

7. Shortnews

1. Coconut Development Board (CDB)

The Coconut Development Board (CDB) has celebrated World Coconut Day on 2 September. It also launched its newly revised schemes and presented the Export Excellence Awards.

About Coconut Development Board (CDB)

Overview – It is a Statutory body under the Ministry of Agriculture & Farmers Welfare, Government of India.

Establishment – 1981

Headquarters – Kochi, Kerala.

Mandate & Functions – Development of coconut cultivation and industry in India.

Implementation of schemes to – Increase production and productivity. Promote processing and value addition. Encourage marketing and exports. Support research, extension, and farmer training.

Key Focus Areas –

1. Integrated development of coconut cultivation.
2. Climate-resilient farming systems.
3. Diversification into value-added products (coconut water, milk, oil, activated carbon, coir-based products).
4. Promotion of Farmer Producer Organizations (FPOs).

2. BHARATI Initiative

The Agricultural and Processed Food Products Export Development Authority (APEDA) has launched the BHARATI initiative to support 100 agri-food startups.

About BHARATI Initiative

About – BHARATI stands for Bharat's Hub for Agritech, Resilience, Advancement, and Incubation for Export Enablement. It is a national platform designed to support startups and accelerate exports in India's agri-food and agri-tech sectors.

Organizations Involved – The initiative is spearheaded by APEDA (Agricultural and Processed Food Products Export Development Authority), which operates under the Ministry of Commerce & Industry. The program is also supported by the Ministry of Food Processing Industries.

Objectives – Empower 100 agri-food and agri-tech startups to drive innovation. Increase agri-food exports to \$50 billion by 2030. Foster advancements in agri-food production, processing, packaging, and logistics.

Features

1. **Startup Cohort** – 100 startups selected via APEDA's website (starting September 2025).
2. **Acceleration Programme** – 3-month training on product development, export readiness, compliance, and market access.
3. **Innovation Focus** – High-value GI products, organic foods, superfoods, livestock products, AYUSH products.
4. **Technology Adoption** – AI-based quality checks, blockchain-enabled traceability, IoT-enabled cold chains, agri-fintech solutions.
5. **Problem Solving** – Addressing export challenges of perishability, wastage, logistics, packaging, and quality assurance.
6. **Awareness Campaign** – Nationwide outreach to attract startups and stakeholders.

3. NASA-ESA Solar Orbiter Mission

Recently, the NASA-ESA Solar Orbiter Mission has made a significant breakthrough by successfully tracing the origin of Solar Energetic Electrons (SEEs).

About NASA-ESA (European Space Agency) Solar Orbiter Mission

Launch & Cost – Launched in February 2020 from Cape Canaveral, this \$1.5 billion joint mission between NASA and ESA aims to explore the Sun.

Duration – The primary mission lasts until 2026, with a potential extension to 2030.

Orbit – The spacecraft follows a highly eccentric orbit, approaching as close as 0.28 AU and gradually tilting to image the Sun's poles.

Payload – Equipped with 10 instruments, it measures solar wind, magnetic fields, particles, and includes imaging and spectroscopy for remote sensing.

Objectives – The mission will be the first to image the solar poles and aims to study solar wind, flares, CMEs, and their effects on space weather.

Solar Energetic Electrons (SEE)

About – Solar Energetic Electrons (SEE) are high-energy electrons that are ejected into space, traveling across the heliosphere.

Sources – These electrons originate from solar flares, which are sudden bursts of energy on the Sun's surface, and from coronal mass ejections (CMEs), which are large eruptions of plasma and magnetic fields.

Release Patterns – The release of SEE is not always immediate. It is often delayed by several hours due to turbulence and scattering within the interplanetary medium.

Solar Orbiter Observations – From 2020 to 2022, the Solar Orbiter detected over 300 bursts, providing clear evidence of the connection between SEE and solar flares/CMEs for the first time.

4. Exercise MAITREE

The 14th edition of Exercise MAITREE, a bilateral military exercise between India and Thailand, began on September 1, 2025, at the Joint Training Node (JTN) in Umroi, Meghalaya.

Objective

Promoting Interoperability – Initiated in 2006, Exercise MAITREE focuses on improving mutual understanding, interoperability, and joint tactical capabilities to address regional security challenges.

Bilateral Defence Commitment – The exercise emphasizes India and Thailand's shared commitment to maintaining peace and security, especially in response to evolving counter-terrorism threats in the Indo-Pacific.

Urban Warfare – This edition focuses on company-level counter-terrorist operations in semi-urban terrain, conducted under Chapter VII of the UN Charter, emphasizing collective action for international peace.

Key Training Modules

1. Joint tactical drills and coordination
2. Special arms and weapons handling
3. Counter-insurgency operation planning
4. Physical fitness and endurance training
5. Combined raiding and clearance operations

5. PRATUSH Mission

Raman Research Institute (RRI) has devised the Probing reionization of the Universe using Signal from Hydrogen (PRATUSH) Telescope to study the "Cosmic Dawn.

About PRATUSH Mission

Developer – The PRATUSH mission is developed by the Raman Research Institute (RRI) in Bengaluru, an autonomous institute under the Department of Science and Technology (DST).

Goal – The mission aims to study the Cosmic Dawn—the era when the first stars and galaxies formed—by detecting faint 21-cm radio signals from neutral hydrogen.

Why the Moon – On Earth, these signals are obscured by radio noise and atmospheric distortions. The lunar far side provides the quietest environment in the inner Solar System, making it an ideal

location for radio astronomy.

Scientific Importance – PRATUSH will help scientists understand how the first stars ionized hydrogen, how the early Universe evolved, and could provide insights into dark matter and fundamental physics.

Key Features

Compact Design – The instrument is small, lightweight, low-power, and cost-effective, aligning with global trends in miniaturized space technology.

Digital Receiver System – Utilizes a single-board computer (similar to Raspberry Pi) and FPGA (Field Programmable Gate Array) for high-speed radio data processing.

How it Works?

1. **Antenna** – Captures faint hydrogen signals.
2. **Analog Receiver** – Amplifies the signals.
3. **Digital Receiver + FPGA** – Converts the signals into detailed spectral data, providing insights into the sky's brightness.

6. Seychelles

The Indian Navy's First Training Squadron (INS Tir, INS Shardul, and ICGS Sarathi) docked at Port Victoria, Seychelles, for a long-range training deployment.

About Seychelles

Location – A small island nation and archipelagic state in the Indian Ocean. Known for its diverse cultural blend and high human development in Africa. Northeast of Madagascar and about 1,500 km east of mainland Africa. Lies in the Southwest Indian Ocean Region, strategically close to key sea lanes.

Capital – Victoria, one of the world's smallest capitals.

Neighbours – Island countries and territories nearby include Maldives, Mauritius, Comoros, Madagascar, and French territories like Réunion and Mayotte.

Key Features

1. **Geography** – An archipelago of 115 islands, only a few are inhabited.
2. **Society** – Multicultural mix (French, British, Indian, African, Chinese) reflected in Creole language, festivals, cuisine, and architecture.

7. KAPAS Kisan App

Recently, Union Textiles Minister Giriraj Singh launched the KAPAS Kisan App, a digital platform aimed at enhancing the cotton procurement process.

Objective of the App

Digitizing Procurement – The app seeks to streamline the cotton procurement process by eliminating procedural delays and reducing reliance on middlemen. It allows farmers to self-register, book delivery slots, and track payments in real-time, addressing issues of transparency, delays, and distress sales.

Ensuring MSP – The app ensures that all eligible cotton farmers can access Minimum Support Price (MSP) procurement, safeguarding them from market exploitation and price crashes.

Key Features of the KAPAS Kisan App

1. **Self-Registration** – Farmers can create accounts using their Aadhaar-linked details.
2. **Slot Booking** – Pre-schedule cotton deliveries to procurement centers, avoiding long queues.
3. **Payment Tracking** – Track payments in real-time after selling cotton to government agencies.
4. **Language Accessibility** – Available in multiple Indian languages for inclusivity.
5. **Farmer-Centric Design** – Simple, intuitive interface tailored for ease of use by rural farmers.

