

### THE JUDICIAL PUSH FOR ENVIRONMENTAL CSR

- India has positioned itself as a global leader in corporate accountability through the **Companies Act, 2013**, which mandates profit-sharing for social development under Corporate Social Responsibility (CSR).
- This progressive framework was designed to channel corporate resources toward national development goals.
- However, despite its broad vision, **environmental sustainability** has remained a relatively neglected domain within CSR.
- At a time when India faces severe ecological challenges, such as air pollution, water scarcity, and poor waste management, this imbalance raises serious concerns about the long-term sustainability of growth.

### **Judicial Intervention and Constitutional Mandate**

- A significant shift in the discourse on CSR has emerged through recent Supreme Court observations.
- By invoking **Article 51A(g)** of the Constitution, the judiciary has reframed environmental responsibility as a constitutional duty rather than discretionary charity.
- This interpretation establishes that the **right to conduct business** is inherently linked to the obligation to protect and restore the environment.
- The Court's intervention, particularly in response to the neglect of the Great Indian Bustard's habitat by energy companies, underscores the urgency of integrating ecological concerns into corporate decision-making.

### **Examples of Positive Environmental Initiatives**

- Despite the overall imbalance, certain corporations have demonstrated that impactful environmental action is **both achievable and beneficial**.
- Large-scale initiatives in afforestation, water conservation, and waste management highlight the potential of CSR to contribute meaningfully to ecological restoration.



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition

## Current Affairs - 24 March 2026



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

- These efforts not only generate measurable environmental benefits but also integrate community livelihoods with conservation.
- However, such examples remain exceptions, as most companies continue to prioritise short-term, highly visible projects over long-term ecological commitments.

### Challenges in Environmental Restoration

- One of the key reasons for the neglect of environmental CSR lies in the **inherent complexity** of restoration projects.
- Unlike social initiatives that yield quick and easily measurable results, ecological restoration requires long-term investment, scientific expertise, and continuous monitoring.
- India's limited progress toward its **Bonn Challenge** targets illustrates this challenge, with corporate contributions to land restoration remaining minimal.
- Additionally, corporations often favour initiatives that provide immediate visibility, such as awareness campaigns or rapid plantation techniques like Miyawaki forests.
- While these projects may enhance corporate image, they can sometimes compromise native biodiversity and fail to address **deeper ecological issues**.
- Structural challenges, including urban bias in project selection, inadequate policies for degraded lands, and weak collaboration with forest departments and experts, further hinder effective restoration.

### Conclusion

- India stands at a critical juncture where the **integration of ecological priorities** into CSR is both necessary and urgent.
- While the country has taken significant steps toward institutionalising corporate responsibility, the environmental dimension requires far greater attention and investment.
- By embracing an ecosystem-centric approach and aligning corporate actions with constitutional and ecological imperatives, India can pave the way for **truly sustainable development**, where economic progress and environmental preservation go hand in hand.



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

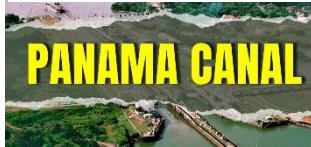
School of Research Based Learning & Competition

## Current Affairs - 24 March 2026



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

### PANAMA CANAL



The Panama Canal is operating at top capacity, as Iran war triggers more LNG vessel traffic.

- It is a **manmade waterway** that connects the **Atlantic and Pacific oceans across the Isthmus of Panama**.
- It is one of the strategic artificial waterways in the world.
- It is **owned and administered by Panama**.
- **History:**
  - It was **built by the United States** and completed in 1914.
  - From its opening in 1914 until 1979, the Panama Canal was controlled solely by the United States.
  - In 1979, control of the canal passed to the **Panama Canal Commission**, a joint agency of the **United States and the Republic of Panama**, and complete control passed to Panama in 1999.

### **Functioning**

- It **uses a system of locks and elevators** to take ships from one end to the other.
- This is needed because the **two oceans that the Panama Canal connects do not lie** at the same elevation, with the **Pacific slightly higher than the Atlantic**.
- For a ship entering the canal through the Atlantic, it needs to gain elevation during its journey to the Pacific.
- This is **achieved using a lock system** which lifts and drops vessels to the required sea level at either end of the canal.
- Basically, locks are either flooded (to gain elevation) or drained (to lose elevation), and act as water elevators.



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

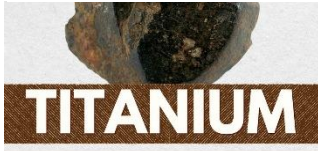
School of Research Based Learning & Competition

## Current Affairs - 24 March 2026



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

### TITANIUM



- It is the **fourth most abundant metal** and the ninth most abundant element in the Earth's crust.

- It often occurs in ore deposits in the form of **chemical compounds with iron or oxygen**.
- It is present in **meteorites and the sun**.
- **Ores of Titanium:** The two prime commercial minerals are **Ilmenite (FeTiO<sub>3</sub>)** and **Rutile (TiO<sub>2</sub>)**.
- Titanium is obtained by the **Kroll process**.
  - **Kroll process** is a method for producing titanium metal in large quantities and high purity **using a magnesium reduction process** for titanium tetrachloride, developed by William Justin Kroll in the 1940s.
- **Properties:**
  - It is very **corrosion resistant** and generally not affected by air, water, acids or bases.
  - It has a **low density, good strength, is easily fabricated**, and has excellent corrosion resistance.
  - The **metal burns in air** and is the **only element that burns in nitrogen**.

#### **Applications of Titanium:**

- It is **useful in aircraft**, spacecraft, ships, and other high-stress applications.
- It also is **used in prosthetic devices**, because it does not react with fleshy tissue and bone.
- Titanium oxide spectra are used by **astronomers to identify cool red dwarf stars**.
- It is **used as an alloying agent** with many metals including aluminium, molybdenum and iron.



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition

## Current Affairs - 24 March 2026



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

### GARBH-INI INITIATIVE



GARBH-INi initiative is aimed at developing indigenous, AI-driven solutions to address preterm births

- It promotes **Maternal and Child Health** and develops **prediction tools for preterm birth**.
- It is an interdisciplinary **Group for Advanced Research in Birth outcomes- DBT India Initiative (GARBH-Ini)** has initiated a **cohort study of pregnant women** has been initiated in 2015.
- **Objective**
  - To **acquire deep fundamental knowledge** on adverse pregnancy outcomes such as **preterm birth (PTB) and fetal growth restriction (FGR)**
  - Apply this knowledge to **identify efficient and sustainable solutions** that would assist in reducing **associated mortality, immediate and long term morbidity**.
- It is an initiative under the **Department of Biotechnology** of the Union Ministry of Science and Technology as a collaborative interdisciplinary programme.
- This program is led by the **Translational Health Science and Technology Institute (THSTI)**, NCR Biotech cluster, Faridabad.
- It is part of the **Atal Jai Anusandhan Biotech Mission** – Undertaking Nationally Relevant Technology Innovation (UNaTI).

### **What is a Preterm Birth?**

- It is defined as **babies born alive before 37 weeks** of pregnancy are completed. There are sub-categories of preterm birth, based on gestational age:
  - Extremely preterm (less than 28 weeks)
  - Very preterm (28 to 32 weeks)
  - Moderate to late preterm (32 to 37 weeks)



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition

## Current Affairs - 24 March 2026



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

### MICRO AND SMALL ENTERPRISES CLUSTER DEVELOPMENT PROGRAMME



- It is a demand driven **Central Sector Scheme**.
- It aims to **increase the productivity and competitiveness of Micro and Small Enterprises (MSEs)** for their holistic development using a cluster approach.
- Under this programme, **State Government sends proposals for establishment of Common Facility Centers (CFCs)** and establishment /up-gradation of Infrastructure Development (ID) projects as per requirements in clusters.
- **Objectives**
  - To **enhance the sustainability and growth of MSEs** by addressing common issues such as improvement of technology, skills & quality, market access, etc
  - To **build capacity of MSEs for common supportive action** through formation of self-help groups, consortia, upgradation of associations, etc
  - To create/upgrade infrastructural facilities in the new/existing Industrial Areas/ Clusters of MSEs
  - To set up **Common Facility Centres** (for testing, training, raw material depot, effluent treatment, complementing production processes, etc.).
  - **Promotion of green & sustainable manufacturing** technology for the clusters so as to enable units switch to sustainable and green production processes and products
- There are **two components under the scheme viz.**
  - **Common Facility Centers (CFCs):** Creation of tangible “assets” as Common Facility Centers (CFCs) in Industrial Estate.
  - **Infrastructure Development (ID):** This component is for development of infrastructure in new/existing notified Industrial Estate including Flatted factory complexes.
- **Nodal Ministry:** Ministry of Micro, Small & Medium Enterprises



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition

## Current Affairs - 24 March 2026



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

### AKASHA300 3D PRINTER



Kerala start-up delivers cutting-edge Akasha300 3D Printer to ISRO in a major step towards India's self-reliance in advanced manufacturing.

- It is a high-temperature **multi-material extrusion 3D printer**.
- It is backed by the **Space Technology Innovation and Incubation Centre** at IIST and the **Kerala Startup Mission**.

#### Features of Akasha300 3D Printer:

- The printer features **dual-extrusion technology** capable of operating at temperatures up to  $350^{\circ}\text{C}$ , with future upgrades planned to extend this to  $500^{\circ}\text{C}$ .
- Its modular extruder design allows **integration of additional extrusion systems**, paving the way for **hybrid additive manufacturing techniques**.
- It includes a **heated bed** that can reach up to  $110^{\circ}\text{C}$ , upgradeable to  $150^{\circ}\text{C}$ , and an enclosed chamber capable of maintaining temperatures up to  $80^{\circ}\text{C}$ .
- This enables stable and precise printing of high-performance materials that require strict thermal conditions.
- It is designed as an industrial-grade research platform, the system **incorporates a robust motion system and integrated air filtration**.

**Significance:** These features make it suitable for research and development, allowing engineers and scientists to create functional components and prototypes with greater speed and accuracy.



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

# CROSS & CLIMB ROHTAK

School of Research Based Learning & Competition

## Current Affairs - 24 March 2026



CROSS & CLIMB  
MAKING THE ELIGIBLE ENTITLED

### MINOR PLANET CENTRE



Recently, the Minor Planet Centre (MPC) announced 15 new moons had been found, four around Jupiter and 11 around

Saturn

- It is the world's **primary repository** for all observations of **small bodies in the solar system**.
- It operates at the **Smithsonian Astrophysical Observatory** under the **International Astronomical Union**.
- It is Located in **Cambridge, Massachusetts USA**.
- **Process**
  - When astronomers discover a new object, they send their data to the MPC, where experts verify the observations and calculate the object's orbit.
  - If the discovery is new, the **MPC assigns it an official designation**.

#### **Functions of Minor Planet Centre**

- It plays a vital role in **tracking asteroids, comets, and the moons of the outer planets**.
- One of the MPC's most critical jobs involves **monitoring near-earth objects (NEOs)**.
  - NEOs are space rocks that could potentially threaten the earth.
- MPC maintains a large database that allows scientists to predict if and when a rock might come close to the earth.
- The MPC also facilitates communication within the global scientific **community** by **publishing electronic circulars** that alert researchers to new discoveries or interesting celestial events.

### NATIONAL AI SKILLING INITIATIVE



- It is aimed at **strengthening AI capabilities** in areas such as animation, visual effects, gaming, comics (AVGC) and media technology.
- It was launched by the **Ministry of Information and Broadcasting**, in partnership with Google and YouTube.
- This initiative **will train participants** from the creative and media sectors.
- **Implementation:** It is being implemented through the **Indian Institute of Creative Technologies (IICT)**.

#### Features of National AI Skilling Initiative:

- It will be conducted in **two phases**.
  - **Phase I:** It will focus on **foundational AI learning** at scale through Google Career Certificates and Google Cloud Generative AI learning paths.
  - Participants will undergo courses such as **AI Essentials, Prompting Essentials, Introduction to Generative AI**, and Generative AI Leader Path. Successful completion of this phase will be mandatory for progression to the next stage.
  - **Phase II:** It will focus on **advanced, hands-on and project-based specialization** for the creative industry.
- The training will be conducted in **major cities across the country**.

**Significance:** It will support creators, media professionals, students and developers in building future-ready skills.