

# NEWS TODAY

## China's Grey-zone Warfare tactics

China has been deploying Grey-zone Warfare tactics in Taiwan, South China Sea, India's boundary disputes, etc. to achieve its strategic objective.

### About Grey-zone Warfare

- It refers to **middle, unclear space** that exists between direct conflict and peace.
  - ⊕ It aims to harm an adversary without them feeling threatened or realising they are under attack.
  - ⊕ It uses both conventional and non-conventional means of warfare.
- **Mechanism:** Actions like **salami slicing** that deals with small military actions to conquer opposition's territory piece by piece, nefarious **economic** activities (e.g. sanctions), **cyberattacks**, **Psychological operations** (e.g. disinformation campaigns), use of proxy forces, etc.

### Characteristics of Grey-zone Warfare

- **Below threshold operation:** Aggressor uses non-military tools that do not justify a military response.
- **Gradually unfolding of bold steps:** It may even take years or decades thereby reducing opportunities for decisive counter response.
- **Lack of attributability/accountability:** Aggressor does not accept responsibilities for such activities and hence distracts responses.
- **Target Specific:** Usually targets are vulnerable countries that have little scope for retaliation due to domestic or strategic reasons.

### India's Preparedness against Grey-zone Warfare

- **Chief of Defence Staff:** Coordinate the working of the three Services (Indian Army, Air Force and Navy).
- **Self-reliance in Defence Manufacturing:** Promoting it with the help of initiative like Defence Procurement Procedure (DAP) 2020, etc.
- **Cooperation with like-minded country:** E.g. India has signed agreements like General Security of Military Information Agreement (GSOMIA) with US.
- **Other:** Establishment of Indian Computer Emergency Response Team (CERT-In), etc.

### Measures Required

- **Active Monitoring** (sharing of information between like-minded countries), **Deterrence** through **Capability Demonstration**, fostering rule-based order etc.

## Untapped Collective Intelligence for Climate Action report released

The report **released by the UNDP** explores the potential of **Collective Intelligence (CI)** initiatives in climate adaptation and mitigation.

### About CI

- It is the **enhanced capacity** created when **people work together, often with the help of technology**, to mobilize a wider range of information, ideas, and insights.
  - ⊕ CI emerges when these **contributions are combined to become more than the sum of their parts**.

### Potential of CI in Climate Action:

- **It can bridge:**
  - ⊕ **Data gap:** Mobilising citizens to generate **real-time localized data**, and brings together data sets to uncover new insight.
  - ⊕ **Doing gap:** Getting **more people involved** in taking climate action, and helping people monitor the follow through of institutions.
  - ⊕ **Diversity gap:** Bringing a wider range of people, including Indigenous communities and perspectives into climate processes and data collection.
- **It can decrease:**
  - ⊕ **Distance Gap:** CI initiatives foster a **two-way exchange** between scientists and local communities, **enhancing scientific understanding and public knowledge**, as well as **creating mutual trust**.
  - ⊕ **Decision-making Gap:** Closing gaps between opposing views and interests (like (Climate vs. growth) to speed up required climate action.

### Example of CI in India

- **Agrolly app:** Provides real-time weather monitoring and crop information to help farmers decide which crops to grow
- **Water-Associated Infectious Diseases in India (WADIM):** For disease surveillance for waterborne diseases.
- **GeoAI open data platform:** To map the entire brick kiln belt in India, being used in Bihar to better target environmental policy violations.
- **Data in Climate Resilient Agriculture (DiCRA)** platform developed by UNDP India to identify the best regional strategies for food security

## Pacific Ocean free from El Nino conditions: NOAA

National Ocean and Atmospheric Administration (NOAA), a US body, announced that the El Nino conditions prevailing since mid-2023 had ended and were replaced by El Nino Southern Oscillation (ENSO) neutral phase.

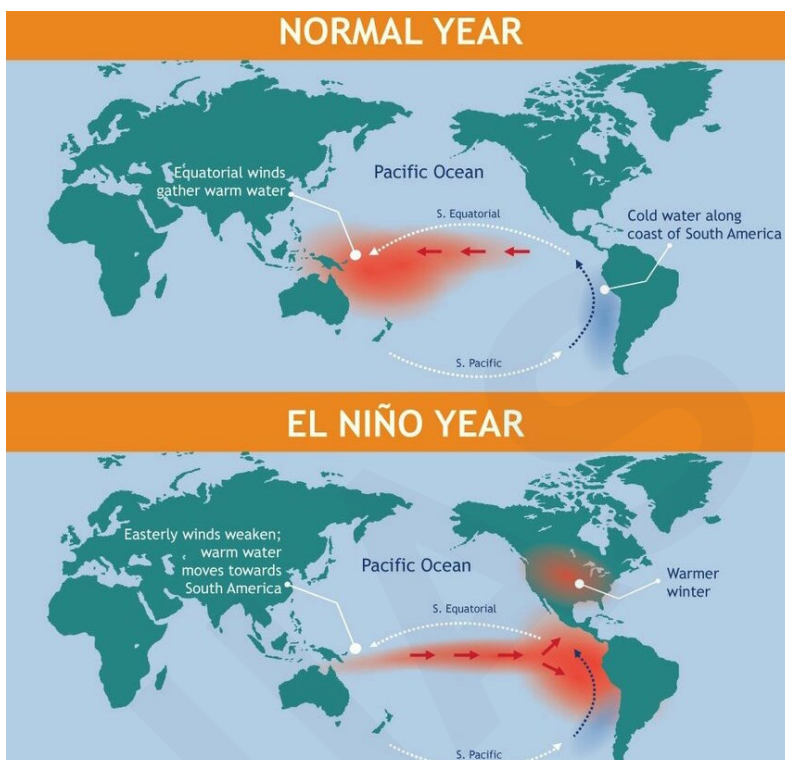
- ENSO is a recurring climate pattern involving changes in the temperature of waters in the **central** and **eastern** tropical Pacific Ocean.
  - ⊖ Occurs in irregular cycles of 2–7 years.
- **El Nino** (warm phase) and **La Nina** (cold phase) are extreme phases of the **ENSO cycle**; between these two phases is a third phase called **ENSO-neutral**.
  - ⊖ In the neutral phase, tropical Pacific sea surface temperatures (SST) are generally close to average.

### About El Nino

- **El Nino** (the Christ Child) is a **climate pattern associated** with the warming of the ocean surface temperatures in the **central** and **eastern** tropical Pacific Ocean.
- **Key Impacts:** It suppresses rainfall over India during monsoon.
  - ⊖ It brings rain to South America and droughts to Indonesia and Australia.

### About La Nina

- **La Nina** refers (Little Girl) to the periodic **cooling** of ocean surface temperatures in the **central** and **east-central equatorial Pacific**.
- **Key Impacts:** It has the opposite effect of El Nino.
  - ⊖ It is associated with a **strong monsoon** and above average rains and colder winters in the subcontinent.



## WHO Designates CCRAS-NIIMH Collaborating Centre for Traditional Medicine Research

National Institute of Indian Medical Heritage (NIIMH) is recognised as the **first WHO Collaborating Centre (CC)** for "**Fundamental and Literary Research in Traditional Medicine (CC IND-177)**".

- The recognition is granted for **Four years**, starting from June 3, 2024

### Responsibilities of NIIMH as CC IND-177

- **Assisting WHO in standardizing terminologies** for Ayurveda, Unani, Siddha, and Sowa-Rigpa,
- Assisting WHO in **updating the Traditional Medicine Module-II** for the Eleventh edition of the International Classification of Diseases (ICD-11).
  - ⊖ ICD is the **international standard** for systematic recording, reporting, analysis, interpretation, and comparison of mortality and morbidity data.
  - ⊖ It also includes a **dedicated chapter on traditional medicine**.
  - ⊖ **Module 2** of the supplementary chapter on traditional medicine conditions under ICD 11 is **dedicated to Ayurveda, Siddha, and Unani** data and terminology.
- **Support Member States in developing research methodologies** for Traditional Medicine.

### About NIIMH

- **Genesis:** Established in 1956
- **Nodal Ministry:** NIIMH is a unit of the Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of Ayush.
- **Mandate:** To **document and showcase medico-historical research** in Ayurveda, Yoga Naturopathy, Unani, Siddha, etc. and other related healthcare disciplines in India.

### Initiatives of NIIMH for promoting Traditional Medicine research

- **Publication:** Journal of Indian Medical Heritage
- **Digital Initiatives**
  - ⊖ **AMAR Portal:** Catalogues 16,000 Ayush manuscripts (it includes digitized manuscripts, rare books, etc.)
  - ⊖ **National Ayush Morbidity and Standardized Terminologies Electronic (NAMSTE) portal:** Provides standardized terminologies & morbidity codes for Ayurveda, Siddha and Unani systems of medicine.
  - ⊖ **Showcase of Ayurvedic Historical Imprints (SAHI) portal:** Showcases various medico-historical artefacts
  - ⊖ **Other:** e-Books of Ayush, Ayush Research Portal

## 50th Group of Seven (G7) Summit Concludes

The summit was hosted by Italy.

- India also participated in the G7 outreach session on Artificial Intelligence, Energy, Africa and Mediterranean.

### Key Outcomes:

- Launched **G7 Apulia Food Systems Initiative (AFSI)**: Aims to intensify efforts to overcome **structural barriers to food security and nutrition**.
- Partnership for Global Infrastructure Investment (PGII)**: Mobilize up to USD 600 billion through the PGII by 2027.
  - PGII is joint initiative of G7 countries to help fund **infrastructure projects in developing countries through public and private investments**.
- Artificial intelligence**: Announced to develop a brand to support the implementation of the **International Code of Conduct for Organizations Developing Advanced AI Systems**.

### About G7 Summit

- An informal forum that brings together **Italy, Canada, France, Germany, Japan, United Kingdom, and the United States of America**.
  - European Union also participates in the Summit.
- Established as a platform for **economic and financial cooperation** in response to the **1973 energy crisis**.
  - First Summit was held in **1975**.
- Expanded into the G8 between 1997 and 2013, with the inclusion of Russia. However, Russia's participation was suspended in 2014 following the annexation of Crimea.
- Does not have a **permanent administrative structure**.

### Relevance of G7

- Their collective economic power allows them to shape global economic policies, coordinate financial regulations, and address economic challenges such as trade imbalances, currency stability, and financial crises.
- Launched PGII in response to China's **Belt and Road Initiative (BRI)**.
- Played a key role in the creation of international financial institutions like the **Financial Action Task Force (FATF)**.

## The Prime Minister held a bilateral meeting with his Japanese counterpart.

The meeting was held on the sidelines of the **G-7 Summit in Apulia, Italy**.

- Both major democracies share **converging interests amidst the rise of China in the Indo-Pacific**.

### Key dimensions of bilateral cooperation

- Political:**
  - Since 2014 both the countries have elevated relation to **'Special Strategic and Global Partnership'**.
  - India-Japan Act East Forum** established to provide a platform for collaboration under India's **"Act East Policy"** and Japan's **"Vision of a Free and Open Indo-Pacific"**
- Economic:**
  - Signed the **Comprehensive Economic Partnership Agreement**.
  - Japan's bilateral trade with India totalled US\$ 21.96 billion during FY 2022-23.
  - India has been the **largest recipient of Japanese ODA loans for decades**.
- Security:**
  - Established** Foreign and Defense Ministerial Meeting ("2+2" meeting)
  - Bilateral logistics agreement for **reciprocal provision of supplies and services between the Defense Forces** of both countries,
  - Military** exercises like Veer Guardian, 'DHARMA GUARDIAN', Malabar etc.
- Infrastructure:**
  - Mumbai-Ahmedabad High-Speed Rail Project,
  - Japan-India Clean Energy Partnership.
- Other Multilateral Cooperation**
  - Jointly Asia Africa Growth Corridor**
  - Members of **Quadrilateral Security Dialogue and India-Japan-Australia Supply Chain Resilience Initiative (SCRI)**.
  - Japan has joined India-led initiatives such as the **International Solar Alliance (ISA), Coalition for Disaster Resilient Infrastructure (CDRI), etc.**

## Also in News



### Derivatives

National Stock Exchange (NSE) chief **cautioned retail investors** against derivatives trading.

### About Derivatives

- Definition:** Derivatives are **financial contracts that draw their value from an underlying asset**.
  - The underlying asset can be a **commodity, security, currency, or index**.
- Purpose:** Can be used for **hedging purposes or speculation**.
- Types:** Common types of derivatives include futures, options, and swaps.
- Derivatives Market**
  - In India, the derivative market is **regulated by the Securities and Exchange Board of India**.
  - India has two types of derivative markets:
    - Exchanges-traded:** Standardised contracts are traded on an exchange.
    - Over-the-Counter (OTC).** It is decentralised. Contracts are **negotiated directly between two parties**.



### Nagastra-1

Indian Army received First indigenous Loitering Munition **suicide drones Nagastra-1**.

### About Nagastra-1

- Developed by **Solar Industries' Economics Explosives Ltd (EEL) Nagpur**.
- Can **neutralise hostile threats in 'kamikaze mode'** with **GPS-enabled precision strikes** with an accuracy of up to 2 metres.
  - Kamikaze** refers to members of a **Japanese air attack corps in World War II** assigned to make a suicidal crash on a target (such as a ship)
  - However, **Nagastra-1** is capable of carrying out **precision strikes on enemy camps without endangering the lives of soldiers**.
- Equipped with **day-and-night surveillance cameras**.
- Carries a **1 kg high-explosive fragmenting warhead**.
- Unique features include **abort, recover and reuse, facilitated by a parachute recovery mechanism**.





### Divya Drishti

A start-up has developed an AI tool "Divya Drishti".

#### About Divya Drishti

- Creates a robust and **multifaceted authentication** system by combining **facial recognition** with gait analysis.
- It ensures accuracy in **identification**, minimizing the risk of false positives or identity fraud.
- **Developed** under the guidance of **Centre for Artificial Intelligence & Robotics (CAIR)**, a laboratory of **Defence Research and Development Organisation (DRDO)**.
- **Applications:** Defence, Law Enforcement, Corporate and Public Infrastructure.



### Dead Zone

NOAA forecasts above-average summer 'dead zone' in Gulf of Mexico. **Dead Zone (Hypoxic area)**

- An area of low oxygen that can kill fish and other marine life.
- **Causes:**
  - ⊕ **Natural:** Stratification in the water column restricts the supply of oxygen from surface waters to more saline bottom waters.
    - ◆ **Black Sea** is largest dead zone that occurs naturally.
  - ⊕ **Anthropogenic: Eutrophication**, i.e. when a body of water gets too many nutrients, such as phosphorus and nitrogen due to agricultural runoff, fossil-fuel burning, and wastewater treatment effluent.
    - ◆ This causes **algal bloom** which prevents light from penetrating the water's surface.



### Indian Ocean Rim Association (IORA)

India-IORA Cruise Tourism Conference held in New Delhi.

#### About IORA

- **Genesis:** An inter-governmental organisation established in 1997 and based on the visions of Nelson Mandela.
- **Aim:** Strengthening regional cooperation and sustainable development within IOR.
- **Members:** 23 members (including India).
- **Priority areas:** Maritime Safety & Security, Disaster Risk Management etc.
- **Specialised agencies:** Regional Centre for Science and Technology Transfer (RCSTT)
- **Secretariat:** Mauritius



### Environmental DNA (eDNA)

Researchers have shown the potential of freshwater biodiversity monitoring using eDNA.

- eDNA is organismal DNA that is **released in the environment from cellular material shed by organisms** (via skin, excrement, etc.) into **aquatic or terrestrial environments**.
- eDNA is **increasingly being used to detect the presence of species and assess biodiversity in an ecosystem**.
  - ⊕ Unlike conventional methods, eDNA approach is **reliable, and accurate, and can be done at a low cost**.
- This information can be used to inform the **IUCN Red List of Threatened Species** and other conservation tools.



### Truenat platform

India's **Truenat Platform** (developed by Goa-based Molbio) for TB detection received appreciation at the World Health Assembly.

#### About Truenat platform

- It is a **handheld, battery-operated, real-time, rapid molecular test** for the diagnosis of pulmonary, extrapulmonary, and rifampicin-resistant tuberculosis.
- It can be deployed in health centres, labs, and fields.
- It delivers test results in **less than an hour** and can serve more than **40 diseases**.



### Kavli Prize

The Kavli Prize **winners were announced**, honouring **breakthroughs in astrophysics, nanoscience, and neuroscience**.

#### Kavli Prize

- This **biennial award**, established by **Norwegian-American philanthropist Fred Kavli (1927-2013)**.
- Given by the US-based **Kavli Foundation** in partnership with the **Norwegian Academy of Science and Letters** and the **Norwegian Ministry of Education and Research**.
- Each award includes a **\$1 million cash prize, a scroll, and a 7 cm diameter medal**.
- Although it was **designed to be like the Nobel** in the fields of astrophysics, neuroscience, and nanoscience, it does **not restrict achievements to the preceding year**.

## Personality in news



### Tarakanth Das (15<sup>th</sup> June, 1884- 22<sup>nd</sup> December, 1958)

The **birth anniversary** of Shri Tarakanth Das was celebrated.

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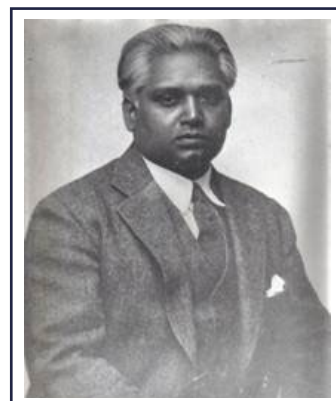
- **About:** Born in North 24 Pargana, Bengal, Shri Das was a journalist, teacher, philanthropist and revolutionary.

#### Contribution

- In 1903, he joined the revolutionary organisation **Anushilan Samiti** (established by Satish Chandra Bose and Praanath Mitra in Kolkata).
- Started an anti-British newspaper, '**Free Hindusthan**' in the USA.
- In 1913, he was associated with the **Ghadar Movement**.
- Implicated in the **Indo-German conspiracy case in 1917**.
- **Established Tarakanth Das Foundation** in 1935, to promote educational activities, to foster cultural relations between the US and Asian countries

#### Values

- Dedication, courage, determination, vision, selflessness.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI