

UPSC CURRENT AFFAIRS NOTES 17-04-2024

Combined Maritime Forces (CMF)

INS Talwar of the Indian Navy recently seized 940 kg of drugs in the Arabian Sea as part of an operation led by the Combined Maritime Forces (CMF).



About Combined Maritime Forces (CMF)

It is a multi-national naval partnership based **in Bahrain** which exists to promote security, stability, and prosperity across approximately 3.2 million square miles of international waters, which encompass some of the world's most important shipping lanes.

CMF's main focus areas are defeating terrorism, preventing piracy, encouraging regional cooperation, and promoting a safe maritime environment.

CMF counters violent extremism and terrorist networks in maritime areas of responsibility; works with regional and other partners to improve overall security and stability; helps strengthen regional nations' maritime capabilities; and, when requested, responds to environmental and humanitarian crises.

It is comprised of five task forces:

Member Nations: Australia, Bahrain, Belgium, Brazil, Canada, Colombia, Denmark, Ecuador, Egypt, France, Germany, Greece, India, Iraq, Italy, Japan, Jordan, Kenya, Republic of Korea, Kuwait, Malaysia, the Netherlands, New Zealand, Norway, Pakistan, the Philippines, Poland, Portugal, Qatar, Saudi

Arabia, Seychelles, Singapore, Spain, Thailand, Türkiye, UAE, United Kingdom, United States, and Yemen.

Participation is purely voluntary. No nation is asked to carry out any duty that it is unwilling to conduct.

The member nations are not bound by either a political or military mandate.

CMF is a flexible organisation. Contributions can vary from the provision of a liaison officer at CMF HQ in Bahrain to the supply of warships or support vessels in task forces, and maritime reconnaissance aircraft based on land.

It can also call on war ships not explicitly assigned to CMF to give associated support, which is assistance they can offer if they have the time and capacity to do so whilst undertaking national tasking.



Headquarters are co-located with US Naval Central Command and US Navy Fifth Fleet at Naval Support Activity (NSA) Bahrain.

Command:

CMF is commanded by a U.S. Navy Vice Admiral, who also serves as Commander of the US Naval Forces Central Command (NAVCENT) and US Navy Fifth Fleet.

CMF's Deputy Commander is a United Kingdom Royal Navy Commodore.



Other senior staff roles at CMF's headquarters are filled by personnel from member nations.

UNPFII

The 23rd session of the UN Permanent Forum on Indigenous Issues commenced in New York on April 15, highlighting concerns over the slow pace of recognition of indigenous territories (IT) despite growing awareness.

Reporting and Action:

The nine Amazonian states are expected to provide updates on progress toward the goal of protecting 80% of the Amazon during the session.

Challenges in Land Protection in Indigenous Territories (IT):

Failure to meet the targets: Failure to protect land may impede meeting the targets of the Kunming Montreal Global Biodiversity Framework, notably Target 3 aiming for 30% land and water protection by 2030.

Sluggish progress: Progress has been sluggish, with only around 7 million hectares of ITs recognized between 2021-2023, predominantly comprising expansions of pre-existing areas.

Recognition Delays: Despite the increasing recognition of the importance of ITs, there is a significant delay in formally recognizing these territories, hindering efforts to implement protective measures and manage resources sustainably.

Policy Inadequacies: Existing conservation policies and frameworks often fail to adequately incorporate the unique needs and rights of Indigenous Peoples, leading to ineffective protection strategies and conflicts over land use and resource management.

Pressure from External Forces: ITs face mounting pressures from external factors such as industrial development, extractive industries, agricultural expansion, and infrastructure projects, which threaten the integrity of these territories and exacerbate environmental degradation.



Lack of Resources: Indigenous communities often lack the financial resources, technical expertise, and institutional support needed to effectively manage and protect their territories, leaving them vulnerable to exploitation and encroachment by external actors.

Legal Uncertainties: Legal uncertainties regarding land tenure, ownership rights, and jurisdictional boundaries contribute to the marginalization of Indigenous Peoples and create obstacles to asserting their rights to their ancestral lands, perpetuating a cycle of land insecurity and vulnerability.

Significance of Indigenous Territories:

Biodiversity Hotspots: Indigenous territories (ITs) encompass approximately 22% of the Earth's land surface and are home to an astounding 80% of the remaining global biodiversity, making them crucial hotspots for conservation efforts.

Cultural Preservation: ITs serve as the ancestral lands of Indigenous Peoples, preserving their unique cultures, languages, and traditional knowledge systems that are invaluable for sustainable resource management and biodiversity conservation.

Ecosystem Services: These territories play a vital role in providing ecosystem services such as clean water, air purification, soil fertility, and climate regulation, benefiting not only Indigenous communities but also surrounding regions and the global ecosystem.

Sustainable Land Management: Indigenous communities have historically practiced sustainable land management techniques, including agroforestry, rotational farming, and traditional hunting and gathering methods, which contribute to maintaining ecosystem health and resilience.

Climate Resilience: ITs often possess traditional ecological knowledge that enhances their resilience to climate change impacts, offering valuable insights for adaptation strategies and contributing to broader climate resilience efforts.

United Nations Permanent Forum on Indigenous Issues (UNPFII)

The United Nations Permanent Forum on Indigenous Issues (UNPFII) is a body within the United Nations (UN) system focused on indigenous peoples' rights and issues. Here are some key points about UNPFII:



Establishment: The UNPFII was established in 2000 by the UN Economic and Social Council (ECOSOC) resolution 2000/22. It was created as a platform for indigenous peoples to voice their concerns and contribute to UN processes.

Mandate: The forum's mandate includes discussing indigenous issues related to economic and social development, culture, the environment, education, health, and human rights. It provides recommendations to UN agencies and member states on indigenous issues.

Membership: The UNPFII consists of 16 independent experts, including eight nominated by governments and eight nominated by indigenous organizations. The experts are selected based on their knowledge and experience in indigenous issues.

Sessions: The forum holds annual sessions at the UN Headquarters in New York, typically in April or May, lasting for about two weeks. During these sessions, participants engage in discussions, panels, and workshops on various indigenous topics.

LAKE KARIBA

Drought affected Lake Kariba in Zimbabwe, impacting both human communities and wildlife in the region.

Impact on Local Communities

Survival and Livelihoods: Fishermen rely directly on Lake Kariba for their livelihoods. Reduced water levels lead to diminished fish spawning areas, resulting in lower catches and economic losses. Increased human-crocodile conflicts as crocodiles raid fishers' nets, prompting retaliatory actions that endanger fishers.

Human-Wildlife Conflict: Water scarcity drives wild animals closer to human settlements in search of water, leading to heightened conflicts between humans and wildlife over limited resources.

Poaching: Wildlife encroaching on human habitats increases opportunities for poaching as animals seek water and food, exacerbating conservation challenges.

Tourism Decline: Reduced water levels disrupt wildlife habitats and limit tourist activities like game drives and fishing, impacting local tourism revenues and employment.

Water Access: Decreased water levels necessitate longer journeys for women and children to collect water, posing risks from encounters with wildlife and straining daily life.

Trade Disruption: Cross-border traders face economic challenges due to reduced fishing opportunities, impacting livelihoods and regional trade dynamics.

Government Interventions



Renewable Energy Transition: Invest in renewable energy projects like wind and solar to diversify energy sources and reduce dependence on hydroelectric power during droughts.

Wildlife Management: Implement strategies to mitigate human-wildlife conflicts, such as directing human activity away from high animal activity zones and increasing public awareness.



Traditional Practices: Support local traditional rainmaking ceremonies to promote community resilience and preserve cultural practices associated with water management.

Community Engagement: Involve local communities in water governance and decision-making, leveraging indigenous knowledge to adapt to changing environmental conditions.

Capacity Building: Provide resources and training to communities for sustainable water use and conservation practices during drought periods.

Cross-Border Collaboration: Coordinate with neighbouring countries like Zambia to address shared challenges related to water resource management and conservation.

Lake Kariba

Lake Kariba, situated between **Zambia and Zimbabwe**, is the largest artificial lake and reservoir in terms of volume globally.

It was formed by the construction of the Kariba Dam across the Zambezi River; it serves vital functions ranging from hydroelectric power generation to supporting diverse ecosystems and local communities.

Lake Kariba hosts diverse fish populations, including the introduction of kapenta (similar to sardines) from Lake Tanganyika, which has spurred a thriving commercial fishery.

The lake sustains a rich ecosystem with notable inhabitants such as Nile crocodiles, hippopotami, and gamefish like tigerfish.

The surrounding areas are home to large terrestrial mammals, including elephants, lions, cheetahs, leopards, buffaloes, and numerous plains game species.

HOKKAIDO

The warming trend in Hokkaido, highlighted by Sapporo reaching 26°C on April 15, 2024, reflects substantial environmental shifts affecting Japan's northernmost region, once revered as the 'Garden of the Gods'.

Key Highlights



The warming trends observed in Hokkaido, Japan's northern island and renowned "Garden of the Gods," reflect broader climate change impacts on the region.

Sapporo recently experienced an unprecedented temperature of 26 degrees Celsius on April 15, 2024, marking the earliest occurrence of such warmth in a given year since record-keeping began in 1877.

Hokkaido's Climate and Recent Trends

Hokkaido's climate is traditionally sub-arctic characterised by an average annual temperature of 8°C and significant snowfall.

The mean temperature in August, historically the hottest month, has been around 21°C; however, these statistics are likely to shift due to climate change.

Recent warming trends, as highlighted by the record-setting temperature in Sapporo, validate earlier warnings from organisations like the World-Wide Fund for Nature-Japan (WWF-Japan).

World Wide Fund for Nature (WWF)

The World Wide Fund for Nature (WWF) is a prominent international non-governmental organisation (NGO) established in 1961 to preserve wilderness and reduce human impact on the environment.

It operates globally under the name World Wildlife Fund in Canada and the United States. WWF is recognized as the largest conservation organisation worldwide, boasting over five million supporters across more than 100 countries and engaging in approximately 3,000 conservation and environmental projects.

WWF's mission is to "stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature." This goal is pursued through a range of initiatives aimed at conservation, sustainability, and ecological balance.

Impacts on Hokkaido's Wilderness and Indigenous Communities

Hokkaido has long been regarded as Japan's last wild frontier, known as the 'Garden of the Gods' by the Ainu, the island's indigenous people.

Climate change is altering Hokkaido's ecosystems, potentially disrupting wildlife and biodiversity.



The reduction in sea ice thickness in the Sea of Okhotsk, a vital habitat for marine life, has implications for fish migration patterns and coastal ecosystems.

Broader Implications for Japan's Archipelago

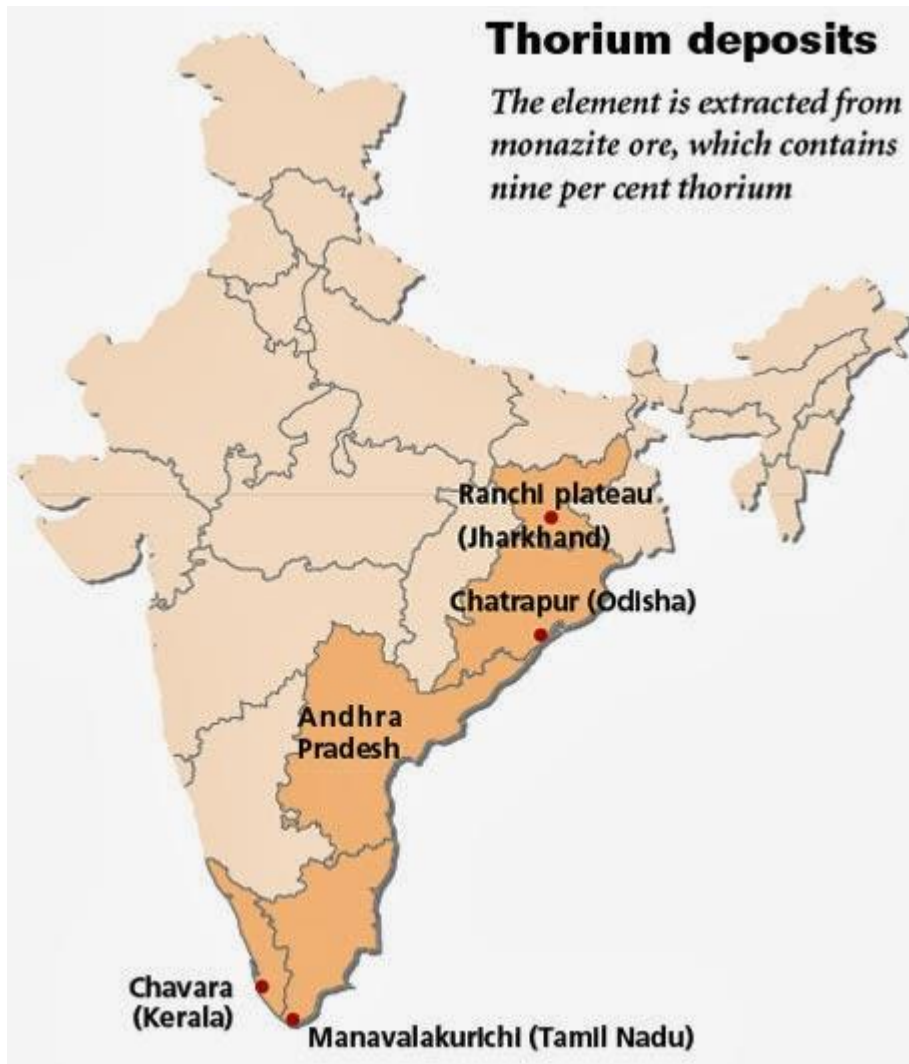
The warming trends in Hokkaido reflect broader climate change impacts across the Japanese archipelago.

Rising temperatures, coupled with sea level rise and extreme weather events, pose significant challenges for Japan's environment, economy, and society.

Urgent action is needed to mitigate the effects of climate change and support vulnerable communities like the Ainu in adapting to changing environmental conditions.

THORIUM RESERVES IN INDIA

India's thorium-rich deposits in Kerala and Odisha are essential for an indigenous nuclear power program.



Thorium

Thorium (Th) is a weakly radioactive metal that gives an olive-grey colour when exposed to air, forming thorium dioxide (ThO₂).

It is moderately soft and malleable, with a high melting point.

Thorium is estimated to be over three times more abundant than uranium in the Earth's crust.

It is primarily extracted from monazite sands as a by-product during the extraction of rare-earth metals.

Historically, thorium found applications in high-end optics, scientific instrumentation, vacuum tubes, gas mantles, and as a strengthening element in alloys. Its radioactivity became widely recognized in the early 20th century, leading to reduced use over time.



Thorium is still used as an alloying element in welding electrodes, although its use is gradually declining. It finds applications in strengthening magnesium, coating tungsten wire, controlling grain size in tungsten for lamps, high-temperature crucibles, and glasses for optical instruments.

Thorium has been proposed as a potential nuclear fuel in advanced reactor designs due to its abundance and unique nuclear properties.

Thorium Reserves in India

India has significant thorium reserves, estimated at 11.93 million tonnes of in-situ resources of monazite; Kerala and Odisha alone contribute over 70% of India's thorium reserves.

Thorium in Nuclear Energy

Thorium serves as a fertile material for nuclear fission, producing Uranium-233 when irradiated in a reactor.

India's first indigenous fast breeder reactor at Kalpakkam, Tamil Nadu, has demonstrated the feasibility of using thorium as a fuel source.

Three-Stage Nuclear Power Programme

Natural Uranium Phase: Utilising natural uranium in Pressurised Heavy Water Reactors (PHWRs).

Plutonium Phase: Reprocessing spent fuel from PHWRs to obtain plutonium for use in Fast Breeder Reactors (FBRs).

Thorium Phase: Large-scale utilisation of thorium with bred Uranium-233 from FBRs.

International Landscape

China, the US, UK, and Japan are actively exploring thorium-based nuclear technologies.

India aims to achieve energy self-sufficiency and reduce dependence on foreign uranium supplies through thorium utilisation.

India's Collaborations

Collaboration with the US includes the potential sale of nuclear reactors and joint development of small modular reactor technologies.



Negotiations with France for new Pressurised Reactors at Jaitapur have stalled due to unresolved issues.

India's nuclear cooperation with Canada and Russia involves uranium supply and technology transfer for small modular reactors.

Thorium-based nuclear technology requires significant research and development investments to develop efficient thorium fuel cycles.

India's three-stage nuclear power program, aimed at utilising thorium in nuclear reactors, necessitates advanced technological capabilities and infrastructure.

Regulatory and safety concerns must be addressed to ensure the safe deployment of thorium-based reactors.

International cooperation and collaboration are essential for accessing advanced technologies and expertise in thorium utilisation.

India has taken several steps to leverage its thorium reserves:

Research and development efforts focused on thorium-based nuclear reactor designs, such as the Prototype Fast Breeder Reactor (PFBR) and Advanced Heavy Water Reactor (AHWR).

Collaborative projects with international partners to advance thorium-based nuclear technologies.

Investments in scientific research institutions and nuclear facilities to support thorium fuel cycle development.

Policy initiatives and frameworks to promote the utilisation of thorium in the energy sector.

Future Outlook

Thorium-based systems hold promise for decarbonizing India's energy sector and achieving energy security and sustainable development goals.

Continued investment in research and development to overcome technical challenges associated with thorium-based nuclear technology.

Strengthening international collaborations to access expertise and resources for advancing thorium fuel cycle technologies.

Developing regulatory frameworks and safety standards specific to thorium-based nuclear reactors.



Enhancing public awareness and engagement regarding the benefits and safety aspects of thorium-based nuclear energy.

Imported Inflation

The Asian Development Bank recently warned that India could face imported inflation as the rupee could depreciate amid the rise in interest rates in the West.

About Imported Inflation

Imported inflation is a general and sustainable price increase due to an increase in the costs of imported products.

This price increase concerns the price of raw materials and all imported products or services used by companies in a country.

Imported inflation is also referred to as cost inflation.

Several factors cause imported inflation:

Exchange Rates: The most significant driver of imported inflation is fluctuations in exchange rates. The more the currency depreciates on the foreign exchange market, the higher the price of imports. Effectively, more money is needed to buy goods and services outside the country.

Commodity Prices: Many countries, particularly smaller countries, are highly dependent on imported commodities like oil, metals, and agricultural products. When commodity prices rise globally, it directly impacts the cost of imports and can lead to higher inflation in the importing country.

Trade Policies and Global Supply-Chains: Changes in trade policies, such as tariffs and quotas, can influence the cost of imported goods.

Transportation Costs: Fluctuations in transportation costs, influenced by factors like fuel prices and logistical challenges, can affect the final cost of imported goods.

Effect:

With imported inflation, production costs are higher for companies. These companies most often reflect this increase in the selling price of the goods and services sold.



As a result, prices within the country rise.

Special Rupee Vostro Account (SRVA)

India has simplified the payment mechanism for traders importing pulses from Myanmar, requiring them to use the Rupee/Kyat direct payment system through the **Special Rupee Vostro Account (SRVA)** through the Punjab National Bank.

About SRVA

The settlement of international trade through Indian Rupees (INR) is an additional arrangement to the existing system of settlement that uses freely convertible currencies and works as a complimentary system.

Freely convertible currency is a currency which is permitted by the rules and regulations of the country concerned to be converted into major reserve currencies like the U.S. Dollar, Pound Sterling.

This will reduce dependence on hard (freely convertible) currency.

SRVA requires prior approval of RBI before opening, unlike Rupee Vostro account.

How does SRVA arrangement function?

The framework entails three important components, namely, invoicing, exchange rate, and settlement.

Invoicing entails that all exports and imports must be denominated and invoiced in INR.

The exchange rate between the currencies of the trading partner countries would be market-determined.

The final settlement also takes place in Indian National Rupee (INR).

The authorised domestic dealer banks (those authorised to deal in foreign currencies) are required to open SRVA accounts for correspondent banks of the partner trading country.



Domestic importers are required to make payment(in INR)into the SRVA account of the correspondent bank against the invoices for supply of goods or services from the overseas seller/supplier.

Similarly, domestic exporters are to be paid the export proceeds (in INR) from the balances in the designated account of the correspondent bank of the partner country.

As for availing an advance against exports, it would be the responsibility of the domestic bank to accord foremost priority to ensuring that the available funds are used to meet existing payment obligations, that is, from the already executed export orders or export payments in the pipeline.

All reporting of cross-border transactions are to be done in accordance with the extant guidelines under the Foreign Exchange Management Act (FEMA), 1999.

What are the eligibility criteria of banks?

Banks from partner countries are required to approach an authorised domestic dealer bank for opening the SRVA.

The domestic bank would then seek approval from the apex banking regulator, providing details of the arrangement.

It would be the responsibility of the domestic banks to ensure that the correspondent bank is not from a country mentioned in the updated Financial Action Task Force (FATF) Public Statement on High-Risk and Non-Co-operative jurisdictions.

Domestic banks must also put forth, for perusal, financial parameters pertaining to the corresponding bank.

Authorised banks can open multiple SRV accounts for different banks from the same country.

Further, balances in the account can be repatriated in freely convertible currency and/or the currency of the beneficiary partner country, depending on the underlying transaction, that is, for which the account was credited.