

- ₹0.2 / Unit = Delay up to 180 days
- ₹0.3 / Unit = Delay from 181 to 365 days
- ₹0.4 / Unit = Delay beyond 1 year

## Pillar 5 : Issue of Extension of Deadlines:

### Issues with Installation of FGD:

- **CEA Review Report** = "One mole of CO<sub>2</sub> is released for absorption of One mole of SO<sub>2</sub>"
- **CSE** = "Lack of coordination between MoP, MoEFCC & TPPs"
- **Long gestation period & High installation cost**
- **Customers** = "Paying for installed but unused FGD"
- **Delayed payments from DISCOMS** = Legacy dues of > ₹610 Billion
- **No accountability mechanism on CPCB & SPCB**

## CSIR - NEERI Study:

- Recommended against installing **additional FGD Systems**
- "SO<sub>2</sub> emission norms are not important to achieve **Good Ambient Air Quality**"
- Focus on reducing **Particulate emissions**
- Indian coal has **lower sulphur content**



# Controlling PM 2.5 pollution

**CONTEXT:** The article highlights the challenges of controlling SO<sub>2</sub> Emissions which contribute to the PM 2.5 Pollution in the country.

## Pillar 6 : Steps taken by GOI to control Air Pollution :

### Steps Taken :

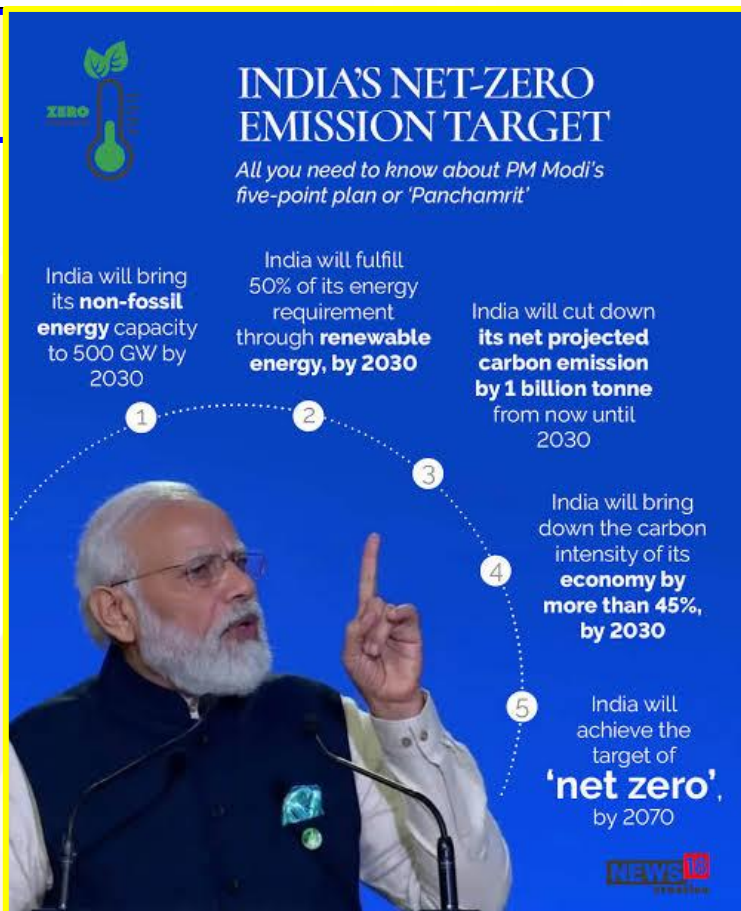
**National Clean Air Programme**

**SATAT & FAME Scheme**

**Ban on use of Pet Coke & Furnace Oil as fuel**

**Technical Interventions :  
Happy Seeder**

**National Air Quality Index (NAQI)**



## Mains Practise Question

**Question :** What are Primary & Secondary Pollutants? What are the issues revolving installation of Flue Gas Desulphurisation Technique in the Thermal Power Plants?

**Provide suggestive measures.**

**(15 Marks, 250 words)**





**SYLLABUS:** GS 3 Paper: Environment Conservation

**Newspaper:** Indian Express; **Page Number:** 15

## Context of the News :

MICROPLASTICS FOUND in beverages packaged in glass bottles are attributable to the colour used on bottle caps instead of the bottle, according to a statement by the All India Glass Manufacturers' Federation (AIGMF). The industry body issued the statement in response to reports which stated that beverages — water, soda, iced tea, wine and beer — stored in glass bottles had higher plastic content than glass bottles, citing a study by the French agency ANSES.

**"Non - Biodegradable"  
: Made of Synthetic  
Polymer**

**Microplastic**

Long degradation  
Time :  
**Microplastic  
s &  
Microbeads**

**NIEHS : "Plastic  
fragments  
smaller than  
5mm**

## Cause of Concern?

### THE PROBLEM WITH SINGLE-USE PLASTIC ITEMS

Plastic bags consumed annually  
**WOULD COVER FRANCE**  
TWICE OVER

Each year,  
**1,00,000**  
**MARINE ANIMALS**  
DIE OF EATING PLASTIC

An average person will use  
**200,000 PLASTIC ITEMS**  
OVER A LIFETIME

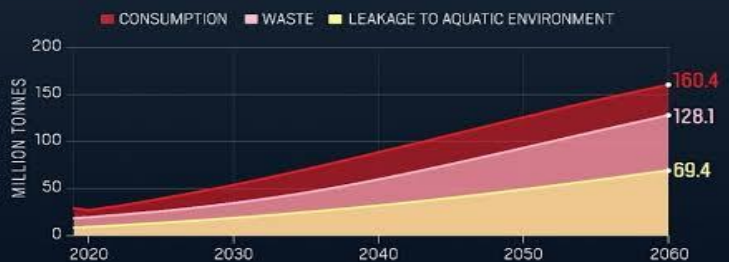
They can take over  
**50-10,000 YEARS**  
TO DEGRADE

Total economic damage of  
**13 BILLION** to  
MARINE ECOSYSTEMS

## INDIA'S PLASTIC USAGE MAY RISE 4 TIMES BY 2050



### THREAT OF PLASTIC WASTE IN INDIA



Note: Data from 2020-2060 are estimates

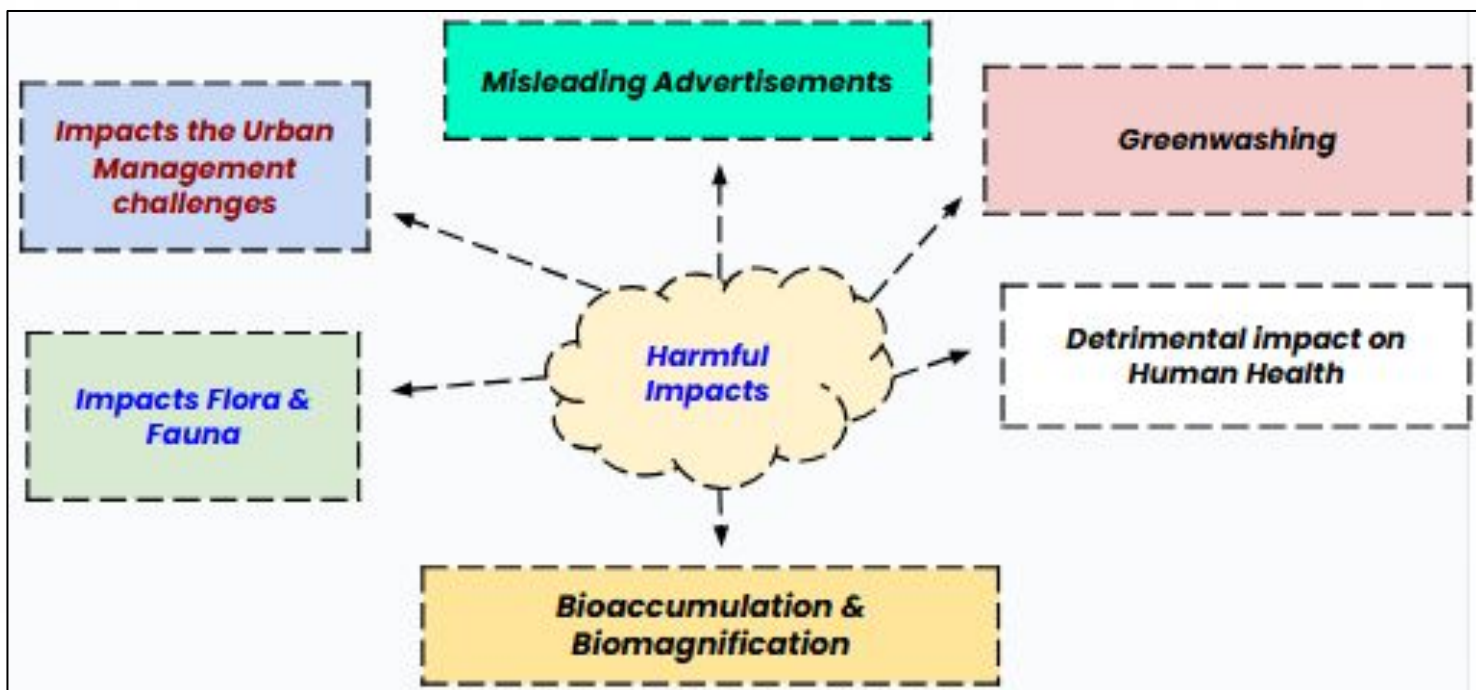
Source: OECD | Graphic: Samrat Sharma, Jaipal Sharma



# Menace of Microplastics

**SYLLABUS:** GS 3 Paper: Environment Conservation

**Newspaper:** Indian Express; **Page Number:** 15



## Steps Taken :

- **International Level:**
  - **UNEA : "End Plastic Pollution" Resolution 2022**
  - **Plastic Treaty Negotiations 2024**
- **Plastic Waste Management Rules 2021:**
  - **Banning 19 Categories of SUPs**
  - **Directive to Petrochemical Industries - Not supply raw material**
  - **SPCB & PCC - Revoke "Consent of Operation"**
  - **CPCB : Certification for Biodegradable Plastic**

## ITEMS THAT COME UNDER SINGLE-USE PLASTIC BAN

- 
- Plastic carry bags (less than 75 micron in thickness) 
  - Polystyrene (thermocol) for decoration
  - Disposable crockery - plates, cups, glasses, cutlery such as forks, spoons, knives, straws, trays 
  - Earbuds with plastic sticks 
  - Plastic sticks for balloons
  - Wrapping or packing films around sweet boxes 
  - Plastic flags 
  - Invitation cards and cigarette packets
  - Candy sticks
  - Plastic or PVC banners less than 100 micron, stirrers
  - Ice-cream sticks



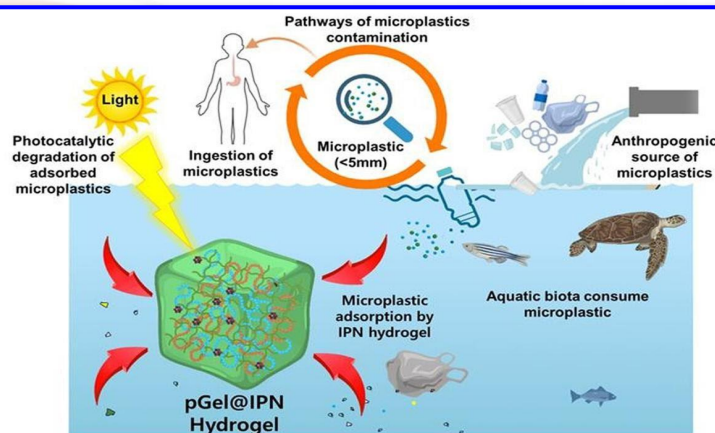
**SYLLABUS:** GS 3 Paper: Environment Conservation

**Newspaper:** Indian Express; **Page Number:** 15

## Steps Taken :

- **Environment Damage Compensation under EPA 1986**
- **Extended Producer Responsibility under PWM Rules 2024**
- **Micro & Nano Plastic Removal Project by FSSAI**
- **Advertising Standards Council of India : Substantial evidence for "Eco- Friendly" Claims**
- **Consumer Protection Act 2019 : Prohibits deceptive claims & outlines penalties**

## IISc researchers design novel hydrogel to remove microplastics from water





# Global Gender Gap 2025



**SYLLABUS:** GS 1 Paper: Issues related to Women Empowerment

**Newspaper:** The Hindu: **Page Number:** 12

## The story so far:

India dropped two places in the World Economic Forum's Global Gender Gap Index for 2025, slipping to the 131st rank out of 148 countries. While the gender gap has narrowed or remained stable in the case of three categories – economic participation and opportunity; educational attainment; health and survival – it has worsened in the case of political empowerment. At a time when rising numbers of women are voting in elections, the number of women in the highest halls of power remain stubbornly low. This is set to change in 2029, when mandatory 33% reservation for women in State and national legislatures is set to kick in, but steps need to be taken to ensure the benefits of this law extend to the long term.

## The Global Gender Gap Index Framework



Subindex 1  
Economic Participation and Opportunity



Subindex 2  
Educational Attainment



Subindex 3  
Health and Survival



Subindex 4  
Political Empowerment

**2006 : 19th edition**

**Scores : 0-1 Scale**

**"Distance covered toward  
Parity : % of Gender Gap  
closed"**

**2025 = 68% Gender  
Gap closed**

**No economy has yet achieved  
full gender parity**

**INDIA'S Performance :**

**Increased parity in Economic Participation :  
40% Gender Gap closed**

**Labour force participation : 45%**

**Educational Attainment :  
97% Gender Gap closed**

**Female Representation in Parliament:  
14.7% to 13.8% in 2025**

**Share of Women in Ministerial roles :  
6.5% to 5.6% in 2025**



**SYLLABUS:** GS 1 Paper: Issues related to Women Empowerment

**Newspaper:** The Hindu: **Page Number:** 12

	Rank	Economy	Score		Score change from	Rank change from
			0–1, 1=parity		2024	2024
	1	Iceland	0.926		-0.010	-
	2	Finland	0.879		0.004	-
	3	Norway	0.863		-0.012	-
	4	United Kingdom	0.838		0.049	+10
	5	New Zealand	0.827		-0.008	-1
	6	Sweden	0.817		0.001	-1
	7	Republic of Moldova	0.813		0.023	+6
	8	Namibia	0.811		0.006	-
	9	Germany	0.803		-0.006	-2
	10	Ireland	0.801		-0.001	-1
	125	Nepal	0.648		-0.015	-8
	126	Fiji	0.647		0.005	+2
	127	Côte d'Ivoire	0.647		-0.008	-6
	128	Kuwait	0.646		0.010	+3
	129	Tajikistan	0.646		-0.027	-17
	130	Sri Lanka	0.645		-0.007	-8
	131	India	0.644		0.003	-2
	132	Saudi Arabia	0.643		-0.003	-6
	133	Papua New Guinea*	0.638		n/a	n/a
	134	Oman	0.637		0.009	+2
	135	Türkiye	0.633		-0.012	-8

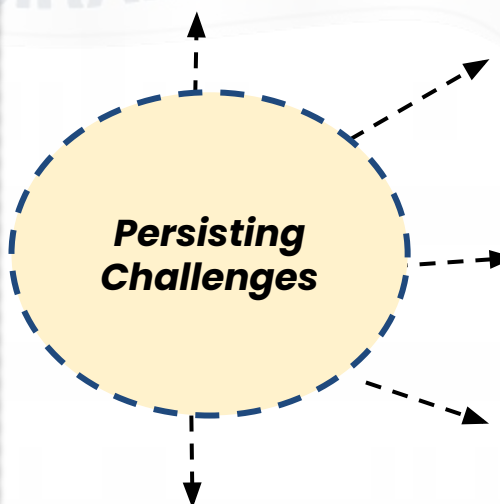
### What will change after women's reservation?

The legislation for 33% reservation for women in the Lok Sabha and in State legislatures was passed after a long wait in 2023, but as it is tied to a new Census and delimitation exercise, it can only be implemented from the 2029 general election at the earliest. Women's representation

in the Lok Sabha has ranged from 3.4% in 1977 to 14% in 2019. At the time of the passage of the women's reservation legislation in 2023, women accounted for only 9% of

MLAs in State Assemblies, with Chhattisgarh having the highest representation (18% women MLAs), while Himachal Pradesh had just one woman MLA and Mizoram had none. Jacking these figures up to at least 33% will give a significant boost to India's political empowerment scores.

**Reservation is valid for only 15 years : Implementable for only 2029 & 2034**



**Short period of significant gains made**

**MPs doesn't translate to Ministerial roles**

**Inadequate drawing of local leaders from Panchayats & Municipalities**

**Prevailing Social Stigma & Taboos**



**SYLLABUS:** GS 1 Paper: Issues related to Women Empowerment

**Newspaper:** The Hindu: **Page Number:** 12

## II. PRE-ELECTION PERIOD

### CANDIDATE RECRUITMENT

Establish consensus among party leadership to promote women's electoral participation

Consider adoption of voluntary party quotas for women candidates and formalize in recruitment rules

Enforce candidate quota rules i.e. by the election bureau or leadership of the party in line with the electoral timetable

Place women in winnable positions on party lists, or in winnable/safe constituencies

Identify incentives to attract women and encourage them to join the party, such as capacity building or advocacy

Ensure coordination with CSOs and organizations providing support to women candidates

Form strategic partnerships and gain support from men

### FUNDING AND CAMPAIGNING

Provide women with skills to raise early money, campaign and build name recognition

Establish or tap into fundraising networks for women candidates, such as Emily's List and Wish List

Establish an internal party fund or provide subsidies to women candidates

Consider setting a limit on nomination/primary contest expenditure

Consider earmarking a portion of party finances (including from public sources if applicable) for women candidates and training

Form partnerships and work with international organizations and CSOs

## III. ELECTION PERIOD

### CAMPAIGN PERIOD

Build women's capacities to campaign and consider twinning or mentoring of first time candidates

Ensure women's visibility in the electoral campaign and access to the media

Ensure the party manifesto articulates policy on gender equality and disseminate it to voters

### ELECTION DAY

Ensure women are trained and included as party agents in polling stations

Ensure monitoring includes a gender perspective and ensures the safety of women

Women trained and included as election monitors

## IV. POST-ELECTION PERIOD

### WOMEN ELECTED

Undertake gender equality assessment; develop gender action plan within party

Provide capacity building and strengthen legislative skills of elected women

Promote gender sensitive political reforms to institutions, particularly in parliament

Promote the participation of women in policy making of the party; ensure gender mainstreaming in party policies

Encourage formation of cross-party caucus and support its functioning

Sensitize party members about gender equality and work with men

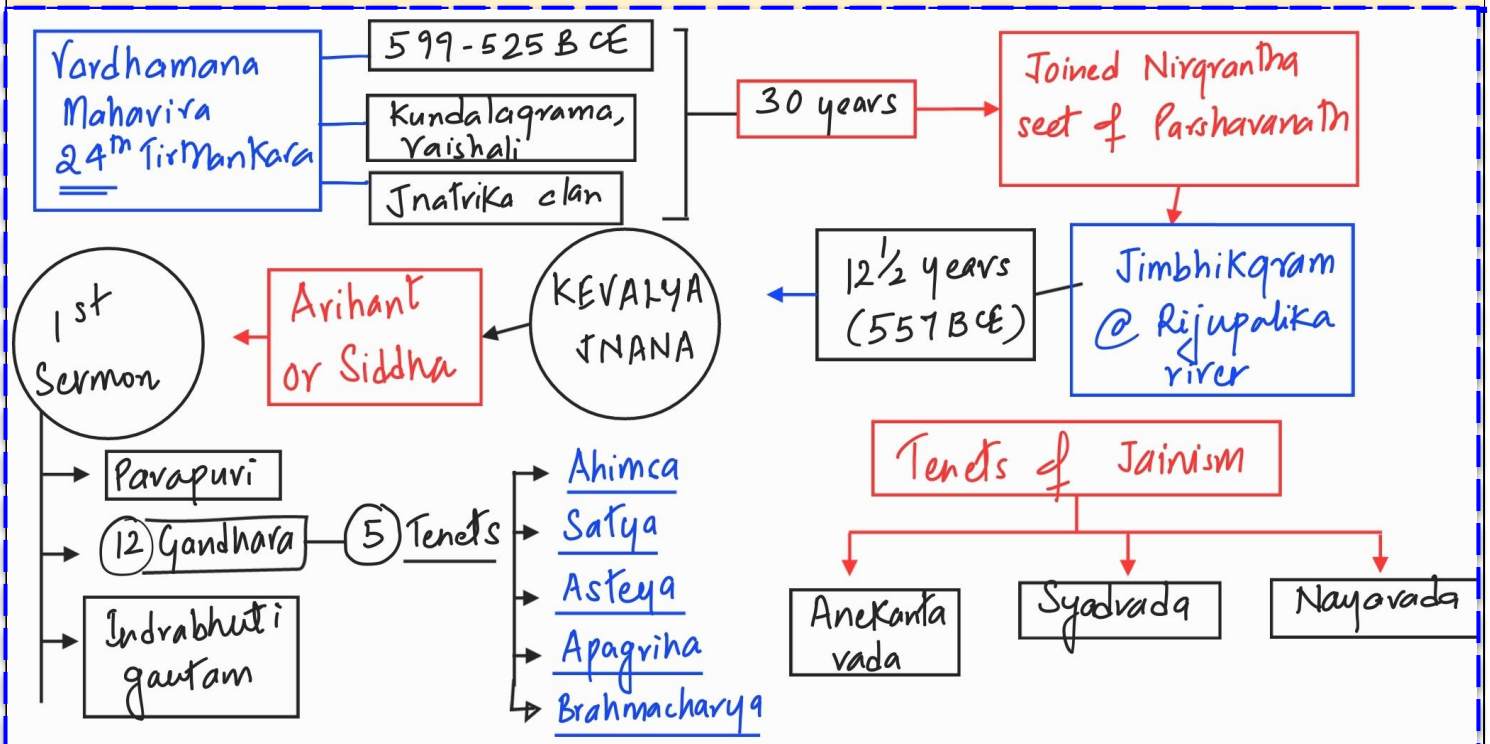




**SYLLABUS:** GS 1 Paper: Significant personalities in the News

**Newspaper:** Indian Express: **Page Number:** 6

## Jaina Monk : Acharya Vidyanand ji Maharaj :



### Context of the News :

IN A veiled warning to Pakistan, without naming the country, Prime Minister Narendra Modi said on Saturday that India had introduced the world to the power of non-violence, but would not allow anybody to meddle with it.

PM Modi was speaking at the centenary celebrations of Jain spiritual leader Acharya Vidyanand Ji Maharaj in New Delhi.



**SYLLABUS:** GS 1 Paper: Significant personalities in the News

**Newspaper:** Indian Express: **Page Number:** 6

## **Vidyanand Maharaj:**

**1925 in Belagavi, Karnataka**

**"Prolific Jain scholar memorising over  
8000 Jain Agamic verses"**

**Authored Books : Jain Darshan,  
Anekantvad & Moksha Marg Darshan**

**Revival of Prakrit Language**

**Ministry of Culture : Yuga Purush & Yuga  
Drashta**

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**SYLLABUS:** GS 3 Paper: Science & Technology  
**Newspaper:** The Hindu: **Page Number:** SCIENCE

## Context of the News :

India's vast linguistic, cultural, and social diversity has long been evident, but only now are scientists beginning to uncover the genetic richness underpinning it. In a new study in *Cell*, researchers reported sequencing the genomes of 2,762 Indians from 23 States and Union Territories. The data captured variation across caste, tribal groups, language, geography, and rural-to-urban settings, offering the most comprehensive genomic map of India to date.

# Gene Mapping

Gene mapping, also known as genome mapping, refers to the process of determining the specific locations of genes on a chromosome. This task is integral to understanding the structure of the genome, which is essential for studying genetic diseases and individual genetic traits.

Packed in the nucleus of the cell are the 23 pairs of chromosomes that represent your unique genotype.

A gene is a segment of the DNA that contains the genetic instructions for making a particular protein.

Each gene is a segment of DNA. The twisted strands that make up a DNA molecule resemble a spiral staircase.

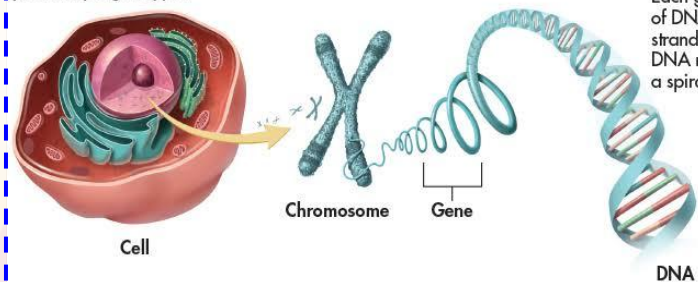


Figure 9.1  
Hockenbury/Nolan, *Discovering Psychology*, 7e, © 2016 Worth Publishers

## Past continuous

India's deep genetic past is still shaping contemporary Indians' health

- Scientists sequenced the genomes of 2,762 Indians in 23 regions, revealing a detailed genetic map of India

- Most Indians mix hunter-gatherer, Iranian farmer, and Steppe herder roots, with eastern groups adding East Asian ancestry

- Strict marriage within communities increases shared genes, boosting chances of recessive diseases like dangerous anaesthetic reactions

- Indian genomes hold diverse Neanderthal and Denisovan segments, including a chromosome 3 piece that raises COVID-19 risk



- Researchers discovered 2.6 crore new variants, many altering proteins and tied to thalassemia, deafness, and metabolic disorders

- Scientists call for bigger, more community-focused studies so precision medicine fairly serves India's immense genetic diversity



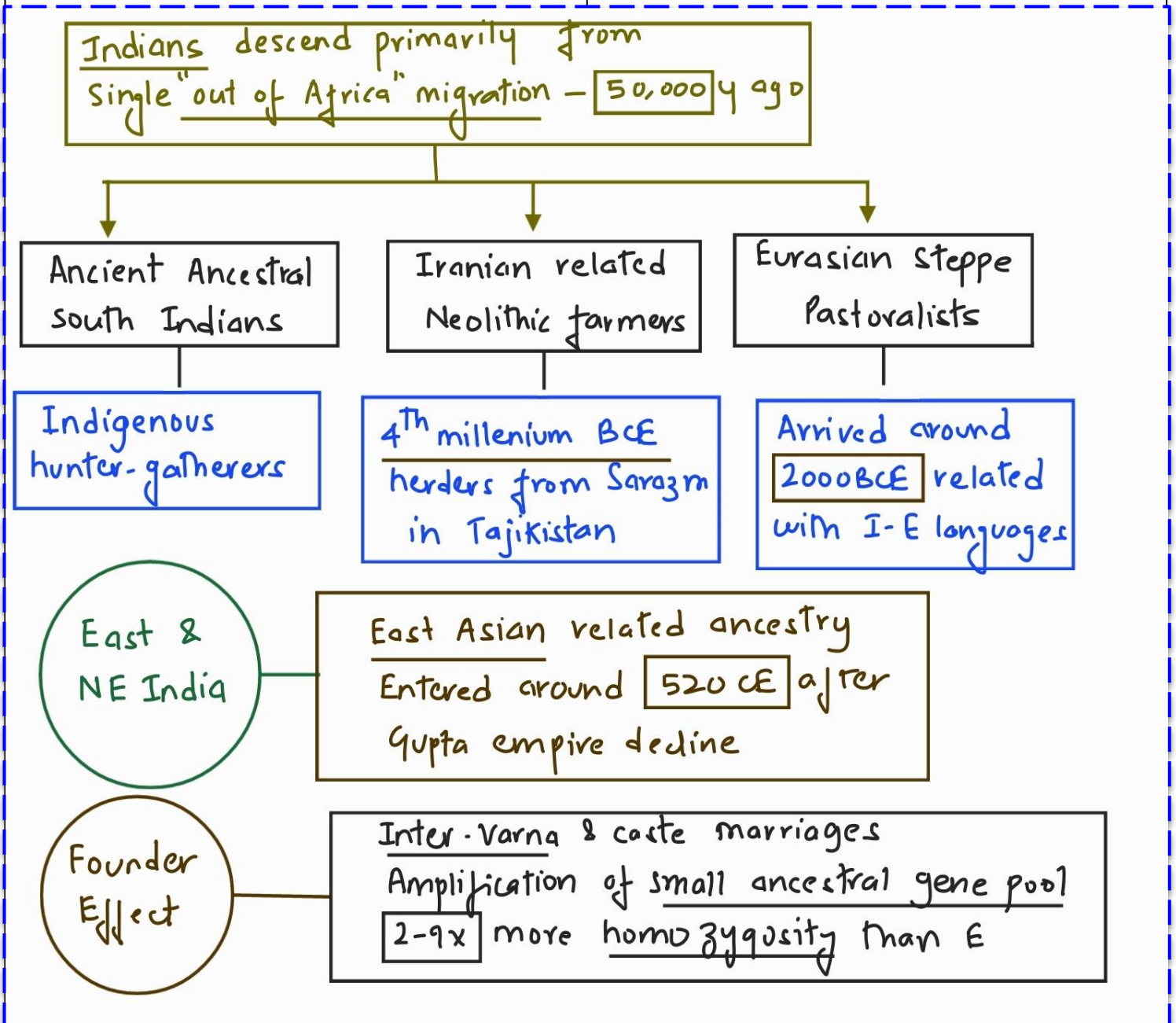


# Genetic Map of Indians



**SYLLABUS:** GS 3 Paper: Science & Technology  
**Newspaper:** The Hindu: **Page Number:** SCIENCE

## Findings of Research :



## Genetic Map of Indians



**SYLLABUS:** GS 3 Paper: Science & Technology  
**Newspaper:** The Hindu: **Page Number:** SCIENCE

### Practise the "Uncertainty":

Like all non-Africans, Indians carry traces of ancient interbreeding with other hominins, with Neanderthal or Denisovan segments covering up to 1.5% of the genome in some Indians. They also have the widest variety of Neanderthal segments. "Multiple waves of migration, fol-

92. The word 'Denisovan' is sometimes mentioned in media in reference to
- (a) fossils of a kind of dinosaurs
  - (b) an early human species
  - (c) a cave system found in North-East India
  - (d) a geological period in the history of Indian subcontinent

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# 1st ever Artificial Rain



**SYLLABUS:** GS 1 Paper: Geophysical Phenomenons

**Newspaper:** The Hindu: **Page Number:** 2

## Context of the News :

**D**elhi is all set for its first date with artificial rain as a trial of the cloud seeding process has been scheduled between July 4 and 11, Environment Minister Manjinder Singh Sirsa announced on Saturday.

“The initiative marks a historic step in controlling urban air pollution. Our aim is to provide Delhiites with clean air. That’s why we’re taking this bold step of inducing artificial rain. We are hopeful that it will bring about a meaningful change,” Mr. Sirsa told mediapersons.

## Artificial Rain

- **Process of precipitation through Cloud seeding**
- **Dispersing of chemicals : Silver iodide, potassium iodide & dry ice into clouds**
- **Acts as nuclei for condensation of water vapour to form larger droplets**
- **Stratospheric Aerosol Injection : Inspired by Volcanic eruptions where SO<sub>2</sub> & other reflective particles are injected to reduce smog & cool planet**

**25.** In the context of which of the following do some scientists suggest the use of cirrus cloud thinning technique and the injection of sulphate aerosol into stratosphere?

- (a) Creating the artificial rains in some regions
- (b) Reducing the frequency and intensity of tropical cyclones
- (c) Reducing the adverse effects of solar wind on the Earth
- (d) Reducing the global warming





**Q1. Consider the following statements:**

1. Secularism in the Indian context permits the State to recognise religious institutions.
2. Socialism in the Indian context is entirely aligned with the Marxist model.
3. The Supreme Court has held both secularism and socialism as part of the Constitution's basic structure.

**Which of the statements given above is/are correct?**

- a) 1 and 3 only
- b) 1 only
- c) 2 only
- d) 1 and 2 only

**Answer: a**

**Q2. Consider the following statements regarding microplastics:**

1. Microplastics disrupt endocrine functions in marine life but not in humans.
2. Secondary microplastics arise from the degradation of larger plastic items.

**Which of the statements given above is/are correct?**

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: b**

**Q3. Regarding atmospheric pollutants, consider the following statements:**

1. Sulphur dioxide and carbon monoxide are primary pollutants.
2. Ozone and peroxyacetyl nitrate are examples of secondary pollutants.
3. Carbon dioxide is a secondary pollutant formed by microbial action in wetlands.

**How many of the statements given above is/are correct?**

- a) Only One
- b) Only Two
- c) All Three
- d) None

**Answer: b**

**Q4. Regarding Jainism, consider the following statements:**

1. The first Jain Tirthankara was Rishabhanatha.
2. Chandragupta Maurya adopted Jainism.
3. Jain councils were held during the reigns of Kharavela and Chandragupta II.
4. Anekantavada is a tenet of Jainism.

**How many of the statements given above is/are correct?**

- a) Only One
- b) Only Two
- c) Only Three
- d) All Four

**Answer: c**

**Q5. Regarding Gene Mapping, consider the following statements:**

1. It identifies the exact nucleotide sequence of a gene.
2. Recombination frequency is crucial in constructing linkage maps.
3. Physical mapping relies on observable traits rather than DNA fragments.

**Which of the statements given above is/are correct?**

- a) 1 and 2 only
- b) 1 only
- c) 2 only
- d) 1 and 3 only

**Answer: c**





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