

NEWS TODAY

CENTRALIZED QUALITY CHECKING SYSTEM FOR DRUGS PROPOSED BY MINISTRY OF HEALTH AND FAMILY WELFARE (MOHFW)

- MoHFW is preparing a proposal to **create a centralised system of drug registration under Central Drugs Control Standard Organisation (CDSCO)** to keep a close watch on drug quality.

➤ It involves **repurposing CDSCO's online portal Sugam** which maintain **quality checks on new drugs**.

➤ This plan comes in backdrop of **string of scandals abroad over toxic Indian drugs** like cough syrups causing children's deaths in Gambia and Uzbekistan etc.

• Drug regulation in India

➤ CDSCO, **central drug authority** under MoHFW, **regulates quality, safety, and efficacy of drugs** including vaccines under New Drugs and Clinical Trials Rules 2019, and Drugs and Cosmetics Act, 1940.

➤ It also **regulates market authorization of new drugs and clinical trials standards**; supervises drug imports and approves licenses to manufacture.

➤ CDSCO along with state drug regulators are responsible for **grant of licenses for certain specialized categories of critical Drugs** such as **blood, vaccines, etc.**

• CDSCO is headed by Drug controller general of India (DCGI).

➤ DCGI acts as an **appellate authority if there is any dispute** with respect to drugs quality.

CHALLENGES IN ENSURING DRUGS QUALITY

- **Absence of unified and interoperable labelling** and identification standards.

- **Lack of adequate number of testing facilities and inspectors and monitors.**

- **Pharmaceutical companies get the registration** of a new drug formulation **at state level**, if their application is not approved by CDSCO.

- **Lack of public databases on violations, inspections, and history of a brand.**

GOVERNMENT APPROVED INTEGRATION OF 101 AGRICULTURAL PRODUCE MARKETING COMMITTEE (APMC) MANDIS INTO E-NAM

- This will bring total number of APMC mandis to 1,361 by March end and **boost turnover of electronic National Agriculture Market (e-NAM) platform in current fiscal.**

➤ Presently, 260 mandis have joined e-NAM platform, bringing total to 1,260.

- e-NAM is a **pan-India electronic trading portal** which **networks existing APMC mandis** to create a **unified national market for agricultural commodities.**

➤ **Small Farmers Agribusiness Consortium (SFAC)** under Ministry of Agriculture and Farmers' Welfare (MoA&FW) is **implementing agency for e-NAM.**

• Significance of integrating APMCs in e-NAM

➤ **Creation of unified agricultural market** transcending state boundaries.

➤ **Increase in agricultural trade** and market reach.

➤ **Real time price discovery and stable price realization** for producers.

➤ **Better monitoring and regulation of traders** and commission agents.

- APMC is a **statutory market committee constituted by State Government** in respect of trade in certain notified agricultural or horticultural or livestock products, under APMC Act 2003 issued by that state government.

- Other initiatives for digitalization of agriculture:** Digital Agriculture Mission 2021–2025, National e-Governance Plan in Agriculture, Platform of Platforms (POP) within e-NAM portal etc.

CONDITIONS FOR JOINING E-NAM REQUIRES THREE AMENDMENTS IN APMC ACTS OF STATES

Single trading license (Unified) to be valid across state

Single point levy of market fees across state

Provision for e-auction/ e-trading as a mode of price discovery

WATER SENSITIVE URBAN DESIGN AND PLANNING (WSUDP) FOR CITIES IN GLOBAL SOUTH

• WSUDP was primarily developed for western city contexts but rapid urbanisation in Global South necessitates WSUDP for them.

• WSUD is an emerging urban development paradigm aimed to **minimise hydrological impacts** of urban development on environment.

➤ In practice, this means **combining groundwater recharge besides several accompanying measures** that **reduce run off and increase infiltration**.

➤ It **contributes towards sustainability** and liveability, particularly when considered as part of an overall urban strategy.

➤ It integrates **urban water cycle, water supply, wastewater, storm-water and groundwater management** with spatial and urban design.

• **Key principles of WSUDP**

➤ **Integration** of water planning and city planning.

➤ Linking of **drains with statute protected water bodies**;

➤ **Green places** as recharge areas.

➤ **Reuse of adequately treated wastewater** for irrigation purposes.

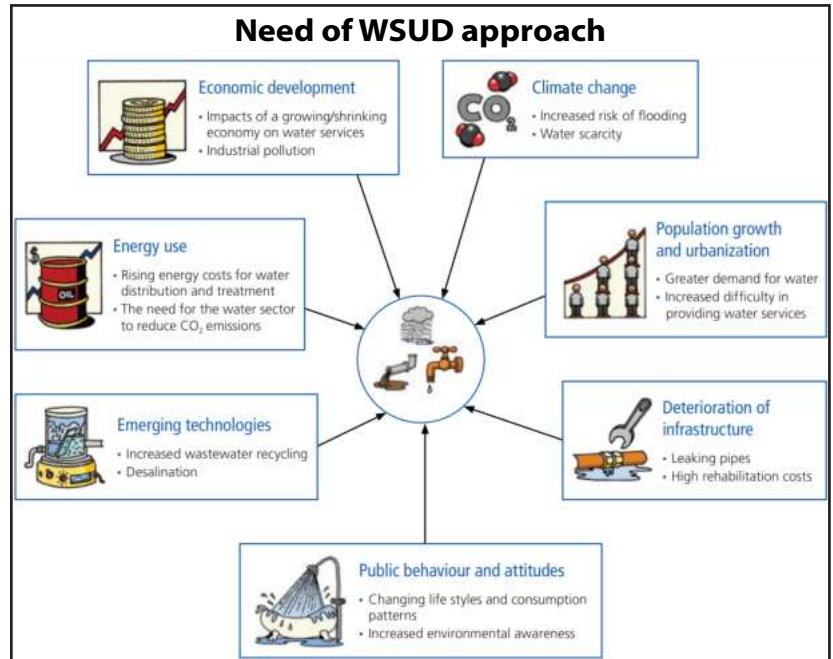
➤ **Building roads and drains** as per hydrogeography of a place.

• **Scope of WSUDP intervention in Indian cities**

➤ **City level** (planning stage): Open spaces—parks and waterbodies, road infrastructure.

➤ **Zone level** (planning and designing stages): Parking lots, roads, sanitation, storm-water drainage, etc.

➤ **Individual level** (designing stage): Site-specific on-site water-sensitive facilities, water-efficient fittings, etc.



INDIAN ARMY DOCTORS USE 3D PRINTING TECHNOLOGY TO FIX PATIENT'S SKULL DEFECT

• 3D printing or Additive manufacturing (AM) uses **data computer-aided-design (CAD) software** or 3D object scanners to direct hardware to **deposit material, layer upon layer**, in precise geometric shapes.

➤ AM **adds material to create an object**. By contrast, traditional manufacturing involves **removing material** through milling, machining, carving, shaping or other means.

➤ AM was **first developed in 1980s**.

• The technique has been applied to (and utilised by) **many different industries including medical**.

• **Medical 3D printing** involves the **creation of physical replicas of anatomical structures** using 3D printing.

➤ It uses 3D imaging techniques such as X-rays, CT scans, MRI scans and 3D ultrasounds to produce an image of the anatomy.

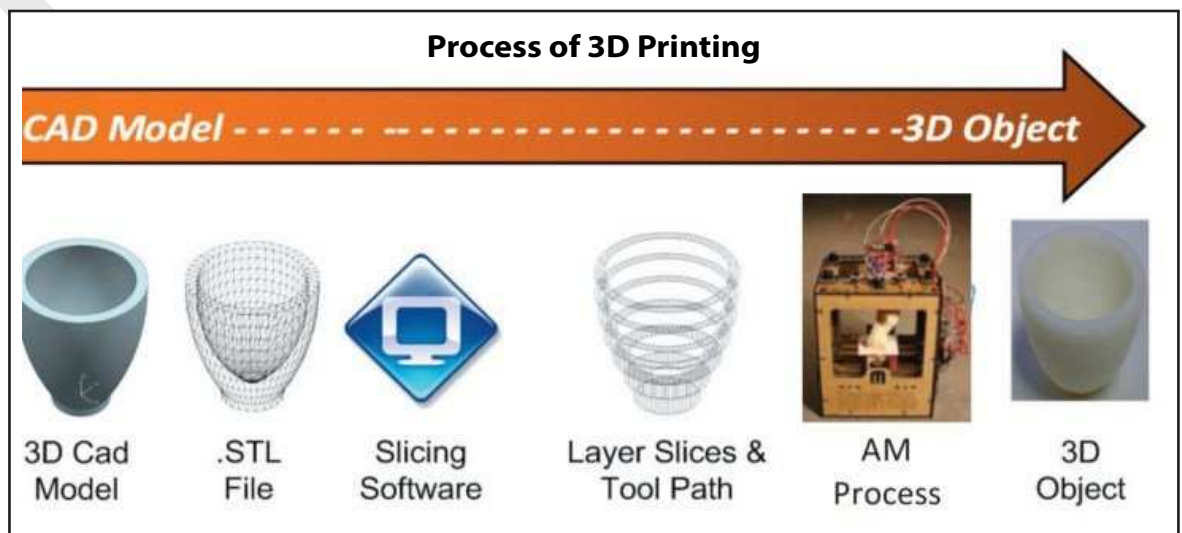
• **Uses of 3D printing in medical field**

➤ **Creating tissues and organoids** to replace human organ transplants.

➤ Produce **cheaper versions** of required **surgical tools**.

➤ Patient-specific surgical models to **speed up surgical procedures**.

➤ Custom-made prosthetics to **improve lives of those reliant on prosthetic limbs**.



NUCLEAR INSPECTORS IN IRAN FIND URANIUM ENRICHED TO 84% PURITY: REPORTS

- International Atomic Energy Agency (IAEA) had detected **uranium enriched to 84%** (just below the level needed to develop nuclear weapons) **at Iran's nuclear facility.**

➤ IAEA (Estd. 1957; HQ: Vienna, Austria) is the world's centre for **cooperation in nuclear field, promoting safe, secure and peaceful use of nuclear technology.**

- Uranium is a **radioactive heavy metal** with atomic number 92.

➤ **Uraninite (UO₂) is its primary ore.** It is found with **other mineral deposits** like autunite, carnotite, torbernite, samarskite etc. and in **traces in soil and water.**

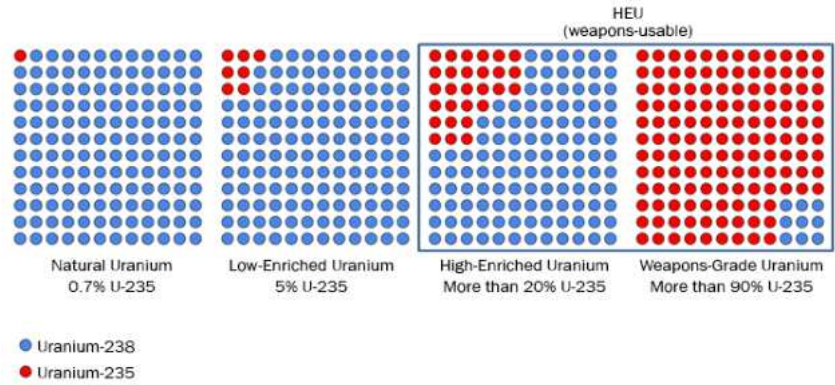
➤ Naturally, Uranium occurs in three major isotopes: **U-238** (99.27%), **U-235** (0.72%) and **U-234** (0.006%).

- Uranium enrichment is the **process of creating an effective nuclear fuel by increasing the percentage of U-235 in natural uranium by removing U-238** to different enrichment levels. (refer image)

- Iran's Nuclear Agreement, 2015**, also known as Joint Comprehensive Plan of Action (JCPOA), **capped Iran's Uranium enrichment at 3.67%.**

➤ JCPOA was signed between **Iran and P5+1 nations** (USA, UK, China, Russia, France and Germany).

➤ **In 2018, USA pulled out of nuclear deal** and reimposed sanctions on Iran leading to Iran breaching restrictions under deal.



NATIONAL STOCK EXCHANGE (NSE) GETS FINAL SEBI APPROVAL TO LAUNCH SOCIAL STOCK EXCHANGE (SSE)

- Idea of SSE was first floated by **Finance Minister in Budget speech 2019-20.**

➤ Following this, **government issued a notification declaring a new security 'zero coupon zero principal (ZCZP)'** under Securities Contracts (Regulation) Act, 1956.

➤ **ZCZP can be publicly or privately issued by NPO** upon registering with SSE of NSE.

➤ Earlier, in July 2022, SEBI notified rules for SSE.

- SSE functions as a **regulated funding platform** to allow **For-Profit Social Enterprises (FPEs) and not-for-profit organisations (NPO)** with a social purpose **to raise funds.**

➤ **At present, avenues** through which social sector (FPEs and NPO) **receive funding include Corporate Social Responsibility (CSR), impact investing, philanthropic/Government grants, etc.**

➤ **Some of the prominent SSE** includes UK (Social Stock Exchange), Canada (Social Venture Connexion), Singapore (Impact Investment Exchange) etc.

- Benefits of SSE:**

➤ **Enables public participation in social causes** through equity route.

➤ Provides **additional capital to improve lives of underserved.**

➤ **Leverage private sector** participation thus **complementing government efforts** for developmental goals.

➤ **Brings together social enterprises** and impact investors on a common platform.



ALSO IN NEWS



Lab-Grown Diamonds (LGD)

- India Centre for LGD is proposed to be established at IIT Madras.
- LGD are **developed from a carbon seed placed in a microwave chamber** and superheated into a glowing plasma ball. The process **creates particles that crystallize into diamonds** in weeks.
 - LGD are **produced through 2 technologies**, namely **High-Pressure High Temperature (HPHT) and Chemical Vapour Deposition (CVD)**.
 - India is one of the **leading producers of LGD using CVD technology**.
 - Globally, LGD market is **expected to rise to \$ 5 billion by 2025** from \$1 billion in 2020.
 - **Applications of LGD:** Jewellery, computer chips, satellites, 5G networks etc.



Jaipur Declaration

- **18th UIC World Security Congress**, jointly organized by **Railway Protection Force (RPF)** and **International Union of Railways (UIC)**, concluded with adoption of 'Jaipur Declaration'.
 - Declaration outlines an **actionable agenda for UIC** to explore **innovative approaches** that can help **global Railway organizations** to achieve their **long-term goal of safety and security**.
 - It also highlighted the **commitment of UIC** to provide **safe and secure rail network across globe**, by activating Asia-Pacific, Latin America and African regional assemblies by 2025.
- **UIC (HQ: Paris)** is worldwide professional association representing railway sector for research, development & promotion of rail transport.



LORA (Long-Range Artillery) Weapon System

- Bharat Electronics Ltd (BEL) has signed an MoU with Israel Aerospace Industries (IAI) for domestic manufacture and supply of its **LORA Weapon System (LORA) for Indian Tri-services**.
- LORA is a **short-range, road-mobile, ground and sea-launched solid fuelled ballistic missile** developed and operated by Israel.
 - LORA system provides **ballistic assault capabilities for multiple ranges (maximum range 280km)** with a precision level of 10 meters CEP (Circular Error Probability).
 - It uses **Inertial Navigation System/Global Positioning System** and TV for terminal guidance, with possible in-flight maneuvering capability.
 - It can carry a **warhead of upto 600 kg**.



FSSAI notifies comprehensive group standards for millets

- FSSAI has framed **comprehensive group standard for 15 types of millets specifying 8 quality parameters** to ensure availability of **good quality (standardized) millets in domestic and global market**.
 - **Group standard is applicable to** barnyard millet, Amaranthus, Buckwheat, Finger Millet, Foxtail Millet, Pearl Millet, Fonio, Little Millet and Sorghum among others.
 - **8 parameters are** maximum limits for moisture content, uric acid content, extraneous matter, other edible grains, defects, weevilled grains, and immature and shrivelled grains.
- **Millets (superfood)** are a group of **small-grained cereal food crops** that are **highly tolerant and require low chemical inputs**.



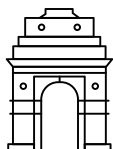
Cyclone Freddy

- It is a tropical cyclone that hits Madagascar and Mozambique.
- Tropical cyclone is a **rapidly rotating storm originating over tropical oceans from where it draws the energy to develop**.
 - It has a **low-pressure center** and clouds spiralling towards eyewall surrounding the "eye" normally calm weather conditions and free of clouds.

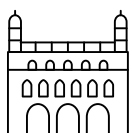


Keeladi findings

- Keeladi is a **tiny hamlet in Sivaganga district, Tamil Nadu**. It is **located**, near temple city of Madurai, **along the Vaigai river**.
- **2015 excavations** at Keeladi prove that an **urban civilisation existed in Tamil Nadu in Sangam age**.
 - **Sangam age** in ancient Tamil Nadu was believed to be **from third century BCE to third century CE**.
 - Based on Keeladi findings **Archaeologists have pushed Sangam age further back**.



DELHI



LUCKNOW



JAIPUR



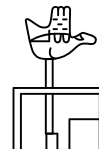
HYDERABAD



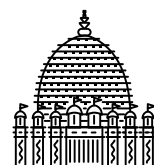
PUNE



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