

January - 06

TNPSC BITS

- ❖ Former world rapid champion Koneru Humpy has won India's first-ever silver medal in the FIDE World Blitz Chess Championships in Almaty, Kazakhstan.
- ❖ Madhya Pradesh defeated Odisha to clinch Khelo India Youth Games 2022 Men's Under-18 Hockey Qualifiers title in Bhubaneswar.

NATIONAL

India's first underwater tunnel



- ❖ As part of Kolkata's East-West Metro Corridor, India's first underwater tunnel is being built under the Hooghly River in West Bengal.
- ❖ The metro trains that will use the structure will take just 45 seconds to cross the 520-metre underwater tunnel.
- ❖ The Kolkata metro tunnel in Kolkata is 13 metres below the riverbed and 33 metres below the ground.

World Bank's flagship Gender Toolkit

- ❖ A Gender Toolkit based on "Enabling gender responsive urban mobility and public spaces" was launched recently.
- ❖ It aims at bringing under spotlight the gender issues surrounding mobility and city design.
- ❖ The toolkit is a two-volume guide brought out by the World Bank.

- ❖ It has a details of four-pillar implementation framework for urban bodies to design a gender responsive urban mobility and public spaces programme.



ECONOMY

RBI's Systemic Risk Survey

- ❖ The 23rd round of the RBI's Systemic Risk Survey (SRS) was conducted in November 2022.
- ❖ The Reserve Bank of India released its report recently.
- ❖ It showed that global spillovers, financial market and general risks have increased, while macroeconomic risks have moderated.
- ❖ According to the survey, confidence in the stability of the global financial system marginally declined during the last six months.
- ❖ In contrast, confidence in the Indian financial system further improved with 93.6 per cent of the respondents

Trend and Progress of Banking in India 2021-22



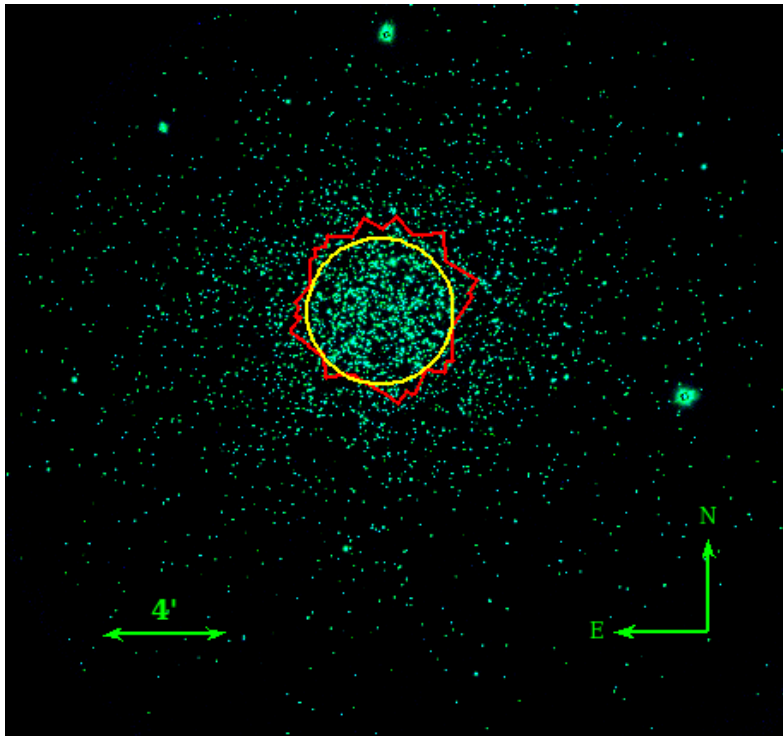
- ❖ This report is statutory compliance in accordance with the Banking Regulation Act 1949.
- ❖ It presents the performance of banking sectors (including cooperative banks and NBFCs).
- ❖ The consolidated balance sheets of scheduled commercial banks (SCBs) in India registered double-digit growth in 2021-22 after a gap of seven years.
- ❖ The gross non-performing assets (GNPA) ratio of SCBs has been declining sequentially from its peak in 2017-18 to reach 5.8% at the end of March 2022.

SCIENCE AND TECHNOLOGY

54 Starlink v2.0 satellites

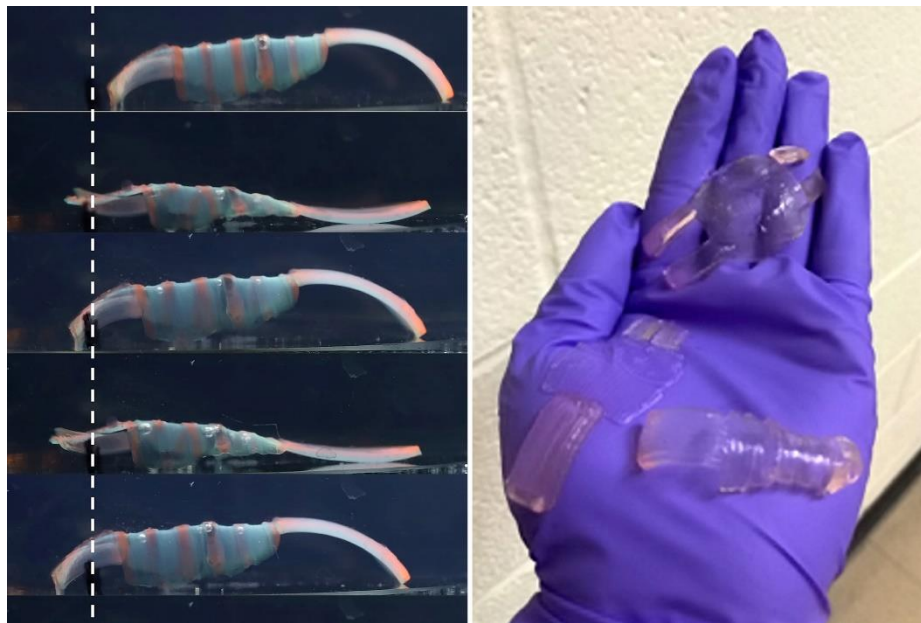
- ❖ The first 54 v2.0 or Gen2 Starlink Satellites were launched into low Earth orbit by the SpaceX Falcon 9 rocket.
- ❖ Since the start of 2022, 60 SpaceX missions have been completed successfully.
- ❖ SpaceX currently has 3,604 operational Starlink Satellites in orbit.
- ❖ The anticipated total number of satellites is 12,000, with a potential increase to 42,000.

Discovery of hot stars and white dwarfs



- ❖ The Astronomers and scientists at the Indian Institute of Astrophysics (IIA) have found that hot stars and white dwarfs emitted less ultraviolet radiation than expected.
- ❖ It is discovered while studying the Omega Centauri, which is the most massive globular cluster system in our galaxy.
- ❖ The enhancement in helium could be one of the reasons for the lesser far-ultraviolet radiation emitted by these stars.
- ❖ The team detected strange hot stars in the cluster using the Ultraviolet Imaging Telescope (UVIT) images on AstroSat.
- ❖ AstroSat is India's first dedicated space observatory, which has been operating since 2015.

Gelbots



- ❖ John Hopkins University scientists of USA have built a soft robot named Gelbots.
- ❖ Gelbots are made out of gelatin.
- ❖ They are created by 3D printing.
- ❖ They are capable of moving without requiring an extra power source because of the way their shape, dimensions and patterning of gel are designed.
- ❖ This is because the gels swell or shrink in response to temperature.
- ❖ They can be used to create smart structures.
- ❖ Even they can be used for moving on surfaces through the human body to deliver targeted medicines.

- ❖ They could also be deployed as marine robots, patrolling and monitoring the ocean's surface.
- ❖ Gelbots can be trained to crawl in response to variations in human biomarkers and biochemical.

ENVIRONMENT

Invasive species of Mussel

- ❖ The spread of an invasive species of mussel is a threat to the prawns of river and seabed.
- ❖ It is a South American mussel species.
- ❖ That is spreading due to the discharge of ballast waters from ships visiting the ports of Kattupalli, Chennai.
- ❖ This is the first time this invasive species has been found in the Eastern coast.
- ❖ The mussels were first spotted some two decades ago in the Ennore wetlands by local fishers.

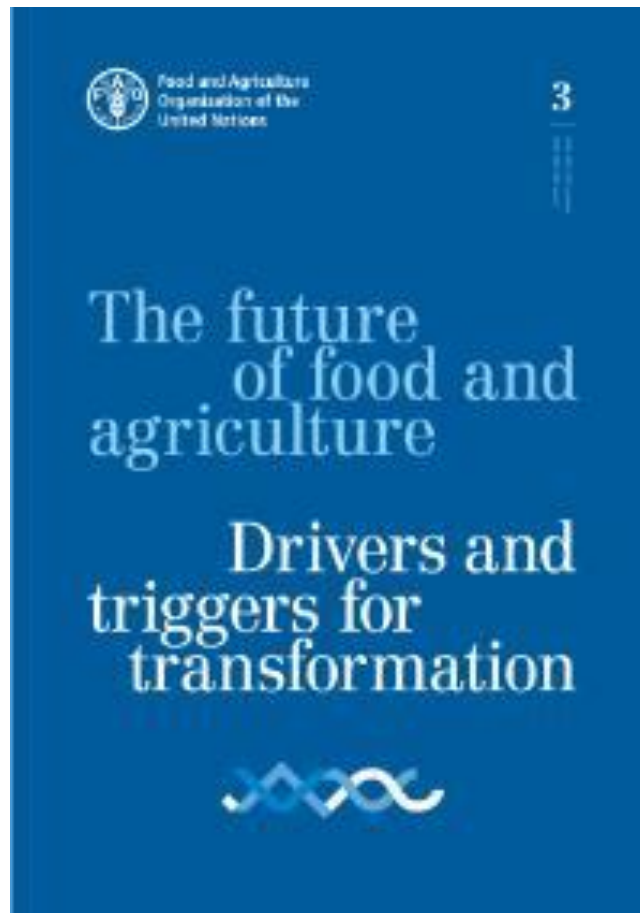


REPORTS AND INDICES

The Future of Food and Agriculture - Drivers and Triggers for Transformation

- ❖ This report was released by the Food and Agriculture Organization (FAO).
- ❖ This report analysed the current and emerging drivers of agrifood systems and their possible future trends.
- ❖ As per the report, it is unlikely to meet the 2030 sustainable development goals, including agrifood targets.

- ❖ The world is expected to witness persistent food insecurity, degradation of resources, and unsustainable economic growth in the future.
- ❖ The report hypothesised following four future scenarios for agrifood systems that would bring diverse outcomes in terms of food security, nutritional security and overall sustainability.
 - More of the same
 - Adjusted future
 - Race to the bottom
 - Trading off for sustainability

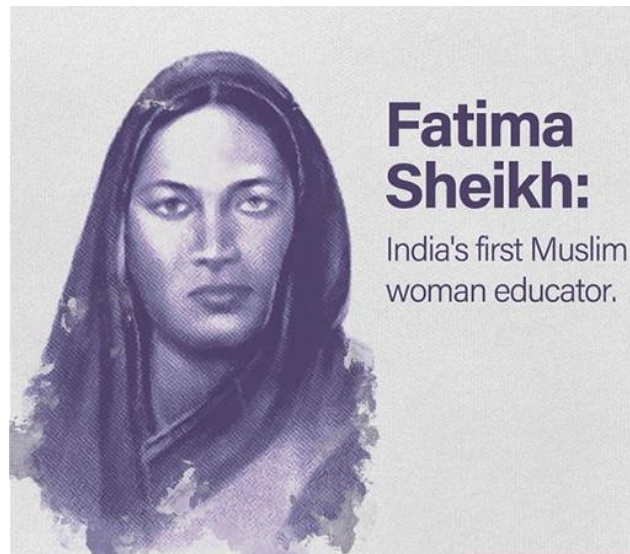


PERSONALITIES, AWARDS, AND EVENTS

India's first woman Muslim teacher

- ❖ Fatima Sheikh, India's first woman Muslim teacher is now being recognized by the Andhra Pradesh Government.

- ❖ Government introduced a lesson on her contributions in the school textbooks of class eight.
- ❖ Earlier Maharashtra government had also introduced a brief lesson on Fatima Sheikh's contributions to its school curriculum.
- ❖ Fatima Sheikh is known to have given shelter to Jyotirao Phule and Savitribai Phule in 1848 at her residence in Poona.
- ❖ Sheikh did her teacher's training programme along with Savitribai Phule at an institute run by Cynthia Farrar.
- ❖ After that along with the Phule couple, she started the first all-girls school at her house.
- ❖ Fatima Sheikh taught at all the five schools which were run by Phule and founded two schools of her own in Mumbai in 1851.



Gouri Amma Foundation award





- ❖ Noted Cuban social worker and human rights advocate Aleida Guevara has been selected for the first award instituted by the K.R. Gouri Amma Foundation.
- ❖ This is awarded for her efforts to rehabilitate differently-abled children and provide debt relief to developing countries.
- ❖ Dr. Aleida is also an active member of the Cuban Medical Mission that works to improve the health profile of children in Latin America.

