

India's Foreign Policy Dilemma in the West Asia

Recent escalation of tensions between Iran and Israel, following assassination of leaders of Hamas and Hezbollah (groups backed by Iran), has spurred the US and other regional powers to step up diplomacy to prevent an all-out war in West Asia.

> India, however, faces a foreign policy dilemma as it has key interests to pursue with both the countries.

India's stakes in the region

- **Energy security:** Gulf- West Asia- North Africa region contribute over 2/3rd of India's total imports of crude oil.
- Diaspora and remittances: There are around 8 to 9 million Indians in West Asia with countries like UAE, Saudi Arabia, Kuwait, Oman, etc., among top sources of inward remittances.

Tel Aviv

Strategic: Implementation of projects such as India-Middle-East-Europe Economic Corridor, Chabahar Port (Iran), etc.

India's Foreign Policy towards West Asia

- 'Extended Neighbourhood': India considers the Gulf region as part of its 'extended neighbourhood'. Iran has been defined as a part of India's 'proximate neighbourhood.'
- Look West Policy: Adopted in 2005, to deepen cooperation with West Asian countries and meet India's national interests in the region.
- Policy of de-hyphenation: India has adopted the policy of de-hyphenation vis-à-vis its relations with Israel and Palestine.
 - **Policy of de-hyphenation** essentially emphasizes
 on separate and independent diplomatic relations,

between two countries having adversarial relations, based on merit.



TÜRKIYE

Global methane emissions rising at fastest rate in decades: Study

Study conducted by an international team of experts highlights how **global methane emissions have been rising rapidly since 2006**, particularly since 2020, a trend that's expected to continue over the remainder of the 2020s.

Key Highlights of the Study

- Anthropogenic methane (CH4) emissions increases from the period 1850–1900 until 2019 are responsible for ~65% as much warming as CO2 has caused to date.
- Abrupt and rapid increase in methane growth rates in early 2020s is likely attributable largely to response of wetlands to warming, with additional contributions from fossil fuel use.

About Methane Emissions

- It is a short-lived climate pollutant and is the secondlargest contributor to climate warming after CO2.
- Emission Sources
 - Natural: Wetlands produce 30% of CH4. Minor sources include wildfires, biomass burning, permafrost, termites, and oceans.
 - ● Anthropogenic: Agriculture (combination of livestock, waste management and rice cultivation comprise 20%), fossil fuel extraction (30%), and activities like waste management, etc.

Impact

 ● Global Warming Potential (GWP): CH4 has ~28 times higher GWP (heat-trapping ability of a gas measured against carbon dioxide) than CO2.

Initiatives to reduce CH4 emissions

Global

● **Global Methane Pledge:** Commits to a collective 30% cut in methane emissions by 2030.

🗆 Tehran

- **Others:** Global Methane Initiative (2004), Methane Alert and Response System (MARS), etc.

India

 ● National Mission on Sustainable Agriculture (NMSA), Direct Seeded Rice & Crop Diversification Programme, Gobar (Galvanizing Organic Bio-Agro Resources) -Dhan Scheme, National Livestock Mission, etc.

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Pollution: It can lead to formation of ground level (tropospheric) ozone, a dangerous air pollutant. Methane leaks can also pose explosion hazards.

VISIONIAS INSPIRING INNOVATION

Report titled 'Sea level rise scenarios and inundation maps for selected Indian coastal cities' released

Report was published by Bengaluru-based think tank, Center for Study of Science, Technology and Policy (CSTEP) and it presents information on changes in sea levels for 15 Indian coastal cities and towns.

Sea Level Rise (SLR)

- **SLR is the gradual increase in average height of world's oceans and seas.**
- Between 1901 and 2018, average worldwide sea level rose by 15 to 25 cm, reached record high in 2022 and is predicted to further rise by 15 mm per year by 2100.

Key Highlights of Report

- **Mumbai witnessed maximum SLR (4.44 cm)** between 1987 to 2021.
- **More than 10% of land** in Mumbai, Yanam, and Thoothukudi would be **submerged** by 2040.
- Increasing SLR trend was observed for Mumbai, Kochi, and Mormugao on west coast and Haldia, Paradip, Visakhapatnam, and Chennai on east coast.

Factors responsible for SLR

- Ocean Thermal Expansion: Oceans absorb >90% of heat trapped by accumulating GHGs.
- Ice melting: Melting of ice from glaciers, ice caps, and ice sheets in Greenland and Antarctica.

Impacts of SLR

- Loss of beaches and coastal habitats due to increased coastal erosion.
- Freshwater salinisation contaminating drinking water and reducing agricultural output.
- Loss of coastal ecosystems such as mangroves, salt marshes, and coral reefs affecting fisheries and biodiversity.

Adaptation and Mitigation Strategies for SLR

- Sea walls, surge barriers and other coastal defences.
- Floating homes as experimented by South Korea and Maldives.
- Efficient city strategies such as sponge cities and use of technology such as digital twin.
- Achieving net zero targets and limiting global mean temperature increase in line with the 2015 Paris Agreement.

Union Law Ministry released a report on state of infrastructure in District Courts

Union Ministry of Law & Justice published a report titled 'Empirical Study to Evaluate the Delivery of Justice through Improved Infrastructure' which focused on various aspects of Infrastructural issues faced by Chief Administrators, Judicial Officers, Advocates, and Support Staff.

Key Findings of the Report

- **Basic infrastructure:** ~37.7% of Judicial Officers (JOs) have reported lack of adequate space in courtrooms.
- Human resource: Shortage of JOs with lack of adequate training and skill development to effectively manage workload and maintain a timely disposition of cases.
- Digital infrastructure: Lack of computerisation of the Offices of District Legal Services Authority (DLSA) and Taluk Legal Services Committee (TLSC).
 - Inability of advocates to cope up with technicality of digitization process, increased burden on support staff due to E-Court missions, etc.
- Other issues with district courts: Lack of cooperation and coordination among all departments of District Court, temporary or casual employment of support staff leads to lack of support within the court system, etc.

Key Recommendations

- Establish an independent IT department equipped with the latest hardware and software with sufficiently trained manpower to manage and service, at District and Taluka courts.
- More emphasis should be laid on sustaining the filed cases in electronic form till the end to increase efficiency.
- Creation of separate Civil and Criminal Courts headed by separate JOs.

Initiatives to improve district courts

- Centrally Sponsored Scheme for Development of Infrastructure Facilities for the Judiciary (1993-94): For improving physical infrastructure requirements of the courts.
- National Mission for Justice Delivery and Legal Reforms (2011): To increase access by reducing delays and arrears in the system and enhance accountability through structural changes.
- E-Courts Integrated Mission Mode Project: For computerization of District and subordinate courts with the objective of improving access to justice using technology.

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Scientists identify Ladakh as potential site for Martian or Lunar analogue research station

An analogue research station is a place that has **physical** similarities to a planet or planetary body or extreme space environments.

- Presently, there are 33 analogue research stations with none being in Indian sub-continent.
 - These include BIOS-3 (Russia), HERA and Biosphere 2 (USA), Mars One (Netherlands) and D-MARS (Israel).

Need for Analogue sites

- Field testing for new technologies, robotic equipment, vehicles, power generation, infrastructure etc. which are crucial for prolonged space missions.
- Study or simulate human habitats in such environment and associated behavioural effects – such as isolation and confinement, team dynamics, menu fatigue etc.

Why is Ladakh ideal as Martian/Lunar Analogue?

B Geomorphological similarities to an early Mars and Moon:

- Dry, cold, arid desert, with abundant rocky ground.
- Vast flat land devoid of vegetation, dunes, and drainage networks.
- Segregated ground ice and permafrost, and rock glaciers.
- Geochemical similarities to Martian surface: Volcanic rocks, saline lakes, and hydrothermal systems.
- Exobiological similarities: Permafrost (evidence of water in past), increased UV and cosmic radiation flux, reduced atmospheric pressure, hot springs (rich in boron) and sufficient isolation.

Ladakh as Astronomical Hub of India

- Indian Astronomical Observatory (IAO): Located in Hanle, Ladakh, with an optical infrared telescope.
- A stra Tourierat An area of radius roughly
- Astro Tourism: An area of radius roughly 22 km around Hanley has been notified as Hanley Dark Sky Reserve (HDSR).
- Host to various Space Programmes: NASA's Spaceward Bound India Programme 2016, Field validations of ExoMars 2020 HABIT Instrument etc.

Cloudbursts followed by flashfloods wreaked widespread destruction in Himachal Pradesh

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Recently, a cloudburst event was reported in Kullu, Mandi, and Shimla regions of Himachal Pradesh, as per the District Disaster Management Authority.

About Cloudbursts

- It refers to particularly heavy precipitation in a short period of time over limited geographical area.
- Any unexpected precipitation exceeding 100 millimetres per hour over a geographical region of approximately 20 to 30 square km can be categorized as cloudburst. (IMD)
- Vulnerability of Himalayas to Cloudbursts
 - Topography and orography of Himalayas force moist air to rise rapidly, causing intense condensation and precipitation facilitating favorable condition to cloudbursts.
 - Some studies suggest that mostly cloudbursts occur in low elevation high-temperature zones of topoclimate regimes of Himalayas which receive low rainfall and exhibit high land surface temperature between 18°C-28°C in July and August.
- Consequences of Cloudbursts: Flashfloods, landslides, damage to infrastructure such as roads, bridges, etc.

Cloudbursts Disaster Risk Reduction (DRR) (National Disaster Management Plan, 2019)

- Understanding risk: Compile and maintain data on cloudburst events, Landslide Hazard Zonation, etc.
- Invest in DRR: Repair and maintain natural drainage systems, rivulets, etc., to ensure unhindered flow of storm water, etc.
- Capacity building: Enhance capabilities of local bodies to prepare and cope with cloudburst events, promote use of insurance, risk transfer, etc.

Also in News

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Forest Advisory Committee

Forest Advisory Committee (FAC) has **exempted surveys involving drilling and felling of up to 100 trees** for hydro and other developmental projects in forest areas from taking prior forest clearance. **About FAC**

- It is a statutory body under Forest (Conservation) Act, 1980 under the Union Ministry of Environment, Forest and Climate Change (MoEF&CC).
- FAC approves **diversion of forest land** for non-forest purposes.
- FAC assesses land request validity, evaluates impact minimization plans, and considers potential damage to local ecology and wildlife habitats.
- Role of FAC is recommendatory in nature so far as diversion of forest land for purpose of non-forestry use is concerned.



Butterfly

The elusive Four-ringed butterfly (Ypthima cantliei) resurfaces in Arunachal Pradesh's Namdapha National Park, the country's easternmost tiger reserve, bordering Myanmar.

About Butterfly

- Butterflies belong to the **insect Order Lepidoptera**.
- Butterflies can be found in nearly all types of habitats and some spend part of their lives underground.
- Significance:
 - Butterflies are flagship species for conservation, especially for invertebrates.
 - Butterflies play **critical role in pollination** of some plants.
 - They're an important element of food chain and are prey for birds, bats and other insectivorous animals.

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● Monarch butterflies have poison in their wings.

VISIONIAS INSPIRING INNOVATION



Substantive Equality

The Chief Justice of India has underlined the concept of **Substantive Equality** in the State of Punjab v. Davinder Singh Case 2024 (Subclassification in SC/ST reservation).

About Substantive Equality

- It refers to the principle that the law must account for the different backgrounds and historical injustices faced by persons or groups.
- It focuses on equality of outcomes and impacts of laws and policies.
- While formal equality applies consistent rules, substantive equality aims for social redistribution through moral principles.

Flag Code of India

Union Minister for Home Affairs urged the countrymen to hoist the Tricolour at their homes under **'Har Ghar Tiranga' campaign**.

Hoisting/ display of the Indian National Flag are governed by the Flag Code of India, 2002 [as amended in 2021 & 2022].

Salient Provisions of the Flag Code of India, 2002

- National Flag shall be made of hand spun and hand woven/ machine-made, cotton/ polyester/ wool/ silk/ Ichadi bunting.
- Public can display National Flag day and Night.
- National Flag shall be rectangular in shape. The Flag can be of any size but the ratio of the length to the height (width) of the Flag shall be 3:2.

CARRY % ()

Carry Trade

Yen carry trade has been in focus in the past few trading sessions in the wake of the sell-off in shares of US technology giants.

About Carry Trade

- A carry trade is an investment strategy most often associated with foreign currency trading.
- In a carry trade, an investor borrows in a low interest-rate currency to buy a currency or asset earning a higher interest rate.
- It is a high-risk strategy due to volatile currencies or changes in interest rates.

RAND

Village Defence Guards Scheme - 2022

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Union Minister said that Village Defence Guards (VDGs) have been provided with sophisticated weapons to deal with rising incidents of terror in the Jammu region.

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About VDGs

- Constituted under VDGs Scheme 2022, to organize small group of volunteer armed civilians in identified villages in Jammu division, to instill sense of self-protection and ensure safety and security of such villages, infrastructure, etc.
 - Previously, Village Defense Groups were constituted in 1995 in identified vulnerable villages to supplement efforts of security forces in safeguarding internal security.
- VDGs shall be headed by a retired officer of the Army/ CPMF/ J&K Police.



Recently, **5th AITIGA Joint Committee and related meetings for review of ASEAN-India Trade in Goods Agreement (AITIGA)** were held in ASEAN Secretariat, Jakarta (Indonesia).

About AITGA

- Entered into force in 2010 (signed in 2009).
- It aims to achieve free flow of goods in the region resulting to less trade barriers and deeper economic linkages among Member States, lower business costs, increased trade, and a larger market and economies of scale for businesses.



AstroSat and Vampire star

Researchers, using data from AstroSat, discovered a vampire star (named WOCS 9005) in **star cluster M67**.

- Vampire Stars, known as Blue Straggler Stars (BSS), defy simple models of stellar evolution and show characteristics of younger stars.
- They rejuvenate by eating up material from a binary companion star in a process known as mass-transfer in a binary system.

AstroSat

- Launched in 2015, AstroSat is India's first dedicated space observatory.
- It is aimed at studying celestial sources in X-ray, optical and UV spectral bands simultaneously.

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 Coastal plains parallel to Gulf of Aden are known as Guban. Bur region is rich in inselbergs (isolated hill, ridge, or small mountain that abruptly protrudes out from a virtually level surrounding plain). 											
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