

Daily Defence Current Affairs

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Indian-Origin Scientist Wins Crafoord Prize 2026

- Indian-origin scientist Veerabhadran Ramanathan received the Crafoord Prize, widely known as the “**Nobel of Geosciences.**” His decades-long research fundamentally changed how the world understands climate change.
- Veerabhadran Ramanathan is an Indian-origin atmospheric scientist whose work transformed climate science.
- Born and educated in southern India, he studied engineering in Bengaluru before moving to the United States for higher education.
- Over a career spanning five decades, he worked at leading global institutions and quietly reshaped scientific thinking on global warming.
- In the 1970s, while working at NASA Langley Research Center, Ramanathan discovered that chlorofluorocarbons (CFCs) trap enormous amounts of heat.
- His 1975 paper in Science showed that a single CFC molecule could warm the planet thousands of times more than carbon dioxide.
- This was the first clear proof that gases other than CO₂ could drive global warming, changing the direction of climate research worldwide.



Asian Rifle & Pistol Shooting Championships

- The Asian Rifle and Pistol Shooting Championships 2026 officially kicked off at the Dr Karni Singh Shooting Ranges in the national capital in New Delhi. Elite shooters from across Asia are participating in this prestigious two-week tournament.
- The Asian Rifle and Pistol Shooting Championships is one of the most important shooting tournaments in the continent.
- It brings together Asia's top shooters to compete at the highest level.
- The championship serves as a platform to test skills, build rankings, and gain international exposure.
- It is also crucial for identifying future Olympic and world-level contenders.
- The 2026 edition reflects Asia's growing competitiveness in shooting sports and showcases the depth of talent across different age groups and categories.



NSO Announces Countrywide Migration Survey

- The National Statistics Office (NSO) has announced a nationwide Survey on Migration, scheduled from July 2026 to June 2027. With rapid urbanization, labour mobility and seasonal movement increasing across states, the government aims to generate updated and comprehensive migration data.
- The survey will focus on the extent and nature of migration, including who migrates, where they move, and why.
- It will also study the employment profile of migrants, helping assess how migration is linked to job opportunities.
- Special attention will be given to temporary, circular and seasonal migration, which often remains underreported but plays a crucial role in India's informal economy.
- Migration surveys are not new. The most recent data came from the Periodic Labour Force Survey (PLFS) 2020–21 and the Multiple Indicator Survey 2020–21.
- According to PLFS 2020–21, India's overall migration rate was 28.9%, highlighting the scale of internal migration in the country.
- These figures now need updating in light of post-pandemic economic changes.



Kabak Yano Conquers Western Hemisphere's Peak

- Indian mountaineer Kabak Yano successfully summited Mount Aconcagua in Argentina, the highest peak in South America and the Western Hemisphere.
- Towering at 22,831 feet, the climb marks a major milestone in her 7-Summit Mountaineering Expedition.
- Mount Aconcagua is located in **Argentina's Andes mountain range** and stands at 22,831 feet above sea level. It is the highest mountain in South America, the Western Hemisphere, and outside Asia.



United States and India Reach To Trade Deal

- On 2nd February 2026, U.S. President Donald Trump claimed that the United States and India have reached a trade deal, with tariffs set to be reduced

immediately. The announcement followed a direct call with Indian Prime Minister Narendra Modi.

- According to President Trump, the U.S. will lower reciprocal tariffs on Indian goods to 18%, while India will move towards reducing tariffs and non-tariff barriers on U.S. products to zero.
- Trump also stated that India committed to buying American products at a much higher level, including over **\$500 billion** worth of U.S. energy, technology, agriculture, coal, and other goods.



Exercise KHANJAR-XIII

- Exercise KHANJAR is an annual joint Special Forces military exercise between India and Kyrgyzstan, started in 2011.
- The exercise aims to strengthen interoperability and mutual understanding between the armed forces of both nations.
- The 13th edition, KHANJAR-XIII, will take place at Misamari from February 4 to February 17, 2026.
- Misamari is a major military training location in Northeast India, offering terrain suitable for realistic combat training.



MoU Between IHMCL, NFSU

- Indian Highways Management Company Limited (IHMCL) signed a key agreement with the National Forensic Sciences University (NFSU) to enhance cyber security and data protection in national highway operations.
- The Memorandum of Understanding focuses on cyber forensics, digital evidence integrity, research, training and consultancy.
- It aims to protect sensitive highway data from cyber threats and ensure secure functioning of digital platforms used in national highway management.
- Modern highways generate and process large volumes of data, including vehicle movement, toll payments, surveillance feeds and traffic analytics.
- With the rollout of Multi-Lane Free Flow (MLFF) tolling, physical toll booths are being replaced by fully digital systems.
- NFSU brings specialized expertise in cyber forensics, digital investigation and data integrity.
- Through this MoU, it will support research, capacity building and training of personnel involved in highway operations.



REVIEW QUESTIONS

1. The Crafoord Prize, awarded to Veerabhadran Ramanathan in 2026, is mainly associated with which field?

- A. Medical Sciences
- B. Geosciences
- C. Economics
- D. Literature

Answer: B. Geosciences

2. Veerabhadran Ramanathan's 1975 research proved the climate impact of which gas?

- A. Methane
- B. Carbon monoxide
- C. Chlorofluorocarbons (CFCs)
- D. Nitrous oxide

Answer: C. Chlorofluorocarbons (CFCs)

3. The Asian Rifle and Pistol Shooting Championships 2026 is being held at which venue?

- A. Jawaharlal Nehru Stadium
- B. Karni Singh Shooting Range
- C. Indira Gandhi Indoor Stadium
- D. Shiv Chhatrapati Sports Complex

Answer: B. Karni Singh Shooting Range

4. The Asian Rifle and Pistol Shooting Championships mainly serve which purpose?

- A. Selection for national civil services
- B. Promotion of traditional sports
- C. Identification of future Olympic-level shooters
- D. Training of military personnel

Answer: C. Identification of future Olympic-level shooters

5. The nationwide Survey on Migration announced by NSO will be conducted during which period?

- A. January 2026 – December 2026
- B. April 2026 – March 2027
- C. July 2026 – June 2027
- D. August 2026 – July 2027

Answer: C. July 2026 – June 2027

6. According to PLFS 2020–21, India's overall migration rate was approximately:

- A. 18.5%
- B. 22.4%
- C. 25.7%
- D. 28.9%

Answer: D. 28.9%

7. Mount Aconcagua, scaled by Kabak Yano, is located in which mountain range?

- A. Rockies
- B. Alps

- C. Andes
- D. Himalayas

Answer: C. Andes

8. Exercise KHANJAR-XIII is a joint military exercise between India and which country?

- A. Uzbekistan
- B. Kazakhstan
- C. Kyrgyzstan
- D. Tajikistan

Answer: C. Kyrgyzstan

9. KHANJAR-XIII will be conducted at which location in India?

- A. Leh
- B. Pokhran
- C. Misamari
- D. Deolali

Answer: C. Misamari

10. IHMCL signed an MoU with which institution to strengthen cyber security in highway operations?

- A. IIT Delhi
- B. CERT-In
- C. National Informatics Centre
- D. National Forensic Sciences University

Answer: D. National Forensic Sciences University