

Current Affairs – 9 June 25

India's Textile and Apparel Industry

Source: IE

A recent analysis highlighted India's stagnant global apparel trade share (3%), stressing the urgent need for policy innovation to achieve the \$40 billion export target by 2030.

DRUM App (Dynamic Route Planning for Urban Green Mobility)

Source: TH

The DRUM app, developed by IIT-Kharagpur researchers, is set to begin real-world trials after successful simulations in Delhi.

- It offers eco-friendly route planning to reduce commuters' exposure to air pollution.
- Commuting accounts for less than a tenth of an urban Indian's day but a third of their air pollution exposure.
- The MUST Lab's DRUM app lets users pick routes based on air quality and energy efficiency.
- It offers five routes: shortest, fastest, least exposure to air pollution (LEAP), least energy consumption (LECR), and a combined route.
- In Central Delhi, LEAP route reduced pollution exposure by 50% but increased travel time by 40%.
- DRUM uses GraphHopper and Mapbox to fetch real-time traffic and pollution data.
- Future plans include crowdsourced data and predictive features using machine learning.

The World Bank Revised the Global Poverty Line

Source: LM

The World Bank revised the global poverty line to \$3/day (PPP 2021) from \$2.15/day (PPP 2017) based on updated price data and survey methods.

International Conference on Disaster Resilient Infrastructure (ICDRI) 2025

Source: PIB

Prime Minister of India addressed the International Conference on Disaster Resilient Infrastructure (ICDRI) 2025, held for the first time in Europe.

Finance Commission – 16th Finance Commission

What is the Finance Commission?

- A constitutional body constituted under Article 280 of the Indian Constitution.
- It recommends the distribution of tax revenues between the Union and States and evaluates fiscal needs of local bodies.

Establishment and Tenure:

- The 16th Finance Commission (XVIFC) was set up on 31 December 2023.
- It is tasked with giving recommendations for the award period from 1 April 2026 to 31 March 2031.

Composition:

1. Dr. Arvind Panagariya – Chairman, Former NITI Aayog Vice-Chairman
2. Dr. Manoj Panda – Full-time Member, Economist
3. Smt. Annie George Mathew – Full-time Member, Ex-Spl. Secretary, Finance
4. Dr. Soumya Kanti Ghosh – Full-time Member, Group Chief Economist, SBI
5. Shri T. Rabi Sankar – Part-time Member, Deputy Governor, RBI

Axiom-4 (Ax-4) Space Mission

Source: ET

Group Captain Shubhanshu Shukla, one of the four astronauts shortlisted for India's Gaganyaan Mission, will pilot the Axiom-4 (Ax-4) space mission, launching on June 10, 2025 from the USA.

Solar Climate Intervention Techniques

Source: TH

A new study in Earth's Future journal proposes a low-altitude version of Stratospheric Aerosol Injection (SAI) using modified existing aircraft.

What is Solar Climate Intervention?

- Geoengineering technologies aimed at reducing incoming solar radiation to counteract global warming without cutting greenhouse gas emissions.

Key Techniques:

1. Stratospheric Aerosol Injection (SAI): Spraying sulphur dioxide into the stratosphere to reflect sunlight.
2. Marine Cloud Brightening: Spraying sea salt into marine clouds to increase reflectivity.
3. Space-Based Reflectors: Deploying mirrors or shades in space to block sunlight.
4. Surface Albedo Modification: Lightening surfaces (e.g., painting roofs white) to reflect more sunlight.

Magnetic Isolation and Concentration (MagIC)

Source: TH

A new technique called Magnetic Isolation and Concentration (MagIC) has enabled cryo-electron microscopy (cryo-EM) to analyse samples 100 times more dilute than earlier.