Prelim Bits 01-09-2023 | UPSC Daily Current Affairs

Project TAMARA

Technology Development Board (TDB) of Ministry of Science & Technology supports the Waterbody Management Project "TAMARA" with 89 Lakhs out of 150 lakhs.

- **Project Title** - Development and Commercialization of Intelligent Water Body Management System (IWMS)-TAMARA.
- It is a smart aeration system enhanced with sensors and IoT-based technology to manage water quality.
- This modern approach not only improves existing methods of treating water and wastewater but also ensures that water bodies and aquaculture ponds stay clean and healthy for everyone.
- **Agency -** M/s Bariflo Labs Private Limited, Odisha.
- This project is in line with other successful initiatives of the Govt. like Namami Gange and Jal Shakti Abhiyan that focus on revitalizing and protecting India's waterbodies.

AMRUT 2.0 mission

- It is a step towards AatmaNirbhar Bharat with aim of making the cities 'water secure' and providing functional water tap connections to all households.
- This Mission will be run as people’s program i.e. Jan Aandolan.
- Mission also targets to provide 100% sewage/ septage management in 500 AMRUT cities.
- The Mission will co-opt women and youth for concurrent feedbacks about its progress to ensure community participation
- Mission will be paperless and monitored on a robust technology-based monitoring & evaluation platform.

Reference

1. PIB | Project "TAMARA"
2. AMRUT 0

Radio Anatomy of Moon Bound Hypersensitive ionosphere and Atmosphere - Langmuir Probe (RAMBHA-LP)

RAMBHA-LP payload on board Chandrayaan-3’s lander Vikram has completed the first in-situ measurements of surface-bound lunar plasma environment recently.

- **About -** The RAMBHA Langmuir probe is an instrument that measures properties of plasmas, a state of matter.
- **Developed by -** Space Physics Laboratory (SPL) at ISRO’s Vikram Sarabhai Space

Centre (VSSC).

- **Payload -** It is one of the 3 Indian payloads on the Chandrayaan-3 lander (Vikram).
- **Features -** It is a 5 cm metallic spherical probe mounted on a 1-meter boom attached to the Chandrayaan-3 Lander's upper deck.
- It is named after American chemist and physicist ***Irving Langmuir***, who was awarded the Nobel Prize in Chemistry.

Plasma is often called "the fourth state of matter," along with solid, liquid and gas.

- **Findings of Langmuir Probe -** The initial assessment indicates that the plasma encompassing the lunar surface is relatively sparse (thin).
- The thinness of lunar plasma is important because *it affects the way radio waves propagate through space*.

Radio waves are affected by the presence of plasma—the denser the plasma, the more the radio waves are scattered.

- The sparseness of lunar plasma means that radio waves can propagate through space with less attenuation, which is important for communication between lunar missions.

References

1. The Hindu | RAMBHA completes first in-situ measurements
2. ISRO | RAMBHA-LP
3. The Times of India | Vikram's RAMBHA

Nasha Roko Committee

A vigilant wave is sweeping through villages in Punjab to tackle the decade-old drug problem.

- **About -** It is an informal committee to stop the use and sale of drugs.
- **Against -** It act against the drugs Chitta and the prescription-only pharma drug, pregabalin.
- **Campaign** - *'Nasha roko, rozgaar do'* (stop addiction, provide employment) campaign was started to end the drugs.

Only 250 gm or above of heroin is considered a commercial quantity under the Narcotic Drugs and Psychotropic Substances Act.

References

1. The Hindu | Nasha Roko Committees
2. The Indian Express | Local committees declare war on drugs

Global Fund

The Global Fund recently announced a deal with generic pharmaceutical manufacturers to significantly slash the price of a cutting-edge HIV drug.

- **About** - It is a worldwide movement to defeat HIV, TB and Malaria and ensure a healthier, safer, more equitable future for all.
- **Partners**- Governments, civil society, technical agencies, the private sector and people affected by the diseases.
- **Year** - It was set up in *2002*.
- **Funding** - The Fund pools the world's resources to invest strategically in programs to end AIDS, TB and malaria as public health threats.
- The financing is primarily from the *public sector, with 92%* of total funding coming from donor governments.
- **Strategy –** To accelerate impact towards the 2030 horizon as set out in Sustainable Development Goal 3.



- **Recent Initiative -** It envisages to provide the advanced pill known as TLD for under ***$45 per person per year***.
- **TLD -** The three-in-one pill bands together the drugs *Tenofovir disoproxil fumarate, Lamivudine and Dolutegravir.*
- It is recommended by the World Health Organization for first-line treatment of HIV.
- This improved pricing is a 25% reduction, will allow governments in resource-limited settings to expand access to critical HIV services.

References

1. The Hindu | Global Fund secures deal to slash HIV treatment price
2. The Global Fund | About

Cauvery Water Management Authority

- **Origin -** In exercise of the powers conferred by section 6A of the Inter-State River Water Disputes Act, 1956, Cauvery Water Management Scheme is introduced on 1st June, 2018.
- The 'Cauvery Water Management Authority' (CWMA) is constituted under this scheme.
- **Ministry -** Ministry of Jalshakti.
- **Composition**
  - Chairman (5 years or till 65 years of age whichever is earlier).
  - 2 whole time members (3 years extendable upto 5 years)
  - 2 part time members from centre's side,
  - 4 part time members from party states.
- **Functions -** The Authority shall exercise such power and shall discharge such duty as modified by the Hon'ble Supreme Court vide Order in relation to storage, appointment,

regulation and control of Cauvery river.

- It also envisages the planning, construction and maintenance of the projects will be carried out by each State or Union territory administration through its own agencies.
- The authority has also been tasked to advise the states to take suitable measures to improve water use efficiency, by way of
    - Promoting micro-irrigation (drip and sprinkler),
    - Change in cropping pattern,
    - Improved agronomic practices,
    - System deficiency correction and
    - Command area development.
- It has to also prepare an annual report covering the activities of the authority for the preceding year.
- **Meetings of the Committee** - The Committee shall meet once in ten days during the months of June and October.
- In case of any exigency, a minimum of 48 hours notice shall be given for holding a meeting.

Reference

Ministry of Jalshakti | Cauvery Water Management Authorit

