UPSC Daily Current Affairs | Prelim Bits 08-10-2024

Asteroids as Foods

A study published in The International Journal of Astrobiology suggests that astronauts could use asteroids to meet their nutritional needs.

- **Concept** - The idea is to extract and convert the carbon from space rocks into something edible.
- **Principle** – Asteroids share similarities with plastics regarding how microbes interact with them.

Asteroids are remnants of planetary formation and they circle the Sun in a zone lying between Mars and Jupiter. The circular chain of asteroids is called the asteroid belt.

- **Conversion of plastic into food** - Plastic wastes are broken down into solid, gas and oil through the process of *pyrolysis*.
- The *oil is then fed to bacteria* in a bioreactor, producing a nutritious biomass.

***Pyrolysis** uses heat to break down combustible materials in the absence of oxygen, producing a mixture of combustible gases, liquids and solid residues.*

- **Microbes in meteorite** – It was observed that microbes thrived on the meteorite material.
- **Significance** – It addresses the limitations of the amount of dried food astronauts can carry.

Some astronauts have grown food in space, such as chillies and lettuce.

- It can also help in space farming that hasn't evolved yet.
- It is reported that asteroid Bennu when broken down by microbes, even inefficiently could sustain astronauts for up to 600 years.
- **Challenges** – Extensive toxicity testing is needed to ensure that the biomass created for astronauts is safe to eat.

Reference

NDTV| Asteroids as Food

India-UAE Bilateral Investment Treaty 2024

Recently, India-UAE Bilateral Investment Treaty (BIT) came into effect.

- **Need** - The earlier Bilateral Investment Promotion and Protection Agreement *(BIPPA) between them expired* in September 2024.
- **Signed in** – February 2024 at Abu Dhabi
- **Entered into force** – With effect from August 2024.
- **Bilateral trade** – *UAE is the 7th largest* with a share of 3% in the total Foreign Direct Investment (FDI) received in India
    - Cumulative investment of approximately $19 Billion from April 2000- June 2024.
- India also makes *5% of its total Overseas Direct Investments in UAE* to the tune of $15.26 Billion from April 2000 - August 2024.
- **Importance of BIT 2024** – It gives continuity of investment protection to investors of both the countries

Key features of India-UAE BIT 2024

- Closed asset-based definition of Investment with coverage of Portfolio Investment.
- Treatment of Investment with obligation for *no denial of justice, no fundamental breach of due process*, no targeted discrimination and no manifestly abusive or arbitrary treatment.
- *Investor-State Dispute Settlement (ISDS)* through arbitration with mandatory exhaustion of Local remedies for 3 years
- General and Security Exceptions
- Right to Regulate for State
- No investor claim in case investments is involved with corruption, fraud, round tripping etc.
- Provision on National Treatment
- Treaty for protection to investments from Expropriation
- Treaty for Transparency, Transfers and Compensation for losses.
- Scope carve out for measures such as those related to taxation, local government, government procurement, subsidies or grants and Compulsory license.

Reference

PIB| Bilateral Investment Treaty of India-UAE Comes into Effect

Nutrition Support for TB Patients and their Families

Union Health Minister Unveils Key Initiatives to boost Nutrition Support for TB Patients and their Families

- **Ni-Kshay Poshan Yojana (NPY)** – Nutrition support under this has been increased from existing Rs. 500 per month/patient to Rs. ***1,000/month/patient*** for entire duration of the treatment.
- All TB patients will now receive a nutritional support of *Rs. 3,000 to Rs.6,000* under Ni-Kshay Poshan Yojana (NPY).

- It will benefit all *25 lakh TB patients in a year*.
- Till date, Rs.3,202 crores have been disbursed to 1.13 crore beneficiaries through Direct Benefit Transfer under this.
- **Energy Dense Nutritional Supplementation (EDNS)** – It would be provided to all eligible patients ***for the first 2 months of their treatment.***
- Patients having *BMI less than 18.5 kg/m2* at the time of diagnosis are eligible for this scheme.
- It would cover *approximately 12 lakh underweight patients*.
- It move will cost the Government of India approximately an additional Rs.1,040 crores to be shared between the center and states on 60:40 basis.
- **Ni-Kshay Mitras** – It provides for nutritional support to Tb patients under Pradhan Mantri TB Mukt Bharat Abhiyaan (PMTBMBA).
- Its scope has been expanded to provide nutritional support *to the family members (household contacts)* of TB patients.
- It provides for distribution of food baskets with a view to improve the immunity of the family members of TB patients.
- It would lead to a significant reduction in out-of-pocket expenses (OOPE) incurred by TB patients and their families.
- **Significance** – These measures are expected to aid nutritional recovery, improve response to treatment and outcomes and reduce mortality due to TB in India.

Reference

PIB| Nutritional Support to TB Patients and their Families

Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU)

India Participates in 44th Session of Codex Committee on Nutrition and Foods for Special Dietary Uses.

- **Codex Alimentarius** - It is the international food standards, guidelines and codes of practice for the safety, quality and fairness in international food trade.
- **Established in -** 1963
- **Functions of CCNFSDU -** To study specific nutritional problems assigned to it by the Commission and advise the Commission on general nutrition issues.
- To draft general provisions, as appropriate, concerning the nutritional aspects of all foods.
- To develop standards, guidelines or related texts for foods for special dietary uses, in cooperation with other committees where necessary.
- Endorse provisions on nutritional aspects proposed for inclusion Codex standards, guidelines and related text.
- **India's Representatives** - Food Safety and Standards Authority of India, the Ministry of Health and Family Welfare, and the Ministry of Women and Child Development
- **Matters Discussed** - Various food safety, consumer health, and trade-related issues.
- **India's Contribution** – It provided valuable insights on nutrient reference values for persons aged 6 to 36 months.
- India disagreed with the EU's proposal for sensory testing on assessing the relative sweetness of carbohydrate sources.

- **India's Demand** - Update Probiotic Guidelines for foods and food supplements and Nutrient Standards.
- During the adoption of the final report, India's suggestions were officially incorporated, marking a significant contribution to shaping global food safety and nutrition standards.
- **Joint Statement on Healthy Diet Principles** - During the session, FAO/WHO announced plans for a Joint Statement on Healthy Diet Principles.
- **Food and Diet domain** – This new domain was introduced by FAO on its FAOSTAT database.

References

1. PIB | Codex Committee on Nutrition and Foods for Special Dietary Uses
2. FAO | CCNFSDU
3. FAO | Codex Alimentarius

Sports Authority of India (SAI)

Sports Authority of India (SAI) signs MoU with Government of Maharashtra to develop National Centre of Sports Excellence in Mumbai.

- **SAI** – It was set up as a Society registered under Societies Act, 1860 in pursuance of the Resolution of the Department of Sports, Govt. of India.
- **Established in** – 1984.
- **Objective** - Promoting sports and achieving sporting excellence at the national and international level.
- SAI Sports complex is located in Kandivali.
- **Role** - Training and preparation of National teams.
- Support Training with Scientific & Sports Equipment and scientific personnel.
- Monitor and enhance Performance with a scientific evaluation system.
- Implement various schemes like Khelo India , Assistance to NSF, TOPS, FIT India.
- Offering academic programmes in physical education and sports.
- Sports Infrastructure Development & Maintenance.
- Maintaining and utilizing Stadia in Delhi
    - Jawaharlal Nehru Sports Stadium
    - Indira Gandhi Sports Complex
    - Major Dhyan Chand National
    - Dr. Syama Prasad Mookherjee Swimming Pool Complex
    - Dr. Karni Singh Shooting Ranges
- **Strategies** - International collaboration for sports development and sporting excellence.
- Evolving a structured system for spotting and increasing the talent pool in all Olympic disciplines and selected indigenous and other sports.
- Focused attention on areas and regions having potential of excellence in the specific sports disciplines.
- Encouraging active involvement of the corporate sector in developing academies and Centres of Excellence for different disciplines
- Ensuring the availability of quality sports goods and the development of indigenous

sports goods industry.

References

1. PIB | SAI
2. SAI | SAI

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