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Suez Canal Lakes

- Due to the blockage of the Suez Canal, the \$200 billion of India's trade flows with Europe, North America and South America is at risk.
- To know more about Suez canal, [click here](#).

Global Gender Gap Index 2021

- This Index was released by the World Economic Forum since 2006.
- The Gender Gap Index serves as a compass to track the progress on their towards gender parity of the countries in four areas,
 1. Political Empowerment,
 2. Economic Participation and Opportunity,
 3. Educational Attainment and
 4. Health and Survival.
- It also examines the drivers of gender gaps and outlines the policies and practices needed for a gender-inclusive recovery.
- The index scores the countries from 0 (inequality) to 1 (equality).
- **Findings** - Among 156 countries ranked by the Gender Gap Report 2021, Iceland is the most gender-equal country in the world.
- India has ranked 140th rank, becoming the third-worst performer in South Asia. India has closed 62.5% of its gender gap till date.
- For India, most of the decline occurred on the political empowerment subindex. The decline also took place on the economic participation and opportunity subindex, and health and survival subindex.
- The estimated earned income of women in India is only one-fifth of men's, which puts the country among the bottom 10 globally on the economic participation and opportunity subindex.

AIM-PRIME

- AIM-PRIME (Program for Researchers on Innovations, Market-Readiness & Entrepreneurship) aims to translate science-based deep-tech research to startups & ventures across India.
- **Partners** - Atal Innovation Mission has joined hands with Bill & Melinda Gates Foundation (BMGF) to launch this initiative, which will be

implemented by Venture Center, a technology business incubator.

- **Beneficiaries** - The program is open to technology developers (early-stage deep tech start-ups, and scientists/ engineers/ clinicians) with strong science-based deep tech business ideas.
- It is also open to CEOs and Senior incubation managers of AIM Funded Atal Incubation Centers that are supporting deep tech entrepreneurs.
- **Working** - It aims at addressing specific issues through in-depth learning, training and guidance over a period of 12 months.
- AIM-PRIME program is specifically tailored for the rapid scaling up of deep-tech science ventures in India, providing not just the necessary intellect and support but also the exposure they rightly deserve.

DSIR-PRISM Scheme

- DSIR-PRISM Scheme will be aligned with three National Initiatives like Unnat Bharat Abhiyan (UBA), Smart India Hackathon (SIH) and Rural Technology Action Group (RuTAG), IIT Delhi.
- Dept. of Scientific and Industrial Research - Promoting Innovations in Individuals, Startups and MSMEs (DSIR-PRISM) scheme supports individual innovators enabling inclusive development of India.
- It aims at transforming an innovator into a technopreneur by promoting and funding implementable and commercially viable innovations created for the society.
- PRISM extends its support to any citizen of the country through Direct Benefit Transfer for idea development, prototype development and pilot scaling, and patenting in the core technology areas.
- **Areas** - Affordable Healthcare, Water, Sewage Management, Green Technology, Clean Energy, Industrially Utilizable Smart Materials, Waste to Wealth aligned with our National objectives.
- PRISM considers the Intellectual Property (IP) as a belonging to the innovators.
- The grant is given in two phases: Phase I and Phase II, catering to both the initial innovation stage and the advanced enterprise setup phase through DSIR outreach-cum-cluster innovation centres across India.

Culex Mosquito

- With the change in season and rise in temperature, culex or common house mosquitoes have made reappearance across Delhi.
- Unlike Aedes aegypti mosquitoes, which spread dengue and chikungunya and breed in clean water, culex mosquitoes breed in unclean stagnant water.
- Culex mosquitoes are known as carriers or vectors of diseases such as Japanese encephalitis, West Nile Virus and Lymphatic filariasis.

- They bite by detecting body heat and carbon dioxide that humans exhale.

CIISCO Algorithm

- Coronal Mass Ejections (CMEs) Identification in Inner Solar Corona (CIISCO) algorithm will be used in India's first solar mission, Aditya-L1.
- CIISCO was developed by the Aryabhata Research Institute of observational sciences (ARIES) and Royal Observatory of Belgium.
- This new algorithm will be used to detect and track the accelerating Coronal Mass Ejections (CMEs) in the lower corona of the Sun.
- Previously, Computer Aided CME Tracking Software (CACTus) based on a **computer vision algorithm** was used to detect and characterise such eruptions.
- This vision algorithm detects the CMEs automatically in the outer corona where these eruptions cease to show accelerations and propagate with a nearly constant speed.
- However, this algorithm could not be applied to the inner corona observations due to the vast acceleration experienced by these eruptions.

Coronal Mass Ejections

- Coronal Mass Ejections (CMEs) that comes from the Sun are huge bubbles of gas threaded with magnetic field lines.
- They cause various disturbances to the space environment, and cause geomagnetic storms, satellite failures, and power outages.

Source: PIB, The Hindu, The Indian Express, Down To Earth, Business Line