

NEWS TODAY

National level Coordination Committee for World's Largest Grain Storage Plan held its first meeting in Delhi

Committee reviewed the **implementation status of World's Largest Grain Storage Plan in Cooperative Sector.**

About World's Largest Grain Storage Plan

- **Initiated by Ministry of Cooperation** as a pilot project in 2023 across 11 states.
- **Implemented by** National Cooperative Development Corporation with support of NABARD, Food Corporation of India (FCI), Central Warehousing Corporation (CWC), NABARD Consultancy Services, National Buildings Construction Corporation.
- Aims to **develop agricultural infrastructures at Primary Agricultural Cooperative Societies** level including warehouses, fair price shops (FPS) etc. through **convergence of various existing schemes including-**
 - ⊕ Agriculture Infrastructure Fund, Agricultural Marketing Infrastructure Scheme, Sub Mission on Agricultural Mechanization, Pradhan Mantri Formalization of Micro Food Processing Enterprises Scheme etc.
- **Benefits of Plan**
 - ⊕ **Ensuring food security.**
 - ⊕ **Help in reduction of post-harvest loss**, thus enabling farmers to earn better prices.
 - ⊕ **Minimizes transportation costs** between procurement centres, warehouses, and FPS.
 - ⊕ **Prevention of distress sale by farmers** at low rates.

Grain Storage System

- **FCI is nodal agency** responsible for procurement, storage and movement of food grains, public distribution and maintenance of buffer stocks.
 - ⊕ **FCI, setup under Food Corporation's Act 1964**, works under Ministry of Consumer Affairs, Food and Public Distribution.
- **CWC established under Warehousing Corporations Act, 1962** for warehousing of agricultural produce and other notified commodities.

Other Steps taken to improve Grain Storage Capacity

- **Private Entrepreneur Guarantee scheme** for augmenting food storage capacity through private participation.
- **Negotiable Warehouse Receipt (NWRs) issued by Warehousing Development and Regulatory Authority** help farmers to seek loans from banks against NWRs to avoid distress sales of agricultural produce.

Nuclear technologies are important tools for food safety: FAO

Role of Nuclear technologies has been highlighted at the **International Symposium on Food Safety and Control**, held in **Vienna, Austria.**

- Event was organized by the **Food and Agriculture Organization (FAO)** and the **International Atomic Energy Agency (IAEA).**

Nuclear technologies offer solutions to combat hunger, reduce malnutrition, enhance **environmental sustainability etc.**

- Also, technologies are complimentary to the **One Health approach.**
 - ⊕ **One Health** is an integrated, unifying approach that aims to sustainably balance and optimize the **health of people, animals and ecosystems.**

Role of Nuclear Technologies in Food system

- **Animal health: Polymerase Chain Reaction (PCR) tests**, a molecular nuclear technique, will rapidly detect diseases.
- **Soil and water management: Radioactive nuclides** left behind after nuclear events can help scientists determine the **health of soil and rate of erosion.**
- **Insect pest management: Nuclear based Sterile Insect Technique (SIT)** on manage pest.
 - ⊕ Technique involves mass-rearing the insects then sterilizing them through ionizing radiation before releasing them.
- **Food safety and control: Food irradiation** (the application of ionizing radiation to food) improves the safety and **extends the shelf life** of foods by reducing or eliminating microorganisms and insects.
- **Plant Breeding and Genetics:** Desired Genetic changes can be done by irradiation.

Key Initiatives

Global

- **Atoms4Food Initiative**, by FAO and IAEA
- **Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture**

India

- **Technology demonstration plants were set up for Irradiation:**
 - ⊕ **KRUSHAK at Lasalgaon, Nashik** for low dose radiation treatment
 - ⊕ **Radiation Processing Plant (RPP) in Navi Mumbai** for high dose radiation treatment.
- **Food Safety and Standards Authority of India (FSSAI)** brought **Food Safety and Standards (Food Products Standards and Food Additives) Sixth Amendment Regulations, 2016**, to harmonize food irradiation rules with the international regulation.

Sundhnukagigar Volcano in southwestern Iceland erupted for the fifth time since December 2023

Iceland (Land of Fire and Ice) is a volcanically active region as it is situated on Mid-Atlantic Ridge in North Atlantic Ocean, where Eurasian and North American plates are moving apart.

- It is also part of hot-spots, leading to enhanced volcanic activity in the region.

Global Distribution of Volcanoes

- Hotspot** is an area of Earth's mantle from which hot plumes rise upward, forming volcanoes on overlying crust.
 - Example: Reunion hotspot.
- Circum-Pacific Belt (Ring of Fire)** includes more than two-third of volcanoes.
 - Example: Mount Ruapehu, New Zealand.
- Divergent Plate Margins** where one tectonic plate moves away from another.
 - Example: Mid-Atlantic Ridge (longest mountain range in world, situated in ocean).

About Volcano

- A vent in earth's crust through which gases, ashes, molten lava escapes to ground.
- They are found on both land and ocean floor.
- Volcanic eruption released gases like** Water vapour, carbon dioxide, sulfur dioxide, hydrogen sulfide etc.

Impact of Volcanoes

- Positive**
 - Volcanic materials upon weathering form fertile soils. Example: Black soil.
 - Rich source of minerals like iron, magnesium etc.
- Negative**
 - Volcanic ash and gases released increase Earth's albedo, leading to cooling of Earth.
 - Volcanic eruptions can cause infectious diseases (conjunctivitis), chronic respiratory diseases etc.

Types of Volcanoes

- Based on eruption frequency:** Active, Dormant and Extinct.
 - Barren Island (only active volcano in India) is situated in Nicobar Islands.
- Based on type of eruption:**
 - Shield or Dome:** Made up of basalt, not steep. Example, Hawaiian volcanoes.
 - Composite Volcanoes (Strato Volcanoes):** Steep sides than shield volcanoes. Example: Mount Fuji, Japan.
 - Caldera:** Most explosive volcanoes. Example: Yellowstone supervolcano, USA.

13 districts of Assam were affected by floods due to cyclone Remal

As per National Commission on Floods, around 39.58% of total land area of Assam is flood-prone area.

Factors behind frequent floods in Assam

- Monsoon Rainfall:** Approximately 85% of annual rainfall in Brahmaputra basin takes place during monsoon months, leading to floods.
- High discharge:** More than 50 tributaries feed Brahmaputra and Barak River leading to high discharge and annual flooding.
- Bank erosion:** High rate of bank erosion due to high discharge and velocity of Brahmaputra River leading to shifting course and flooding.
- Seismic Active Zone:** Earthquakes and landslides push sediments and debris into rivers, which further raise riverbed and increase floods risk.
- Other:** Man-made factors like deforestation, hill cutting, encroachments and destruction of wetlands have worsened flood situation.

Impacts of Flood

- Loss of life, property and farmland** due to riverbank erosion, etc.
- Disrupt transportation routes** and commercial supplies, and pollute drinking water systems.
- Damage vegetation** and impact wildlife habitat, flora and fauna.

Initiatives for Flood Prevention

- Flood Early Warning Systems** to disseminate information and issue timely alerts to public.
- Flood Management program** to prevent erosion and improve drainage in flood prone areas.
- National Disaster Management authority guidelines** on flood management.

Way Forward

- Non-structural measures** like flood forecasting and warning, flood profiling, and regulation of reservoirs.
- Rejuvenation of wetlands and local water bodies** to improve drainage system, which can act as an exit for excess water and prevent waterlogging.
- Establishing National Integrated Flood Management Group under Ministry of Jal Shakti** as suggested by Standing Committee on Water Resources to oversee flood management.

Amendments to International Health Regulations (IHR), 2005 adopted

The 77th annual **World Health Assembly (WHA)** meeting recently concluded with an agreement on a crucial set of amendments to the **IHR, 2005**.

- Also, decided to extend the mandate of the **Intergovernmental Negotiating Body** (established in 2021) to finish its work to negotiate a **Pandemic Agreement** within a year.

About IHR

- Successor of the **International Sanitary Regulations (1951)**.
- **Aim:** An overarching **legally binding framework** that defines countries' **rights** and **obligations** in handling public health events and emergencies that have the potential to cross borders.
- **Members:** Comprises all 194 WHO Member States plus **Liechtenstein** and the **Holy See**.
- **Need of Amendments:** Experience of epidemics and pandemics, from Ebola to COVID-19, highlighted the need of better public health surveillance, response and preparedness mechanisms around the world

Key Amendments

- **Defining the Pandemic emergency** as a **communicable disease** that has a "wide geographical spread" or a high risk of one, and has exceeded or can exceed the ability of national health systems to respond.
- Establishing a **Coordinating Financial Mechanism** to address the needs and priorities of developing countries.
- Establish a **States Parties Committee** for effective IHR implementation.
- Create **National IHR Authorities** to improve coordination among countries.

About World Health Assembly (WHA)

- The decision-making body of the World Health Organisation (WHO).
- **Functions:** To determine the policies of the Organization, appoint the Director-General, supervise financial policies, and review and approve the proposed programme budget.

Also in News



World Summit on the Information Society (WSIS)

India participates in International Telecommunication Union's (ITU) WSIS+20 Forum High-Level Event 2024 in Geneva, Switzerland.

- **WSIS+20 Forum** marks 20 years of progress made in implementation of outcomes of WSIS, which took place in two phases in Geneva (2003) and Tunis (2005).

About WSIS

- WSIS forum is **co-organised annually** by **ITU, UNESCO, UNDP and UNCTAD** and **co-hosted** by **ITU and Swiss Confederation**.
- **Aim:** Create multi-stakeholder platform to **address issues raised by information and communication technologies** through inclusive approach at national, regional and international levels.
- **Goal:** To build a people-centric, inclusive and development-oriented Information Society, enabling universal access, utilization, and sharing of information.

Global Purchasing Power Parities (PPP) Data Released for 2021

Data has been released by the **International Comparison Program (ICP)**, covering **176 economies**.

Key Findings

- **China (\$28.8 trillion)** was the **largest economy** in 2021, followed by US on the basis of PPP.
- **India's economy** (\$11.0 trillion) was the **third largest**, accounting for 7.2% of Global GDP.
 - ⊕ On the basis of GDP ranking, India is 5th largest economy at present.
- **High-income economies** with just **16.4 % of world's population** accounted for 46 % of the global GDP. On the other hand, **low-income economies** (8.4 % of world's population) accounted for just 1 % of global GDP.

About PPP

- PPP is the **exchange rate** at which **one nation's currency** would be converted into another to purchase the same amounts of a large group of products.
- Used to determine the **relative value** of different currencies.
- **Significance:** Provides **more accurate measure of living standards across countries** than Market exchange rate (MER)- based estimates.
 - ⊕ **MER** often **inflates** the **buying power of high-income countries** (where prices are high) and underestimates that of low-income ones (where prices are lower).
 - ⊕ **PPP** exchange rates are **relatively stable over time** than MER.

About ICP

- A **worldwide statistical initiative** to collect comparative price data and detailed GDP expenditures to produce PPPs for the world's economies.
- Multi-partner initiative coordinated by the **World Bank** under the auspices of the **United Nations Statistical Commission**.
- Initiated in **1968** and has been a **permanent element of the global statistical program** since 2016.
- Also, measures **Price Level Index (PLI)**.
 - ⊕ **PLI** is the ratio of a PPP to its corresponding exchange rate.



PraVaHa Software

ISRO develops PraVaHa (Parallel RANS Solver for Aerospace Vehicle Aero-thermo-dynamic Analysis) software.

About PraVaHa

- Computational Fluid Dynamics (CFD) software.
- Can simulate external and internal flows on launch vehicles, winged and non-winged re-entry vehicles.
- Developed in ISRO's **Vikram Sarabhai Space Centre (VSSC)**.

Vikram Sarabhai Space Centre (VSSC)

- Responsible for the **design and development of launch vehicle technology**.
 - ⊕ Major programme includes Polar Satellite Launch Vehicle (PSLV), Geosynchronous Satellite Launch Vehicle (GSLV), GSLV Mk III etc.
 - ⊕ **HQ:** Thiruvananthapuram, Kerala



Organization of the Petroleum Exporting Countries (OPEC) +

OPEC+ agreed to extend its deep oil output cuts into 2025.

About OPEC+

- OPEC (HQ: **Vienna, Austria**) was established at **Baghdad Conference (1960)**, by **Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela**. Currently it has **12 members**.
 - ⊖ **Other members:** Algeria, Equatorial Guinea, Gabon, Libya, Nigeria, Congo, & UAE.
- **Objective:** To co-ordinate and unify petroleum policies among Member Countries to secure fair and stable prices for petroleum producers.
- In **2016**, OPEC signed an **agreement with 10 other oil-producing countries** and this grouping is known as **OPEC+**.
 - ⊖ **Members:** Russia, Mexico, Kazakhstan, Oman, Azerbaijan, Malaysia, Bahrain, South Sudan, Brunei, Sudan.



Siang Valley

Indian researchers have discovered a **new blue-coloured ant species** named *Paraparatrechina neela* in Siang Valley.

About Siang Valley

- Lies primarily in **Arunachal Pradesh**.
 - ⊖ **Brahmaputra River** in Arunachal Pradesh is known as the Siang River.
- Part of the **Eastern Himalaya Biodiversity Hotspot**.
 - ⊖ Key Protected Areas in this valley includes **Mouloung National Park** and **Daying Ering Wildlife Sanctuary**.
- **Tribal Groups:** Nyishi, Adi tribes etc.
- **Threat:** Large-scale infrastructure projects like dams, highways and military installations and climate change.



Greedflation

As per experts, the phenomenon of greedflation is contributing to high rates of inflation in the Western Countries.

About Greedflation

- Greedflation means **corporate greed is fuelling inflation**. Instead of the wage-price spiral, it is the profit-price spiral that fuels inflation.
 - ⊖ A **wage-price spiral** is an economic situation in which rising wages and rising prices feed into each other in a self-reinforcing cycle.
- It implies that **Companies exploit inflation** by increasing their **prices beyond just covering their increased costs** and then use that to **maximize their profit margins** which further fuelled inflation.



Phenome India-CSIR Health Cohort Knowledgebase (PI-CheCK) Project

Phenome India-CSIR Health Cohort Knowledgebase (PI-CheCK) Project successful concluded the first phase.

About PI-CheCK Project

- It is the flagship project launched by **Council of Scientific and Industrial Research (CSIR)** in 2023.
- It aims to **assess risk factors in non-communicable (cardio-metabolic) diseases** within Indian population.
- It ensures **"Swasthya Bharat Viksit Bharat"** through health and wellness check.
- It exemplifies CSIR's commitment to **advancing precision medicine** through Predictive, Personalized, Participatory, and Preventive healthcare.



Abu Musa Island

Iran summoned China's envoy over a China-UAE statement questioning Iran's sovereignty over the disputed **Abu Musa Island** and **2 other islands i.e Greater Tunb and Lesser Tunb**.

- **Abu Musa Island** is largest among them.
- Also, it is rich in **offshore oil** and **natural gas**.

Disputes over Islands

- Claimed by both Iran and United Arab Emirates (UAE) but have been held by Iran since 1971.
 - ⊖ Iran took control over these Islands after withdrawal of British.
- **Strategic Importance:** Located close to the **Strait of Hormuz** (Connects Persian Gulf with the Gulf of Oman and the Arabian Sea).
 - ⊖ About a **fifth of the volume of the world's total oil consumption** passes through the Strait on a daily basis.



Global Soil Partnership (GSP)

GSP Assembly calls for urgent action to **improve and maintain health of at least 50 percent of world's soils by 2030** at Twelfth Plenary session (hosted by FAO).

About Global Soil Partnership

- It was established in **2012** by **Food and Agriculture Organization (FAO)** as a mechanism to develop a strong interactive partnership and enhanced collaboration and synergy of efforts between all stakeholders.
- It aims to **position soils on Global Agenda, promote inclusive policies and soil governance** as well as sustainable soil management.

Personality in news



Sukumar Sen (1898-1963)

- A biopic on the life of Sukumar Sen has been announced.

About Sukumar Sen

- **First Chief Election Commissioner** of India, served from 1950 to 1958.

Contributions

- Conducted first **two Lok Sabha elections** of India (**1952 and 1957**) simultaneously with the Legislative Assembly Elections based on universal adult franchise.
- Many innovative methods were introduced under his leadership to conduct free and fair elections such as **indelible ink** to avoid voter impersonation.
- Served as the Chairman of the **International Election Commission**.

Awards and Honour: Padma Bhushan.

Values: Leadership, Integrity, Impartiality, etc.

