

NEWS TODAY

49TH GST (GOODS AND SERVICES TAX) COUNCIL MEETING

• Major developments

Approval to GST Appellate Tribunal (GSTAT)	<ul style="list-style-type: none"> GSTAT constituted for disputes redressal under GST laws. ➤ Central Goods and Service Tax Act, 2017 (CGST Act) mandates for constitution of GSTAT and its Benches. ➤ National (Principal) Bench of GSTAT situated at New Delhi. It'll be presided by its President and consists two technical members and two judicial members (one each from centre and state).
GST compensation	<ul style="list-style-type: none"> Centre will clear entire GST compensation dues to States amounting to ₹33,506 crore. ➤ GST (Compensation to States) Act 2017 provides for compensation to States for 5 years for loss of revenue arising on account of implementation of GST regime. ➤ GST Compensation Cess Fund (GCCF) was established to enforce the same. It is funded by Cess levied on certain good. • Due to inadequate balance in GCCF Centre would release compensation from their own resources and recover the same from fund in future.
Group of Ministers (GoM) reports adopted	<ul style="list-style-type: none"> • Report on Capacity Based Taxation and Special Composition Scheme in certain Sectors on GST approved to improve revenue collection from commodities like pan masala, gutkha, chewing tobacco.

• Other changes

- **Extended exception of educational institutions and central and state educational boards** from conducting entrance examinations through any authority including National Testing Agency.
- **GST rate has been reduced** on certain commodities. Eg. Rab (liquid jaggery), pencil sharpener.

GST Council, **joint forum of Centre and States on GST**, was constituted by **President under Article 279A (1) of Constitution (101st Constitutional Amendment Act)**.

DEPARTMENT OF FISHERIES TO HOST SAGAR PARIKRAMA PHASE III PROGRAM FROM GUJARAT TO MAHARASHTRA

• Sagar Parikrama program shall be celebrated in **all coastal States/UTs**.

- Sagar Parikrama Phase III is **follow-up of Sagar Parikrama phase first (March, 2022) and second (September, 2022)**.

• India is **3rd largest fish producing and 2nd largest aquaculture nation** in world after China.

- India is **4th largest exporter of fish** in world. **Exports from India contribute 7.7% to global fish production**.
- Fisheries sector has been recognized as '**Sunrise Sector**'.
- Sector provides **livelihood support to about 280 lakh people at primary level** and almost twice the number along value chain.

• Initiatives to promote fisheries sector

- **Blue Revolution** focuses mainly on **increasing fisheries production and productivity** from aquaculture and fisheries resources, both inland and marine.
- Fisheries & Aquaculture Infrastructure Development Fund (FIDF), 2015.
- **Pradhan Mantri Matsya Sampada Yojana (PMMSY)**, 2020.
- **Kisan Credit Cards** for Fishermen (2018-19).

SAGAR PARIKRAMA PROGRAM AIMS TO

Facilitate interaction with fishermen, coastal communities and stakeholders to disseminate information of various fisheries related schemes

Demonstrate solidarity with all fisher folk, fish farmers and concerned stakeholders with the **spirit of Aatmanirbhar Bharat**

Promote responsible fisheries with **focus on sustainable balance between utilization of marine fisheries resources for food security** of nation and livelihoods of coastal fisher communities

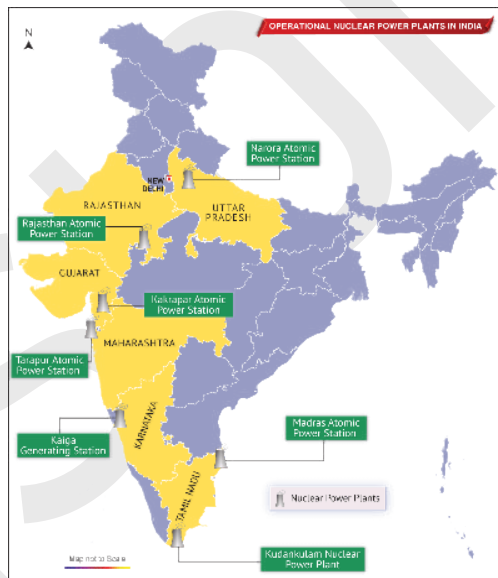
Protect marine ecosystems

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION (AICTE) APPROVES TECHNICAL CURRICULUM TO BOOST SEMICONDUCTORS MANUFACTURING, DESIGN

- AICTE has launched the curriculum designed for **B. Tech Electronics VLSI Design & Technology** and **Diploma in Integrated Circuit (IC) manufacturing**.
 - It provides variety of **employment roles and salary incentives for students**.
- VLSI (Very Large-Scale Integration) sector is a **high-paying industry and immune to automation** and it'll create an environment for Semiconductor ecosystem for setting and scaling up.
 - VLSI **integrates hundreds of thousands of transistors on a single silicon semiconductor microchip**.
 - IC (also called chip or microchip) is a **set of electronic circuits on one small flat piece (or chip)** which acts as fundamental **building block of all modern electronic devices**.
- **Semiconductor chips** are materials that conduct electricity more than an insulator but less than a pure conductor.
 - They can be classified into small number of categories including **memory chips, microprocessors, and Integrated chips**.
 - **Taiwan, South Korea and U.S. among others are major players of chip-making industry**.
 - Currently, global semiconductor industry is valued at \$500-\$600 billion. In India, **demand would increase to \$70-\$80 billion by 2026**.
- **Challenges in making chips:** Expensive process, need uninterrupted power supply and ultrapure water etc.

HARYANA'S FIRST NUCLEAR POWER PLANT COMING UP IN GORAKHPUR VILLAGE

- Upcoming Gorakhpur Haryana Anu Vidyut Pariyojana (GHAVP) will have **two units of 700 MWe capacity each of Pressurised Heavy Water Reactor (PHWR)**.
- India's **3-stage nuclear energy program**, envisioned by Homi Bhabha, is based on a closed nuclear fuel cycle.
 - **Stage-I: PHWRs fuelled by Natural uranium would produce plutonium-239. Heavy water (D2O) is used as moderator and coolant in PHWR.**
 - **Stage-II: Fast Breeder Reactors utilising plutonium-239 fuel from first stage and formed uranium-238.**
 - **Stage-III: Advanced nuclear power systems for utilisation of thorium.**
- India successfully **reached the first stage in 2013** with over 22 nuclear reactors (18 PHWRs, and 4 Light Water Reactors) in 7 nuclear power plants. (refer map)
- **India is currently on second stage of program.**
 - India's current nuclear power capacity of 6,780 MW is expected to **increase to 22,480 MW by 2031**.
 - Nuclear energy is **fifth-largest source of electricity for India**.
- **Steps taken to increase nuclear power output**
 - **Atomic Energy Amendment Act 2015** allow public-sector companies to form joint ventures to build nuclear power plants.
 - **Resolution of issues relating to Civil Liability for Nuclear Damage (CLND) Act 2010** and establishment of an **Indian Nuclear Insurance Pool**.



INITIATIVES FOR SEMICONDUCTOR MANUFACTURING

- **India Semiconductor Mission**
- **Production linked incentive (PLI) scheme** for semiconductor and display board production
- **Fiscal support for design-linked initiative (DLI) scheme**
- **Chips to Startup (C2S) programme**

GEOMAGNETIC STORM HITS EARTH

- Recently, **Solar wind passed through a gap** which occurred due to a **crack in Earth's magnetic field** sparking a **G1-class geomagnetic storm (GMS)**.
 - Crack occurred due to **South-pointing magnetic fields weakening Earth's defenses against solar wind**.
- GMS is a **disturbance in earth's magnetosphere**, which is the area around planet controlled by its magnetic field.
 - Earth's magnetosphere protects its inhabitants from most of the particles emitted by sun.
 - It is **caused by massive exchange of energy from solar wind into space environment** surrounding the Earth.
 - GMS are **categorised between G1 and G5, the latter being the strongest**.
- **Effect of GMS**
 - **Formation of bright red auroras.**
 - Disrupt navigation systems such as Global Navigation Satellite System (GNSS) and **create harmful geomagnetic induced currents (GICs)** in power grid and pipelines.
 - **Damage satellite electronics** and expose astronauts and high-altitude pilots to increased levels of radiation.
- Red auroras occur when **solar particles react with Oxygen at higher altitudes**, generally above 150 miles.
 - At this height, **Oxygen is less concentrated** and is **"excited" at a higher frequency** or wavelength than denser Oxygen lower down making reds visible.



EXTRA MEASURES ADOPTED TO CHECK IRREGULARITIES IN ORGANIC FARMING CERTIFICATION: MINISTRY OF COMMERCE (MOC)

- MoC has begun adopting **additional onsite measures to check field-level irregularities including verification of organisations** that certify organic farming.
 - > **Certification of Organic Foods** assures that they **comply with set standards laid out**.
 - > Organic foods are certified under **National Programme for Organic Production (NPOP) or Participatory Guarantee System for India (PGS-India)**.
- NPOP, launched under **APEDA, MoC**, involves **accreditation of Certification Bodies, promotion of organic farming and marketing etc.**
 - > NPOP standards have been **recognized by European Commission and Switzerland** for unprocessed plant products.
- PGS- India**, launched under Ministry of Agriculture, is based on **NPOP standards but is distinct in its certification procedure. PGS is for domestic use only.**
- Organic farming uses **organic fertilizers** (vermicompost, cow dung manure, etc) and **farming methods** that result in **sustainable production of crops without affecting quality** of production.
 - > Whereas, in **natural farming, neither chemical nor organic fertilizers are added to soil**. In fact, no external fertilizers are added to soil.
- Advantages of organic farming:** Maintain environment health by reducing pollution; reduces crop failure risk; reduces input cost leading to high profits; increases export potential etc.
- Disadvantages of organic farming:** Labour intensive; strict certification procedure inhibits farmers; requires specialised infrastructure etc.

● In related development, Centre has announced that it would set up a **high quality modern organic testing lab in Sikkim to promote organic produce of State.**

> **Sikkim is India's first fully organic state. India ranks first in terms of number of Organic producers.**

ALSO IN NEWS



Securities Market Regulation

- Securities market facilitates trade of securities. In India, it is **regulated by Securities and Exchange Board of India (SEBI) under**
 - > **Securities Contracts (Regulation) Act, 1956:** To recognise (and de-recognise) stock exchanges, prescribe rules for their functioning, etc.
 - > **SEBI Act, 1992 (SEBI Act):** To protect interests of investors and promote development of capital/securities market, besides regulating it.
 - > **Depositories Act, 1996:** Introduced and legitimized the concept of de-materialised securities being held in an electronic form.
 - > **Companies Act, 2013:** Empowers SEBI to regulate issue and transfer of securities, etc.



Shinku La tunnel

- Construction of **4.1-km Shinkun La tunnel on Nimu-Padam-Darcha Road link** has been approved.
- Shinku-la pass **connects Himachal Pradesh's Lahaul valley and Ladakh's Zaskar valley.**
 - > It'll be built by **Border Road Organisation (BRO)** under its ambitious Project Yojak.
 - Project aims to **build more tunnels like Atal Tunnel** and maintain the connecting roads.
 - > It'll **provide all-weather road connectivity to Ladakh** and this will be the **shortest route to border areas of Union territory** from other parts of country.
 - > It will **bring swiftness in movement of security forces.**



Underwater Noise Emissions (UNE)

- New study titled **"Measuring Underwater Noise Levels Radiated by Ships in Indian Waters"** at Visakhapatnam Port (East) and Goa's Mormugao port (West) was conducted by Andhra University.
- UNE or underwater sound pressure levels in Indian waters are **102-115 decibels, relative to one microPascal.**
 - > **East Coast level is slightly higher** than that of the West.
 - > **Rising anthropogenic UNE from ships are posing threat** to life of marine mammals like Bottlenose Dolphin, Manatees, Pilot Whale, Seal, and Sperm Whale.
 - > It **causes loss of hearing ability, change in behavioural responses, masking, and stress.**
- Solutions:** Develop green ports; regulations to reduce noise level; speed of ships should be less than 5 knots; rerouting of shipping lanes away from foraging regions of marine species.



Dustlik Exercise

- It is a joint military exercise between **India and Uzbekistan**.



Food Safety and Standards Authority of India (FSSAI)

- Alliance for Sustainable & Holistic Agriculture (ASHA)** has alleged that **Food Fortification Resource Centre (FFRC)** members are benefiting financially from public food fortification programme.
 - ASHA is an umbrella organisation of scientists, intellectuals and non-governmental organisations.
- FFRC is an **industry-led organisation under FSSAI, India's food safety regulator**. It provides information and inputs on standards and food safety, technology and processes.
- FSSAI has been **created under FSSA, 2006** and functions **under Ministry of Health and Family Welfare**.
 - It lays down science-based standards for articles of food and regulates their manufacture, storage, distribution, sale and import to ensure availability of safe food for human consumption.



UN Commission for Social Development (CSocD)

- India has been elected as the Chair of 62nd Session of UN CSocD.
- CSocD is one of the 9 **functional commissions of the Economic and Social Council (ECOSOC)**, established in 1946.
 - It **advises ECOSOC on social policies of a general character** and, in particular, on all matters in social field not covered by specialised inter-governmental agencies.
 - It **consists of 46 members**. They are elected by ECOSOC based on equitable geographical distribution **for four-year terms**.
 - ECOSOC is one of the **6 principal organs of the United Nations, established in 1945**.



Chandrayaan-3

- Chandrayaan-3 lander has successfully **completed the crucial EMI-EMC (Electro - Magnetic Interference/ Electro - Magnetic Compatibility) test**.
 - EMI-EMC test is **conducted for satellite missions to ensure functionality of satellite subsystems in space environment** and their compatibility with expected electromagnetic levels.
- Chandrayaan-3 is a **follow-on mission to Chandrayaan-2** to demonstrate end-to-end capability in safe landing and roving on lunar surface.
 - It has **three major modules** namely Propulsion module, Lander module, and Rover.
 - It'll be **launched by Geosynchronous Satellite Launch Vehicle (GSLV) Mk III** from Sriharikota, Andhra Pradesh.



Sickle cell anaemia (SCA)

- Finance Minister said that government will work in **"mission mode" to eliminate condition by SCA 2047**.
- SCA is an **inherited blood disorder** is highly **prevalent among tribes in South Indian States**.
 - It **affects shape of red blood cells, which carry oxygen** to all parts of the body.
 - People with this disease have a **typical hemoglobin molecule called hemoglobin S**, which can distort red blood cells into a sickle, or crescent, shape.
 - Liver, heart, kidneys, gallbladder, eyes, bones, and joints can suffer damage** from abnormal function of sickle cells.
 - Stem cell or bone marrow transplants are the only cure** for this disease, but they involve significant risks.
 - India is second-worst affected country** in terms of **chances of being born with SCA condition**.

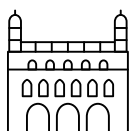


Tsetse fly

- Yale researchers have found a **volatile pheromone (chemical signals) generated by tsetse fly**.
- Tsetse flies are known to **carry protozoan parasites called African Trypanosomes**.
 - When insects bite humans or animals, they transmit these parasites, **spreading diseases** such as **African sleeping sickness** which can be **fatal to humans**, and **nagana disease** that affects **livestock** (particularly in cattle) **and other animals**.



DELHI



LUCKNOW



JAIPUR



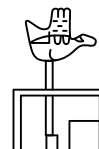
HYDERABAD



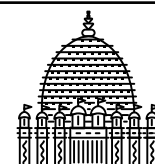
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