

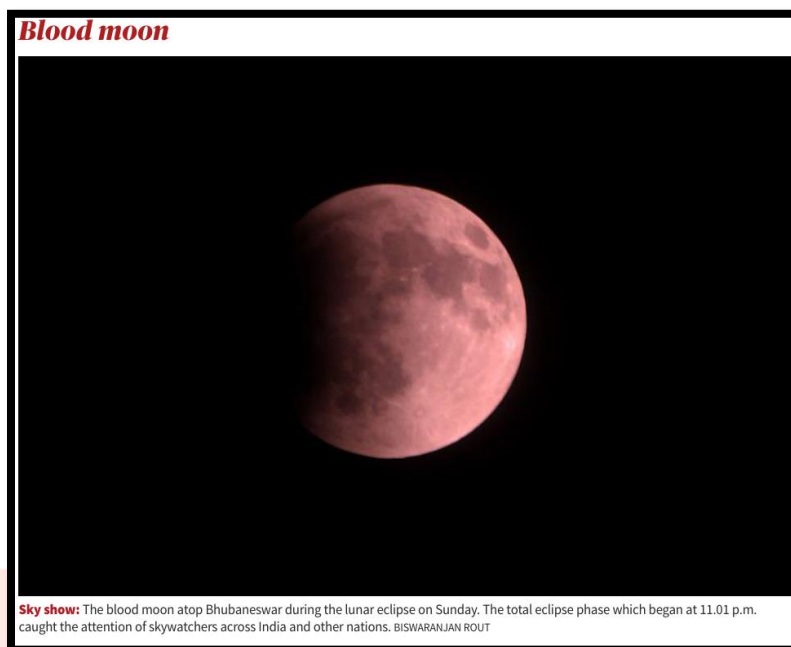
# **The Hindu Important News Articles & Editorial For UPSC CSE**

**Monday, 08 Sep, 2025**

## **Edition: International Table of Contents**

<b>Page 01</b> <b>Syllabus : Prelims</b>	<b>Blood moon</b>
<b>Page 02</b> <b>Syllabus : GS 1 : Modern History/ Prelims</b>	<b>Looking back at 100 years of the Self-Respect Movement in Tamil Nadu</b>
<b>Page 07</b> <b>Syllabus : GS 3 : Science and Technology / Prelims</b>	<b>Lost in space? You might need just two stars to find your way</b>
<b>Page 08</b> <b>Syllabus : GS 1 : Social Issues / Prelims</b>	<b>Greying with grace : Changing population dynamics require a policy reorientation for governments</b>
<b>Page 08</b> <b>Syllabus : GS 3 : Disaster Management / Prelims</b>	<b>The making of an ecological disaster in the Nicobar</b>
<b>Page 08 : Editorial Analysis</b> <b>Syllabus : GS 2 &amp; 3 : Social Justice &amp; Indian Economy</b>	<b>GST 2.0 will empower young Indians</b>

On Sunday night, skywatchers in India, including Bhubaneswar, witnessed a rare celestial event – a **total lunar eclipse**, popularly known as the *Blood Moon*. The phenomenon occurred when the Moon entered Earth's shadow, giving it a reddish hue. The total eclipse phase began at 11:01 p.m. IST and was visible across large parts of Asia, Australia, Africa, Europe, and the Americas.



### Key Details for Prelims

1. **What is a Blood Moon?**
  - It occurs during a **total lunar eclipse**, when sunlight passing through Earth's atmosphere gets scattered.
  - The shorter wavelengths (blue/green) scatter away, while the longer **red wavelength** bends towards the Moon, giving it a reddish appearance.
  - This effect is due to **Rayleigh Scattering** – the same reason why sunsets appear red.
2. **Astronomical Significance**
  - Unlike solar eclipses, lunar eclipses are **safe to view with naked eyes**.
  - It helps scientists study **Earth's atmospheric composition**, as sunlight filtered through our atmosphere paints the Moon.
3. **Geographical Coverage**
  - Visible in India (late night), Southeast Asia, Africa, Europe, and the Americas.
  - The **entire country of India** could see at least the partial phase.
4. **Prelims Pointers**
  - **Solar vs Lunar Eclipse**→ Solar eclipse happens at **new moon**, lunar eclipse at **full moon**.
  - **Frequency**→ 2–5 lunar eclipses occur every year, but total eclipses are rarer.
  - **Alignment**→ Sun – Earth – Moon (for lunar eclipse).

### Conclusion

The recent Blood Moon was not just a visual spectacle but also an important reminder of the dynamic relationship between celestial bodies and Earth's atmosphere. For students and researchers, it reinforces concepts of **light scattering, celestial mechanics, and geography of eclipse visibility**—all of which are significant for UPSC preparation.

### UPSC Prelims Practice Question

**Ques: A Blood Moon appears red because:**

- (a) The Moon emits its own red light during eclipse
- (b) Earth's atmosphere scatters shorter wavelengths of sunlight, while longer red wavelengths reach the Moon
- (c) The Sun emits only red light during eclipse
- (d) Reflection from Mars gives the Moon its red colour

**Ans: (b)**



The year 2025 marks the centenary of the **Self-Respect Movement** in Tamil Nadu, spearheaded by Periyar E.V. Ramasamy after his exit from the Indian National Congress. The movement questioned caste hierarchy, patriarchal norms, and religious orthodoxy, reshaping Tamil society and laying the ideological foundation for the **Dravidian movement**. Its centenary offers an opportunity to revisit its contributions to India's social reform and political discourse.

## Looking back at 100 years of the Self-Respect Movement in Tamil Nadu

**C. Palanivel Rajan**  
MADURAI

This year marks the centenary of the Self-Respect Movement, which changed the course of political discourse in Tamil Nadu. Though the movement was recorded to have started in 1925, historians contend that it did not have a singular moment of origin.

In their book, *Towards a Non-Brahmin Millennium (From Iyotho Thass to Periyar)*, V. Geetha and S.V. Rajadurai write: "The Self-Respect Movement comes to us, as it were, in process, as an ideological impulse, an energetic mobilising of men and women across castes and classes, a vision of a society that had erupted into rebellion, into acts of defiance, daring and, finally, as a time of great churning, when all things

were subject to doubt and enquiry, when all matters, however sacred and inviolate were relentlessly interrogated...When women ignored the claims of family and the bonds of community; when young men willingly forsook personal fortunes and defied elders; a time when scores of hitherto despised and ignored peoples, until then, mere objects of charity, pity and paternalist benevolence, were asked to play protagonists in a struggle which, above all, was committed to running their world upside down." Social reformer Periyar E.V. Ramasamy, who later founded the Dravidar Kazhagam, through the launch of Tamil weekly *Kudi Arasu* (Republic), paved the way for the formal beginning of the Self-Respect Movement.

Following his departure



**Leading light:** Social reformer Periyar E.V. Ramasamy, through the launch of Tamil weekly *Kudi Arasu*, paved the way for the formal beginning of the Self-Respect Movement.



from the Indian National Congress in November 1925, Periyar utilised an opportunity to address a Justice Party special conference in Coimbatore "to espouse a radical and militant non-Brahminism".

According to the authors, "He observed that the Justice Party had been un-

able to attract popular support because it did not have a political programme which addressed the real needs of the people." He said its members and leaders seemed to labour under the illusion that an English education and a position in the services, in themselves,

would bring cheer and good to the non-Brahmin commonweal.

### Radical reform

Periyar went on to assure his audience that he endorsed these objectives, but did not consider them a significant achievement in themselves.

"They could very well go to constitute a non-Brahmin elite which, in the days to come, could prove as oppressive as a Brahmin oligarchy," he warned.

*Kudi Arasu* was seen as an extension of the Self-Respect Movement, taking a more radical strand of the Dravidian movement, articulating the radical politics of caste and gender, and embarking on a far-reaching reform of Hindu society.

In her research article, *Advocacy journalism and the self-respect movement in late colonial South India*, published in *SudAsian Chronik-South Asia Chronicle*, Uma Ganesan says *Kudi Arasu*, as a movement in itself, intervened in the crowded journalistic space of early 20<sup>th</sup> Century south India, which was dominated by Brahmins and other

upper-caste elites, to create an alternative space for articulating its goals and mobilising support for its programme of social reform. The movement, according to her, posed a radical challenge to the Gandhi-led Congress nationalism by identifying the Congress as a bastion of Hinduism and its caste system.

### Justice Party's role

Author N.K. Mangalamurugesan, in his book, *Self-Respect Movement in Tamil Nadu 1920-1940*, wrote that the launching of the South Indian Liberal Federation (Justice Party) in 1916 marked the first step of non-Brahmins in challenging the Brahmin supremacy in the political and social fields.

"But the activities of the party were largely con-

finned to the interests of educated and rich non-Brahmins with the result that the bulk of the non-Brahmin masses remained untouched by them," he added.

Mangalamurugesan said the credit for making the non-Brahmin masses conscious of their rights goes to Periyar. "It is he who instilled into them a sense of pride and self-respect by starting the Self-Respect Movement," he said.

As a movement, it is known for its radical social reforms, including the introduction and popularisation of self-respect marriages, its advocacy for women's liberation from oppressive social norms like widow remarriage, the right to divorce, the right to property, abortion, among others.

### Key Aspects for Prelims

- Founder** – E.V. Ramasamy "Periyar" (1925, through his journal *Kudi Arasu*).
- Core Ideas** – Radical non-Brahminism, rationalism, equality, women's rights, and social justice.
- Associated Reforms** –
  - Self-respect marriages** (without priests or rituals, legalised in Tamil Nadu in 1967).
  - Promotion of widow remarriage, divorce rights, inheritance rights, reproductive rights.
  - Eradication of caste-based discrimination.
- Role of Justice Party (1916)** – First non-Brahmin political mobilisation, but limited to elites; Periyar's movement expanded it to the masses.
- Journalistic Role** – *Kudi Arasu* provided an alternative media space against Brahmin-dominated press.

### Relevance for Mains (GS I & II)

- Social Reform and Caste Question**
  - Movement attacked caste hierarchy and Brahmin dominance.
  - Mobilised backward castes, Dalits, and women, making them active participants in public life.
- Women's Empowerment**
  - Advocated for gender justice much ahead of its time.
  - Championed widow remarriage, property rights, reproductive rights, and against dowry.
- Political Significance**
  - Provided ideological foundation for the **Dravidian parties** (Justice Party → Dravidar Kazhagam → DMK/AIADMK).

## Daily News Analysis

- Created a counter-narrative to Congress nationalism, accusing it of perpetuating Hindu orthodoxy and caste.
4. **Legacy and Impact**
- Strengthened regional identity, rationalist thought, and state autonomy debates.
  - Influenced policies like **reservations in education and jobs** in Tamil Nadu.
  - Its radical questioning of caste and patriarchy remains relevant for India's ongoing debates on social justice.

### Conclusion

The Self-Respect Movement was not merely a regional reform but a transformative socio-political experiment that reshaped Tamil Nadu's society and politics. By foregrounding rationalism, social justice, and gender equality, it challenged entrenched hierarchies and empowered marginalized voices. A century later, its legacy continues to shape India's discourse on caste, equality, and democracy—making it a critical case study for both history and contemporary governance.

### UPSC Prelims Practice Question

**Ques:** KudiArasu, an important journal associated with the Self-Respect Movement, was launched to:

- a) Promote Gandhi's ideas of non-violence and swadeshi
- b) Mobilise support against the Simon Commission
- c) Articulate radical politics of caste and gender reform
- d) Support British colonial government policies

**Ans :c)**

### UPSC Mains Practice Question

**Ques:** Evaluate the role of the Self-Respect Movement in challenging caste hierarchy and promoting rationalism in Tamil Nadu. (150 Words)



Navigation in deep space has always been a major challenge for interplanetary missions. NASA's *New Horizons* spacecraft, launched in 2006, has now demonstrated a potential method of **self-navigation** using only two nearby stars — *Proxima Centauri* and *Wolf 359*. This technique, based on **stellar parallax**, may provide future spacecraft with autonomy from Earth-based tracking systems, a critical step for long-duration interstellar exploration.

## Lost in space? You might need just two stars to find your way

As the earth orbits the sun, a star's position relative to other stars might seem to shift; this is called stellar parallax. This phenomenon happens because every six months, the earth is on opposite sides of the sun, providing two different viewpoints you can achieve the same effect by looking at a candle with one eye at a time.

**Shreyasi Karanth**

**Navigation is essential**

If you're lost somewhere on the earth, you can use GPS or public landmarks to find your way back. Navigation in the vastness of space isn't so easy, however — especially if you're on a spacecraft racing billions of kilometres away from the earth. There is no GPS in space, and where a landmark is depends on where you're looking from. But recently, astronomers found that a deceptively simple trick could help the *New Horizons* spacecraft find its way through space using only two stars.

NASA launched *New Horizons* in 2006 to explore Pluto, its moons, and, later, objects in the Kuiper Belt, a disc of icy rocks and dust in the outer edge of the solar system. *New Horizons* flew by Pluto in 2015, beaming back stunning images of the dwarf planet and its moons. In 2024, the spacecraft went beyond 60x the sun-earth distance, a new record.

"Navigation is essential, just as it is on the earth," says Hans Kaper, director of the Max Planck Institute for Astronomy staff member Coryn Ruler-Jones said. "Spacecraft have to know where they are and where they are heading for many reasons" — from planning their fuel use to pointing their antenna to send data back home.

Interplanetary missions like *New Horizons* are tracked by NASA's Deep Space Network (DSN), a global array of giant radio antennae that send and receive signals from spacecraft. This system is precise but always earth-centred, i.e., the spacecraft's location is measured relative to our planet. As spacecraft travel farther, signals between ground stations and the spacecraft drop, increasing communication time and decreasing signal strength. Therefore, spacecraft that can find their way without asking for directions from the earth will be at an advantage.

The new study proposes a simple way to do this using stellar parallax, the same method early astronomers used to measure stars' distances from the earth. The findings were published in *The Astronomical Journal* in June.

**One eye at a time**

As the earth orbits the sun, a star's position relative to other stars might seem to shift. This is called stellar parallax. This is because every six months, the earth is on opposite sides of the sun, providing two different viewpoints. You can achieve the same effect by looking at a candle first with only your left eye and then only your right eye: the candle will change position against the background. The amount of shift is called the

parallax angle, and it's directly related to the distance to the star.

In the study, the astronomers observed two stars from the earth using *New Horizons*' instruments. They're like two eyes that were 7 billion km apart on April 23, 2020, when the team made the observations.

The two stars were *Proxima Centauri* and *Wolf 359*, located 4.2 light years and 7.9 light years away from the earth, respectively.

"We wanted large parallaxes, which means using the closest stars," says U.S. National Science Foundation National Optical-Infrared Astronomy Research Laboratory astronomer and the study's lead author Tod Lauer said.

"*Proxima Centauri* is the closest star besides the sun. *Wolf 359* is in the top five. We also needed stars that were not too bright for the camera. *Wolf 359* was optimal for navigation, as it's close to 80° away from *Proxima*."

**Self-sufficient**

For the study's purposes, the European Space Agency's *Gaia* spacecraft played a vital role: it provided the 3D positions of stars in a fixed, universal reference frame. With these reference positions, the team measured how much the stars' positions changed against the background by comparing their positions from *New Horizons*' vantage point with those from the earth.

The parallax was 32.4 arcseconds for *Proxima* and 15.7 arcseconds for *Wolf 359*.

**THE GIST**

Interplanetary missions are monitored by radio antennae. This system is earth-centred. As spacecraft travel farther, communication time increases and signal strength decreases. Therefore, spacecraft need to navigate without asking for directions from the earth.

The parallax was 32.4 arcseconds for *Proxima Centauri* and 15.7 for *Wolf 359*. This indicated that *New Horizons* was at 46.89-times the earth-sun distance — close to the 47.12 AU estimated by radio-tracking. This could be the simplest way to navigate spacecraft because it doesn't require special equipment.

Scientists say the method is not of practical use to navigate *New Horizons*, because we can still use earth-based beacons for the distance involved. But for much deeper missions, such as interstellar travel, an extension of this method becomes very useful.

Scientists say the method is not of practical use to navigate *New Horizons*, because we can still use earth-based beacons for the distance involved. But for much deeper missions, such as interstellar travel, an extension of this method becomes very useful.

**TECHNIQUE**

ALL it needs is a camera, a standard spacecraft computer, and a catalogue for reference positions on any spacecraft.

U.S. NATIONAL SCIENCE FOUNDATION NATIONAL OPTICAL-INFRARED ASTRONOMY RESEARCH LABORATORY

at the time of measurement. (An arcsecond is equal to 1/3600th of a degree.)

This calculation indicated that *New Horizons* was positioned at 46.89-times the earth-sun distance — close to the 47.12 AU estimated by radio-tracking measurements from the earth.

The technique could be the simplest way to navigate spacecraft because it doesn't require special equipment, Mr. Lauer said.

"All it needs is a camera, a standard spacecraft computer, and a catalogue for reference positions on any spacecraft." The team wrote in its paper that its demonstration was "educational," not yet ready for practical use.

"We can't improve [the accuracy] that much with *New Horizons*, but a better camera on another spacecraft would help," Mr. Lauer said.

**Stars as compass**

The "study is a good one and a nice demonstration," Mr. Ruler-Jones, who

wasn't involved in the study, said. "As they themselves note, it is not of practical use to navigate *New Horizons*, because we can still use earth-based beacons for this [distance]."

"But for much deeper space missions, such as interstellar travel, where beacons are no longer usable, an extension of this method becomes very useful."

He also said an existing method called stellar astrometric navigation also uses stars as well as accounts for the effects of special relativity to estimate a spacecraft's 3D position and velocity by measuring the angular separation between two stars in the sky. The new study has proposed a simpler version of this method, he added.

Mr. Ruler-Jones also said researchers are investigating another method called pulsar navigation, which uses rapidly spinning neutron stars like lighthouses to show the way.

"It's potentially much more accurate than stellar astrometric navigation, but it needs reasonable knowledge of the initial position, which the stellar astrometric navigation could supply," he said.

Mr. Lauer said he grew up watching *Star Trek* and that in one scene, he noticed the stars appeared to move as a spacecraft found its way through deep space. Did the show's producers know they were being accurate, or had they simply missed a detail? The new method has rendered this question irrelevant.

Shreyasi Karanth is a freelance science writer.

shreyasikarant@gmail.com

### Key Concepts for Prelims

#### 1. Stellar Parallax

- Apparent shift of a star's position against the background when viewed from two different vantage points.
- Used historically to measure distances to stars; now repurposed for navigation.

#### 2. Demonstration

- *New Horizons*, ~47 AU from Earth, observed *Proxima Centauri* (4.2 light years away) and *Wolf 359* (7.9 light years away).
- By comparing their positions from Earth and spacecraft, astronomers calculated *New Horizons*' distance with good accuracy.

#### 3. Supporting Missions

- **Gaia spacecraft (ESA)**: Provided precise 3D positions of stars in a fixed reference frame.
- **Deep Space Network (DSN)**: Current Earth-based radio tracking system for spacecraft.

#### 4. Key Measurements

- Parallax angle for Proxima: 32.4 arcseconds.
- Parallax angle for Wolf 359: 15.7 arcseconds.
- Estimated location: 46.89 AU, close to Earth-based tracking (47.11 AU).

#### Relevance for Mains

##### 1. Challenges in Deep-Space Navigation

- DSN is Earth-centric, limited by increasing communication delays and weaker signals as distance increases.
- For interstellar missions, Earth-based tracking may become impractical.

##### 2. Proposed Solutions

- **Stellar Parallax Navigation** – Simple, requires only a camera, computer, and star catalogue.
- **Stellar Astrometric Navigation** – More advanced, accounts for relativity and angular measurements between stars.
- **Pulsar Navigation** – Uses neutron stars as natural beacons; more accurate but requires initial positional knowledge.

##### 3. Advantages

- Self-sufficient spacecraft navigation.
- Reduced dependency on Earth stations.
- Potentially vital for future interstellar missions.

##### 4. Limitations

- Current demonstration is “educational” and not yet practically accurate enough.
- Requires better instruments for operational use.

#### Conclusion

The New Horizons experiment highlights the possibility of using **stars as natural compasses** in space. While Earth-based systems remain reliable for current missions, future deep-space exploration will need autonomous navigation methods. Stellar parallax, stellar astrometry, and pulsar navigation together point towards a future where spacecraft can chart their own paths across the cosmos — a critical leap for interstellar ambitions.

### UPSC Prelims Practice Question

**Ques :**With reference to New Horizons mission, consider the following statements:

1. It was launched by NASA primarily to study Pluto and the Kuiper Belt.
2. It recently demonstrated a method of spacecraft navigation using nearby stars.
3. It is equipped with instruments to measure the stellar parallax of Proxima Centauri and Wolf 359.

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

- A. 1 only
- B. 1 and 2 only
- C. 2 and 3 only
- D. 1, 2 and 3

**Ans : d)**

### UPSC Mains Practice Question

**Ques:** The New Horizons mission demonstrated the use of stellar parallax as a method of spacecraft navigation. Explain the principle behind stellar parallax and critically analyze how it may contribute to achieving self-sufficient deep-space exploration. (150 Words)





The 2023 **Sample Registration System (SRS) Statistical Report** confirms India's ongoing demographic transition, with a steady decline in fertility rates and a rise in the elderly population. This shift, while a marker of socio-economic progress, also signals future challenges for governance, healthcare, and social security.

### Key Prelims Pointers

1. **Crude Birth Rate (CBR)**
  - India (2023): **18.4 per 1,000 population** (down from 19.1 in 2022).
  - Highest: Bihar (25.8), Lowest: Tamil Nadu (12).
2. **Total Fertility Rate (TFR)**
  - India (2023): **1.9**, below replacement level (2.1).
  - Highest: Bihar (2.8).
  - Lowest: Delhi (1.2).
  - 18 States/UTs now below replacement level.
3. **Ageing Population**
  - Elderly (60+ years): **9.7% of population** (up by 0.7% in one year).
  - Highest elderly share: Kerala (15%).
  - Lowest: Assam, Delhi, Jharkhand.
4. **Demographic Dividend**
  - India still has a young workforce, but ageing trend is accelerating.

### Mains Relevance

#### 1. Implications of Falling Fertility

- Decline in workforce over time → potential labour shortages.
- Risk of economic slowdown similar to Japan, South Korea, China.

#### 2. Rise of Ageing Population

- Increased demand for **healthcare infrastructure**, geriatric care, mental health services.
- Strain on **pensions, social security, and welfare systems**.
- Need for urban design & transport systems friendly to elderly and differently-abled.

#### 3. Regional Disparities

- North India (Bihar, UP, MP, Rajasthan, Chhattisgarh) → still above replacement fertility.
- South & West India → ageing faster (Kerala already 15% elderly).
- Policy must balance both challenges: overpopulation in some states vs ageing in others.

### Greying with grace

Changing population dynamics require a policy reorientation for governments

If there was any doubt about India going through the throes of a demographic change, confirmation came with the Sample Registration System (SRS) Statistical Report indicating a fall in the country's Crude Birth Rate (CBR) and Total Fertility Rate. As per the SRS data for 2023, India's CBR, defined as the number of annual live births in a population per 1,000 people, had declined to 18.4, a drop from 19.1 in 2022. The country's TFR had also fallen to 1.9, after hovering at 2.0 in 2021 and 2022. The TFR indicates the average number of children a woman will have in her lifetime to replace that generation, and a TFR of 2.1 births per woman is considered replacement-level fertility, translating to a stable population over time. Any figure over 2.1 suggests a growing population while rates below 2.1 signify a clear trend towards population decline and ageing. Of course, as usual, for a country of this size and diversity, there were vast regional differences. The highest CBR was in Bihar at 25.8, and the lowest was in Tamil Nadu at 12. Bihar also reported the highest TFR (2.8) and Delhi, the lowest (1.2). Eighteen States and Union Territories had a TFR below the replacement level, and all States reporting higher than replacement level TFR were in northern India – Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, and Chhattisgarh. Following Delhi, West Bengal, Tamil Nadu, and Maharashtra too have a TFR below 2.0. Simultaneously, as expected from such a demographic shift, SRS data indicated the proportion of people above 60 rose by 0.7 percentage points in a year to 9.7% of the population. Kerala has the highest proportion of elderly population, at 15%, while Assam, Delhi and Jharkhand reported the lowest proportion of their population over 60 years.

It will be foolhardy to look away from the writing on the wall. As the most populous nation, home to over 1.46 billion people, the current declining trend will admittedly take several years to have an impact on the population. However, there is no doubt that the nation, having, at least theoretically, prepared for 'more' all these years, should now prepare for a different future, while continuing to leverage the demographic dividend it still possesses thanks to a relatively young workforce. A greying nation will come with its own attendant concerns and needs – financial, universal access for reduced mobility, physical and mental health-care facilities and social support services. A 'young' nation, after all, will require a massive realignment to be ready to serve the needs of a growing population of the elderly.

#### 4. Policy Reorientation Needed

- Strengthen **public health systems** with geriatric care.
- Expand **social security schemes** like pensions, insurance, elderly-friendly housing.
- Encourage **female labour force participation** to balance shrinking workforce.
- Invest in **skill development & automation** to sustain productivity.
- Create a **National Elderly Policy 2.0** focused on financial independence, dignity, and active ageing.

#### Conclusion

India stands at a demographic crossroads. The declining fertility rate and rising elderly population signal the end of an era of unchecked population growth. While the demographic dividend still offers opportunities, policy must pivot towards preparing for a greying society. Proactive reforms in healthcare, social security, and workforce management will determine whether India can age gracefully while sustaining growth and inclusivity.

#### UPSC Prelims Practice Question

**Ques:** In demographic studies, “Replacement Level Fertility” refers to:

- (a) Fertility rate required to double the population every 25 years
- (b) Fertility rate required to maintain a stable population over time
- (c) Fertility rate required for a developed economy
- (d) Fertility rate required to replace elderly population with young population

**Ans :b)**

#### UPSC Mains Practice Question

**Ques:** India is undergoing a demographic transition from a young nation to an ageing society.” Discuss the regional variations and socio-economic implications of this shift. **(150 words)**

Quality education

The proposed **₹72,000 crore mega-infrastructure project in Great Nicobar Island** has triggered intense debates over environmental sustainability, tribal rights, and disaster preparedness. While the government projects it as a development initiative, critics highlight its grave ecological and humanitarian costs, particularly for indigenous tribes and fragile ecosystems.

### *The making of an ecological disaster in the Nicobar*

**T**here has been no shortage of half-baked and ill-conceived policymaking in the last 11 years. The latest in this series of planned misadventures is the Great Nicobar mega-infrastructure project. The totally misplaced ₹72,000 crore expenditure poses an existential danger to the island's indigenous tribal communities, threatens one of the world's most unique flora and fauna ecosystems, and is highly susceptible to natural disasters. Nevertheless, it is being insensitively pushed through, making a mockery of all legal and deliberative processes.

#### Uprooting tribals

The Great Nicobar Island is home to two indigenous communities, the Nicobarese tribe and the Shompen tribe (a Particularly Vulnerable Tribal Group). The ancestral villages of the Nicobarese tribals fall in the project's proposed land area. The Nicobarese were forced to evacuate their villages during the Indian Ocean tsunami of 2004. This project will now permanently displace this community, ending its dream of returning to its ancestral villages.

The Shompen face an even greater threat. The Island's Shompen Policy, notified by the Union Ministry of Tribal Affairs, specifically requires the authorities to prioritise the tribe's welfare and "integrity", when considering "large scale development proposals." Instead, the project denotifies a significant part of the Shompen tribal reserve, destroys the forest ecosystems where the Shompen live, and will cause a large-scale influx of people and tourists on the island. Ultimately, the Shompen will find themselves cut off from their ancestral lands and unable to sustain their social and economic existence. Yet, the Government is stubbornly adamant and shockingly insistent.

The Constitutional and statutory bodies set up to preserve tribal rights have been sidestepped throughout this process. As in Article 338-A of the Constitution, the Government should have consulted the National Commission for Scheduled Tribes. It has failed to do so. The Government should have consulted the Tribal Council of Great Nicobar and Little Nicobar Island. Instead, the Council Chairman's plea that the Nicobarese tribals be allowed to return to their ancestral villages has been neglected. A



**Sonia Gandhi**  
is the Chairperson,  
Congress  
Parliamentary Party

Letter of No Objection was secured from the Council, but it has since been revoked, with the Council noting that the authorities had "rushed them" into signing the letter.

Due process and regulatory safeguards set up to protect local communities have been evaded. The Social Impact Assessment (SIA) conducted as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 should have considered the Nicobarese and Shompen as stakeholders of the process and evaluated the project's impact on them. Instead, it omits any reference to them altogether. The Forest Rights Act (2006), which empowers the Shompen as the authority to protect, preserve, regulate and manage the forests, should have underpinned any policy action. Instead, the Shompen have not been consulted on this issue – a fact which the Tribal Council has now confirmed. The country's laws are being mocked wholesale. Unconscionably, one of the country's most vulnerable groups may have to pay the ultimate price for it.

#### The farce of compensatory afforestation

Ecologically, this project is nothing short of an environmental and humanitarian catastrophe. The project will require the cutting down of trees on an estimated 15% of the island's land, decimating a nationally and globally unique rainforest ecosystem. The Ministry of Environment, Forests, and Climate Change estimates that 8.5 lakh trees may be cut. This is a depressing figure, but it may also be a gross underestimate – independent estimates have suggested that 32 lakh trees to 58 lakh trees may eventually be cut.

The Government's solution to this indiscriminate tree felling is that of 'compensatory afforestation', a rather poor substitute for the loss of natural, old-growth forests. Inexplicably, the planned afforestation is in Haryana, a State that is thousands of kilometres away, and in a decidedly different ecology. In a tragedy bordering on farce, a quarter of this land planned for afforestation has now been auctioned off by the Haryana Government for mining. In any case, compensatory afforestation may help assuage a guilty conscience but is simply no substitute for

the destruction of multi-species, biodiversity-rich natural forests. The planned port site is also controversial with some of it falling under the Coastal Regulation Zone (CRZ) 1A. Port construction is prohibited in CRZ 1A areas due to the presence of turtle nesting sites and coral reefs.

Despite abundant evidence confirming the same, which includes a National Green Tribunal order, the Government has contrived ways to manipulate this truth through a high-powered committee (HPC). The report of this HPC and the ground-truthing exercise it conducted to reclassify the port site out of CRZ 1A has not been made public.

#### Flaws in methodology

From a wildlife standpoint too, the project raises serious concerns. Primatologists have written to the Government expressing grave concerns about the project's impact on the Nicobar long-tailed macaque. These concerns have been ignored. The biodiversity assessments for the projects have come under questioning for critical methodological flaws. The assessment of sea turtle nesting sites was conducted in the off-season for nesting. Drones were employed to gauge the project's impact on dugongs, but these drones have limited capacity and can only assess shallow areas. Evidence has emerged that the institutes were made to conduct these assessments under highly unusual conditions, bordering on duress.

Finally, the project – including the port – is coming up in a seismically sensitive earthquake prone zone. The tsunami of December 2004 saw a permanent land subsidence of about 15 feet. The 6.2 magnitude earthquake in the Andaman and Nicobar Islands in July 2025 only reminds us of this ever-present threat. Locating such a massive project here deliberately jeopardises investment, infrastructure, people, and the ecology.

Our collective conscience cannot, and must not, stay silent when the very survival of the Shompen and Nicobarese tribes is at stake. Our commitment to future generations cannot permit this large-scale destruction of a most unique ecosystem. We must raise our voice against this travesty of justice and this betrayal of our national values.

The Great Nicobar Island Project is a grave misadventure, trampling on tribal rights and making a mockery of legal and deliberative processes

### Key Prelims Pointers

#### 1. Great Nicobar Island Tribes

- **Nicobarese** (Scheduled Tribe).
- **Shompen** (Particularly Vulnerable Tribal Group – PVTG).

#### 2. Relevant Laws & Safeguards

- **Forest Rights Act, 2006** → empowers tribal communities to manage forests.
- **Right to Fair Compensation and Transparency in Land Acquisition Act, 2013** → requires Social Impact Assessment.
- **Article 338A** → National Commission for Scheduled Tribes must be consulted.
- **Coastal Regulation Zone (CRZ) 1A** → prohibits port construction in turtle nesting and coral reef areas.

### 3. Ecological Impact

- Estimated **8.5 lakh to 58 lakh trees** may be cut.
- Loss of **rainforests, turtle nesting grounds, coral reefs, dugong habitats, Nicobar macaque**.
- Compensatory afforestation planned in Haryana (ecologically irrelevant).

### 4. Disaster Risk

- **Seismically active zone** – witnessed 2004 tsunami (land subsidence ~15 ft).
- July 2025 earthquake (6.2 magnitude) highlights vulnerability.

## Mains Relevance

### 1. Impact on Tribal Communities

- Permanent displacement of Nicobarese (already affected by 2004 tsunami).
- Threat to Shompen tribe's survival due to loss of forest habitat.
- Violation of constitutional and statutory safeguards for Scheduled Tribes.

### 2. Governance & Legal Issues

- Bypassing of NCST and Tribal Councils.
- Social Impact Assessment excluding tribals.
- Questionable environmental clearances and opaque HPC reports.

### 3. Ecological & Biodiversity Loss

- Irreversible destruction of **old-growth tropical rainforest**.
- Threat to endemic and endangered species.
- Misplaced afforestation efforts far from the island's ecosystem.

### 4. Disaster Management Concerns

- Project located in a **tsunami-prone and earthquake-prone zone**.
- High risk to infrastructure, investments, and lives.

### 5. Ethical and Developmental Dilemma

- Raises questions on **sustainable development vs. ecological justice**.
- Puts indigenous survival and ecological security against short-term economic gains.

## Conclusion

The Great Nicobar project exemplifies the risks of pursuing development without ecological and social sensitivity. By undermining tribal rights, ignoring environmental safeguards, and pushing massive infrastructure into a seismically fragile zone, it risks becoming an ecological and humanitarian disaster. True progress requires balancing national development with **environmental sustainability, disaster resilience, and the dignity of indigenous communities**.

### UPSC Prelims Practice Question

**Ques:** Which of the following ecological features are present in Great Nicobar Island?

1. Coral reefs
2. Sea turtle nesting sites
3. Tropical rainforests
4. Dugong habitats

**Select the correct answer using the code below:**

- (a) 1, 2 and 3 only
- (b) 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

**Ans: d)**

### UPSC Mains Practice Question

**Ques:** Evaluate the disaster risks of placing large infrastructure projects in ecologically fragile and seismically active zones, with special reference to the 2004 tsunami and 2025 earthquake in the Andaman & Nicobar Islands. **(150 Words)**





## GST 2.0 will empower young Indians

India's greatest strength is its people. With nearly two-thirds of the population under the age of 35 years, the country's economic engine is powered by aspiration, enterprise and consumption. This demographic dividend is not merely a statistic. It is the pulse of an economy that is increasingly youthful, ambitious and globally connected. GST 2.0 is a reform that directly responds to this advantage. By simplifying rates, reducing burdens on essentials and exempting services such as insurance, the new structure of GST 2.0 strengthens household purchasing power and supports the ambitions of young India.

### India's household spending

Private consumption already accounts for over 60% of India's GDP, a proportion far higher than in many other large economies. This makes household spending the single-most powerful driver of national growth. When families save on taxes, even by a small margin, their disposable income increases. Multiplied across millions of households, these savings translate into significant demand for goods and services—from basic necessities to education, health care, housing and digital products. GST 2.0 unleashes this multiplier effect, ensuring that affordability at the micro-level translates into growth at the macro-level.

For young households balancing equated monthly instalments (EMI), health-care expenses and education costs, the reform provides genuine relief. Reduced taxes on essentials ease monthly financial pressure, while exemptions on critical services such as insurance encourage a culture of protection and planning. For many families in urban and semi-urban areas, the reform could be the difference between postponing an aspiration and achieving it sooner. By making everyday life slightly more affordable, GST 2.0 makes long-term goals such as home



**Suneeta Reddy**

is Managing Director  
of Apollo Hospitals  
Enterprise Limited

The reform will align fiscal policy with the aspirations of a young population

ownership, education or health security more attainable.

The exemption of GST on health and life insurance premiums is particularly meaningful. India's insurance penetration has historically been low, and cost has been a major barrier. For a young workforce juggling EMIs, student loans and discretionary spending, insurance often felt like an avoidable burden. Removing the tax burden changes that equation. It sends a clear message that financial protection is not just an individual choice but a national priority. Over time, this measure will accelerate insurance penetration, strengthen household resilience and reduce the vulnerability of families to sudden medical or financial shocks. In the process, it creates a healthier, more secure society—one where risk is shared, not borne by individuals alone.

The reform is equally significant for micro, small, and medium enterprises (MSMEs), which together employ over 110 million people and contribute substantially to India's GDP. For decades, compliance complexities and uneven tax structures have discouraged many small firms from formalising. GST 2.0 simplifies these processes, reducing friction and encouraging wider participation in the formal economy. For young entrepreneurs, this translates into easier access to credit, greater visibility in supply chains and stronger confidence in building businesses that can scale. By easing the path for MSMEs, the reform empowers the very segment that provides jobs and opportunities to young India.

Youth-driven consumption creates a virtuous cycle. When affordability increases, demand rises. Rising demand encourages new investments. Investments generate employment. Employment fuels further consumption. This cycle, once strengthened, becomes self-sustaining. GST 2.0 nurtures this cycle by aligning fiscal policy

with the realities of a youthful and ambitious nation. It recognises that consumption is not merely a private activity but the collective force that shapes the country's growth trajectory.

Just as important as affordability is predictability. A tax system that is transparent, consistent, and stable provides confidence to young professionals planning their financial futures. Entrepreneurs too benefit from knowing that their compliance costs will not fluctuate unpredictably.

GST 2.0, with its two-tier structure, addresses this need for predictability. It reassures citizens that India's economic journey will be supported by fair and transparent governance. That trust is as important as the immediate financial relief delivered by lower rates.

Few countries have enjoyed a demographic opportunity on the scale that India does today. But such advantages can also become risks if not properly harnessed. A young population without opportunities can quickly turn disillusioned. GST 2.0 is a step toward ensuring that India's youth dividend is not squandered. By aligning fiscal reform with the aspirations of a young population, it creates the conditions for inclusive, consumption-led and sustainable growth.

### A new foundation

As India moves towards becoming a mature, consumption-driven economy, GST 2.0 provides the fiscal architecture to channel youthful aspiration into national momentum. It is a reform that reduces financial barriers, encourages protection, supports entrepreneurs and builds trust. Most importantly, it is not only a reform for today's households but also a foundation for the India that this generation will build. By empowering young India to spend, save, and secure its future, GST 2.0 strengthens the very core of the country's economic promise.

### GS. Paper 02 & 03—Social Justice & Indian Economy

**UPSC Mains Practice Question:** Critically examine how GST 2.0 can help India harness its demographic dividend. Discuss the challenges that may limit its impact on youth-led consumption and entrepreneurship. (150 Words)



## Context :

India, with nearly **two-thirds of its population under 35**, enjoys a significant **demographic dividend**. The introduction of **GST 2.0**, aimed at simplifying rates, reducing burdens on essentials, and exempting services like insurance, seeks to harness this youthful advantage. By easing financial pressure on households and businesses, the reform is positioned as a driver of **inclusive, consumption-led growth**.

### Key Prelims Pointers

1. **Household Consumption**
  - Accounts for over **60% of India's GDP**.
  - GST 2.0 reduces taxes on essentials → higher **disposable income**.
2. **Exemptions**
  - Health and life insurance premiums exempt → boosts **insurance penetration** and **financial resilience**.
  - Supports young households managing EMIs, education, and healthcare costs.
3. **Impact on MSMEs**
  - India's **MSMEs employ 110+ million** people.
  - Simplified compliance → encourages **formalisation**, access to credit, and entrepreneurship.
4. **Two-tier GST structure**
  - Ensures **predictability, transparency, and stability** in taxation.

### Mains Relevance

#### 1. Demographic Dividend & Consumption-Led Growth

- Youth-driven spending creates a **virtuous cycle**: consumption → investment → employment → more consumption.
- GST 2.0 strengthens this cycle by lowering tax barriers and encouraging economic participation.

#### 2. Financial Inclusion & Household Resilience

- Exempting insurance premiums reduces vulnerability to **medical or financial shocks**.
- Encourages a culture of **risk-sharing and financial planning**.

#### 3. MSME Empowerment & Formal Economy

- Simplified compliance reduces barriers for **small businesses**.
- Greater participation in formal supply chains → improved **credit access** and **job creation**.

#### 4. Policy Predictability & Economic Confidence

- Transparent, stable taxation builds **trust** among young professionals and entrepreneurs.
- Aligns fiscal policy with **long-term economic planning**.

## 5. Inclusive & Sustainable Growth

- By channeling youth aspiration, GST 2.0 ensures **equitable benefits** across households and enterprises.
- Contributes to **financial stability, social security, and economic empowerment**.

## Conclusion

GST 2.0 is more than a fiscal reform; it is a strategic tool to leverage India's **demographic dividend**. By reducing tax burdens, boosting household disposable income, supporting MSMEs, and ensuring predictability, it aligns policy with the ambitions of young India. The reform not only strengthens **consumption-led growth** but also lays a **foundation for sustainable, inclusive economic development**, empowering the next generation to secure their financial future and drive national progress.

