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6-7 October 2024

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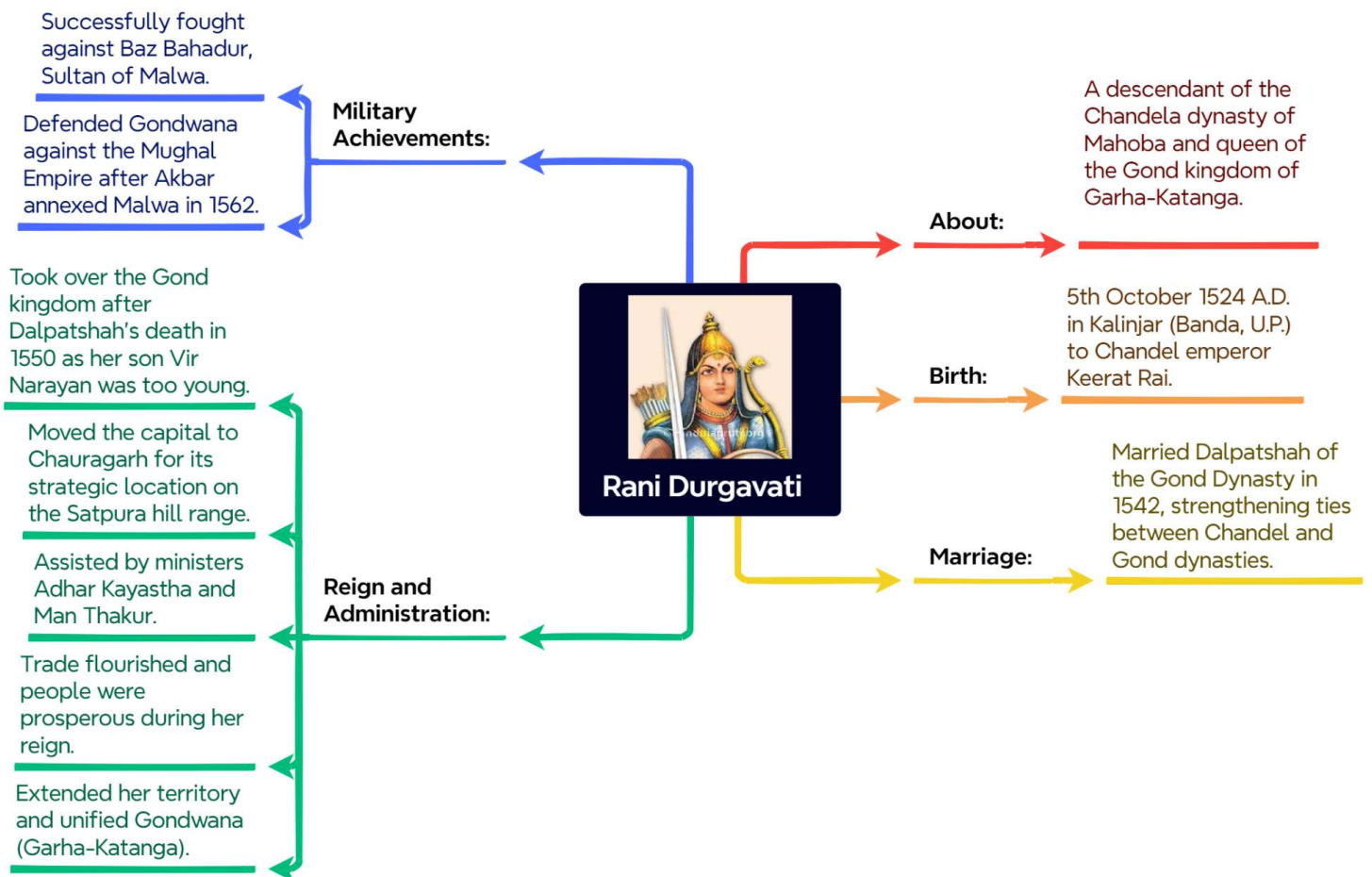
 **SAMYAK IAS, NEAR RIDDHI-SIDDHI, JAIPUR**

Art and Culture

1. Rani Durgavati - The Hindu

Madhya Pradesh cabinet recently approved the formation of a panel to develop a memorial and garden dedicated to Gond queen Rani Durgavati for Rs 100 crore.

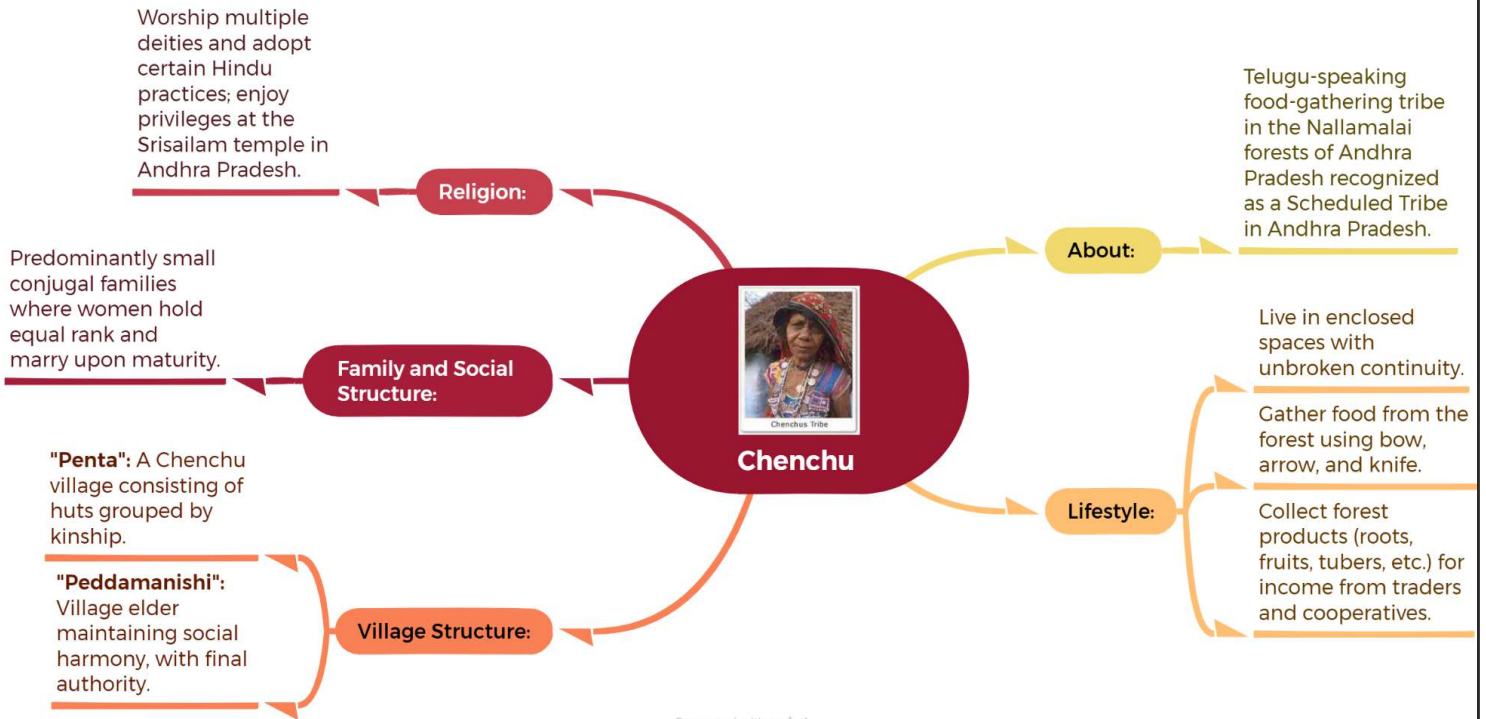
Rani Durgavati



2. Chenchu Tribe - The Hindu

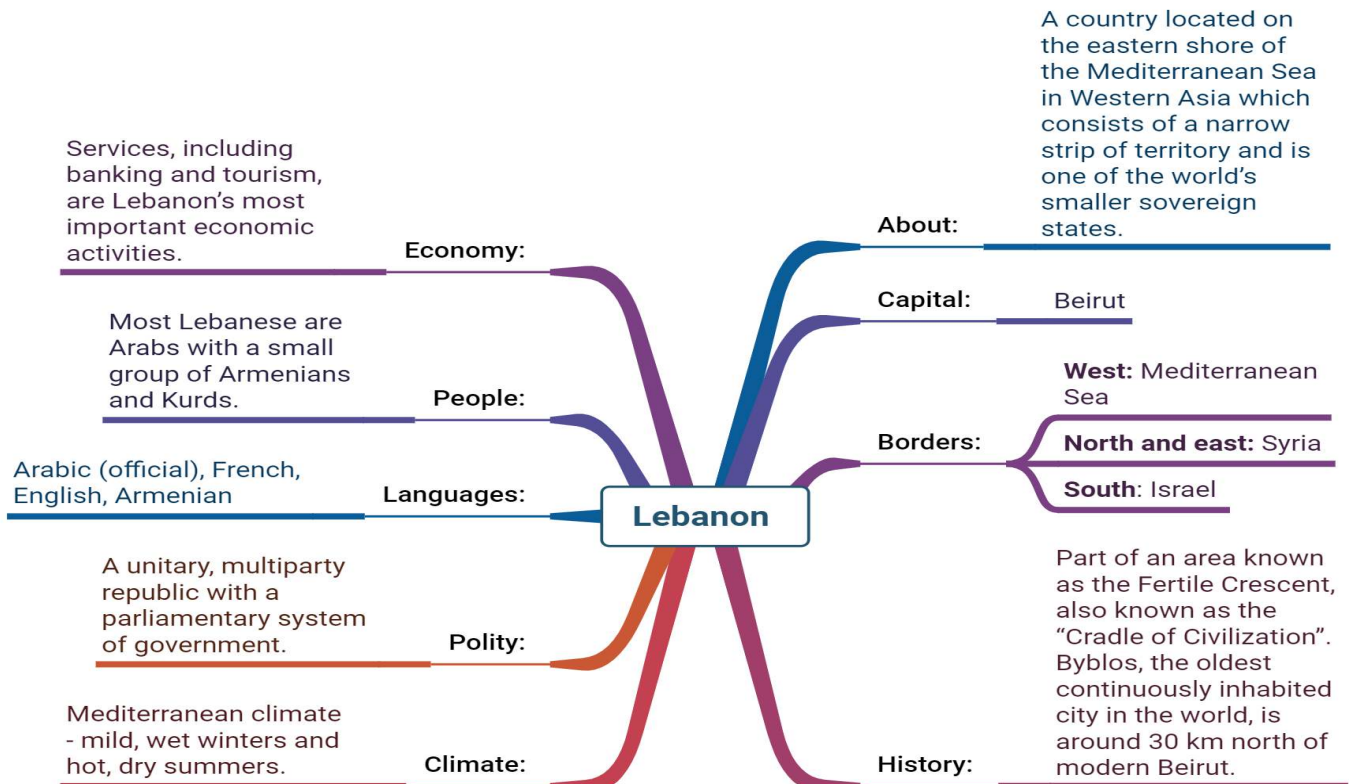
The Chenchus of Penukumadugu have lived in the dense Nallamala forests for centuries, their existence intertwined with the wilderness around them. However, their inability to keep up with the relentless pace of modernisation has led to dwindling work opportunities under the MGNREGA.

Chenchu



Geography

3. Lebanon - The Hindu





4. Pilgrims get first-ever view of Kailash peak from Indian territory - The Hindu

Pilgrims recently had the first-ever view of the sacred Kailash peak, believed to be the abode of Lord Shiva, from the Old Lipulekh pass inside the Indian territory.

Lipulekh Pass

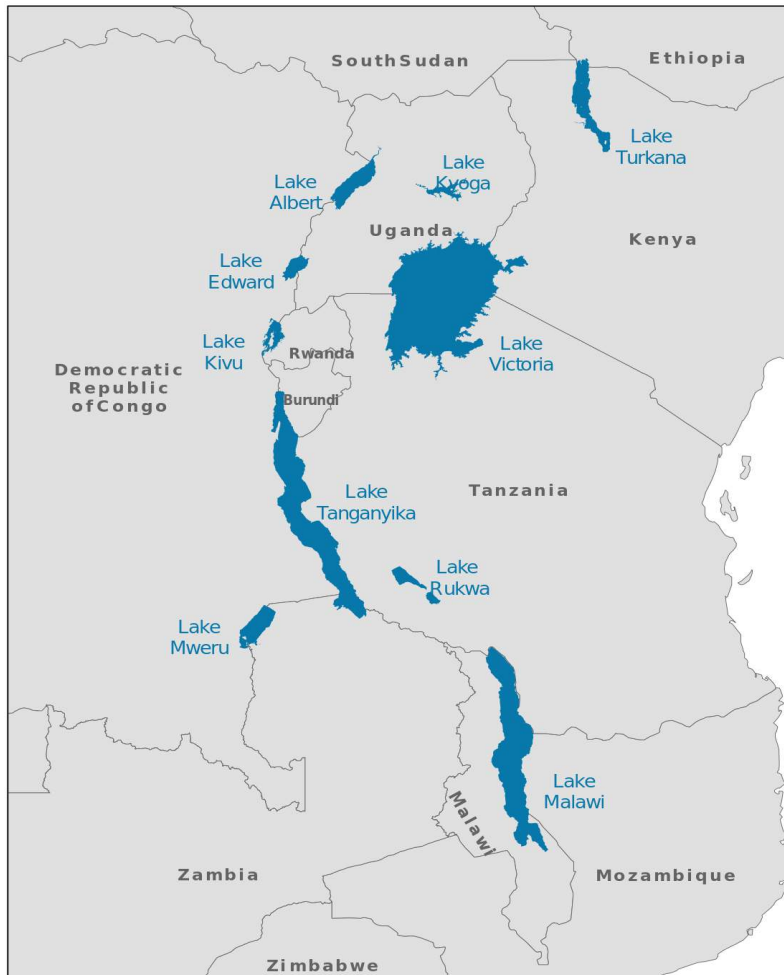
- **About:** A high-altitude mountain pass located in the Kumaon region of Uttarakhand, near the trijunction of India, Nepal and China which links the Indian state of Uttarakhand with the Tibet region of China.
- **Altitude:** Approximately 5,334 meters (17,500 feet).
- **Location:** Situated in the Vyas Valley of Pithoragarh district in Uttarakhand and it carries immense religious significance.
- **First in India:** It is the first Indian border post opened for trade with China in 1992 followed by the opening of Shipki La Pass, Himachal Pradesh in 1994 and Nathu La Pass, Sikkim in 2006.
- **Significance:**
 - **Ancient Trade Route:** Connects the Indian subcontinent with the Tibetan plateau.
 - **Religious Significance:** An integral part of the Kailash Mansarovar Yatra, a sacred pilgrimage for Hindus.



5. Lake Kivu – Indian Express

At least 78 people are dead after a boat carrying 278 passengers capsized in eastern Congo's Lake Kivu recently.

Lake Kivu



- **Location:** Situated between the Democratic Republic of Congo (DRC) to the west and Rwanda to the east. It is in the Albertine Rift, the western branch of the East African Rift.
- **Size:** Rwanda's largest lake and the sixth largest in Africa.
- **Area:** Occupies 1,040 square miles (2,700 sq.km).
- **Countries:** 58% of its waters are lying in the DRC; the rest is in Rwanda.
- **Dimensions:** 90 km long and 50 km wide.
- **Average Depth:** 220 m (Maximum depth - 475 m)
- **Mouth:** Lake Kivu empties into the Rusizi River, which flows southwards into Lake Tanganyika.
- **Island:** The tenth-largest inland island on the planet, Idjwi Island, is located on Kivu Lake.

6. Lake Uru Uru- The Hindu

At Risk: Lakes Poopó and Uru Uru

These lakes are wetlands of international importance and a source of life for indigenous and traditional communities, as well as unique species of plants and animals.

The lakes are threatened due to:



River Diversion

- Almost the entire flow of the Desaguadero River, the lakes' principal tributary, has been channeled for other uses.
- The water of other rivers of the Lake Poopó basin is used for mining activities.



Mining

- Mining activities contaminate the water and soil of wetlands.
- The water used in mining activity is discharged back into wetland tributaries without proper treatment.
- The lakes receive 3,358 tons of metal pollution per year, equal to 177 dump trucks.



The Climate Crisis

- The alarming temperature increase in the highlands has caused the rapid evaporation of the lakes' water.
- The El Niño phenomenon of 2014-2015 brought a severe drought to the region.

There are been warning of the dangers for 20 years:

1998

Lake Poopó is considered to be in a "critical" state of conservation on the Latin American level.

2000

It's declared a National Heritage and Ecological Reserve through Supreme Decree 2091.

2002

A study predicts its disappearance. Together lakes Poopó and Uru Uru are named a Ramsar site.

2014
2015

Lake Poopó disappears, causing the death of many animals that depend on it.

2018

The lake is recovering slowly thanks to the rains, but high pollution levels continue to affect the wetland.



L. Titicaca

PERU

La Paz

BOLIVIA

L. Uru Uru

L. Poopó

CHILE

Salar de Copaisa

Salar de Uyuni

ARGENTINA

Biodiversity

The current situation of the Poopó and Uru Uru implies severe impacts on key wetlands, as well as on the entire life systems.

Birds at-risk of extinction are found in the lakes' basin, including the Andean Ostrich and the Titicaca grebe. Several vulnerable or near threatened species are also present, including the James's or puna flamingo, the Andean flamingo, the horned coot, and the Andean condor.

Home to the unique puna teal, as well as a point of rest for many species of migratory birds.



Oxyura Ferruginea

Welcomes the 2nd largest population of Titicaca grebes, an endemic flightless species declared endangered in 2012. Many of them died when Lake Poopó dried up in 2015.



Zambullidor Rollandia Microptera



P. Chilensis

P. Andinus

P. Jamesi

In winter, the lakes host the largest concentration of flamingos in the Bolivian highlands.

The waters house 24 species of native fish...

Communities

Lakes Poopó and Uru Uru are a source of life for indigenous (Aymaras, Quechuas and Uru Murato) and traditional populations.

Women are most affected due to their dependence on water for their work in the home and in their communities.

The Uru Murato People

Known as "people of water," they once lived from fishing but have since been obligated to migrate to work in mines and salt mines. They are a vulnerable population:



More than 2,000 affected families



250 tons of fish lost per year



58 years Life expectancy



76% live in extreme poverty

As one of the oldest native indigenous communities in Bolivia, their cultural survival is at risk.

Rights Violated

Territory

The Uru Murato have been forced to migrate due to the degradation of their territories, and are considered climate refugees.

Health

The presence of heavy metals has been demonstrated in wells used for human consumption, a direct route to public health impacts.

Work

With fishing impossible, local populations have been left without work and have thus been forced to migrate to seek employment.

Food

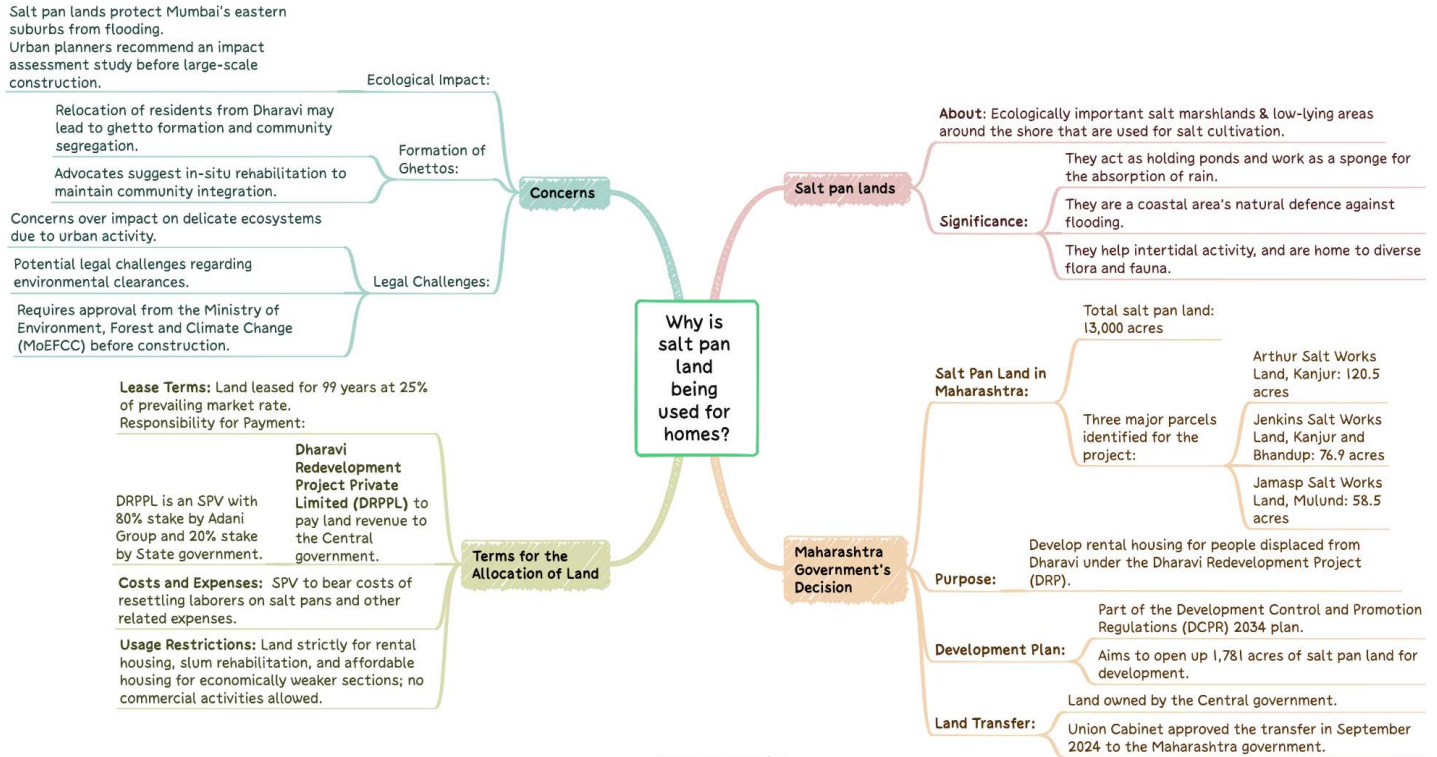
The food sovereignty of the population is at risk due to the pollution of the lakes and the disappearance of biodiversity.

Water

40.6% of the population doesn't have access to safe water and survives with 5 liters per day, 11 L are recommended as minimum by WHO.

7. Why is salt pan land being used for homes? - The Hindu

The Maharashtra government has issued a GR (Government Resolution) allocating 255.9 acres of salt pan land, distributed over three land parcels in Mumbai's eastern suburbs, for the construction of rental houses in the Dharavi Redevelopment Project through a lease agreement.



Way Forward

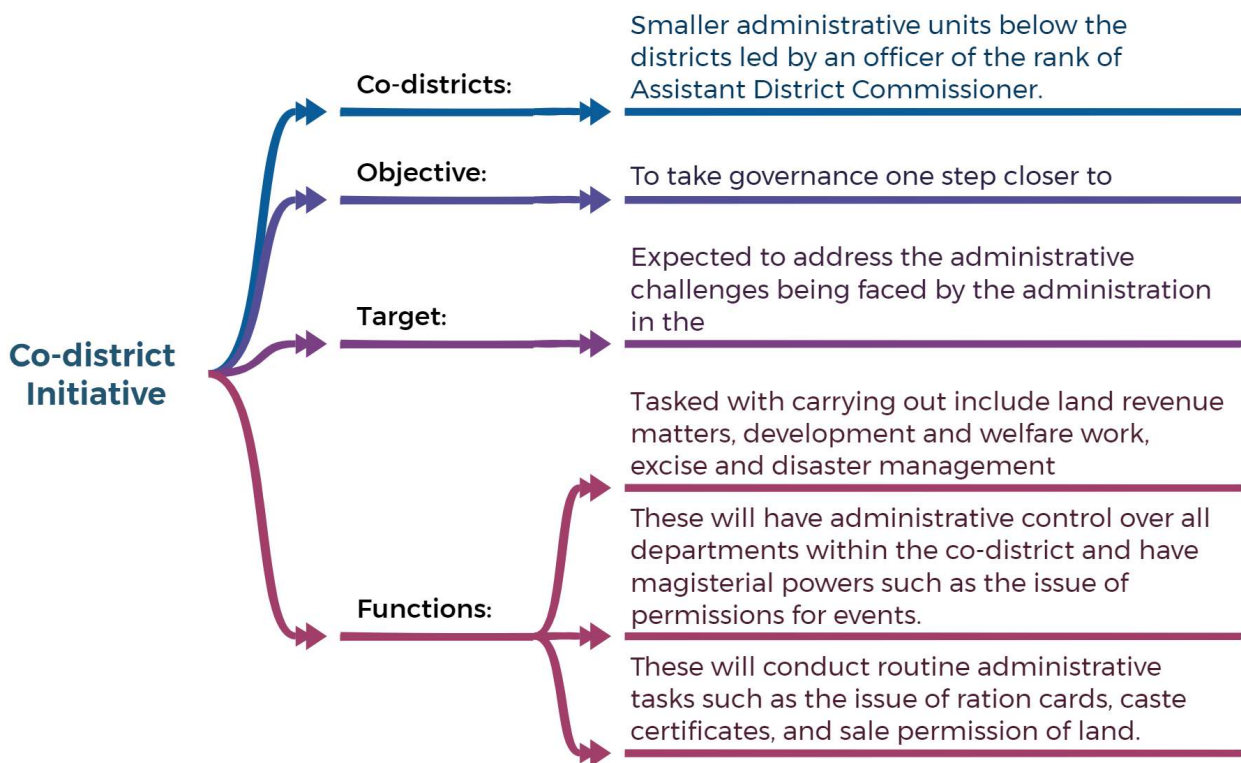
The Centre will hand over the land to the State government, which will give permission to DRPPL to go ahead with the construction after their plans are approved. For that, the DRPPL will have to seek an approval from the Ministry of Environment, Forest and Climate Change. Environmentalists claim that the entire process from here on can be challenged in the court of law.

Polity

8. Taking governance closer to people: Assam launches unique 'co-district' initiative - Indian Express

Assam recently launched a new concept of “co-district” within a district administration by doing away with the existing system of civil sub-divisions.

Co-district Initiative



World Affairs

9. The status of the civil war in Sudan - The Hindu

On September 26, the Sudanese Armed Forces (SAF) launched a major offensive against the paramilitary Rapid Support Forces (RSF) in Khartoum and Bahri. Eighteen months into the civil war, the UN said that more than 20,000 people have been killed.

Actors in the civil war

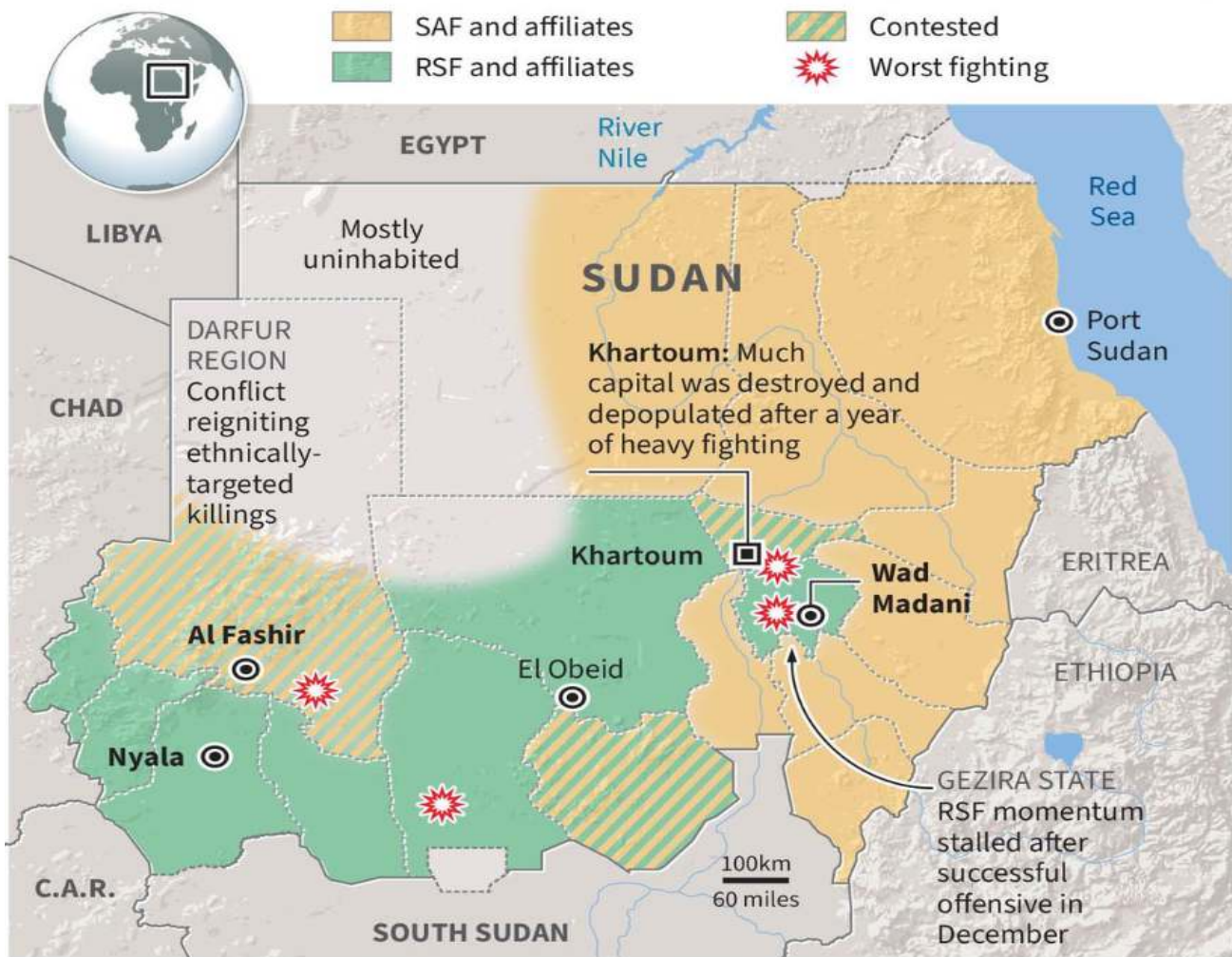
- **2 factions:** Civil war between SAF (Sudanese Armed Forces) and RSF (Rapid Support Forces) began as power rivalry between SAF head Abdel Fattah al-Burhan and RSF head Hamdan Dagalo.

● Current Situation

- RSF has the upper hand in multiple areas; SAF conducts frequent airstrikes, capturing pockets around Khartoum.
- Humanitarian crisis worsening, especially in Darfur, with limited access to aid and healthcare.
- Both factions accused of war crimes, including sexual violence and extrajudicial killings.

● Humanitarian Crisis

- UN declared famine in Zamzam camp (North Darfur) hosting 500,000 IDPs.
- 14 regions face conditions similar to Zamzam, with 25.6 million people facing crisis-level food insecurity.
- Heavy rains, floods, and cholera outbreak have further worsened conditions, with over 200 deaths reported.

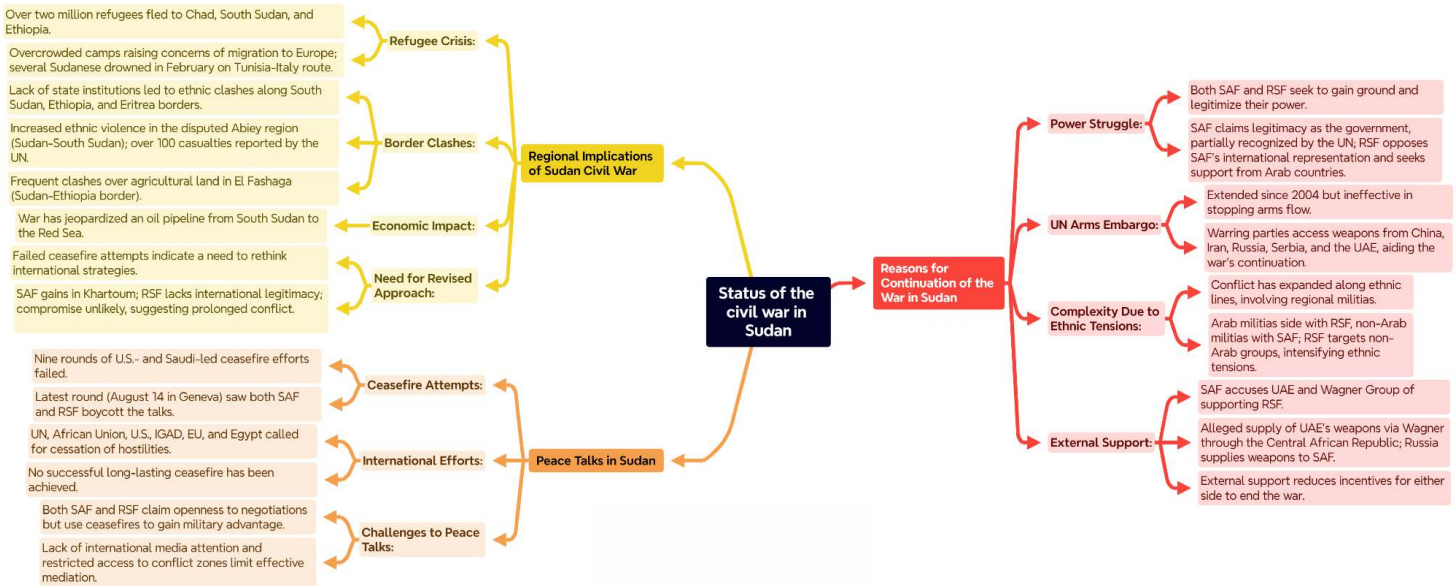


■ According to the latest UN-backed IPC initiative, 25.6 million people, more than half of Sudan's population, face "crisis or worse" levels of food insecurity

Sources: International Crisis Group, UNOCHA

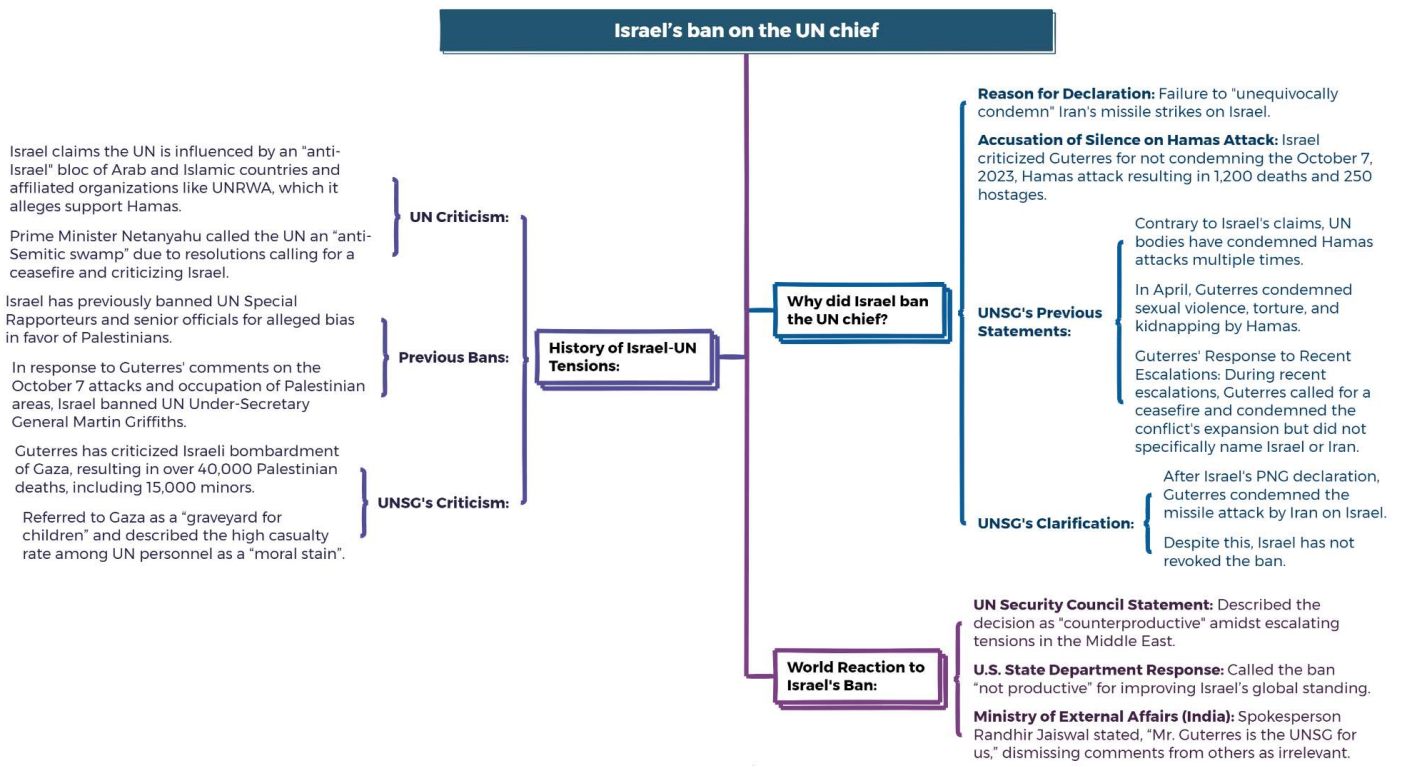
Pictures: Getty Images

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10. What's behind Israel's ban on the UN chief? - The Hindu

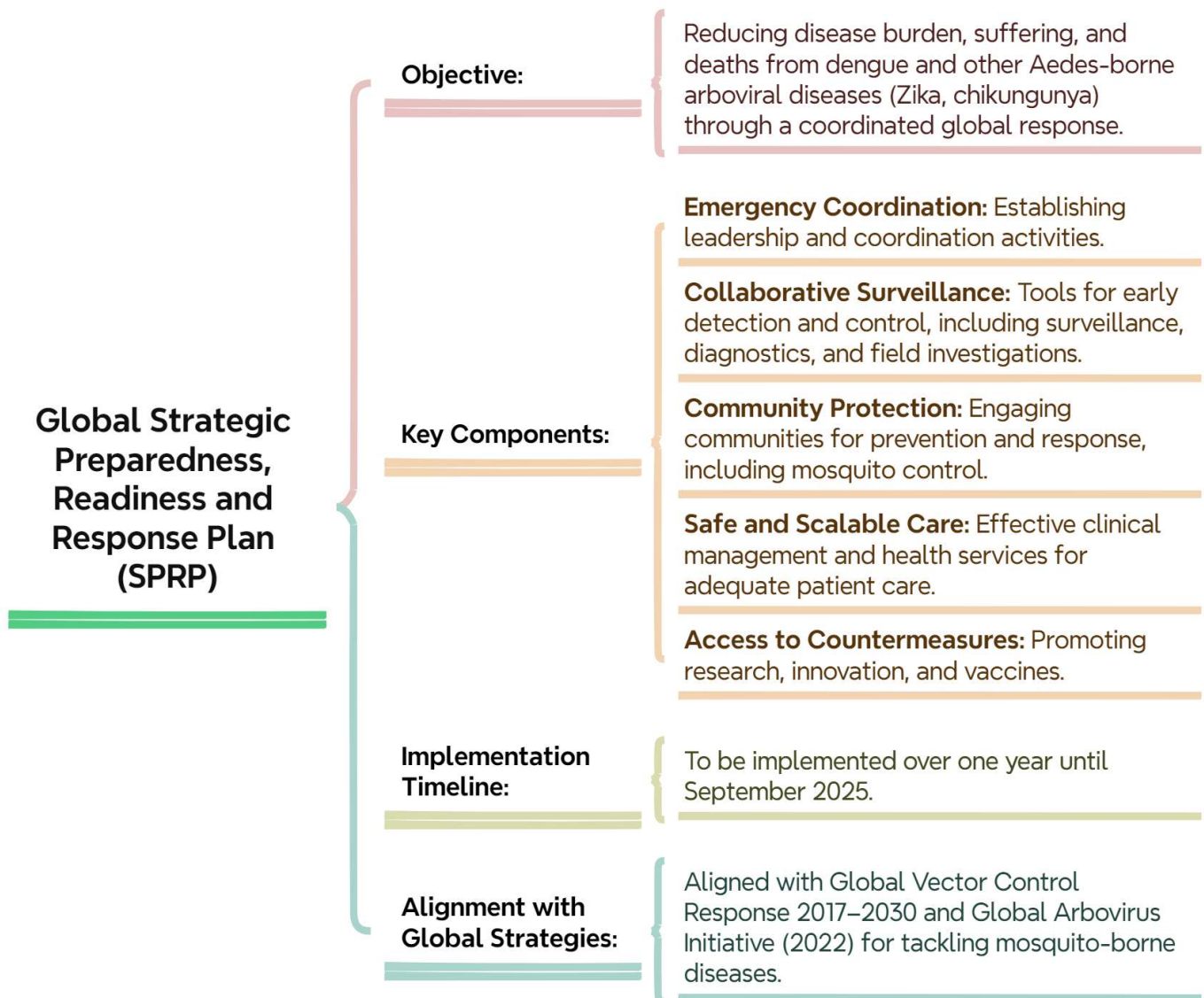
Recently, Israeli Foreign Minister Israel Katz announced that Israel had banned United Nations Secretary-General (UNSG) António Guterres from entering the country, accusing him of "backing" Hamas, Hezbollah, the Houthis, and Iran.



11. WHO launches plan to tackle dengue and other Aedes-borne diseases - Indian Express

The World Health Organization (WHO) recently launched the Global Strategic Preparedness, Readiness and Response Plan (SPRP) to tackle dengue and other Aedes-borne arboviruses.

Global Strategic Preparedness, Readiness and Response Plan (SPRP)



12. How has Telegram changed its stance on content moderation policy? - The Hindu

In the first week of September, Telegram quietly edited out language from its FAQ page that stated private chats were protected and that they “do not process any requests related to them.”

Content Moderation in End-to-End Messaging Apps

Signal	Telegram	WhatsApp
<ul style="list-style-type: none"> • No demographic or personal data collection other than phone numbers. • Groups and direct messages are encrypted; avoids monitoring content to maintain encryption integrity. • No search feature for groups within the app. 	<ul style="list-style-type: none"> • Allows up to 200,000 members in groups, enabling mass communication. • Features like group search make it easier to find harmful content. • Behaves more like a social media platform, making it prone to misuse for misinformation, abuse, and extremist content. 	<ul style="list-style-type: none"> • Claims of end-to-end encryption are undermined by metadata sharing with law enforcement. • Collects user metadata irrespective of privacy settings. • Has content moderators who can view messages if reported, and collects related information such as IP address, phone number, and linked accounts.

Obligations of Intermediaries in India

- **Compliance Requirements:**
 - Must comply with national regulations and respond promptly to complaints regarding unlawful content.
 - Obligated to remove unlawful content once notified by the government.
- **Safe Harbour Provision (Section 79, IT Act 2000):**
 - Intermediaries are not liable for third-party content if they prove lack of knowledge or that due diligence was exercised to prevent offences.
 - Executives (e.g., Telegram CEO) can claim exemption if unaware of unlawful content but must act promptly to remove it once notified.
- **Government Powers:** Government can notify intermediaries of unlawful content, and they must disable access quickly.
- **Grievance Redressal:** Intermediaries (e.g., Telegram, Meta, Google) must have a designated grievance officer to handle public complaints under IT regulations.
- **Concerns:** Potential issues of censorship and undue pressure from governments to remove critical content.

Economy

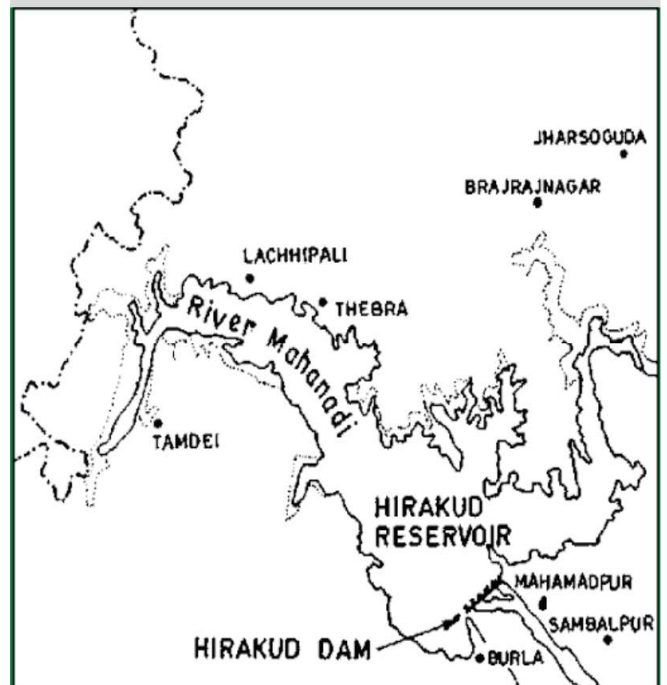
13. Six decade old canal system of Odisha's Hirakud Dam to get facelift - The Hindu

Built six decades ago, the canal network connected to Hirakud Dam, one of the biggest projects in eastern India, is all set to be renovated, which is expected to minimise wastage of water meant for irrigation.

Hirakud Dam

- **About:** The longest dam in India and the longest earthen dam in the world.
- **Length:** 79 km
- **Construction:** Built across the Mahanadi River about 15 km upstream of Sambalpur town in the state of Odisha & is made of earth, concrete and masonry.
- **Reservoir:** Hirakud Reservoir or Hirakud Lake which is the biggest artificial lake in Asia, with an area of 746 sq.km.
- **Significance:** One of the oldest hydel projects in India, the first post-independence major multipurpose river valley project in the country inaugurated in the year 1957.
- **Purpose:** Provides 1,55,635 hectares of Kharif and 1,08,385 ha of Rabi irrigation.
- **Power generation capacity:** 359.8 MW
- **Cattle Island:** A small island in the Hirakud reservoir inhabited by a large herd of wild cattle, that are believed to be left behind by villagers when the dam was constructed in the 1950s.

Cattle Island



14. What is the National Agriculture Code, currently being formulated by Bureau of Indian Standards - Indian Express

The Bureau of Indian Standards (BIS) has begun the process of formulating a National Agriculture Code (NAC), on the lines of the existing National Building Code and National Electrical Code.

National Agriculture Code (NAC)

- **Coverage:**

- Encompasses the entire agriculture cycle with guidance for future standardization.
- Two parts: General principles for all crops and crop-specific standards (e.g., paddy, wheat, oilseeds, pulses).

- **Scope:**

- Guide for farmers, agriculture universities, and officials.
- Includes agriculture processes and post-harvest operations, such as crop selection, land preparation, sowing, irrigation, soil and plant health management, harvesting, processing, sustainability, and record maintenance.
- Covers input management (fertilizers, pesticides, weedicides), crop storage, and traceability standards.
- Addresses new areas like natural farming, organic farming, and use of IoT in agriculture.

- **Objectives:**

- Develop a national code considering agroclimatic zones, crop types, socio-economic diversity, and the agrifood value chain.
- Serve as a quality reference for policymakers, agriculture departments, and regulators.
- Provide a comprehensive guide for effective decision-making in agricultural practices.
- Integrate relevant Indian Standards with recommended agricultural practices.
- Address aspects like SMART farming, sustainability, traceability, and documentation.
- Support capacity-building programs organized by agriculture extension services and civil society organizations.

Environment

15. Hammerhead Shark - The Hindu

A team of marine biologists led by a Florida International University researcher has described a new species of the shark genus *Sphyrna* from the Caribbean and the Southwest Atlantic.

Hammerhead Sharks

- **About:** Belong to the family Sphyrnidae, named for their hammer- or shovel-shaped heads (cephalofoil).
- **Distribution:** Found in tropical and temperate marine waters near coasts and above continental shelves.
- **Seasonal migration:** Equatorward in winter, poleward in summer having extended range during El Niño years.
- **Appearance:**
 - Greyish-brown or olive-green upper sides, white bellies.
 - Triangular, serrated teeth for hunting.
 - Special sensors on head for locating prey.
- **Viviparous:** Give birth to live young.
- **Lifespan:** 20-30 years.
- **Exothermic:** No internal temperature regulation.
- **Conservation Status:**
 - Among the most threatened shark families due to overexploitation.
 - All species except *Sphyrna gilberti* are listed as Vulnerable, Endangered, or Critically Endangered by the IUCN.



16. Indian grey wolf (Canis lupus pallipes) - The Hindu

Ten deaths—those of nine children and one woman —have been presumed to have occurred due to wolf attacks in Bahraich in Uttar Pradesh.

Indian grey wolf

GROUPS

- Social animals, live in packs of 6-8
- Group consists of a breeding male and female
- A group can range over as much as 200 sq km

HUNT

- Can cooperatively hunt large prey such as black bucks
- Capable of chasing prey over long distances

EAT

Small- to medium-sized animals. Livestock is a major part of their diet where there is little natural prey

PROTECTION STATUS AND POPULATION

Grey wolves (*Canis lupus*) of which these are a subspecies are listed as Least Concern on the IUCN Red List. However, only 2,000-3,000 Indian wolves (*Canis lupus pallipes*) are left in the wild



INDIAN

LIFESPAN 5-13 YEARS



WOLF

(CANIS LUPUS PALLIPES)
WEIGHT 17-25 KG

GEOGRAPHIC RANGE: Indian subcontinent (Bihar, Jharkhand, Chhattisgarh, Rajasthan, Gujarat, Madhya Pradesh, Uttar Pradesh, Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu, Telangana, Odisha and West Bengal) up to southwest Asia



HABITAT: Grasslands, scrub forest, thorn and dry deciduous forest; Often share space with agro-pastoral communities

THREATS

- **Retaliatory killing** due to its depredation of livestock
- Long regarded as **vermin** with a bounty placed on them
- **Habitat loss** and change
- Mostly live outside the network of "**Protected Areas**" leaving them vulnerable to hunting
- Most wolf **habitats are not protected**, and often categorised as "wastelands"
- Susceptible to **diseases** like canine distemper and canine parvovirus transmitted by domestic dogs

PHOTO: PRAKASHA LINGGAPPA/SHUTTERSTOCK.COM; TEXT: SAMYAK PRINCE, DESIGN: DIPNA MEENA

17. EnviStats India 2024 - PIB

The Ministry of Statistics and Programme Implementation (MoSPI) compiled and released the 7th consecutive issue of the publication "EnviStats India 2024: Environment Accounts" recently in accordance with the SEEA (System of Environmental- Economic Accounting) Framework which is an agreed international framework for the compilation of the Environment Economic accounts.

EnviStats India 2024

- **Compilation:** In accordance with the System of Environmental-Economic Accounting (SEEA).
- **Current publication:** Seventh in the series that covers Energy Accounts, Ocean Accounts, Soil Nutrient Index and Biodiversity.

EnviStats India 2024 – Highlights

- **Increase in Protected Area**

- 72% increase in the number of Protected Areas from 2000 to 2023.
- 16% increase in the total area of Protected Areas in the same period.

- **Mangrove Coverage:** 8% increase in mangrove coverage from 2013 to 2021.

- **Species Richness (IUCN Red List):** Compiled data on the species richness of threatened species by taxonomic groups using spatial datasets from IUCN.

SEEA (System of Environmental- Economic Accounting) Framework

- **Definition:** International statistical standard for describing interactions between the economy and environment, and changes in stocks of environmental assets.

- **Objective:** Integrates perspectives from various disciplines to improve information on environmental-economic accounts.

- **Components:**

- SEEA-Central Framework (SEEA-CF): Focuses on individual components of the environment that support economic activities.
- SEEA-Ecosystem Accounting (SEEA-EA): Complementary to SEEA-CF; provides a comprehensive framework for organizing data on habitats, measuring ecosystem services, tracking ecosystem asset changes, and linking these to economic activities.=

Defence

18. Air Force plans to procure 12 early warning aircraft - The Hindu

The Indian Air Force (IAF), which is short of Airborne Early Warning and Control (AEW&C) aircraft, a critical force multiplier, is looking at the procurement of 12 aircraft under two different programmes.

Air Force plans to procure 12 early warning aircraft

Existing three Embraer-based AEW&C systems to be expanded with six more.
Minor modifications to equipment, modifications by DRDO and CABS.
Proven design with minimal risk; awaiting Defence Acquisition Council clearance.

Embraer-Based AEW&C (Mk1A):

IAF operates three Israeli Phalcon AWACS (360-degree coverage) and three Netra AEW&C (240-degree coverage).

Shortage noted during the 2019 Balakot aerial engagement with Pakistan Air Force.

Proposal to procure two additional Phalcons remains pending.

Current IAF AEW&C Fleet:

IAF to procure 12 AEW&C aircraft under two programs:

Program 1: Six follow-on AEW&C systems on Embraer aircraft, similar to the Netra systems.

Program 2: Six AEW&C systems on Airbus A-321 aircraft, under development by DRDO.

Development of six AEW&C systems on Airbus A-321 aircraft.

Modification by Airbus; equipment developed by DRDO.

Contract negotiations ongoing for configurations and cost.

Six A-321 aircraft from Air India transferred to IAF, awaiting modifications.

Airbus-Based AEW&C (Mk2):

About: Consists of Active Electronically Scanned Radar, Secondary Surveillance Radar, Electronic and Communication Counter Measures, LOS and beyond LOS data link, voice communication, and self-protection suite.

Construction: Built on Emb-145 platform with air-to-air refuelling capability for extended surveillance.

Airborne Early Warning and Control (AEW&C) aircraft

Capabilities: Long-range surveillance; serves as a force multiplier.

Netra system based on Embraer aircraft.

Complex tactical software for sensor data fusion, providing air situation and threat assessment.

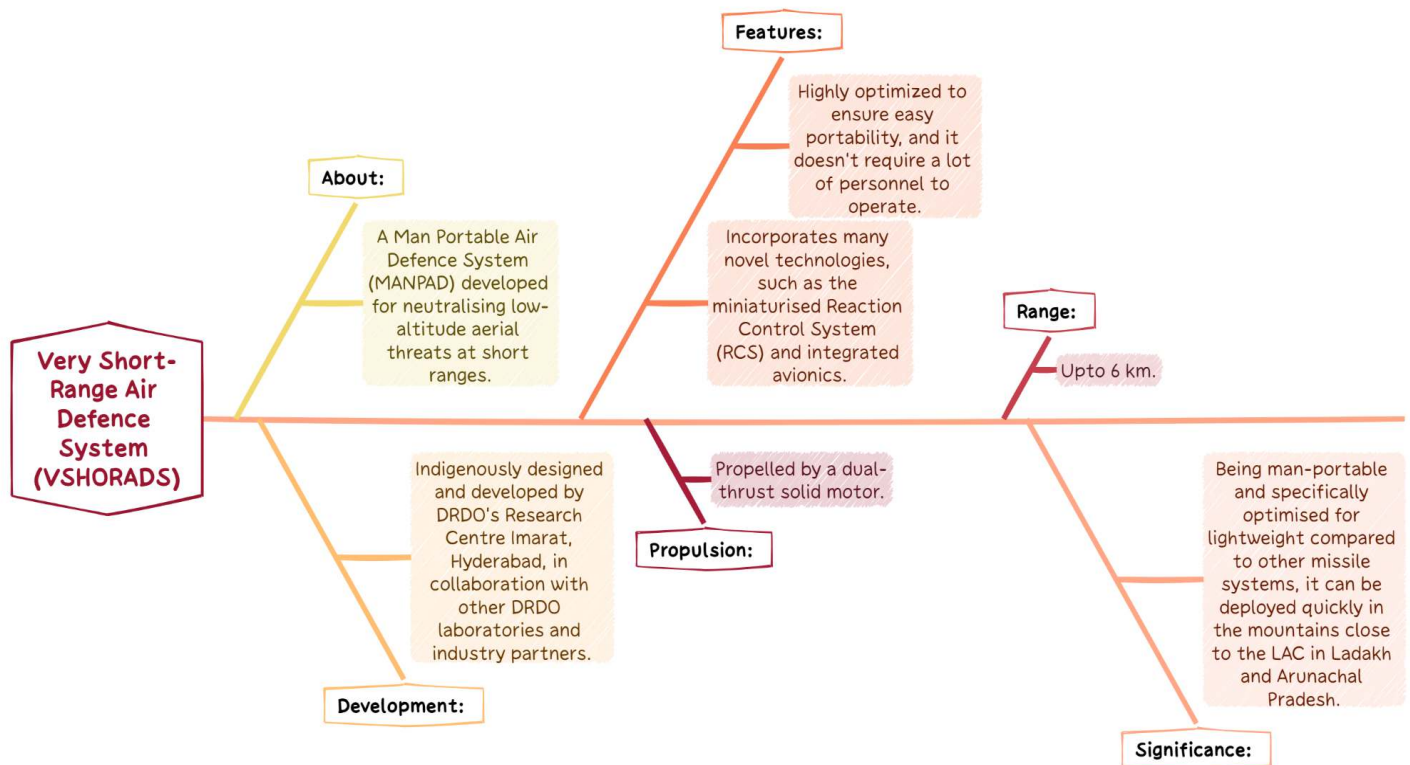
In-house battle management functions for Integrated Air Command & Control System (IACCS) network.

Development: Joint development by DRDO and IAF.

19. DRDO announces completion of development trials of man-portable air defence system - The Hindu

The Defence Research and Development Organisation (DRDO) recently announced the completion of the development trials of the ingeniously developed 4th Generation miniaturised Very Short Range Air Defence System (VSHORAD) after three successful consecutive flight tests at Pokhran Field Firing Ranges in Rajasthan.

Very Short-Range Air Defence System (VSHORADS)



20. Akashteer Systems - Indian Express

Amid heightened global security concerns, the Indian Army has significantly enhanced its air defence capabilities with the acquisition of 100 Akashteer air defence systems.

Akashteer Systems

