

SANSKRITI IAS DAILY CURRENT AFFAIRS

31-07-2026

Kh-101 Missile

 The Guardian

Nato 'will take all necessary measures' to defend territory after Russian missile crashes in Poland – as it happened

Polish PM confirms the missile that crashed in Poland was a Russian Kh-101 cruise missile and says he is in touch with EU and US leaders.



Why in News

- A suspected **Russian Kh-101 cruise missile** reportedly landed in **eastern Poland**, raising security concerns along **NATO's eastern flank**.

Strategic Significance

- Kh-101 (NATO Reporting Name: AS-23A Kodiak) is an advanced **Russian air-launched stealth cruise missile**.
- It was developed by **Tactical Missile Armament Corporation (KTRV)** during the late 1990s.
- It is designed to destroy **bunkers, military installations, and strategic ground targets** with high precision.



Technical Features

- The missile is powered by a **turbofan engine** and flies at approximately **Mach 0.76**.
- It possesses a range of nearly **2,500–3,000 km**.
- Its stealthy airframe minimizes **radar cross-section**, improving survivability.
- It uses **Inertial Navigation System (INS)**, **Satellite Navigation**, and **Terrain Contour Mapping** for precision strikes.
- It can carry **high explosive, penetrator, and cluster munitions**.
- The **Kh-102** is the **nuclear-capable** variant of the Kh-101.

Moken People

Why in News

- Scientists confirmed that Moken children

living in the Andaman Sea possess exceptional underwater vision due to lifelong marine adaptation.

 The Times of India

[Scientists discovered how the Moken sea nomads developed an extraordinary ability to see underwater like](#)

Science News: For most people, opening their eyes underwater turns the world into a blur. The human eye is designed to focus light passing...



Geographical Focus

- The Moken are traditional sea nomads inhabiting nearly 800 islands across the Andaman Sea.
- They mainly reside along the coasts of Thailand and Myanmar.
- Their name means "sea drowned" in the Moken language.

Cultural Characteristics

- They are among the last surviving sea nomadic communities in the world.
- They traditionally travel in wooden boats known as Kabang.
- Their livelihood depends on fishing, shellfish collection, and free diving.
- Their language belongs to the Austronesian language family.

Unique Adaptations

- Moken children develop exceptional underwater vision by naturally constricting their pupils during diving.
- They possess remarkable skills in free diving, spear hunting, and reef navigation.
- Most Moken remain stateless, lacking citizenship in both Thailand and Myanmar.
- The community gained international attention after successfully predicting the 2004 Indian Ocean Tsunami using natural warning signs.

Urban Challenge Fund (UCF)

ThePrint

33 projects approved under Urban Challenge Fund, Lok Sabha told

New Delhi, Jul 30 (PTI) The government has so far approved or accorded in-principle approval to 33 projects under the Urban Challenge Fund...



Why in News

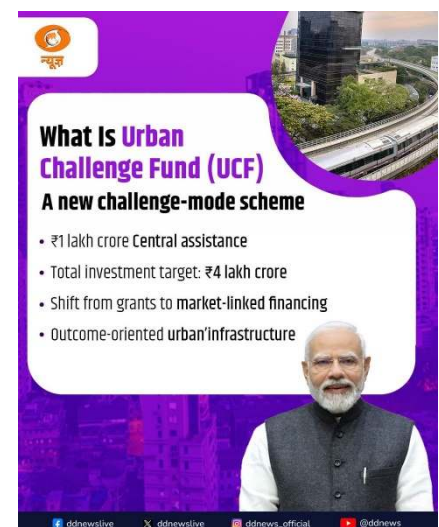
- The Government has accorded approval or in-principle approval to **33 projects** under the **Urban Challenge Fund (UCF)**.

Governance Dimensions

- Urban Challenge Fund (UCF)** is a **Centrally Sponsored Scheme** under the **Ministry of Housing and Urban Affairs (MoHUA)**.
- It supports **bankable urban infrastructure projects** through a competitive **challenge-mode** approach.
- The scheme will operate from **FY 2025–26 to FY 2030–31**, extendable up to **FY 2033–34**.
- The total **Central financial assistance** is **₹1 lakh crore**.

Core Features

- Projects are undertaken under **Creative Development of Cities, Cities as Growth Hubs**, and **Water & Sanitation**.
- Central assistance is limited to **25% of the project cost**.
- At least **50% of project funding** must come through **municipal bonds, bank loans, or PPPs**.
- The remaining cost may be contributed by **States, UTs, Urban Local Bodies (ULBs)**, or **other sources**.



- The scheme is expected to mobilise nearly ₹4 lakh crore in urban investment.

Institutional and Financial Mechanisms

- Project selection follows a transparent competitive challenge process.
- Participating cities must undertake reforms in urban governance, planning, and municipal finance.
- Private sector participation is promoted through structured risk-sharing frameworks.
- Service delivery standards will be benchmarked to improve urban governance.

Credit Repayment Guarantee Scheme

- A ₹5,000 crore Credit Repayment Guarantee Scheme supports smaller cities and Northeastern & Hilly States.
- The Central Government provides guarantees up to ₹7 crore or 70% of the loan amount, whichever is lower.
- Eligible cities include those with 10 lakh or more population, State/UT capitals, and major industrial cities having 1 lakh or more population.
- Smaller ULBs below one lakh population are eligible under the guarantee mechanism to improve market access.

NAKSHA Project

Why in News

- The Directorate of Settlement and Land Records

(DSLRL), Goa has initiated a month-long inquiry under the NAKSHA pilot programme in Margao, Cuncolim, and Panaji.



PIB

<https://www.pib.gov.in> › PressReleasePage



[Why Margao's New Urban Mapping Pilot Protects Property ...](#)

2 days ago — Its sole objective is to prepare reliable digital land maps that support superior town planning, infrastructure management, and efficient public ... [Read more](#)

Governance Significance

- NAKSHA (National Geospatial Knowledge-based Land Survey of Urban Habitations) is a GIS-based urban land parcel mapping initiative.
- It aims to modernise urban land records across Urban Local Bodies (ULBs) in States and Union Territories.
- The programme functions under the Digital India Land Records Modernization Programme (DILRMP).

Governance Benefits

- The project creates a comprehensive geospatial database for urban land records.
- It improves property record management and reduces land-related disputes.
- It supports scientific urban planning and efficient land use.
- It facilitates faster and more transparent property transactions.

Institutional Framework

- The programme is launched by the Department of Land Resources (DoLR), Ministry of Rural Development.
- Survey of India is the technical partner responsible for conducting aerial surveys.
- National Informatics Centre Services Inc. (NICSI) provides technical support for implementation.
- The initiative uses GIS, aerial surveys, and field surveys for accurate urban mapping.

Cloudburst

The Assam Tribune

IMD debunks cloudburst claims as Assam floods expose infrastructure gaps

Guwahati, July 23: The Indian Meteorological Department (IMD) has denied reports of cloudbursts in Assam and Nagaland over the past few days,...



Why in News

- The **India Meteorological Department (IMD)** clarified that recent floods in **Upper Assam** were **not caused by cloudbursts**.

Meteorological Characteristics

- A **cloudburst** is an extreme weather event involving an intense and sudden rainfall over a small area.
- According to the **IMD**, it occurs when **10 cm or more rainfall** is recorded within **one hour** over an area of about **20–30 sq. km**.
- Although possible in plains, cloudbursts occur most frequently in **hilly and mountainous regions**.

Formation Process

- The phenomenon begins with rapid **convection**, where warm, moist air rises into the atmosphere.
- In mountainous areas, **orographic lifting** forces moist monsoon winds upward.
- Rising air cools to form towering **cumulonimbus clouds**, which may reach nearly **15 km** in height.
- Strong **updrafts** temporarily suspend raindrops until gravity overcomes them, causing intense rainfall.

Impact and Relevance

- Cloudbursts trigger **flash floods, landslides, and debris flows** over a limited area.
- The **Himalayan region** is the most vulnerable part of India due to steep terrain and active monsoon systems.
- Increasing climate variability is expected to raise the frequency of **localized extreme rainfall events**.

Arctic Council

TH The Hindu

Panel suggests appointing ambassador for Arctic affairs

India's External Affairs Committee recommends appointing an Arctic Affairs Ambassador to enhance participation in the Arctic Council.

Why in News

- The **Parliamentary Standing Committee on External Affairs** recommended appointing an **Indian Polar Ambassador** and pursuing **full-fledged membership** in the **Arctic Council**.

Institutional Framework

- The **Arctic Council** was established through the **Ottawa Declaration (1996)**.
- It is an **intergovernmental forum**, not a treaty-based international organisation.
- Decisions are taken through **consensus** among members.
- The Council promotes cooperation on **sustainable development, environmental protection, and scientific research**.



Membership Structure

- The Council has **eight member countries**: **Canada, Denmark, Finland, Iceland, Norway, Sweden, Russia, and the United States**.
- It includes **six Permanent Participants** representing **Indigenous Arctic communities**.
- Observer status is open to **non-Arctic States, intergovernmental organisations, and NGOs**.
- India became an Observer in 2013** and is among **13 Observer countries**.

India's Arctic Engagement

- Observer countries have **no decision-making powers** within the Council.
- Observers cannot independently undertake research or make financial contributions under the Council framework.
- India's Arctic interests include **climate change, polar research, shipping routes, energy security, and scientific cooperation**.
- The recommendation for a **Polar Ambassador** reflects India's growing strategic interest in Arctic governance.

Samrasta Sankalp Abhiyan



News On AIR

BJP to launch nationwide Shri Guru Ravidas Maharaj Samrasta Sankalp Abhiyan today

The Bharatiya Janata Party will launch the nationwide 'Shri Guru Ravidas Maharaj Samrasta Sankalp Abhiyan' today, coinciding with Guru...



Why in News

- The **Bharatiya Janata Party (BJP)** launched the nationwide '**Sant Shiromani Shri Guru Ravidas Ji Maharaj Samrasta Sankalp Abhiyan**' to commemorate the **650th birth anniversary** of **Guru Ravidas**.

Campaign Highlights

- The campaign will be held from **29 July 2026 (Guru Purnima)** to **20 February 2027 (Guru Ravidas Jayanti)**.
- It was launched from **Guru Ravidas' birthplace at Varanasi, Uttar Pradesh**.
- **131 Kalash (urns)** carrying soil from Guru Ravidas' birthplace will travel across **all States and districts**.

Key Objectives

- The campaign aims to promote **social harmony (Samrasta), equality, social justice, and national unity** based on the teachings of **Guru Ravidas**.

- **Deepmala** programmes and **diya lighting** will be organised at **51,000 locations**, including the **Ganga Ghats**.
- A **state-level workshop** for the campaign was organised in **Dehradun, Uttarakhand**.

Other Important News of the day

Persons in News

Lovepreet Singh wins Silver at Commonwealth Games 2026

Why in News

- **Lovepreet Singh** won the **silver medal** in the men's +110 kg weightlifting event at the **Commonwealth Games 2026** in Glasgow.



Performance Highlights

- He lifted a total of 388 kg (176 kg Snatch + 212 kg Clean & Jerk).
- He set a new **Commonwealth Games record** in the Snatch (176 kg).
- David Liti (New Zealand) won gold with a Games record total of 389 kg.

Key Facts

- Olympic weightlifting comprises Snatch and Clean & Jerk, with rankings based on the combined total.
- The men's +110 kg event is the super-heavyweight category.
- Lovepreet had won bronze (109 kg) at the Birmingham Commonwealth Games 2022.

	India's Medal Tally - India finished its CWG 2026 weightlifting campaign with 8 medals: 1 Gold 6 Silver 1 Bronze
Places in News	Crete Island Why in News - Massive wildfires recently triggered large-scale evacuations on the Greek island of Crete. Geographical Features Crete is the largest island of Greece and the fifth-largest island in the Mediterranean Sea. - It is located in the southern Aegean Sea, nearly 160 km south of mainland Greece. - The island covers about 8,336 sq. km. - It is bounded by the Sea of Crete (north), Libyan Sea (south), Myrtoan Sea (west), and Carpathian Sea (east). Heraklion is both its capital and largest city. Physical Characteristics - The island stretches about 260 km east-west and nearly 60 km at its widest point. - A continuous mountain chain runs across the island. 

	- Crete contains fertile plains, sandy beaches, and rugged mountainous terrain. Historical Importance - Crete was the birthplace of the Minoan Civilization (c. 2700–1420 BCE), Europe's earliest advanced civilization. - It later came under the rule of the Mycenaean, Romans, Byzantines, Andalusians, Venetians, and Ottomans. - After independence from Ottoman rule, Crete became part of Greece. - During World War II, it witnessed the famous Battle of Crete and was occupied by Nazi Germany.
Defence	INS NIPUN Why in News INS NIPUN was recently delivered to the Indian Navy at Visakhapatnam. Defence Significance INS NIPUN is the second Diving Support Vessel (DSV) built by Hindustan Shipyard Limited (HSL). - The vessel has been constructed according to the standards of the Indian Register of Shipping (IRS). Operational Capabilities - The vessel supports deep-sea saturation diving and underwater rescue operations. 

- It carries advanced **dynamic positioning systems** and modern diving equipment.
- It is equipped with **submarine rescue machinery** and deep-sea intervention systems.
- It serves as the **Mother Ship** for the **Deep Submergence Rescue Vessel (DSRV)** during submarine emergencies.

Indigenous Defence Development

- INS NIPUN contains nearly **75% indigenous content**, supporting **Aatmanirbhar Bharat**.
- The Sanskrit word "**Nipun**" means **skilled, capable, and proficient**.
- The vessel enhances India's capability in **underwater salvage, rescue, and maritime safety operations**.

Science and Technology

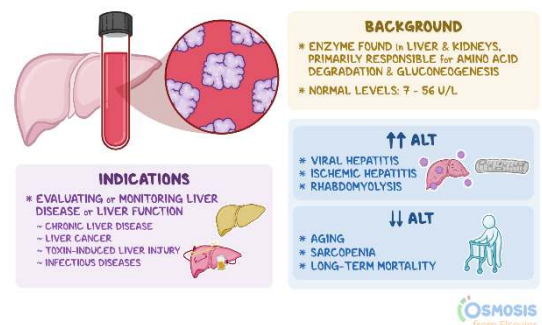
Alanine Aminotransferase (ALT)

Why in News

- The **Union Health Ministry** has advised people to monitor **Alanine Aminotransferase (ALT)** levels as an early indicator of **liver injury**.

Geographical and Biological Significance

- **Alanine Aminotransferase (ALT)**, also called **Serum Glutamic-Pyruvic Transaminase (SGPT)**, is an enzyme found predominantly in **liver cells (hepatocytes)**.
- It is also present in smaller amounts in the **kidneys, heart, and skeletal muscles**.



- ALT plays an important role in **amino acid metabolism** by transferring the amino group from **alanine to alpha-ketoglutarate**.

Clinical Importance

- Healthy individuals normally have **low ALT levels** in the bloodstream because the enzyme remains inside liver cells.
- **Inflammation, infection, or injury** to liver cells causes ALT to leak into the blood.
- Elevated ALT is often the **earliest biochemical marker** of liver damage before symptoms appear.
- Normal ALT values do **not always exclude significant liver disease**, especially in **chronic Hepatitis B and C**.

Diagnostic Relevance

- ALT forms an important component of the **Liver Function Test (LFT)**.
- ALT testing is performed using a **blood sample**, with results generally available within a few hours.
- Many laboratories consider **ALT below 40 U/L** as normal, although interpretation varies with clinical conditions.
- Elevated ALT requires **further clinical evaluation**, as it does not always indicate liver disease alone.