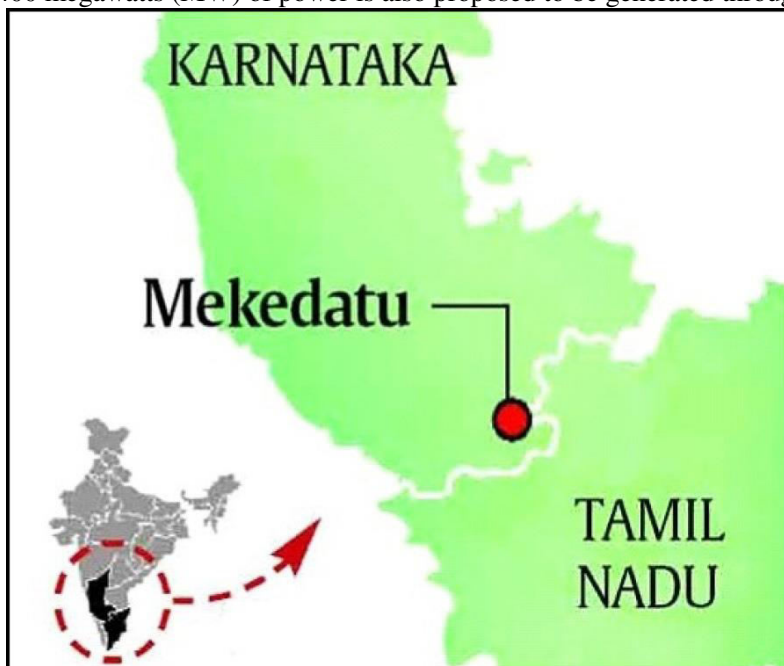


GOVERNANCE- WELFARE SCHEMES, E-GOVERNANCE, SERVICES ETC.
Makedatu Project

The Karnataka government is likely to pressurise the Centre for approval of the construction of the Makedatu Project on the Cauvery river.

- Makedatu, meaning goat's leap, is a deep gorge situated at the confluence of the rivers Cauvery and its tributary Arkavathi.
- Ontigondlu is the proposed reservoir site, situated at Ramanagara district in Karnataka about 100 km away from Bengaluru. It is the midst of the Cauvery Wildlife Sanctuary.
- The Rs. 9,000 crore project aims to store and supply water for drinking purposes for the Bengaluru city. Around 400 megawatts (MW) of power is also proposed to be generated through the project.


Key Points

- The project was first approved by the Karnataka state government in 2017.
- It received approval from the erstwhile Ministry of Water Resources for the detailed project report and is awaiting approval from the Ministry of Environment, Forest and Climate Change (MoEFCC).
 - The approval from MoEFCC is crucial because 63% of the forest area of the Cauvery Wildlife Sanctuary will be submerged.
 - 5,051 hectares of forests would be submerged, including 3,181 hectares in the sanctuary and 1,870 hectares in the reserve forest.
- 4.75 thousand million cubic feet of water could be drawn from the reservoir to partially meet the drinking needs of Bengaluru.
- Tamil Nadu has approached the Supreme Court (SC) against the project even if Karnataka has held that it would not affect the flow of water to Tamil Nadu.
 - In June 2020, during the Cauvery Water Management Authority's meeting, Tamil Nadu reiterated its opposition to the project.
- Reasons for Opposition by Tamil Nadu:
 - Tamil Nadu is opposed to any project being proposed in the upper riparian unless it was approved by the Supreme Court.
 - Karnataka has no right to construct any reservoir on an inter-state river without the consent of the lower riparian state i.e. Tamil Nadu in this case.
 - The project is against the final order of the Cauvery Water Disputes Tribunal (CWDT) in which the SC held that no state can claim exclusive ownership or assert rights to deprive other states of the waters of inter-state rivers.
 - The CWDT and the SC have found that the existing storage facilities available in the Cauvery basin were adequate for storing and distributing water so Karnataka's proposal is ex-facie (on the face of it) untenable and should be rejected outright.

- It has also held that the reservoir is not just for drinking water alone, but to increase the extent of irrigation, which is in clear violation of the Cauvery Water Disputes Award.

INTERNATIONAL RELATION

Hybrid Warfare by China

The Chinese company Zhenhua Data Information Technology Co. Limited is monitoring over 10,000 Indian individuals and organisations in its global database of foreign targets.

Key Points

- **Method:** Zhenhua monitors the digital footprint of its targets using Artificial Intelligence tools across social media platforms, maintains an information library, which includes content not just from news sources, forums, but also from papers, patents, bidding documents, even positions of recruitment.
- **Database:** The database of the company called Overseas Key Information Database (OKIDB) has entries from the USA, UK, Japan, Australia, Canada, Germany and the UAE as well.
- **Targets:** Its targets include individuals and institutions in politics, government, judiciary, art and sports, business, technology, media, and civil society.
- **Link to Chinese Government and Intelligence:** The Company counts the Chinese government, intelligentsia and military among its clients.
 - However, the Chinese government has denied having asked the company to collect or provide data, information and intelligence stored within other countries' territories for the Chinese government.
- **Implication:** This information can be used for strategic and intelligence services of China for hybrid warfare.
- **Legal Aspects:** The data monitoring by Zhenhua cannot be covered under the Information Technology Rules, 2011, under the IT Act, 2000, as it only covers personal data and not information available freely or accessible in the public domain.
 - These rules also do not impose any conditions on the use of personal data for direct marketing etc.
 - Though it emphasizes on data collection by consent which is not done by Zhenhua, the law is impossible to enforce in a foreign jurisdiction.
 - India is yet to have a data protection law for protecting the privacy of individuals and national security.
- **India-China Relations:** The recent Indo-China conflict due to clashes at the Line of Actual Control and later banning of chinese apps by India has led to exponential increase in tension between the two countries. In this scenario, the information assets of Zhenhua can give a strategic leverage to China over India.

Hybrid Warfare

- **About:** It refers to using non-military tools to achieve dominance or damage, subvert or influence. These tools include information pollution, perception management and propaganda.
- **Background :**
 - **By China:** In 1999, Unrestricted Warfare, a publication by China's People's Liberation Army, talked about hybrid warfare and the need for a shift in the arena of violence from military to political, economic and technological.
 - There have been many recent reports on China's attempts to collect sensitive military, intelligence or economic information in the USA and Europe through social media.
 - **Lebanon:** Hybrid warfare was used in the 2006 Israel-Lebanon War by the Hezbollah group.
 - It employed a host of different tactics like guerilla warfare, innovative use of technology and effective information campaigning.
 - **Russia:** It was also used by Russia against Ukraine in the 2014 annexation of Crimea.
 - It involved a combination of activities, including disinformation, economic manipulation, use of proxies and insurgencies, diplomatic pressure etc.
- **Threats:**
 - **Cyber Attacks:** This may include attacks on critical infrastructure like power grids, business systems, and defence systems. These may be used to disrupt economic activities, undermine institutions, and discredit political leadership and the intelligentsia.
 - **Undermining Democracy:** The foreign government may manipulate the data, spread propaganda and misinformation and influence democratic systems like elections through use of social media, websites, advertisements etc.

- The 2016 election of the USA and UK Brexit vote are suspected to have been influenced through such interference by Russia.
- Inciting Social Discord: The information may be used to plant disharmony and communal tensions within a society which is eventually a threat to the unity of the country.

Way Forward

- The governments should establish a process to develop a national approach of self-assessment and threat analysis. Institutionalizing a process regarding threat and vulnerability information will enhance hybrid warfare early warning efforts, assist resiliency efforts, and may even have a deterrent effect.
- Hybrid threats are an international issue, so should be the response. National governments should coordinate a coherent approach amongst themselves to understand, detect and respond to hybrid warfare to their collective interests. Multinational frameworks should be developed to facilitate cooperation and collaboration across borders.

India's shift on Taliban

Recently, India has signaled a shift in its position on engaging with the Taliban by participating in the commencement ceremony of Intra-Afghan talks between the Afghanistan government and the Taliban in Doha, Qatar.

Key Points

- **India's Position Shift:**
 - The Indian presence at the Intra-Afghan peace talks indicates that it has changed its position given the ground reality in Afghanistan and the changing power structure in Afghanistan.
 - USA's withdrawal has given Pakistan a major role to play in Afghanistan directly or indirectly through its proxies.
 - However, some experts were of the opinion that India chose to attend the ceremony because the Afghan government was also at the table.
 - India still does not recognise the Taliban.
- **India's Stand:**
 - India believes any peace process must be Afghan-led, Afghan-owned and Afghan-controlled. i.e.
 - It has to respect the national sovereignty and territorial integrity of Afghanistan and promote human rights and democracy.
 - It also needs to preserve the progress made in the establishment of a democratic Islamic Republic in Afghanistan.
 - The interests of minorities, women and vulnerable sections of society must be preserved and the issue of violence across the country and its neighbourhood has to be effectively addressed.
 - Indian interests, which include the Indian Embassy and Indian companies and workers in Afghanistan, should also be protected.
 - India supports an "independent and sovereign" Afghanistan. The use of words "independent and sovereign" make it clear that Pakistan and the Inter-Services Intelligence (ISI) should not control the levers in Afghanistan.
- **Background:**
 - The USA signed a deal with the Taliban that paved the way towards a full withdrawal of USA troops from Afghanistan and also represent a step towards ending the 18-year-war in Afghanistan.
 - The peace deal was expected to kick-off two processes- a phased withdrawal of US troops and an 'intra-Afghan' dialogue.
 - The deal is a fundamental step to deliver a comprehensive and permanent ceasefire and the future political roadmap for the Afghanistan peace process.
- **India's Interests in Afghanistan:**
 - India has a major stake in the stability of Afghanistan. India has invested considerable resources in Afghanistan's development. E.g. the Afghan Parliament, the Zaranj-Delaram Highway, Afghanistan-India Friendship Dam (Salma Dam) among others.
 - Afghanistan is the gateway to Central Asia.



▪ **Issues Involved:**

- India is concerned about the Taliban's links with Pakistan's ISI and efforts by the latter to use the Haqqani network to target India's interests in Afghanistan.
- India's Afghanistan policy continues to be assessed vis-a-vis Pakistan, which opposes any security role for India in Afghanistan and sees India's presence there as detrimental to its interests.
- Taliban also has link with Jaish-e-Muhammad (JeM) and Laskar-e-Toiba (LeT) who are behind various terrorist activities against India.
- India still does not recognise the Taliban. However, if it considers the option of entering into direct talks with the Taliban, it would constitute a major departure from its consistent policy of dealing only with recognised governments.

Way Forward

- India needs to re-evaluate its decisions and be more omnidirectional in its approach to deal with all forces that are central to the future of Afghanistan.
- The changing political and security situation requires India to be more open to adapting its maximalist position and starting a dialogue with the Taliban.

INDIAN POLITY

Monsoon Session

Recently, the monsoon session of Parliament began after several months which was delayed due to the Covid-19 pandemic.

- However, the government has suspended Question Hour for the session and has also curtailed the Zero Hour.

Key Points

▪ **Parliament Session:**

- The President of India is empowered to summon each House of Parliament from time to time.
- The maximum gap between two sessions of Parliament cannot be more than six months. That means the Parliament should meet at least twice a year.
- A 'session' of Parliament is the period between the first sitting of a House and its prorogation.
- There are usually three sessions in a year, viz,
 - Budget Session (February to May)
 - Monsoon Session (July to September)
 - Winter Session (November to December)
- The period between the prorogation of a House and its reassembly in a new session is called 'recess'.

▪ **Meetings of Session:**

- A session of Parliament consists of many meetings. Each meeting of a day consists of two sittings, that is, a morning sitting from 11 am to 1 pm and post-lunch sitting from 2 pm to 6 pm.

▪ **Termination of Session:**

- A sitting of Parliament can be terminated by adjournment or adjournment sine die or prorogation or dissolution (in the case of the Lok Sabha).
- Adjournment: It suspends the work in a sitting for a specified time, which may be hours, days or weeks.
- Adjournment sine die: It means terminating a sitting of Parliament for an indefinite period.
 - In other words, when the House is adjourned without naming a day for reassembly.
 - The power of adjournment as well as adjournment sine die lies with the presiding officer (Speaker or Chairman) of the House.
- Prorogation: The President issues a notification for prorogation of the session after the business of a session is completed and the presiding officer declares the House adjourned sine die.
 - The President can also prorogue the House while in session.
- Dissolution: Only the Lok Sabha is subject to dissolution. Rajya Sabha, being a permanent House, is not subject to dissolution.
 - A dissolution ends the life of the existing House, and a new House is constituted after general elections are held.
 - The President is empowered to dissolve the Lok Sabha.

SCIENCE AND TECHNOLOGY

Indian Brain Templates

A team of neuroscientists from the National Institute of Mental Health and Neuro Sciences (NIMHANS) has developed Indian Brain Templates (IBT) and a brain atlas.

- NIMHANS is a medical institution located in Bangalore, Karnataka. It is the apex centre for mental health and neuroscience education in the country and operates autonomously.

Key Points

- Brain Template: It is a gross representation from various brain images to understand brain functionality in diseased conditions.
- Background:
 - The Montreal Neurological Index (MNI) template that India currently uses is based on Caucasian brains, which are different from Asian brains.
 - The MNI template was made by averaging 152 healthy brain scans from just a small slice of the city's population in North America.
 - Some countries have their own scale to measure the brain, whereas India is still dependent on the Caucasian brain template.
- NIMHANS Indian Brain Templates and Brain Atlas:
 - Neuroscientists studied over 500 brain scans of Indian patients to develop five sets of Indian Brain Templates (IBT) and a brain atlas.
 - IBT provides a scale that will measure an Indian brain. When most brain scans are taken, they need to be compared to a standard brain template — a model or standard for making comparisons from a group of individual brain scans.
 - Validation experiments and comparisons with existing international templates found that using the NIMHANS IBTs for Indian brains significantly improved the accuracy of alignment and thereby noticeably reducing distortions, errors or biases in final reports of brain structure and function.
 - Brain Atlas has been developed for five age groups covering late childhood to late adulthood (six to 60 years).
- Expected Benefits from IBT and Brain Atlas:
 - These new population and age-specific Indian brain templates will allow more reliable tracking of brain development and ageing.
 - The templates and atlas will provide more precise reference maps for areas of interest in individual patients with neurological disorders like strokes, brain tumours, and dementia.
 - These will also help pool information more usefully in group studies of the human brain and psychological functions, aiding in understanding of psychiatric illnesses like Attention Deficit Hyperactivity Disorder (ADHD), autism, substance dependence, schizophrenia, and mood disorders.

Way Forward

- There have been similar attempts to develop brain templates previously in India, however they were typically focused on young adults and had a significantly smaller number of subjects. NIMHANS IBTs are based on a comprehensive scan.
- NIMHANS IBTs can be incorporated in normal protocols of brain imaging in India.

INDIAN ART AND CULTURE

Hindi Diwas

Every year, 14th September is celebrated as Hindi Diwas in India.

Key Points

- **National Hindi Day:**
 - Hindi, written in the Devanagari script, was adopted as the official language of the Republic of India on 14th September, 1949.
 - Kaka Kalelkar, Maithili Sharan Gupta, Hazari Prasad Dwivedi, Seth Govindadas made important contributions to make Hindi the official language.
 - Besides Hindi, English is the other official language (Article 343 of the Constitution).
 - Hindi is also an eighth schedule language.
 - Article 351 pertains to 'Directive for development of the Hindi language'.
- **World Hindi Day:** It is observed on **10th January**
 - The Day commemorates the anniversary of the first World Hindi Conference held in Nagpur on 10th January, 1975, which saw 122 delegates from 30 countries participating in it.
 - It was first celebrated in 2006 by former Indian Prime Minister Dr. Manmohan Singh with an aim to promote Hindi language across the world.
 - The World Hindi Secretariat building was inaugurated in Mauritius in 2018.
- **About the Hindi Language:**
 - Origin:
 - Hindi got its name from the Persian word Hind, meaning 'land of the Indus River'. Turkish invaders in the early 11th century named the language of the region Hindi, 'language of the land of the Indus River'.
 - The modern Devanagari script came into existence in the 11th century.
 - Spoken in Countries outside India: Hindi is the fifth most spoken language among the total languages spoken in the world.
 - It is spoken in Pakistan, Nepal, Bangladesh, USA, UK, Germany, New Zealand, United Arab Emirates, Uganda, Guyana, Suriname, Trinidad, Mauritius, and South Africa.
- **Government Initiatives to Promote Hindi:**
 - The Central Hindi Directorate was established in 1960 by the Government of India under the Ministry of Education.
 - Indian Council for Cultural Relations (ICCR) has established 'Hindi Chairs' in various foreign universities/institutions abroad.
 - LILA-Rajbhasha (Learn Indian Languages through Artificial Intelligence) is a multimedia based intelligent self-tutoring application for learning Hindi.
 - E-Saral Hindi Vakya Kosh and E-Maha Shabda Kosh Mobile App, both initiatives of the Department of Official Language, aim to harness information technology for the growth of Hindi.
 - Rajbhasha Gaurav Puraskar and Rajbhasha Kirti Puraskar recognise contributions to Hindi.

IMPORTANT FACTS FOR PRELIM

U.P Special Security Forces

The Uttar Pradesh government is going to constitute a Special Security Force (SSF) in the state.

Key Points

- On the lines of the Central Industrial Security Force, SSF will be responsible for security of vital government and private buildings, and industrial establishments.
- It can also be hired by private establishments by paying a fixed cost.
- It will be headed by an Additional Director General (ADG)-ranked officer and will be headquartered in Lucknow.
- Powers: It will not require magistrate's order or warrants to make an arrest or conduct searches.
- Its powers will be governed by a set of rules made by the state government.
- Background : The UPSSF will set up on the basis of orders of the Allahabad High Court, which had expressed its displeasure over the security at civil courts in December 2019 over shootout incidents at Bijnor and Muzaffarnagar courts.

- The court had directed the state government to form an exclusive force for security on court premises.

DAILY ANSWER WRITING PRACTICE

Qns. Health outcomes are the result of an interaction of forces ranging from the level of expertise of health personnel to the civic sense of a population. Comment. (250 words)

Ans.

- Public health services, which reduce a population's exposure to disease through such measures as sanitation and vector control, are an essential part of a country's development infrastructure, are not up to the mark in Indian context.
- Expenditure on public health funding has been consistently low in India (approximately 1.3% of GDP).
- With the advent of a global pandemic, the shortcomings of the public health care system in India have been highlighted.

Problems faced by Public healthcare system in India

- **Lack of Primary Healthcare Services:** The existing public primary health care model in the country is limited in scope.
 - Even where there is a well-functioning public primary health centre, only services related to pregnancy care, limited childcare and certain services related to national health programmes are provided.
- **Supply-Side Deficiencies:** Poor health management skills and lack of appropriate training and supportive supervision for health workers prevent delivery of the desired quality of health services.
- **Sub-optimal Public Health System:** Due to this, it is challenging to tackle Non-communicable Diseases, which is all about prevention and early detection.

Factors affecting public health outcomes

- **Hospital Infrastructure:** Infrastructure is a key pillar supporting the fundamental aim of promoting improved standards of care and wellbeing for all patients, together with a good experience of the healthcare system.
 - Infrastructure must integrate the hospital, as the centre for acute and inpatient care, into the broader health care system, and should facilitate the seven domains of quality – **patient experience, effectiveness, efficiency, timeliness, safety, equity and sustainability.**
- **Level of expertise of health personnel:** There are several shortfalls that need to be addressed in the development of human resources for public health services.
 - There is a dire need to establish training facilities for public health specialists along with identifying the scope for their contribution in the field.
 - The Public Health Foundation of India is a positive step to redress the limited institutional capacity in India by strengthening training, research and policy development in public health.
 - Pre Service training is essential to train the medical workforce in public health leadership and to impart skills required for the practice of public health.
 - Changes in the undergraduate curriculum are vital for capacity building in emerging issues like geriatric care, adolescent health and mental health. Inservice training for medical officers is essential for imparting management skills and leadership qualities.
 - Equally important is the need to increase the number of paramedical workers and training institutes in India.
- **Civic sense:** Civic sense means social ethics and norms. Its examples include keeping roads, streets and public places clean, maintaining hygiene etc. It reflects the actual personality and shows the responsibility of any person.
 - By abiding by these social norms and ethics, the health care outcomes can be positively affected.
 - In order to catalyse people's participation for healthy India, there is need for Swasth Bharat Jan Andolan on lines of Swach Bharat Abhiyan.
 - Indian citizens need to play their role in a manner which helps India prosper. There is a need to bring the positive and constructive discourse of civic sense in India so that citizens can play their due role in strengthening the country.

Conclusion

- Pandemics such as Covid-19 starkly remind us that public health systems are core social institutions in any society. The government has made several efforts to address the shortfall in the public health system through the schemes like the National Medical Commission (NMC) Act, 2019, Pradhan Mantri Bhartiya Janaushadhi Pariyojana, Pradhan Mantri - Jan Arogya Yojana etc.
- However, the need of the hour is an adequate investment, for creating a health system that can withstand any kind of public health emergencies and deliver universal health coverage.

DAILY QUIZ

1. With reference to Singapore Convention on Mediation, consider the following statements:
 1. It will provide a more effective way of enforcing mediated settlements of corporate disputes.
 2. It is an United Nations convention.
 3. India is yet to sign the convention.
 Which of the statements given above is/are correct?
 - A. 1 and 2 only
 - B. 2 and 3 only
 - C. 1 and 3 only
 - D. 1, 2 and 3
2. With reference to Parliament Sessions, consider the following statements:
 1. The Parliament is required to meet at least twice a year.
 2. Recess is the period between the prorogation of a House and its reassembly in a new session.
 Which of the statements given above is/are correct?
 - A. 1 only
 - B. 2 only
 - C. Both 1 and 2**
 - D. Neither 1 nor 2
3. With reference to the Indian Brain Templates, consider the following statements:
 1. It is a representation of various brain images to understand its functionality.
 2. It is developed by the National Institute of Mental Health and Neuro Sciences.
 Which of the above statements is/are correct?
 - A. 1 only
 - B. 2 only
 - C. Both 1 and 2**
 - D. Neither 1 and 2
4. With reference to the Hindi language, consider the following statements:
 1. Hindi is the only official language under Article 343 of the Indian Constitution.
 2. It is also an eighth schedule language.
 Which of the statements given above is/are correct?
 - A. 1 only
 - B. 2 only**
 - C. Both 1 and 2
 - D. Neither 1 nor 2
5. Which of the following are included in the Central Armed Police Forces?
 1. The National Security Guard
 2. Assam Rifles
 3. Border Security Force
 4. Sashastra Seema Bal
 Select the correct answer using the code given below:
 - A. 1, 2 and 4 only
 - B. 1, 2 and 3 only
 - C. 3 and 4 only
 - D. 1, 2, 3 and 4**