

## UNITED NATIONS SECURITY COUNCIL (UNSC)



- The UNSC is one of the six principal organs of the United Nations (UN), with the primary responsibility of maintaining international peace and security.
- Under the UN Charter, all member states must comply with UNSC decisions.
- It determines threats to peace, recommends settlement methods, imposes sanctions, and authorizes military actions.

### Structure and Membership

- The UNSC consists of 15 members, each having one vote.
- Five permanent members (P5) with veto power:
  - China, France, Russia, the United Kingdom, and the United States.
- Ten non-permanent members, elected by the UN General Assembly for two-year terms, with equitable geographical representation:
  - 5 from Africa/Asia, 1 from Eastern Europe, 2 from Latin America, and 2 from Western Europe/others
- The UNSC is headquartered at the United Nations Headquarters in New York City.

### G4 Nations' Position and India's Advocacy

- India, Brazil, Germany, and Japan (G4) are actively advocating UNSC reform. At a recent IGN meeting, India's Permanent Representative declared the current UNSC structure outdated, no longer reflecting contemporary geopolitical realities.
- The G4 proposal calls for:
  - Expanding the Council from 15 to 25 or 26 members
  - Including 11 permanent members and 14–15 non-permanent members
  - Encouraging Member States to submit models to enable formal negotiations.



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

Institute of Research Based Learning & Competition

## Current Affairs - 19 April 2025



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

### UNESCO MEMORY OF THE WORLD (MOW) PROGRAMME



Recently, UNESCO has added manuscripts of the Bhagavad Gita and Bharata's Natyashastra to the Memory of the World (MoW) Register in 2025.

The MoW Programme was launched by UNESCO in 1992 with the goal of preserving global documentary heritage and preventing what it called “collective amnesia.”

- It aims to safeguard rare documents, including manuscripts, oral traditions, audio-visual content, and archive materials, of global and universal value.
- According to UNESCO, this documentary heritage should be preserved, protected, and permanently accessible to all, while respecting cultural practices.
- The MoW Register serves as a global compendium of such heritage, and is updated biennially (every two years).
- As of 2025, the Register contains 570 entries, including:
  - The Mahavamsa (Sri Lanka's ancient chronicle),
  - Shaiva Siddhanta manuscripts (India),
  - Auschwitz trial recordings (Germany),

#### India's Contributions to the MoW Register

- India has made 13 contributions, including two joint submissions:
  - Rig Veda (added in 2005),
  - Works of Abhinavagupta, the Shaivite philosopher (added in 2023),
  - Archives of the Non-Aligned Movement's first summit in Belgrade, 1961 (joint submission),
  - Dutch East India Company archives (joint submission).
- In 2025, two new Indian manuscripts were added, both preserved at the Bhandarkar Oriental Research Institute, Pune:
  - Natyashastra by Bharata Muni
  - Bhagavad Gita, attributed to Vyasa.



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

Institute of Research Based Learning & Competition

## Current Affairs - 19 April 2025



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

### NISAR



- **NISAR (NASA-ISRO Synthetic Aperture Radar)** is a **joint Earth observation satellite mission** developed by **NASA and ISRO** under a **bilateral agreement signed in 2014**.
- The satellite is scheduled for **launch in June 2025** from the **Satish Dhawan Space Centre, Andhra Pradesh**, aboard **ISRO's Geosynchronous Satellite Launch Vehicle Mark II (GSLV Mk II)**.
- It marks the **first-ever collaboration of its kind** between **India and the United States in radar-based Earth monitoring from space**.
- **NISAR aims to map the entire Earth's surface every 12 days**, enabling **high-frequency, precise, and repeat observations**.
- It will monitor **ecosystem changes, ice sheet dynamics, vegetation patterns, sea level rise, and groundwater variation**, and will track **natural hazards like earthquakes, volcanoes, tsunamis, and landslides**.

### Key Features and Components

Feature	Details
<b>Thermal blanketing</b>	Uses <b>gold-coloured thermal blankets</b> to maintain the satellite's optimal temperature.
<b>Radar payload</b>	Core instrument for capturing <b>Earth surface movement and geophysical changes</b> .
<b>Spacecraft bus</b>	Supports <b>power generation, communication, navigation, and attitude control</b> .
<b>Antenna and Reflector</b>	Equipped with a <b>12-metre drum-shaped wire mesh reflector, the largest in space</b> , to enhance signal focus and surface imaging precision.

### Technological Advancements

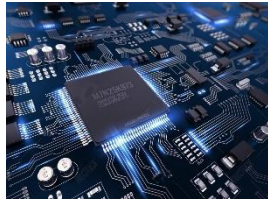
- **Dual Radar System:** NISAR is the first satellite to use **two radar frequencies simultaneously** — L-band (NASA) and S-band (ISRO).
  - **L-band Radar:** Penetrates **dense forests and soil**, useful for **volcanic and seismic zone monitoring**.
  - **S-band Radar:** Offers **higher resolution surface imaging**, operating at 2–4 GHz frequency and 8–15 cm wavelength, ideal for **urban and terrain analysis**.

### ARTICLE 142

- **Article 142** empowers the **Supreme Court** to pass any **order or decree** necessary for **complete justice** in any **pending case** before it. This power is **discretionary** and **unique** to the apex court.
- The **concept of complete justice** means ensuring justice beyond technicalities by **filling legislative gaps**, and interpreting or even overriding laws when necessary to protect **constitutional values, fundamental rights, and social welfare**.
- The **framers of the Constitution**, especially **B.R. Ambedkar**, intentionally entrusted this extraordinary power **only to the Supreme Court**. The jurisprudence under Article 142 has developed over **50+ years**, with the Court maintaining **self-imposed limits**.
- **Article 142** elevates the Supreme Court's role as the **guardian of the Constitution**, enabling it to **intervene** in cases involving **public interest, human rights, or democratic breakdown**, ensuring justice where legislative or executive action is lacking.
- The Article strengthens **democracy** by protecting the **rights of minorities**, ensuring **equal treatment** before the law, and acting as a **check on executive and legislative overreach**.

- Article 142 promotes **judicial innovation** by allowing the Court to create **guidelines** and direct **government authorities**, especially in cases involving **public interest and constitutional values**.
- The **lack of a clear definition** of “**complete justice**” can lead to **subjectivity, inconsistent rulings, and unaccountable discretion**. This raises concerns under the **basic structure doctrine**, particularly **separation of powers**.

### SURFACE MOUNT TECHNOLOGY (SMT)



- It refers to a **manufacturing technique** where **electronic components are directly applied to the surface of a printed circuit board (PCB)**.
- SMT, developed in the 1960s and 1970s, **replaced conventional through-hole technology (THT)**, producing more compact, economical, and efficient electronic devices.
- This method **enables automated production** to conduct a more extensive assembly, resulting in the creation of a fully functional circuit board.
- **Any electronic element installed in this manner** is identified as a **surface-mounted component (SMD)**.
- In opposition to conventional manufacturing techniques, **SMT removes the necessity for elements to be placed through apertures**; rather, **elements are attached to the board via the process of soldering**.
  - The two main soldering techniques are **reflow soldering and wave soldering**.
  - Assembling PCBs using SMT involves various **steps like solder paste application, component placement, reflow soldering, and cleaning**.
- SMT is used in many industries like consumer electronics, medical, and aerospace industries.

## THT vs. SMT:

- As compared to THT, SMT has **cheaper production costs**, **increased component density**, and **superior electrical performance**. But the **initial cost is high**, and it is **difficult to repair**.
- The **process** for SMT production setup is **faster** when compared to THT. This is because components are mounted using solder paste instead of drilled holes. It saves time and labor-intensive work.
- **SMT supports microelectronics** by allowing more components to be placed closer together on the board. This **leads to designs that are more lightweight and compact**.
- **Simplicity**: In THT, lead wires pass through the holes to connect components. Because **SMT components are soldered** right onto the PCB, the overall makeup is **far less complex**.
- The **heat dissipated in SMT is also less** than through-hole components.

## STEERING THE DECARBONISATION OF INDIA'S LOGISTICS SECTOR

- **India's vision of becoming a Viksit Bharat**, a developed nation by 2047, is **rooted not only in economic ambition but in the inclusive and sustainable upliftment of its people, businesses, and regions**.
- **Realising this vision necessitates a robust, efficient, and future-ready logistics sector** that can fuel equitable development across the country.

## Steps Required Towards Green Transformation in Logistics Sector

- **Innovations in Road, Maritime, and Air Logistics**
  - Despite the environmental drawbacks, **road freight will remain an integral part of India's logistics network**.
  - Therefore, it is **imperative to make road transport cleaner**.



# CROSS & CLIMB ROHTAK

Institute of Research Based Learning & Competition

## Current Affairs - 19 April 2025



- **Coastal Shipping and Inland Waterways**
  - The International Maritime Organization's goal of **cutting shipping emissions by 50% by 2050** has catalysed global momentum toward adopting cleaner fuels.
  - **India, too, can lead by investing in LNG-powered vessels, solar-electric boats, and biofuel-run barges, steps that will not only decarbonise transport but also stimulate innovation in green maritime technologies.**

### The Way Forward

- **Adoption of Renewable Energy**
  - **Warehousing, often overshadowed by transport in emissions discussions, is another major source of carbon emissions due to its heavy energy usage.**
  - To reduce its carbon footprint, **India must prioritise the adoption of renewable energy sources such as solar, wind, and geothermal power within warehouse operations.**
- **Toward a Future-Ready, Sustainable Logistics Network**
  - **The decarbonisation of India's logistics sector offers the country a chance to redefine its logistics landscape by making it more competitive, resilient, and aligned with global sustainability standards.**
  - **By investing in electrified rail and road networks, cleaner fuels for shipping, and energy-efficient warehousing, India can build a logistics infrastructure that supports both economic growth and environmental stewardship.**

### Conclusion

- The road to a **greener logistics future is already under construction.**
- **What remains is the political will, strategic investment, and collaborative action to accelerate this transition.**
- As India charts its path toward Viksit Bharat, **the logistics sector must not lag behind but lead the charge, efficiently, inclusively, and sustainably.**

### INDIA'S SILENT YOUTH MENTAL HEALTH CRISIS - A CALL FOR URGENT REFORM AND EMPATHY

#### The Hidden Epidemic of Youth Mental Health:

- **Startling statistics:**
  - Over 40,000 student **suicides** in the last 5 years (NCRB) - over 20 daily.
  - **1 in 10** adolescents suffers from a **mental health disorder** (National Mental Health Survey, 2016).
  - India allocates **less than 0.5%** of its total health budget to **mental health**.
  - India has **over 250 million people below age 20**, making the underinvestment a serious crisis.
- **Post-pandemic impact:**
  - COVID-19 **exacerbated emotional distress** among adolescents.
  - **Digital dependency** and **compulsive social media** use during lockdown led to:
    - **Online validation** replacing self-esteem.
    - **Unrealistic beauty and success standards**.
    - Increased **performance anxiety** and **emotional insecurity**.

#### Cultural and Social Pressures on Mental Health:

- **The influence of online culture:**
  - Social media contributes to **comparison culture**, fear of missing out (**FOMO**), and **digital burnout**.
  - Netflix series **Adolescence** highlights gaps in youth support systems.
- **Rise of toxic masculinity:**
  - Influencers promoting **dominance, aggression, and emotional suppression** harm both boys and girls.
  - Boys are discouraged from showing vulnerability or seeking help.
  - Urgent need to redefine **masculinity around empathy**, emotional expression, and resilience.



## The Need for Systemic and Cultural Reform:

- **Education system reforms:**
  - Mental health support must be integrated into **school infrastructure** - trained counsellors, preventive programmes, and emotional education
  - **Teach digital literacy and emotional intelligence** to combat negative online influences.
- **Budget and infrastructure:**
  - **Increase mental health budget** allocation significantly.
  - **Expand services to rural** and underserved areas.
  - Address shortage of trained professionals and weak infrastructure.

## The Road Ahead - Policy and Empathy:

- **National priority:**
  - Addressing youth mental health is not merely a health issue, but a **developmental imperative**.
  - Inaction leads to **lost potential, lost futures, and lost lives**.
- **Civil society and government responsibility:** India must listen with **empathy**, invest with **urgency**, and act with **compassion**.

## Conclusion - A Call to Action:

- India's youth need more than academic goals and digital success.
- They need emotional support, safe spaces, and a society that values mental well-being.
- **If we call them the future, we must protect their present.** The choice is ours - silence or solidarity.