



EDITORIAL

Greece's Gateway to Asia, India's Gateway to Europe (IR)

Key Points of the Article/Editorial

Background

- The state visit by Greek Prime Minister Kyriakos Mitsotakis to New Delhi (February 21-22) will be another important step in building a strategic relationship between India and Greece a process which began with the historic visit of the Indian Prime Minister, Narendra Modi, to Greece in August 2023.
- Mr. Mitsotakis will be accompanied by a high-level Greek business delegation comprising business leaders not only looking at India's potential as their gateway to Asia but also as a manufacturing base for their global operations.
- India is perceived as an old and traditional friend of Greece, but also as a rising great power in the fast-changing global scene.

Importance of Security and Stability

- Both, Greece and India are located in areas strategically important to the global system but are areas that are at the same time geopolitically volatile.
- As recent events in the Red Sea have shown, the security, stability and prosperity of the East Mediterranean region, where Greece is situated, is vitally dependent on the security, stability and prosperity of the Indian Ocean region.
- The political leadership in India and Greece is aware of the compelling strategic reasons and urgency to build a strategic relationship between the two countries.

Cooperation at various levels

- Military Cooperation: The Indian Navy and Indian Air Force have been participating in joint exercises with the Greek armed forces and reciprocal exercises are planned from time to time.
- Business Cooperation: An Indian construction company, for example, is involved with a major Greek construction company in the building of a new airport on the island of Crete. A well-known Indian business family has made major investments in several companies in the food business in Greece.
- Trade Cooperation: A mid-sized Indian shipping company has already opened a brokerage firm in Athens and looks to become a key player in the trans-Atlantic shipping market. A large systemic bank in Greece has tied up with a major Indian financial institution to sell mutual fund products globally.
- Strategic Cooperation: As Greece positions itself as the reliable eastern flank of the European Union (EU) and the North Atlantic Treaty Organization in the Eastern Mediterranean, also building its





defence industry, the idea of constructing the India-Middle East-Europe Economic Corridor (IMEEC) is gaining in salience.

• Bilateral Trade and Investment: Greece has been a strong supporter of deeper EU-India relations and is now working to ensure the EU-India Bilateral Trade and Investment Agreement (BTIA) is rapidly concluded, which would be a further catalyst to bilateral economic ties.

Steps for More Connections

- The value of closer people-to-people ties that will preserve the heritage of our ancient linkages must not be ignored.
- It must be ensured that there is an attempt to remain familiar to each other even while Greece and India modernize themselves.
- There need to be more university student exchange programmes, more cultural exchanges and more media cooperation.
- Think tanks in both countries need to build more scholarship together and, there definitely needs to be more travel links and connectivity between the two countries.
- Therefore, India-Greece relations hold considerable potential for mutual cooperation and partnership across various sectors including trade, investment, culture, and defense. As both nations share historical and cultural ties dating back centuries, there exists a strong foundation for further strengthening bilateral ties. By fostering greater diplomatic engagement, promoting people-to-people exchanges, and exploring opportunities for economic collaboration, India and Greece can deepen their relationship to the benefit of both countries and contribute to regional stability and prosperity.







EDITORIAL

Human-Wildlife Conflicts in Kerala

Key Points of the Article/Editorial

Background

- Protests have erupted in Wayanad, Kerala after a man was killed by a herd of wild elephants, the third such death in less than a month in the district. This is the latest in a series of such incidents over the years, and has put the spotlight back on Kerala's escalating human-wildlife conflict.
- Forest covers nearly 30% of the State's geographical area. For a relatively small State with an average width of just around 70 km and a population of more than 3.46 crore, this means numerous densely populated human settlements are located close to protected forest regions.
- Moreover, a large number of agricultural plantations too lie near wildlife habitats. This is especially true in the case of hilly reaches, which includes most of the heavily forested eastern part of the State.
- Although this situation makes human-animal conflict inevitable, in recent years, Kerala has seen a sharp increase in the number of such incidents with those living near forest fringes suffering crores of rupees worth of damage to livelihood, mostly due to frequent raids by elephants and wild boars.

Scale of Human-Animal Conflict in Kerala

- As per the State Forest department's own study, Kerala witnessed human-wildlife conflict across 1,004 areas. Wild elephants were involved in the highest number incidents in the State. Elephants, bonnet macaques and wild boars have caused the most damage to farmers residing in forest fringe areas. Herbivores such as sambar, spotted deer and gaur too have contributed significantly to crop damage.
- A total of 814 livestock animals, including cattle, buffalo and goat, also have been reported to have been killed or suffered injuries in such attacks, and Tigers have preyed on 420 of these.

Reasons for the increase in Human-Wildlife Conflict

- Experts cite increased area under cultivation around wildlife habitats, changing cropping pattern, significant increase in the population of animals like elephants and tigers due to conservation efforts, and movement of livestock and humans in wildlife habitats during odd hours as the main reasons for the rise in human-wildlife conflict incidents.
- However, increased number of incidents involving elephants are due to habitat depletion and fragmentation caused by human activities. Moreover, invasive alien species have reduced the availability of food and water. Monoculture of species such as eucalypts and acacia has also adversely affected plant biodiversity.

Proposed Solutions and Lacuna in Implementation

• Elephant-proof trenches and solar power fences are widely used in Kerala, and they are considered largely effective, provided they are properly maintained.





- However, there are several regions where these mechanisms have not been installed. These fences are also often broken by people living nearby to let their cattle into the forests for grazing, and elephants too destroy the fences using their legs and tusks.
- Moreover, as part of the State government's new eco-restoration policy, the Forest department is aiming to plant suitable indigenous plants (wild mango, wild gooseberry, and wild jackfruit) in the forest to ensure wild animals' food security and dissuade them from entering agricultural lands.
- Such measures need to be supplemented by creating early warning systems that can track the movement of elephants and other dangerous animals using drones and watchers, so that people can avoid going to locations where they have been spotted.
- However, the above measures are not effective against wild boars and also Centre is yet to accept Kerala's request to declare wild boars as vermin.
- The other options include capturing and neutering the boars, or relocating them to forests where there are predators like tigers and leopards.

Human-Animal conflict and ESZ norm

- Although ESZ norm has caused a storm in Kerala with the legislative assembly unanimously passing a resolution on July 7 urging the Centre to exempt the State from it, setting up an ESZ has been suggested by conservationists, retired Forest department officials and scientists as a way to reduce human-wildlife conflicts.
- However, in a State that is densely populated with severe land scarcity and a significant number of people living close to wildlife habitats, this would be difficult to implement.
- Therefore, the escalation of human-wildlife conflicts in Kerala underscores the urgent need for comprehensive and sustainable mitigation strategies. As human populations expand into wildlife habitats and ecosystems face increasing pressures, conflicts are inevitable but manageable. Balancing conservation efforts with the socio-economic needs of local communities is crucial to minimize conflicts and promote coexistence. Implementing measures such as habitat restoration, land-use planning, community-based conservation initiatives, and innovative technologies can help mitigate conflicts and protect both human livelihoods and wildlife populations. Moreover, raising awareness, fostering dialogue among stakeholders, and integrating traditional ecological knowledge can contribute to long-term solutions that ensure the well-being of both humans and wildlife in Kerala.







EDITORIAL

La Nina Air-quality links in new Study

Key Points of the Article/Editorial

Background

- Monsoon rainfall over India is known to be strongly influenced by El Nino and La Nina events, the alternate warming and cooling of the eastern Pacific Ocean that impacts weather across the world. A new study by Indian researchers has now suggested that even air quality in the country could be influenced by the two weather events.
- The study has argued that the unusual air quality in some Indian cities in the winter of 2022 could be attributed to the record-breaking spell of La Nina prevailing at that time. This is the first time that air quality in Indian cities has been linked to a La Nina event and indirectly to climate change, which is making El Nino and La Nina more severe.

Causes of Air Pollution during Winter Months in India

- A variety of meteorological factors temperature, moisture, heaviness in air, wind speed and direction play a role in trapping pollutants in the lower levels of the atmosphere. These factors are also responsible for transporting pollutants from other regions, particularly those generated by agriculture waste burning in Punjab and Haryana, to Delhi and adjoining areas.
- The winter of 2022, however, showed a significant deviation from this normal. Northern Indian cities, including Delhi, were cleaner than usual, while cities in the west and the south, like Mumbai, Bengaluru and Chennai, experienced worse-than-usual air quality.
- The study said PM 2.5 concentrations in Ghaziabad that winter saw a reduction of about 33% from normal, while in Noida, the concentration was 28% below normal. Delhi saw a reduction of about 10%. Simultaneously, the concentrations in Mumbai rose by 30%, while Bengaluru registered a 20% rise.
- It was this anomalous behaviour that the researchers had set out to study when they found themselves led to the possible effects of La Nina.

Wind Direction

- The most crucial factor in explaining the anomaly of winter 2022 was a change in the normal wind direction. During this time, wind usually blows in the northwesterly direction: for example, from Punjab towards Delhi and further into the Gangetic plains. This is one of the main reasons why agricultural waste pollutants in Punjab and Haryana flow into Delhi.
- In the winter of 2022, however, the wind circulation was in the north-south direction. The pollutants being carried from Punjab and Haryana bypassed Delhi and surrounding areas and flew over Rajasthan and Gujarat to southern regions.
- Wind currents alternate between blowing from the land to the sea every few days. When blowing from the land towards the sea, the winds carry pollutants out of the city. In 2022, however, instead of changing direction every four to five days, the winds persisted in one direction for more than a week or 10 days, leading to greater accumulation of pollutants in Mumbai.





La-Nina and its relations with Climate Change

- La Niña means Little Girl in Spanish. La Niña is also sometimes called El Viejo, anti-El Niño, or simply "a cold event." La Niña has the opposite effect of El Niño. During La Niña events, trade winds are even stronger than usual, pushing more warm water toward Asia. Off the west coast of the Americas, upwelling increases, bringing cold, nutrient-rich water to the surface.
- These cold waters in the Pacific push the jet stream northward. This tends to lead to drought in the southern U.S. and heavy rains and flooding in the Pacific Northwest and Canada. During a La Niña year, winter temperatures are warmer than normal in the South and cooler than normal in the North. La Niña can also lead to a more severe hurricane season.
- During La Niña, waters off the Pacific coast are colder and contain more nutrients than usual. This environment supports more marine life and attracts more cold-water species, like squid and salmon, to places like the California coast.
- While La Niña events have occurred for centuries as part of Earth's natural climate variability, there is evidence to suggest that climate change may influence the frequency, intensity, and impacts of La Niña events.
- Climate models generally project that under continued greenhouse gas emissions, La Niña events may become more frequent or more intense in some regions. However, the precise relationship between La Niña and climate change is still an area of ongoing research and debate among scientists.
- One key concern is the potential for La Niña events to exacerbate climate-related impacts such as extreme weather events. For example, La Niña is associated with increased rainfall in some regions, which can lead to flooding, landslides, and agricultural disruptions. Conversely, it can also contribute to drought conditions in other areas, leading to water scarcity, crop failures, and wildfires.
- Furthermore, La Niña can influence global temperature patterns, contributing to temporary cooling effects in some regions even as the overall trend of global warming continues. Understanding these
 - complex interactions between La Niña and climate change is essential for improving climate projections, risk assessments, and adaptation strategies to mitigate the impacts of extreme weather events and variability on communities, ecosystems, and economies worldwide.
- The Study adds that changes in wind patterns were not the only reasons for the unusual trends in air quality that year. It mentioned local meteorological conditions, unrelated to La Nina, that could also have resulted in the reduction of pollutant concentrations over northern India.

