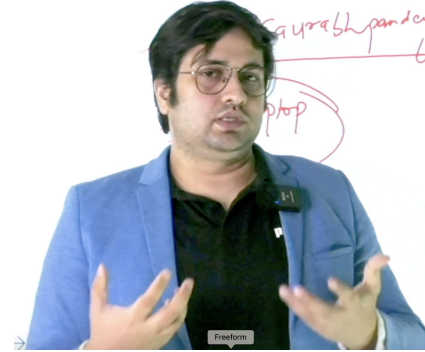


Topics - MINDS MAPS included



- The Mettur Dam (Geography)
- The Gadgil Committee, officially known as the Western Ghats Ecology Expert Panel (WGEEP (Environment)
- Pangong Lake (Geography)
- The Chabahar Port (IR)
- Wood encroachment in open ecosystem
- major separatist groups in Myanmar: (Internal security and IR)

- Mains



By saurabh Pandey



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Target Mains -2024/25 -

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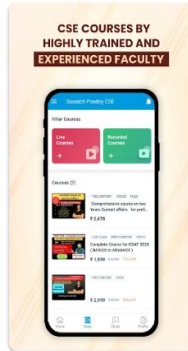
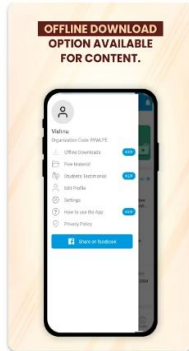
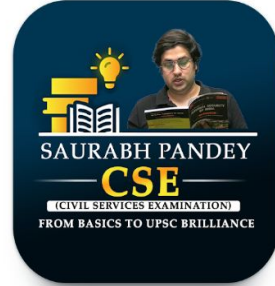
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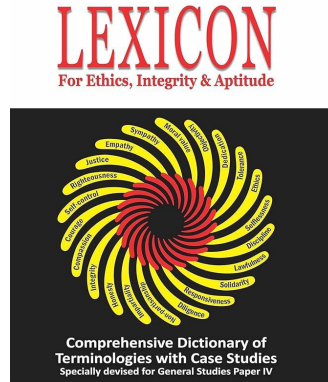
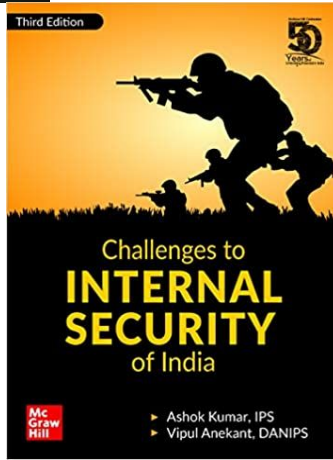
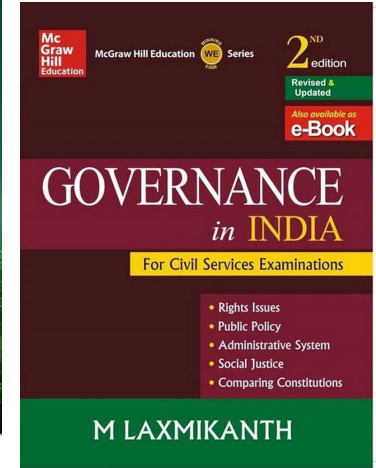
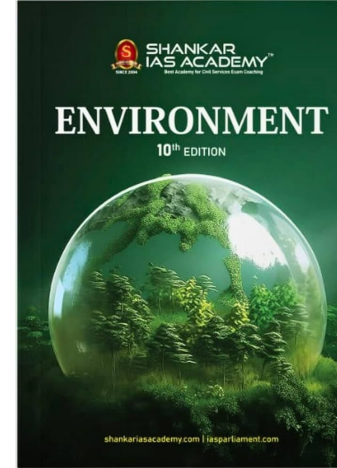
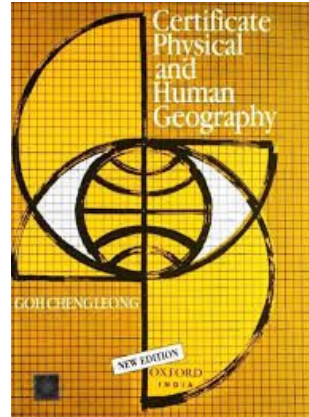
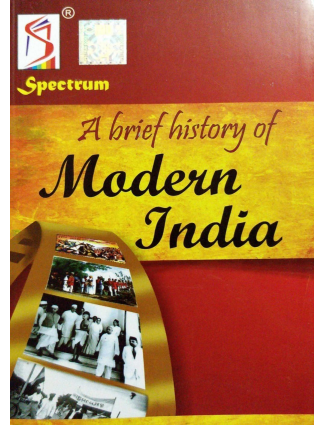
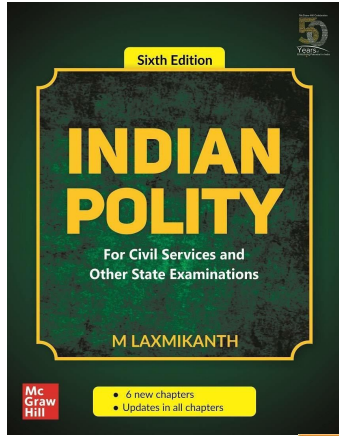
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Topic - 1 The Mettur Dam (Geography)



- **The Mettur Dam, officially known as Stanley Reservoir, is a large reservoir located in the Salem district of the Indian state of Tamil Nadu.**
- **It is one of the most important dams in the state, serving multiple purposes including irrigation, hydroelectricity generation, and water supply.**
- **The dam is constructed across the Kaveri River, a major river in South India that is considered sacred and is an important source of water for irrigation and drinking in the region.**



Construction: The construction of the Mettur Dam began in 1924 and was completed in 1934 under the British Raj. It was named after Sir Arthur Hope, 1st Baronet, who was the Governor of Madras Presidency at the time.

Purpose: The primary purpose of the dam is to provide irrigation water for the fertile delta regions of Thanjavur, Tiruvarur, Nagapattinam, and parts of Pudukkottai and Cuddalore districts. It also supports hydroelectric power generation and serves as a major source of drinking water for several towns and cities downstream.



Topic -2- The Gadgil Committee, officially known as the Western Ghats Ecology Expert Panel (WGEEP (Environment))

- **The Gadgil Committee, officially known as the Western Ghats Ecology Expert Panel (WGEEP), was formed in 2010 by the Ministry of Environment and Forests (MoEF) of the Government of India.**
- **The committee was named after its chairman, Madhav Gadgil, a renowned ecologist and environmentalist.**
- **The primary objective of the committee was to recommend a strategy for the environmental conservation of the Western Ghats, a mountain range in the western part of India that is known for its rich biodiversity and is a UNESCO World Heritage Site.**



The Gadgil Committee submitted its report in 2011, making several recommendations aimed at conserving the ecological integrity of the Western Ghats. Some of the key recommendations include:

Zonation of the Western Ghats: The committee proposed dividing the Western Ghats into three ecological zones based on their ecological sensitivity: **Ecologically Sensitive Zones (ESZ)**, **Ecologically Sensitive Sub-Zones (ESSZ)**, and a zone where development activities are permissible.

- **Restrictions on Development Activities:** The committee suggested imposing restrictions on development activities in the ESZ and ESSZ to protect the ecology of the region. This included limitations on mining, quarrying, thermal power plants, and other potentially harmful activities
- **Involvement of Local Communities:** The committee emphasized the importance of involving local communities in the conservation efforts. It recommended the establishment of Community Conservation Committees and the recognition of traditional rights of local people over forest resources.

Sustainable Development: The committee advocated for the promotion of sustainable development practices that do not harm the environment. This included encouraging eco-friendly tourism and the development of sustainable agriculture.

Compensation and Rehabilitation: The committee proposed a compensation and rehabilitation package for those displaced or affected by the conservation measures, ensuring their livelihoods are not adversely affected

Topic- 3 Pangong Lake (Geography)



- **Pangong Lake, also known as Pangong Tso, is a long, narrow endorheic lake located in the Himalayas.**
- **It is situated at an altitude of approximately 4,350 meters (14,270 feet) and is renowned for its scenic beauty and crystal-clear waters.**
- **The lake is divided between India and China, with about two-thirds of its length in the Tibetan Autonomous Region of China and the remaining one-third in India. The Indian portion of the lake lies in the Ladakh region of Jammu and Kashmir.**

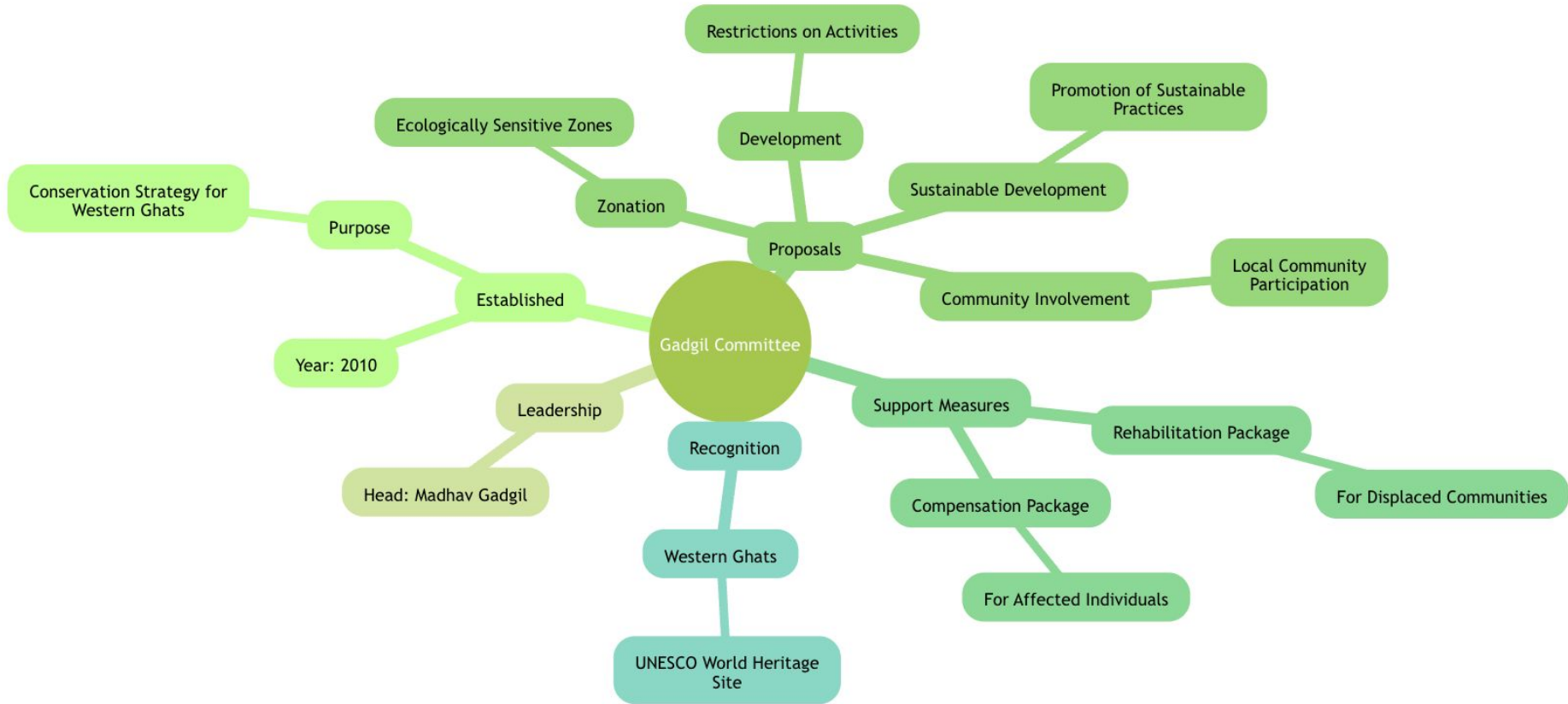


Key points about Pangong Lake include:

Geography: Pangong Lake is approximately 134 kilometers (83 miles) long and varies in width from 1 to 5 kilometers (0.6 to 3.1 miles). It is one of the highest lakes in the world.

Biodiversity: The lake is known for its rich biodiversity, including a variety of fish species. However, the biodiversity of the lake is under threat due to factors such as climate change and human activities

Figure 10.11: Gadgil Committee



Topic -The Chabahar Port (IR)



The Chabahar Port is strategically important for several reasons, primarily due to its location in southeastern Iran, on the Gulf of Oman, which provides access to the Indian Ocean. Here are some of the key reasons for its importance:

Trade and Connectivity: Chabahar Port serves as a crucial transit point for trade between Iran, India, and Afghanistan, bypassing Pakistan.

This is particularly important for India, as it provides a direct sea route to Afghanistan, facilitating the transport of goods and aid to landlocked Afghanistan without relying on Pakistani routes, which have been subject to political tensions.



AFGHANISTAN

KABUL

IRAN

PAKISTAN

NEPAL

CHABAHAR
PORT

GWADAR

INDIA

Myanmar

Saudi Arabia

Oman

Yemen

MUMBAI

Arabian
Sea

Bay
of
Bengal

72 KM

Distance
between the
Chabahar &

- **Regional Connectivity:** The port is a key component of India's vision for regional connectivity, part of the North-South Transport Corridor, linking India to Russia through Iran. This route significantly reduces travel time and cost for cargo, making it an attractive alternative to the traditional route through the Suez Canal
- **Strategic Importance:** Chabahar Port has strategic significance for India, as it allows India to have a presence in the region and to counterbalance China's influence in Pakistan through the Gwadar Port. India's involvement in the development of Chabahar Port is seen as a way to enhance its strategic footprint in the Indian Ocean and to secure its energy and trade routes.



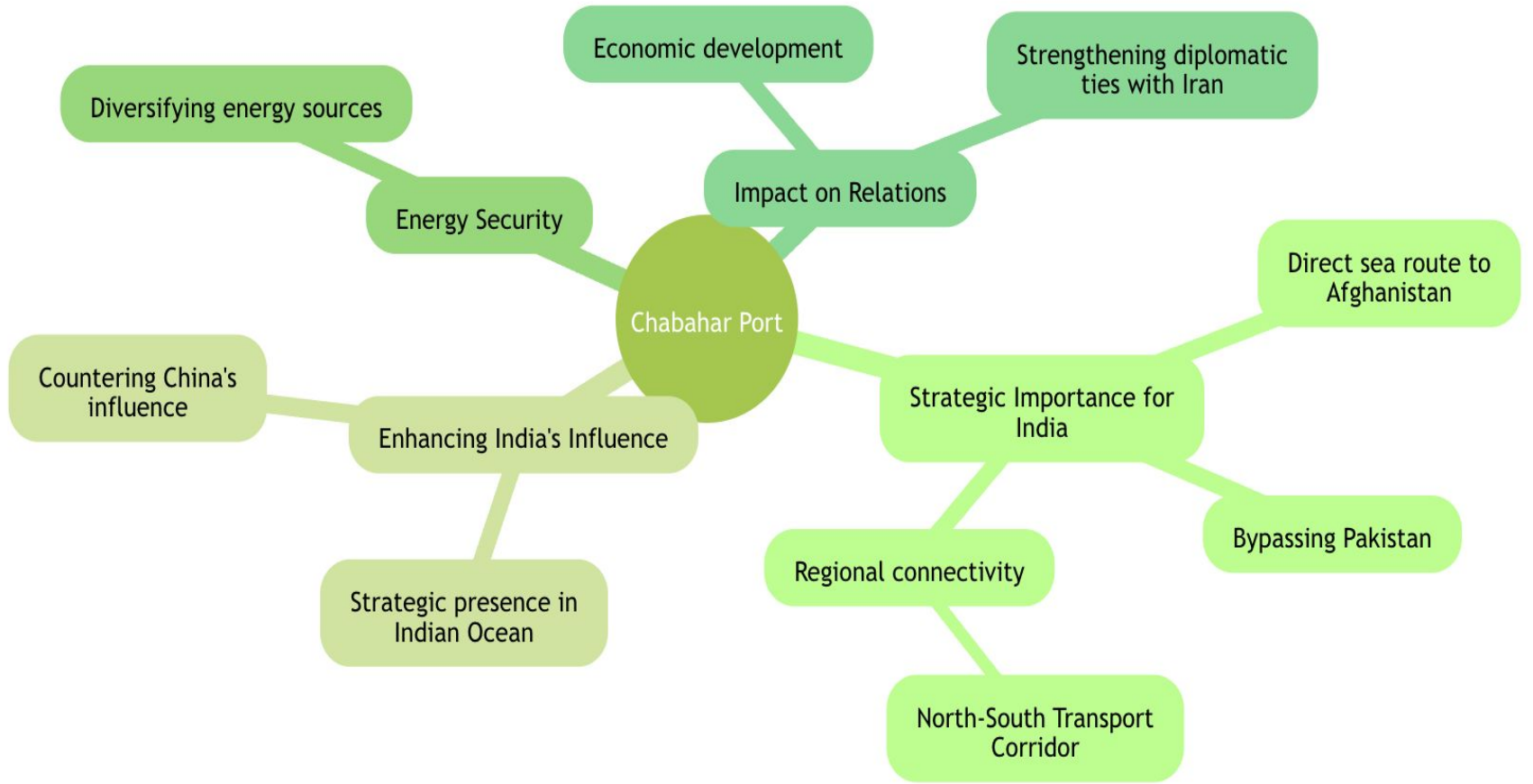


Economic Development: The development of the port is expected to boost economic development in the region, providing opportunities for investment, trade, and job creation. It can also serve as a gateway for Indian companies to access markets in Central Asia and the Middle East.

Energy Security: The port can play a role in India's energy security by facilitating the import of natural gas and oil from Iran and other Central Asian countries. This diversifies India's energy sources and can reduce its dependence on the Strait of Hormuz, a chokepoint for much of the world's oil trade.



- **Diplomatic Relations:** India's involvement in the development of Chabahar Port is a significant aspect of its diplomatic relations with Iran. It demonstrates India's commitment to enhancing ties with Iran and contributing to the development of the region.



Topic- Wood encroachment in open ecosystem



- Grasslands and savannahs are biodiverse habitats in tropical and temperate regions throughout the world.
- They cover nearly 40% of the earth's total landmass and are home to many endemic and at-risk species of plants and animals.
- From rhinoceroses and elephants in Africa to grassland birds like the bustards, Asian grasslands are prime habitats open for grasslands, and because of the dry conditions that limit their expansion, rapidly losing it all. However, we are activists have them.
- Ecosystems intervening in the function of grassland ecosystems, agriculture, deforestation, intensive conversion of lowland to erosion, large-scale loss due to projects, and overgrazing. But lurking among these usual suspects is also a highly unusual one: trees.

- **The increase in tree and shrub cover is called woody encroachment – and it is considered across most ecosystems.**
- **Woody encroachment entails that the dispersion of open habitats to habitats with greater tree cover and/or shrub density.**
- **The end result is the homogenization of an ecosystem, meaning a diverse, multi-layered ecosystem turns into a uniform layer of woody plants.**

- **This is a dire prospect because open ecosystems are characterized by a grassy understory and a scattering of native tree species.**
- **They are generally maintained by certain natural as well as human activities like grazing and fire, which are called disturbance regimes because they work in tandem to limit the growth of tree species.**
- **But once these regimes are disrupted, trees have the calm they need to establish themselves and start woody encroachment.**

When trees have ill-effects

- A higher concentration of carbon dioxide in the air due to ongoing climate change also encourages deep-rooted plants in grasslands to proliferate.
- "Increased atmospheric CO₂ is likely to promote tree over grasses because the C₃ photosynthesis pathway used by trees is preferred under high CO₂ conditions,

The human hand

- **Woody encroachment is a direct result of human-driven factors that are changing the disturbance regimes open ecosystems need to thrive.**
- **The suppression of the practices grasslands need to thrive stems from colonial conservation and management policies.**
- **Colonial officers in tropical countries were known to regard open ecosystems as “wastelands” because they took up space in which trees could grow instead and provide timber**

- **Woody encroachment in open ecosystems has altered biodiversity in myriad ways. There has been a big decline in grassland birds due to woody encroachment.**
- **“Succession of woody species changes the soil conditions, which changes the grass species and faunal association. Woody species invite increased predation, especially of the specialist birds’ nests,”**
- **woody encroachment brought down the population of grassland specialist rodents in the Banni grasslands of Kutch.**

- **In the Banni grasslands, studies have found that the spread of the invasive species *Prosopis juliflora*— which the Gujarat Forest Department planted in 1961 to combat desertification and provide firewood to communities — has since transformed swaths of the grasslands into a *Prosopis* woodland.**
- **In fact, most of India’s open ecosystems have stories to tell of ruin led by artificially introduced plants. In the Shola grasslands, eucalyptus plantations have run amok, whereas the Malabar silk-cotton tree has been running riot in the wet Terai grasslands of the Himalaya.**

Topic - major separatist groups in Myanmar: (Internal security and IR)



Kachin Independence Army (KIA): Representing the Kachin ethnic group in northern Myanmar, the KIA has been fighting for autonomy since the 1960s. The conflict in Kachin State has been particularly intense, with allegations of human rights abuses and significant humanitarian concerns.

Karen National Union (KNU) and Karen National Liberation Army (KNLA): The Karen people are one of the largest ethnic groups in Myanmar, and the KNU has been fighting for autonomy for over six decades. The KNLA is the armed wing of the KNU. The Karen conflict has led to significant displacement and suffering among the Karen population.

- **Shan State Army (SSA):** The Shan people are another major ethnic group in Myanmar, and various factions of the SSA have been involved in armed conflict against the central government. The Shan States are rich in natural resources, and the conflict is also influenced by the control over these resources.
- **Arakan Army (AA):** Representing the Rakhine ethnic group, the AA has been involved in a conflict with the Myanmar military since 2018. The conflict has led to a large-scale humanitarian crisis in Rakhine State.

- **United Wa State Army (UWSA):** The Wa are one of the largest ethnic groups in Myanmar's Shan State. The UWSA is considered one of the strongest ethnic armed groups in Myanmar, controlling a large area and engaging in ceasefire negotiations with the government.
- **New Mon State Party (NMSP):** Representing the Mon people, the NMSP has been involved in a long-standing conflict for autonomy in Mon State. The Mon conflict has seen periods of ceasefire and tension, with the NMSP seeking a political solution to achieve self-determination for the Mon people.

China's influence

China has responded to the fluid political process by engaging with multiple actors.

Given its massive investments and economic interests in the region, China has often extended support to the Myanmar military on various international platforms.

Simultaneously, it has also kept substantive relations with many armed groups, including the Brotherhood Alliance and the United Wa State Army (UWSA).

It was Beijing which facilitated some ceasefires between the military and the EAOs, such as the Haigeng ceasefire agreement in January this year, which proved to be temporary.

- **Beijing's policy towards Myanmar is also guided by emerging security threats, such as the activities of online criminal syndicates operating near the China-Myanmar border, which are targeting Chinese citizens.**
- **Over the years, the UWSA was purportedly the conduit through which some of the armed groups received Chinese weapons. The EAOs reportedly procured commercial drones from the Chinese market and used them in their operations against the military**

- **If India, despite a lack of geographic contiguity, could construct massive infrastructure projects amidst the civil war in Afghanistan, there is no reason why it could not do more in neighbouring Myanmar for regional peace and prosperity**

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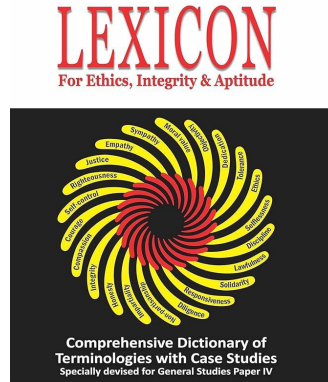
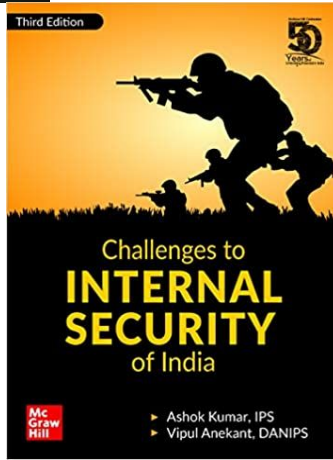
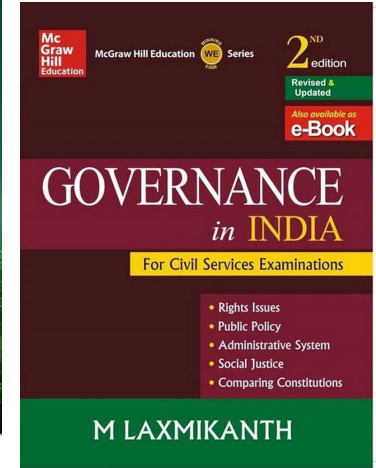
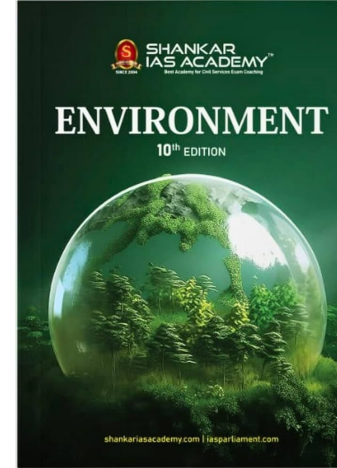
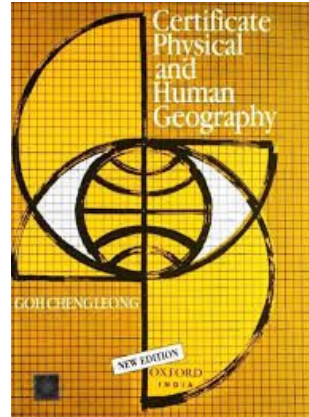
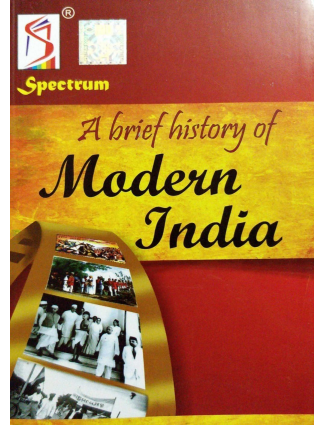
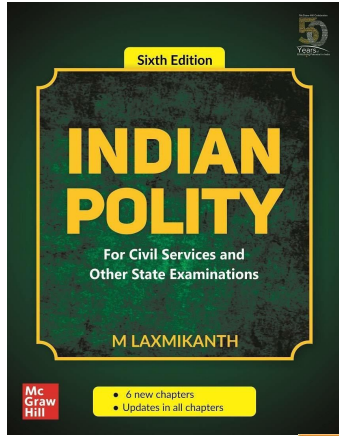
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