DAILY CURRENT AFFAIRS 19-02-2024

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Jnanpith awards

Syllabus: GS-1: Indian Art and Culture – Awards.

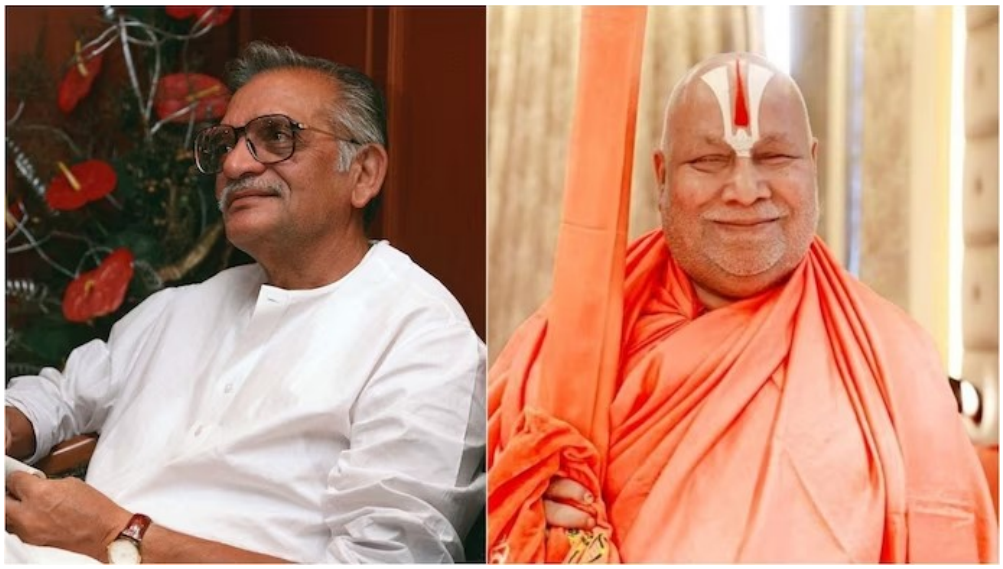
Context:

- *Jnanpith honour for Gulzar and Sanskrit scholar Jagadguru Rambhadracharya.*

Jnanpith Award:

- *Considered India's* **highest literary honour.**
- *Awarded annually since 1965 for outstanding* **contributions to Indian literature**.
- *Presented by* **Bharatiya Jnanpith**, *established in 1944.*
- *58th edition for 2023.*

Awardees:



Gulzar (Sampooran Singh Kalra):

- *Renowned Urdu poet, Bollywood director, and writer.*
- *Known for his contributions to* **Urdu literature and Hindi cinema**.
- *Received numerous awards including Sahitya Akademi Award, Dadasaheb Phalke Award, Padma Bhushan, National Film Awards.*
- **Won Oscar and Grammy** *for the song "Jai Ho" from Slumdog Millionaire.*
- *Directed notable films and television serials.*
- *Introduced a new genre in* **poetry called 'Triveni'**.
- *Active in children's poetry.*

Jagadguru Rambhadracharya:

- **Sanskrit scholar,** *Hindu spiritual leader, educator, and writer.*
- *Founder and head of* **Tulsi Peeth***in Madhya Pradesh.*
- *Written over 240 books including four epics.*
- **Polyglot** *speaking 22 languages.*
- *One of the present four* **Jagadguru Ramanandacharyas** *of the Ramananda sect.*
- *Received* **Padma Vibhushan** *in 2015.*
- *Born in 1950 in Jaunpur, Uttar Pradesh.*

Selection Process:

- *Committee headed by* **Odia writer Pratibha Rai.**
- *Other members include Madhav Kaushik, Damodar Mauzo, Suranjan Das, Purushottam Bilmale, Praful Shiledar, Harish Trivedi, Prabha Verma, Janaki Prasad Sharma, A. Krishna Rao, and Jnanpith director Madhusudan Anand.*

Award Details:

- *Carries a cash prize of ₹11 lakh, a statue of Vagdevi, and a citation.*
- *Second time awarded for Sanskrit and fifth time for Urdu.*

Mekedatu Project

Syllabus: GS-2; Government policies and Interventions

Context

- *Mekedatu Project Gets A Fillip in this year's (2024)* **Karnataka Budget.**

About

- *The Mekedatu project is a* **multipurpose** *balancing reservoir project located in the Ramanagaram district of Karnataka.*
- *According to reports, the project will submerge over 50 sq km of forests, which during the monsoon helps in the recharge of 80-100 thousand million cubic feet (TMC ft) of water. This is more than the planned reservoir capacity of 67 TMC ft.*

Purpose

- *The project's primary objectives are to* **provide drinking water to Bengaluru** *and neighboring areas, and generate 400 MW of power.*

Location

- *The project is located at the confluence of the* **Cauvery and Arkavathi rivers,** *about 100 km south of Bengaluru.*
- *The name Mekedatu translates to* **"goat's leap",** *and comes from the belief that even goats could leap across the narrow crevice where the Cauvery River passes.*

Issues related to the Mekedatu project

- **Tamil Nadu's concerns**
  - *Tamil Nadu claims that the dam will reduce the flow of water downstream, which will impact the state's agricultural activities and water supply. In 2021, Tamil Nadu approached the Supreme Court, claiming that Karnataka is trying to alter the river's flow by building two reservoirs.*
- **Environmental concerns**

- *Activists are concerned that the dam will submerge nearby villages, the habitat of endangered fish, and vast forest areas. The dam is proposed near the Cauvery South Wildlife Sanctuary, which is a pristine forest area.*

➢ **Water dispute**

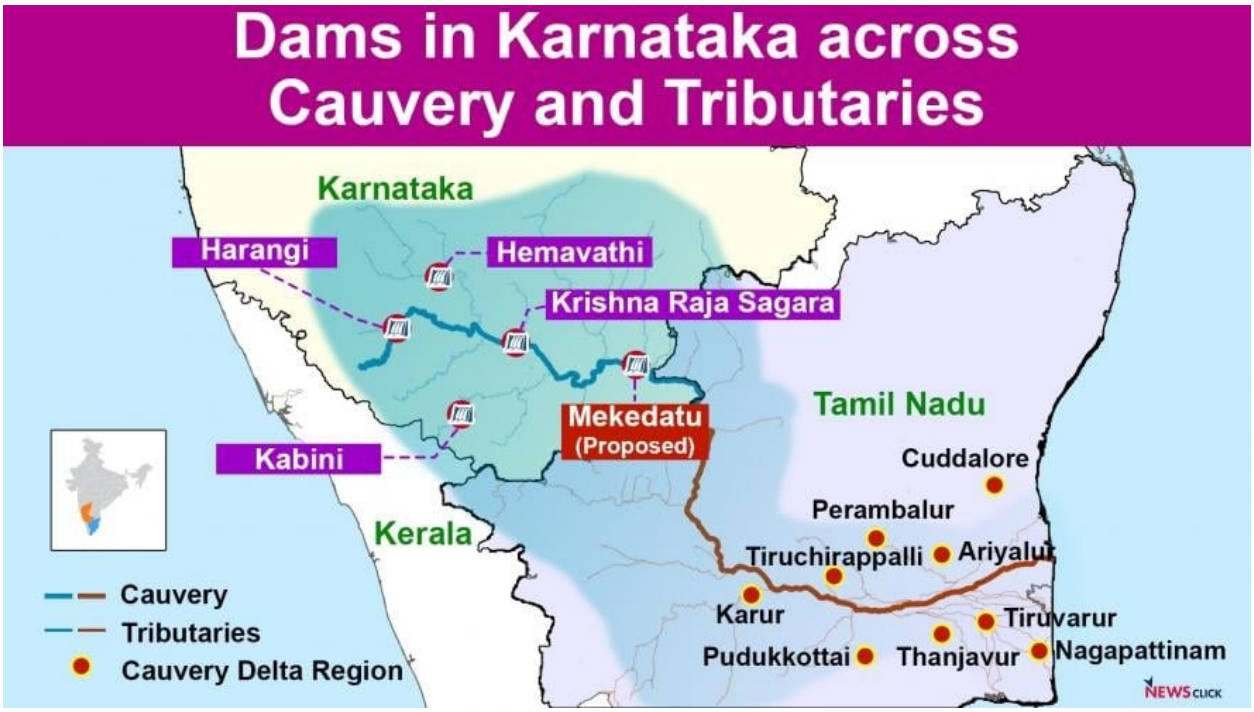
- *The water dispute between Karnataka and Tamil Nadu has been ongoing for decades, and has often led to protests and violence. The dispute has roots in the pre-independence era when the then princely states of Mysore (now Karnataka) and Madras (now Tamil Nadu) contended for control over the river's waters.*

Kaveri River

➢ *The Kaveri River is a major river in India that flows through the states of Karnataka and Tamil Nadu. It's 805 kilometers long and has a basin area of 72,000 square kilometers. The Kaveri* **originates at Talakaveri in the Western Ghats** *in southwestern Karnataka, flows through Tiruchirappalli, and* **empties into the Bay of Bengal.**

➢ *The Kaveri River has 29 major* **tributaries**, *including:*

- *Harangi, Hemavati, Lakshmana Tirtha, Kabini, Suvarnavathi, Shimsha, Arkavati, Sarabanga, Bhavani, Noyyal, Thirumanimutharu, Amaravati.*



Joblessness raising in country with education levels: study

Syllabus: GS-3: Indian Economy –Employment status.

Context:

- *As per recent study conducted by* **IIM Joblessness rising in country** *with education levels.*

Key findings and recommendations from the study:

Stagnant Employment Growth and Weak Elasticity:

- *The study reveals a* **stagnation in employment growth rates**, *suggesting a* **slowdown in job creation** *despite economic expansion.*
- **Weak employment elasticity** *is observed, indicating a disconnect between economic growth and employment generation.*

Slow Structural Transformation:

- *India's economy has shown* **sluggish progress in structural transformation**, *implying a lack of diversification and modernization across sectors.*

Jobless Growth Phenomenon:

- *From 2004–05 to 2018–19, India experienced* **a period of "jobless growth,"** *characterized by economic expansion without a proportional increase in employment opportunities.*

Gender Disparity in Labor Market:

- *Significant* **gender disparities persist in the labour market**, *with lower female labour force participation rates compared to males, particularly pronounced in rural areas.*
- *The overall female* **Work Force Participation Rate** *(WFPR) for those aged 15–59 in* **2020–21 stood at 32.46%**, *significantly lower than male participation rates.*

Unemployment and Education Levels:

- *Unemployment rates tend to rise with higher education levels, posing challenges for highly educated individuals,* **with an unemployment rate of 14.73% in 2020–21** *for graduates and above in the* **age group of 15–29 years**.

Policy Recommendations:

- *The study emphasizes the need for a concerted effort to promote labour-intensive manufacturing sectors to achieve inclusive growth and create quality jobs.*
- *Targeted policy interventions are crucial to address gender disparities in the labour market and mitigate unemployment disparities across education levels.*
- *Efforts should be made to enhance female labor force participation rates, particularly in rural areas, through supportive policies and initiatives.*

Impact of MGNREGA:

- *The* **Mahatma Gandhi National Rural Employment Guarantee Act** *(MGNREGA) and similar public works projects have played a vital role in improving rural livelihoods and reducing poverty.*
- *While MGNREGA has* **positively influenced rural employment and wage dynamics**, *it may also have implications for private sector employment.*

Lymphatic Filariasis

Syllabus: GS-3: General Science – diseases.

Context:

- *Ministry of Health & Family Welfare launches nationwide* **Sarva Dawa Sevan or Mass Drug Administration (MDA)** *campaign to Eliminate Lymphatic Filariasis (LF).*

What is the news?

- *India aims to* **eliminate Lymphatic Filariasis by 2027**, *three years earlier than the global target.*
- *The approach involves a* **mission mode strategy with multiple partners** *and sectors involved.*
- **Awareness generation and communication campaigns** *will be conducted in villages and panchayats to spread information about the disease.*
- *The initiative will utilize a "***Jan Bhagidaari" (public participation)** *approach along with a "***Whole of Government***" and "***Whole of Society"** *approach.*
- *The goal is to eliminate the disease nationwide through collaborative efforts.*

About Lymphatic Filariasis

- *Lymphatic filariasis, also known as elephantiasis, is a* **Neglected Tropical Disease (NTD)** *caused by parasitic worms of the* **Filarioidea family.**
- *Primarily transmitted by mosquitoes, it affects millions in tropical and subtropical regions, including 20 states and union territories in India.*

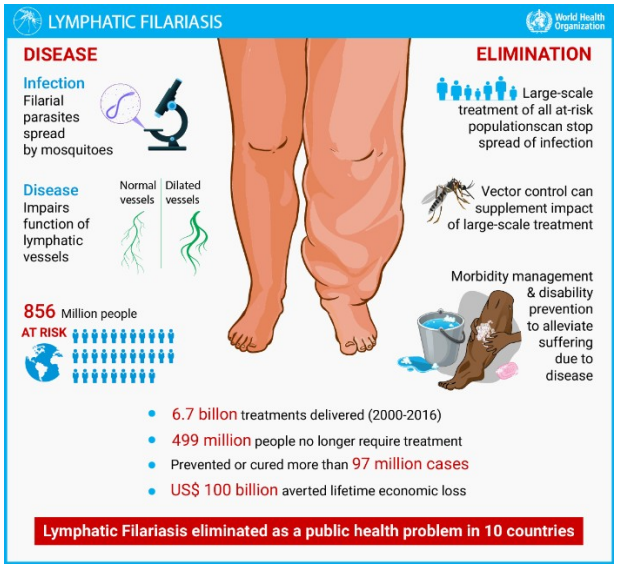
- **Public health concern:** *Causes chronic disability, social stigma, and economic hardship.*

Causative agents:

- *Three main filarial worm species:*
  - *Wuchereriabancrofti (90% of cases)*
  - *Brugiamalayi*
  - *Brugiatimori*

Transmission cycle:

- *Adult worms reside in lymphatic vessels, releasing microfilariae (baby worms) into the bloodstream.*
- *Mosquitoes ingest microfilariae during blood feeding.*
- *Larvae develop within the mosquito and become infective.*
- *Infected mosquito bites another human, transmitting larvae that mature into adult worms, perpetuating the cycle.*



Clinical features:

- *Asymptomatic for years: Early stages often show no symptoms.*

Chronic phase:

- *Swollen limbs (lymphedema) - hallmark symptom*
- *Hydrocele (fluid collection in scrotum) in men*
- *Breast enlargement in women*
- *Fever, pain, and skin changes*

Diagnosis:

- **Blood smear microscopy:** *Detect microfilariae at night (when they circulate in peripheral blood).*
- **Immunological tests:** *Detect filarial antigens or antibodies.*

Management:

- **Mass Drug Administration** *(MDA): Single annual dose of medication (albendazole, ivermectin, DEC) to entire at-risk population to interrupt transmission.*
- **Lymphedema management***: Compression therapy, hygiene measures, and elevation of affected limbs.*
- **Surgery:** *In severe cases, to reduce swelling and improve mobility.*

Public health aspects:

- **Global elimination program***: WHO aims to eliminate LF as a public health problem by 2030.*
- **Challenges:** *Vector control, ensuring MDA coverage, addressing stigma and disability.*
- **India's National Filaria Elimination Programme** *(NFEP): Aims to eliminate LF by 2027.*

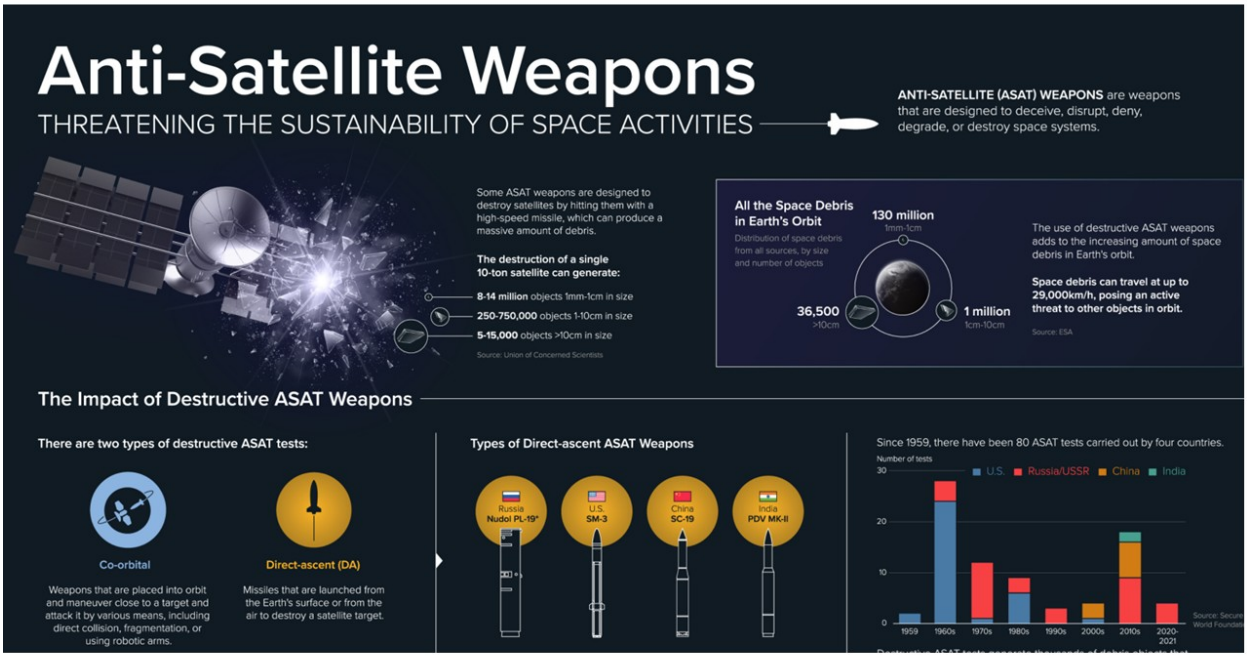
Anti satellite weapons

Syllabus: GS-3; Science and Technology

Context

- *Russia developing 'troubling' new anti-satellite weapon, US says*

What are anti-satellite weapons?



- *Anti-satellite (ASAT) weapons are* **designed to debilitate and/or destroy satellites that are already in orbit and operational**.
- *ASAT weapons violate the OST through the latter's Article VII, which holds parties to the treaty liable for damaging satellites belonging to other parties, and Article IX, which asks parties to refrain from the* **"harmful contamination" of space.**
- **Most of these weapons are kinetic,** *meaning they destroy satellites in orbit by rocketing into them or detonating an explosive near them, and blowing them to pieces. Because of the low gravity and lack of an atmosphere, the resulting debris can stay in orbit for a long time depending on their size. This result violates* **Article IX of the OST.**

Are there space-based nuclear weapons?

- *In a high-altitude test in 1962 called Starfish Prime, the U.S. detonated a* **thermonuclear bomb** *400 km above ground. It remains the largest nuclear test conducted in space.*
- *A Thor rocket launched the warhead to a point west of Hawaii, where its detonation had a yield of 1.4 megatonnes.*
- *More importantly, it set off an* **electromagnetic pulse (EMP)** *much larger than physicists had expected, damaging a few hundred street-lights in Hawaii, 1,500 km away.*
- *The charged particles and radiation emitted by the blast became ensnared in and accelerated by the earth's magnetic field, distorting the ionosphere and resulting in bright aurorae.*

- *Starfish Prime was part of the U.S.'s high-altitude nuclear tests in 1962.*
- *The Soviet Union also conducted such tests around then with similar effects. For example, Test 184 on October 22, 1962, detonated a 300-kilotonne warhead 290 km above ground.*
- *The resulting EMP induced a very high current in more than 500 km of electric cables and eventually triggered a fire that burned down a power plant.*

How will a nuclear weapon affect satellites?

- *The principal threats to other satellites from a space-based nuclear weapon are the EMP and the* **release of charged particles.**
- *Starfish Prime itself temporarily knocked out roughly a third of all satellites in orbit at the time – and illustrates a failing relevant to the current context.*
- *An EMP from a nuclear weapon in space will affect all satellites around the point of detonation, including Russian satellites, those of its strategic allies (such as China), and of countries not involved in a particular conflict. It would also grossly violate the OST. Depending on the strength, location, and directedness of the explosion, it could also blow a large number of satellites to pieces, more than what a 'conventional' kinetic ASAT weapon might.*
- *The damage is not immediate to most [satellites] but rather caused by new and intensified radiation belts". (However, researchers have been working on tamping down disturbances caused by space-based nuclear explosions in radiation belts around the earth through a process called radiation-belt remediation).*
- *Eventually, the result is more dud satellites and debris, raising concerns of the* **Kessler effect:** *when there is a certain level of debris in low-earth orbit, collisions among themselves as well as with other satellites could produce more debris, leading to a "collisional cascade" that rapidly increases the amount of debris in orbit.*