

DAILY CURRENT AFFAIRS (DCA)

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CCI RAISES OBJECTIONS ON RELIANCE-DISNEY DEAL

In News

 The Competition Commission of India (CCI) has raised concerns regarding the proposed merger of media assets between Reliance Industries and Walt Disney in India.

About

- According to the Competition (Amendment)
 Act 2023, if the CCI believes a merger may have
 an appreciable adverse effect on competition
 (AAEC), it issues a statement of objections to
 the involved parties, requiring them to justify the
 merger within 25 days.
- Earlier this year, Reliance, Viacom 18 Media Private Ltd, and The Walt Disney Company announced the signing of binding definitive agreements to form a joint venture (JV) that would combine the businesses of Viacom18 and Star India.
- The merged entity would have near-monopoly control over digital and TV cricket rights, including the highly valuable Indian Premier League (IPL).
- The Competition Commission of India (CCI) previously imposed a fine of 1,337.76 crore on Google for engaging in anti-competitive practices concerning Android mobile devices.

Adverse effect on competition (AAEC) & its Impacts

• It is a situation where a business practice, merger, or agreement has the potential to significantly harm competition within a market.

Impacts of AAEC

- Reduction in Consumer Choices: When competition is diminished, consumers often have fewer choices in terms of products or services. This can lead to a lack of diversity in the market.
- Higher Prices: With reduced competition, companies may have the power to set higher prices, as consumers have fewer alternatives.
- Barrier to Entry for New Players: AAEC can create significant barriers to entry for new companies, making it difficult for startups or smaller firms to enter the market.
- Exploitation of Market Power: Such as unfair terms of trade, tying arrangements, or restrictive covenants.
- Decreased Innovation: AAEC can lead to a reduction in innovation because the incentive to innovate diminishes when competition is weak.

About Competition Commission of India (CCI)

- It is an autonomous statutory body established in 2009 under the **Competition Act**, **2002**.
- The CCI eliminates practices that adversely affect competition, promote and sustain competition in markets, protect the interests of consumers, and ensure freedom of trade in the markets of India.

Source: TH

GUIDELINES FOR SEAPLANE OPERATIONS IN INDIA

Context

 Union Minister for Civil Aviation, has launched the Guidelines for Seaplane Operations in India under RCS-UDAN.

About Seaplane Operations

- Seaplanes can land and take off from the sea.
- Waterdromes are for landing and taking off seaplanes.
- India had seaplane operations in Andaman & Nicobar as well as in Gujarat but they couldn't sustain for long.
- The government plans to set up water aerodromes at 18 places spread across Andaman & Nicobar, Lakshadweep, Goa, Assam, Andhra Pradesh and Himachal Pradesh.

Guidelines for Seaplane Operations

- The relaxed norms are aimed at encouraging seaplane operations under the regional air connectivity scheme UDAN (Ude Desh ka Aam Nagrik).
- The guidelines prioritise the safety and security of seaplane operations and clearly outline the responsibilities of each stakeholder, from the operators to the regulatory bodies.
- There will be no need for a waterdrome license and compliance requirements have also been reduced.
- Fresh Commercial Pilot License (CPL) holders
 can now directly obtain seaplane ratings that will
 allow them to fly seaplanes.
- The revised regulations incorporated easier training requirements and simplified approval processes for seaplane operations.
- The new guidelines allow non-scheduled entities to operate such services and put in place a simplified certificate process.



Other Initiatives

- The minister also launched the 5.4 version of the UDAN.
 - Under UDAN 5.4, fresh bids would be invited for the routes which were cancelled for some reason or the other, to provide connectivity on unserved routes.
- After the success of RCS-UDAN, the government is considering to propose RCS-UDAN 2.0 for the next 10 years.

UDAN

- The Regional Connectivity Scheme (RCS) -UDAN (Ude Desh Ka Aam Nagrik) is an initiative to improve infrastructure and connectivity in India, especially in remote and underserved regions.
- It is a vital component of India's National Civil Aviation Policy (NCAP) 2016, launched by the Ministry of Civil Aviation (MoCA) in 2016, with a 10-year vision.
- The first RCS-UDAN flight was inaugurated in **2017**, connecting **Shimla to Delhi**.
- The scheme focuses on improving unserved air routes in underserved regions of the country and fulfilling the aspirations of the common citizens.

Significance

- The integration of seaplanes into the existing aviation system will provide last-mile connectivity to the regions that have remained isolated due to geographical challenges.
- This new mode of transportation will provide faster and more comfortable travel to these areas but also open up new avenues for economic growth, particularly in the tourism sector.
- The country is uniquely positioned to leverage the potential of seaplane operations and the government is committed to unlocking the potential and transforming coastlines, rivers, lakes, and islands for connectivity, avenues of economic opportunity, and pathways to inclusive development.

Source: PIB

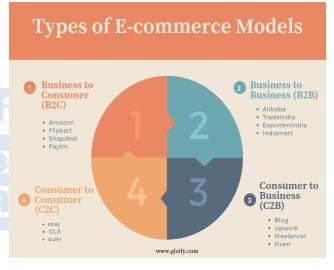
E-COMMERCE IN INDIA: A MATTER OF CONCERN?

Context

 Recently, the Union Trade Minister stirred up debate on India's e-commerce sector, instead of celebrating its exponential growth, he expressed concern.

About status of the e-commerce market in India

- India, with its rapidly growing digital economy and expanding internet user base, is on the brink of a massive transformation in its retail sector.
- At present, the e-commerce market in India is valued at \$70 billion, which accounts for around 7% of the nation's overall retail market.It is predicted to grow to a staggering \$325 billion, and the country's digital economy is expected to reach \$800 billion.
- The number of online shoppers in India is projected to increase with a compound annual growth rate (CAGR) of 22% to 88 million in rural India and 15% to 263 million across urban India between 2019 and 2026.



 It is expected to lead to India surpassing the US as the second largest online shopper base in one to two years.

Factors Driving Rise of the E-commerce

- India currently boasts the second-largest internet user base in the world, with over 900 million users.
- By 2030, it is expected to rise to the third position in the online retail industry.
- This growth is driven by increasing internet penetration, with around 87% of Indian households expected to have internet connections by 2025.
- The duration of internet access through mobiles has seen a 21% rise compared to 2019.
- Indian consumers with annual incomes ranging from INR 2.5 lakh to INR 10 lakh will be responsible for driving nearly half of the growth in India's \$300 billion e-commerce market by 2030.

- The growth of e-commerce in India has been done by the advancement of efficient logistics and supply chain networks. Government initiatives, like the National Logistics Policy, have streamlined last-mile deliveries, significantly improving logistical efficiency and costeffectiveness.
- E-commerce offers consumers the **ease of shopping from their homes or on the go**, saving both time and effort. For example, food delivery platforms like Zomato and Swiggy have become incredibly popular due to this convenience.
- Invest India predicted a significant increase in the number of households engaging in e-commerce transactions, from 60-70 million in 2022 to 120-130 million by 2030.

Challenges associated with e-commerce market in India

- Platform Neutrality and Fairness: There are concerns about lack of platform neutrality, unfair platform-to-business contract terms, exclusive contracts between online marketplace platforms and sellers/service providers, platform price parity restrictions, and deep discounts.
- Taxation: The provisions on carry-forward of losses need to be more accommodative of business restructuring, and withholding tax norms need more clarity.
- Inclusion of Small and Medium Enterprises (SMEs): SMEs often find it challenging to participate in the e-commerce ecosystem due to the need for separate infrastructures for different platforms, distinct terms and conditions of each platform, and the costs associated with these.
- **Digital Infrastructure and Internet Penetration:**The robustness of digital infrastructure is crucial for smooth and seamless online transactions.
 - Any disruption in the digital infrastructure can lead to transaction failures, affecting the trust and confidence of consumers in e-commerce.
 - While **internet penetration** is increasing in India, there is still a significant portion of the population, particularly in rural areas, that does not have access to the internet.
- Regulatory Challenges: E-commerce businesses in India also face regulatory challenges including issues related to data protection, consumer protection, taxation, and other legal and regulatory compliances.

Related Initiatives to Overcome Challenges

- **Policy Support:** 100% FDI is allowed in B2B e-commerce.
 - 100% FDI under the automatic route is permitted in the marketplace model of

E-commerce.

- Government e-Marketplace (GeM): It has facilitated government procurement, crossing an impressive INR 4 Lakh Cr in GMV.
- Open Network for Digital Commerce (ONDC):
 It aims to provide equal opportunities to MSMEs to thrive in digital commerce and democratise e-commerce.
- Other major initiatives include Digital India (to transform India into a digitally empowered society and knowledge economy), Skill India (to train people in different skills), Startup India (to build a strong ecosystem for nurturing innovation and startups in the country), Make in India (to encourage companies to manufacture their products in India), Innovation Fund (aimed at encouraging entrepreneurship and innovation in the country), and BharatNet (to grow rural broadband penetration) etc.

Way Forward (Policy Shift: Striking a Balance)

- Stricter Regulations: The government is contemplating stricter regulations for e-commerce players. While growth is fantastic, it shouldn't come at the cost of the well-being of others. There is a need to balance growth with consumer safety.
- Fair Play and Transparency: The Union Trade
 Minister wants foreign direct investment (FDI)
 and technology to thrive but insists on honesty
 and transparency. Both online and offline
 businesses should play by the same rules.
 - It's about finding that sweet spot where progress doesn't compromise our health and social fabric.

Conclusion

- The rapid growth of India's digital economy, coupled with the increasing internet penetration and the rise of the mass consumer segment, is set to propel India to become the world's thirdlargest ecommerce market by 2030.
- It presents a tremendous opportunity for businesses and investors alike, making India one of the most attractive markets for ecommerce in the world.

Source: ET

PERFORMANCE REVIEW OF REGIONAL RURAL BANKS (RRBS)

Context

 The Union Minister for Finance and Corporate Affairs chaired a meeting to review performance of nine Regional Rural Banks (RRBs) of 5 states.



About

- The review meeting focused on business performance, upgrading digital technology services, fostering business growth in MSME clusters, and deepening financial inclusion in rural areas.
- The RRBs were urged to generate awareness of Government schemes, especially in aspirational districts.

Achievements of RRBs

- Consolidated Capital to Risk (Weighted)
 Assets Ratio (CRAR) of RRBs has increased from 7.8% in FY 2021 to 13.7% in FY 2024.
- The profitability has improved from losses of Rs. 41 crore in FY 2021 to net profit of Rs. 2,018 crore in FY 2024.
- The Gross Non-Performing Assets (GNPA) are relatively lower with a ratio of **3.9%**.

Regional Rural Banks (RRBs)

- RRBs were established under the provisions of an Ordinance passed on 26 September 1975 and the RRB Act 1987 to provide sufficient banking and credit facilities for agriculture and other rural sectors.
- The RRBs were established as per the recommendations of the Narasimham Committee to cater to the rural credit needs of the farming and other rural communities.
- The Prathama Grameen Bank was the first bank to be established on 2nd October 1975.
 - The Syndicate Bank became the first commercial bank to sponsor the Prathama Grameen Bank RRB.

Operation of RRBs

- Regional Rural Banks (RRB) are Indian Scheduled Commercial Banks (Government Banks) operating at regional level in different states of India.
 - They have been created with a view of serving primarily the rural areas of India with basic banking and financial services.
- RRBs perform various functions in following heads:
 - Providing banking facilities to rural and semi –urban areas.
 - Carrying out government operations like disbursement of wages of MGNREGA workers, distribution of pension etc.
 - Providing Para-Banking facilities like locker facilities, debit and credit cards, mobile banking, internet banking, UPI etc.

Ownership of RRBs

- The equity of the Regional Rural Banks is held by the stakeholders in a fixed proportion.
- This proportion is **50:35:15**, distributed as:
 - Central Government 50%
 - Sponsor Bank 35%
 - State Government 15%

Issues with Regional Rural Banks (RRBs)

- High Non-Performing Assets (NPAs): RRBs experience a high level of NPAs, particularly in the agricultural sector. This is due to factors like crop failures, natural disasters, and the vulnerability of rural borrowers.
- Limited Capital Base: RRBs often operate with a limited capital base, restricting their ability to expand, invest in technology, and meet regulatory capital requirements.
- Operational Inefficiencies: RRBs often face operational inefficiencies due to outdated infrastructure, lack of skilled staff, and bureaucratic processes.
- Regulatory Constraints: RRBs are subject to various regulatory constraints, including strict lending norms and capital adequacy requirements, which can be challenging to meet given their limited resources.
- Mobilization issue: Practical exclusion of the richer rural population restricts deposit mobilization.

Significance of Regional Rural Banks (RRBs)

- **Financial Inclusion:** RRBs are crucial in extending banking services to rural and remote areas where commercial banks have limited presence. They help bring the unbanked population into the formal banking system.
- Support to Agriculture and Allied Sectors:
 A major focus of RRBs is to provide credit for agricultural activities, including crop production, purchase of agricultural equipment, and other related activities.
- **Promotion of Rural Entrepreneurship:** RRBs play a key role in promoting rural entrepreneurship by providing credit and financial services to small and medium enterprises (SMEs), self-help groups (SHGs), and individual entrepreneurs in rural areas.
- Poverty Alleviation: Through targeted lending programs and government schemes, RRBs contribute to poverty alleviation efforts by providing microfinance and small loans to the poorest segments of society.

- Implementation of Government Schemes: RRBs are instrumental in the implementation of various government-sponsored schemes and programs like PMJDY, PMJAY etc
- Stabilization of Rural Credit Markets: RRBs help stabilize rural credit markets by providing consistent and regulated sources of credit, reducing the reliance on informal moneylenders who often charge exorbitant interest rates.

Way Ahead

- Structural Consolidation to Improve Efficiency: Structural consolidation involves merging smaller or weaker RRBs to create larger, stronger entities.
- Recapitalization of RRBs for Capital Augmentation: Recapitalization involves infusing additional capital into RRBs to strengthen their financial base.
- Periodic Review and Capacity Building of Human Resources: Regularly reviewing the performance and skills of the workforce in RRBs is essential for maintaining a high standard of service. Capacity building involves training and development programs to enhance the skills and knowledge of RRB employees.

Source: BS

'MERCURY BOMB' IN ARCTIC

Context

 Researchers studying sediment in Alaska's Yukon River discovered that eroding permafrost is contributing mercury-laden sediments to the river.

About

- In the Arctic, plants absorb mercury, then die and become part of the soil, which eventually freezes into permafrost.
 - Over thousands of years, mercury concentrations build up in the frozen soil until it thaws, an increasingly common occurrence due to climate change.
- **Mercury amount in permafrost** is more than the total of all oceans, soils, atmosphere and biosphere of the earth.
- Scholars have warned the world of an impressive 'giant mercury bomb' that may soon explode.
 - The metal accumulates in the food chain specifically through people's customary diets of fish and game.

What is Permafrost?

Permafrost is essentially any ground that stays
 frozen — 0 degree Celsius or lower — for at least

- two years straight.
- It is composed of "a combination of soil, rocks, and sand that are held together by ice. The soil and ice in permafrost stay frozen all year long."
 - Although the ground remains perennially frozen, permafrost regions aren't always covered with snow.
- These permanently frozen grounds are often found in Arctic regions such as Greenland, Alaska (the United States), Canada, Russia, and Eastern Europe.



Consequences of melting of permafrost

- Melting permafrost alters the habitat for plants and animals, potentially disrupting local ecosystems and threatening biodiversity.
- Thawing permafrost causes the ground to become unstable, leading to the sinking or collapse of buildings, roads, pipelines, and other infrastructure.
- Permafrost acts as a freezer for ancient bacteria and viruses. Thawing could potentially release these pathogens, posing a risk of new or reemerging diseases.
- As permafrost thaws, organic matter trapped in the frozen ground decomposes, releasing carbon dioxide and methane. This process accelerates global warming.

Mercury

- Mercury is a naturally-occurring chemical element found in rock in the earth's crust.
 - It is a shiny, silver-white metal, historically referred to as quicksilver, and is liquid at room temperature.
- Mercury is released into the atmosphere through natural processes such as weathering of rocks, volcanic eruptions, geothermal activities, forest fires, etc.



- Human activities, like burning of coal, oil and wood as fuel are responsible for much of the mercury that is released into the environment.
- Mercury has toxic effects on the nervous, digestive and immune systems, and on lungs, kidneys, skin and eyes.

Source: TOI

INDIAN INSTITUTE OF ASTROPHYSICS TO STUDY SUNSPOT'S MAGNETIC FIELD

In News

 Researchers investigated the magnetic field at different layers of the solar atmosphere using data from the Kodaikanal Tower Tunnel Telescope.

About the study

- The IIA's approach involves probing the solar magnetic field at various atmospheric heights, an essential endeavor for understanding fundamental solar processes.
 - The solar atmosphere is composed of various layers connected through magnetic fields.
 - These magnetic fields are responsible for transferring energy and mass from the inner layers to the outer layers.
 - The magnetic field is the prime driver of the solar wind.
- Data Collection: Researchers use Hydrogenalpha and Calcium II 8662 Å spectral lines to analyze the magnetic field at different solar atmosphere heights.
- **Findings**: The H line is less sensitive to local temperature fluctuations, making it effective for probing the chromospheric magnetic field, especially in active regions with sudden temperature changes.

Impact

- The findings from IIA's research have the potential to transform our understanding of solar physics.
- By addressing the complexities of solar magnetic fields, the institute contributes to broader efforts to solve long standing questions about solar energy transfer and solar wind dynamics.
- This research is crucial for tackling the coronal heating problem and understanding the mechanisms driving solar wind.

Future outlook

- The Indian Institute of Astrophysics continues to lead the way in solar research, with its innovative techniques and cutting-edge technology paving the way for groundbreaking discoveries in astrophysics.
- Future studies will likely build on these advancements, offering deeper insights into the sun's behavior and its effects on space weather.

Do you know?

- The Kodaikanal Solar Observatory (KoSO) is known for the discovery of the Evershed Effect in 1909.
- It is operated by the Indian Institute of Astrophysics (IA), and it is located in Kodaikanal, Gujarat.
- The Kodaikanal Tower Tunnel Telescope features a sophisticated 3-mirror Coelostat system.
- This setup includes a primary mirror (M1) that tracks the sun, a secondary mirror (M2) that redirects sunlight downward, and a tertiary mirror (M3) that aligns the beam horizontally.

Source: PIB

NEWS IN SHORT

GUMTI RIVER

In Context

 India strongly denied claims of Bangladesh that flooding of eastern borders of Bangladesh had been caused by the opening of Dumbur dam upstream of the Gumti river in Tripura.

About Gumti River

- The Gumti River is a transboundary river that originates from a range connecting the Longtharai and Atharamura hills in the Indian state of Tripura.
- The river has a total length of 167.4 kilometers from its origin to the Indo-Bangladesh border.
- After entering Bangladesh, the Gumti flows through the plains and eventually merges with the Meghna River system near Daudkandi.
- The river is fed by several right bank tributaries, including: Kanchi Gang, Pitra Gang, San Gang.
- The left bank tributaries of the Gumti River includes: Ek Chhari, Maharani Chhara, Ganga

Source: IE



UKRAINE VOTES TO JOIN ICC

Context

 Ukraine's parliament voted to join the International Criminal Court, as it seeks to bring Russia on charges over war crimes.

The International Criminal Court (ICC)

- ICC investigates and, where warranted, tries individuals charged with the gravest crimes of concern to the international community: genocide, war crimes, crimes against humanity and the crime of aggression.
 - As a court of last resort, it seeks to complement, not replace, national Courts.
- History: Impetus for the court came from the ad hoc international tribunals set up in the 1990s to address the atrocity crimes committed in the former Yugoslavia and Rwanda.
 - The Rome Statute laid the foundation for the establishment of the International Criminal Court in 2002.
- Rome Statute: The Rome Statute was adopted in 1998 by the United Nations.
 - It gives legal authority to investigate alleged crimes on the territory of its members or by their nationals, when domestic authorities are "unwilling or unable" to do so.
- Members: 124 countries are States Parties to the Rome Statute of the International Criminal Court.
 - However many countries never signed the treaty, including China, Ethiopia, India, Indonesia, Iraq, North Korea, Saudi Arabia, and Turkey.
 - The countries which signed the statute, but never ratified it are Egypt, Iran, Israel, Russia, Sudan, Syria, and the United States.
 - In February 2024, Armenia became the latest country to join the ICC after ratifying the Rome Statute in 2023.

Source: TOI

ERI SILK

Context

 The North Eastern Handicrafts and Handlooms Development Corporation (NEHHDC) under the Indian ministry of development of North Eastern region (DoNER) recently received the OEKO-TEX certification from Germany for its Eri silk.

Eri silk

 Eri silk is known as the world's only vegan silk, where, unlike other silks, the moth inside the

- cocoon is not killed. Instead, the **moth naturally exits the cocoon,** leaving it behind for use.
- Hence it is also known as Ahimsa silk.
- The product is found mainly in **North East India** and some parts of China and Japan.
 - It is a Geographical Indication (GI) product of Assam.

Properties

- Eri silk is a protein fiber derived from cocoons made by the Samia Cynthia Ricini moth or Philosamia Ricini moth.
- The texture of the fabric is coarse, fine, and dense. It is very strong, durable, and elastic.
- The **Isothermal properties** of Eri silk makes it cool in summer and its thermal properties make it warm in winter.

Oeko-Tex certification

 It is recognised as a stringent standard for ensuring textiles that are free from harmful substances and produced under environmentally friendly conditions.

Source: TOI

GLASS CEILING

Context

Former US Secretary of State Hillary Clinton said Vice President Kamala Harris' confirmation as the Democratic Party's presidential candidate will help break through the "highest, hardest glass ceiling".

About

- The term "glass ceiling" has long been invoked as a shorthand for the barriers women face in advancing to senior professional positions.
- To say that the ceiling is glass suggests that, although it is very real, it is transparent and not obvious to the casual observer.
 - It also implies that what is on the other side is both visible yet inaccessible to those facing it.
- The term glass ceiling was first used in 1978 by writer and consultant Marilyn Loden at a panelist discussion about women in the workplace.
- The term came as American society witnessed the Second Wave of Feminism in the 1960s and '70s.
 - Women demanded equality across fields, including in the workplace.



- Laws were then introduced to deal with these issues, such as Title VII of the Civil Rights Act, 1964, which prohibited employers from discriminating on the basis of sex.
- US President George HW Bush established a **Glass Ceiling Commission** in 1991 to investigate these issues.

Source: IE

TERAHERTZ

In News

TRAI recommended establishing a Terahertz
 Experimental Authorisation (THEA) for research and development in the 95 GHz - 3 THz frequency bands.

About

- Indian entities including academia, research labs, government bodies, telecom providers, and manufacturers can apply for THEA.
- THEA aims to foster innovation in next-generation wireless technologies, enhancing capacity and reliability for various applications

About Terahertz (THz)

- Terahertz (THz) waves are ranged between microwave and infrared regions in the electromagnetic spectrum.
- THz technology has demonstrated promising potential for biomedical applications.
- Application Exploration of biological effects of THz waves has emerged as a critical new area in life sciences. It is critical to uncover the effects of THz waves on complex biological systems in order to lay out the framework for THz technology development and future applications.
 - Specifically, THz radiation has been shown to affect the nervous system, including the structure of nerve cell membranes, genes expressions, and cytokines level

Source: ET

CENTRAL BANKER REPORT CARDS 2024

Context

Reserve Bank of India Governor Shaktikanta
 Das has been ranked among the top three central bankers globally for the second consecutive year by US-based Global Finance magazine.

About

- Global Finance magazine in its Central Banker Report Cards 2024, newly announced the names of central bank governors from 100 countries across the globe.
- They received top grades, based on an "A+" to "F" scale for success in areas such as inflation control, economic growth goals, currency stability, and interest rate management.
 - An 'A' represents excellent performance, while an 'F' for outright failure.
- Denmark's Christian Kettel Thomsen, India's Shaktikanta Das and Switzerland's Thomas Jordan have been ranked under the 'A+' category of central bankers.

About Annual Central Banker Report Cards

- It honour those bank leaders whose strategies outperformed their peers through originality, creativity and tenacity.
- It has been published annually by Global Finance since 1994 and ranks central bank governors of nearly 100 countries.

Source: IE

RASHTRIYA VIGYAN PURASKAR

Context

 Recently, the President of India presented the Rashtriya Vigyan Puraskar-2024 at Rashtrapati Bhavan.

About the Rashtriya Vigyan Puraskar 2024

- It is a prestigious award that honours outstanding contributions to science and technology, and recognises exceptional scientists across various categories.
- Eligibility: There are no age limits for any prizes under the award categories.
 - These are open to Persons of Indian Origin (PIOs) (maximum one for Vigyan Ratna; three for the Vigyan Shri and the VY-SSB; and no award for the Vigyan Team awards).
- These awards do not include any cash component; instead, they bestow a certificate and a medallion on the awardee.
- A committee (constituted annually) under the chairmanship of the principal scientific adviser selects the awardees.
 - However, the members of the committee are ineligible for the award during their tenure.

Award Categories and Awardees

- Vigyan Ratna Award: It celebrates lifetime contributions in any field of Science and Technology.
 - Recipient: Prof. Govindarajan Padmanabhan, a pioneer in molecular biology and biotechnology research in India. His work has significantly advanced our understanding of life sciences.
- Vigyan Shri Awards: These acknowledge distinguished contributions to Science and Technology.
 - Recipients: Thirteen scientists who have made path-breaking research in their respective domains. Their work spans a wide range of scientific disciplines.
- **Vigyan Yuva-SSB Award:** It recognises exceptional contributions by young scientists.
 - Recipients: Eighteen scientists who have significantly impacted fields such as Indian Ocean Warming; Indigenous 5G Base Station Development; Quantum Mechanics Precision Tests
- Vigyan Team Award: Given to teams of three or more scientists for groundbreaking research.
 - Recipient: Chandrayaan-3 Team

Source: PIB

DIGITAL GENERAL CROP ESTIMATION SURVEY (DGCES)

Context

 Ahead of the nationwide implementation of the Digital General Crop Estimation Survey (DGCES), the Centre has convened a national conference with the States to discuss the improvement in crop production statistics.

About

- DGCES aims to enhance the accuracy, reliability and transparency of agricultural statistics which will help in policy formulation, trade decisions and agricultural planning.
- The conference discussed the need for integrating cutting-edge technologies like remote sensing, geospatial analysis and artificial intelligence in generating crop production statistics through revamped FASAL (Forecasting Agricultural output using Space, Agro-meteorology, and Land-based observations).
- The Digital Crop Survey is designed to provide plot-level data with geotagged areas of crops, serving as a single source of truth for accurate crop area estimation.
- **Significance:** The adoption of digital surveys and advanced technologies will lead to more efficient data collection, reduce discrepancies, and ultimately contribute to better policymaking in the agricultural sector.

Methodology of Crop Estimation

- The Directorate of Economics and Statistics (DES) releases estimates of area, production and yield in respect of principal crops of foodgrains, oilseeds, sugarcane, fibers and important commercial and horticulture crops.
- The estimates of crop production are obtained by multiplication of area estimates by corresponding yield estimates.
- The estimates of area and yield rates assume prime importance in the entire gamut of agricultural statistics.

Source: TH