

7. Short news

1. Australian Open 2026

The 114th edition of the Australian Open took place at Melbourne Park, Australia, from January 18 to February 1, 2026.

Result of Australian Open 2026

Men's Singles- Carlos Alcaraz (Spain) defeated Novak Djokovic (Serbia) in the final.

1. This marked Alcaraz's first Australian Open title and his seventh major overall.
2. As 22 years old, he became the youngest man in history to complete the career Grand Slam.

Women's Singles- Elena Rybakina (Kazakhstan) defeated Aryna Sabalenka (Belarus, world No. 1 and defending champion) in the final. This was Rybakina's maiden Australian Open title and second Grand Slam overall (after Wimbledon 2022).

Doubles-

1. Men's Doubles- Christian Harrison & Neal Skupski won the men's doubles title.
2. Women's Doubles- Elise Mertens & Zhang Shuai clinched the women's doubles championship.
3. Mixed Doubles- Olivia Gadecki & John Peers successfully defended their title, winning the mixed doubles final.

About Australian Open

It is one of the four Grand Slam tennis tournaments (along with French Open, Wimbledon, and US Open). It is the first Grand Slam of the year held annually in Melbourne, Australia, at Melbourne Park. Played on hard courts (since 1988; previously grass).

2. CELPHOS Poisoning

Recently Doctors reported a major clinical breakthrough showing early intravenous lipid emulsion therapy significantly reduces mortality in deadly aluminium phosphide (Celphos) poisoning.

Celphos (Aluminium Phosphide) Poisoning

Aluminium phosphide (AIP) is a cheap solid fumigant and a highly toxic pesticide which is commonly used for grain preservation. Its easy availability in the markets has increased also its misuse for committing suicide. Celphos poisoning is a highly fatal public-health emergency in India, especially in agricultural states, due to its widespread use as a grain preservative and easy accessibility.

Chemical Composition- Celphos contains aluminium phosphide (AIP), which on contact with moisture or gastric acid releases phosphine gas (PH_3), a potent cellular toxin causing systemic failure. Phosphine inhibits cellular oxygen utilization and can induce lipid peroxidation.

Impact on Humans- Causes severe metabolic acidosis, cardiac toxicity, shock and multi-organ failure. Mortality remains extremely high due to absence of a specific antidote. Overall mortality varies between 70–100%

Treatment Breakthrough

1. Study shows intravenous lipid emulsion (ILE) as an effective adjunct therapy. ILE therapy involves infusing fat emulsions to "sink" or absorb lipophilic toxins from tissues, acting as a rescue antidote for anesthetic or medication poisoning.
2. Early ILE administration improves hemodynamic stability, corrects acidosis and reduces mortality.
3. Treatment is low-cost, widely available and suitable for district and rural hospitals.

3. Bharat- VISTAAR

Union Budget 2026–27 prioritises AI and emerging technologies to strengthen agriculture, skills and the Orange Economy, with Bharat-VISTAAR as a key digital agriculture initiative.

About Bharat-VISTAAR

Bharat-Virtually Integrated System to Access Agricultural Resources (VISTAAR) is a multilingual AI-enabled digital platform proposed in Union Budget 2026–27 to enhance farm productivity, improve farmer decision-making and reduce agricultural risk through customised advisory services.

Nodal Body– The initiative will be implemented through the Ministry of Agriculture & Farmers' Welfare, integrating platforms developed by AgriStack and Indian Council of Agricultural Research (ICAR), with support from India's national AI ecosystem.

Key Features

1. Integrates AgriStack farmer databases with ICAR's package of agricultural practices
2. Uses AI-driven analytics for crop-specific, location-specific advisories
3. Provides multilingual, customised recommendations to farmers
4. Supports real-time inputs on weather, soil health, crop management and risk mitigation
5. Reduces information asymmetry and improves last-mile digital outreach

Significance

1. Enhances farm productivity and income stability
2. Strengthens data-driven agriculture and precision farming
3. Reduces climate, market and production risks for small and marginal farmers
4. Advances Digital Agriculture under Viksit Bharat vision
5. Aligns with inclusive tech adoption benefiting farmers, youth and rural communities

4. World Wetlands Day 2026

World Wetlands Day 2026 was observed on February 2 under the theme "*Wetlands and traditional knowledge- Celebrating cultural heritage*", highlighting community-led conservation.

What is a Wetland?

Wetlands are areas of marsh, peatland or shallow water that can be fresh, brackish or saline, where water is static or flowing, including marine areas up to 6 metres depth at low tide. Ecologically, wetlands act as transition zones (ecotones) between land and water ecosystems.

Role of Wetlands-

1. **Biodiversity Support**– Wetlands provide habitats for aquatic plants, fish, amphibians, and migratory birds, sustaining rich food webs and ecological balance.
2. **Hydrological & Climate Regulation**– They purify water, recharge groundwater, recycle nutrients, regulate local microclimates, and reduce flood risks by controlling runoff.
3. **Livelihood & Ecosystem Services**– Wetlands support fisheries, agriculture, and sustainable tourism, linking ecological health with local livelihoods and cultural practices.

World Wetlands Day

World Wetlands Day is observed annually on 2 February to mark the adoption of the Ramsar Convention on Wetlands in 1971 at Ramsar, Iran. The Convention is an intergovernmental treaty aimed at the conservation and wise use of wetlands of international importance, known as Ramsar Sites. The Montreux Record (adopted in 1990) is a register of Ramsar sites requiring priority conservation attention due to ecological degradation. The sites are removed from the list once they are restored)

India and Ramsar Sites

India became a party to the Ramsar Convention in 1982 and has since expanded its wetland conservation efforts.

Total Sites – Recently Patna Bird Sanctuary (Uttar Pradesh) and Chhari-Dhand (Gujarat) were added to the Ramsar sites list, taking India's total to 98.

Need of conservation – India has lost nearly 40% of its wetlands in the last three decades, and about half of the remaining wetlands are degraded.

Initiative– Wetlands (Conservation and Management) Rules, 2017

5. Boost To Fishery

Union Budget 2026–27 prioritises fisheries through record funding, duty-free incentives, and reservoir-based infrastructure to boost value chains, exports, and coastal livelihoods.

Key Announcements for Fisheries (Budget 2026–27)

Integrated Reservoir & Amrit Sarovar Development– The Budget proposes integrated development of 500 reservoirs and Amrit Sarovars to strengthen coastal fisheries value chains, market linkages, and women- and startup-led enterprises. Launched in April 2022, Mission Amrit Sarovar aims to construct or rejuvenate 75 water bodies in every district,

Record Financial Support – Allocation of ₹2,761.8 crore to fisheries, with PMMSY receiving ₹2,500 crore to support fishers, infrastructure, and value addition.

Export Incentives for Marine Fisheries– Fish catch by Indian vessels in the EEZ and high seas is made duty-free, and landings at foreign ports will be treated as exports, with safeguards against misuse.

Boost to Seafood Processing Competitiveness– The duty-free import limit for seafood processing inputs is raised from 1% to 3%, reducing costs and improving compliance with global quality standards.

Status of Fisheries in India

Top Producer– India is the world's second-largest fish producer, contributing 8% to global output, ranks second in aquaculture production, leads in shrimp production and export, and is the second-largest producer in capture fisheries.

Sunrise Sector with Rapid Growth– Fisheries supports nearly 3 crore livelihoods and has grown at 7.87% annually since 2014–15, the highest among agriculture-related sectors.

Rising Production and Inland Fisheries Expansion– Fish production has more than doubled to 197.75 lakh tonnes (FY 2024–25), driven mainly by inland fisheries and aquaculture.

Expanding Seafood Exports– Seafood exports doubled to ₹62,408 crore in FY 2024–25, reinforcing India's position as a leading global exporter.

Strengthening the Blue Economy– With an 11,099 km coastline and vast EEZ, fisheries play a vital role in nutrition, employment, and sustainable blue economy growth.

Support for Fishery

Establishment of dedicated ministry – Ministry of Fisheries, Animal Husbandry and Dairying in June 2019.

Rising Investment– Since 2015, the Government has substantially increased investments in the sector, with cumulative outlays of ₹39,272 crore.

Key Initiatives– Blue Revolution Scheme, Fisheries and Aquaculture Infrastructure Development Fund (FIDF), Pradhan Mantri Matsya Sampada Yojana (PMMSY), Pradhan Mantri Matsya Samridhi Sah Yojana (PM-MKSSY) and Inclusion of fishery under Kisan Credit Card (KCC).