

UPSC Daily Current Affairs | One Liners 23-09-2025

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Agriculture

Equator Initiative Award

The Bibi Fatima Women's Self-Help Group from Teertha village in Kundgol taluk is one among the 10 winners of the Equator Prize 2025.

It also referred to as the *Nobel Prize for Biodiversity Conservation*.

Presented by - United Nations Development Programme.

Announced on - International Day of the World's Indigenous Peoples.

Aim - To honour nature-based solutions led by *indigenous people and local communities* that promote sustainable development and ecological resilience.

Theme 2025 - "Women and Youth Leadership for Nature-Based Climate Action".

India awarded for - Implementing eco-friendly farming practices in rainfed lands, managing community seed banks.

Ensuring food and nutrition security and promoting millet cultivation.

Other winners - Argentina, Brazil, Ecuador, Indonesia, Kenya, Papua New Guinea, Peru, and Tanzania.

Environment

Glyphosate

Glyphosate is a widely used *herbicide that can kill certain weeds and grasses*.

Works by - Blocking an enzyme essential for plant growth.

Primarily used in - Agriculture, but also in forestry and lawn and garden care.

WHO's International Agency for Re-search on Cancer classifies it as - "Probably carcinogenic to humans".

Security

MiG-21 fighter jets

The Indian Air Force (IAF) is retiring its iconic MiG-21 fighter jets after nearly six decades of service.

It is a supersonic jet fighter and interceptor aircraft.

Introduced in - 1963, as the 1st supersonic fighter for India (1963), 28 Squadron (1st Supersonics').

Designed by - Mikovan-Gurevich Design Bureau in the Soviet Union.

Hailed as - "Workhorse" of India's air defence.

Replaced by - Tejas Light Combat Aircraft (LCA) Mk 1A.

Key Roles

1965 & 1971 wars.

1999 Kargil conflict.

2019 Balakot air strikes (Gp Capt Abhinandan Varthaman shot down F-16).

Operation Sindoor.

Tejas Light Combat Aircraft (LCA)

An Indian single-engine, delta wing, all weather and multirole light fighter.

Designed as - A multi-role aircraft capable of taking up offensive air support, close combat and ground attack role at ease.

To undertake ground maritime operations.

Designed by - Aeronautical Development Agency (ADA).

Produced by - Hindustan Aeronautics Limited (HAL).

Generation - 4.5 generation fighter aircraft.

Key component of - India's indigenous defence program.

Science

"Smog-Eating" technology

The Delhi government will conduct a time-bound study on "smog-eating" photocatalytic coatings.

Project - *Titanium Oxide-based coatings,* which can be applied to roads, pavements, and public spaces.

Designed to - Neutralise harmful gases like nitrogen dioxide and volatile hydrocarbons that contribute to the capital's toxic air.

Aim - To strengthen the city's pollution-control measures through technology-driven interventions and scientific validation.

Chronic Insomnia Accelerates Dementia

Chronic insomnia - It refers to sleep problems that last at least 3 times per week for 3 months.

Accelerate - Both amyloid buildup and silent blood-vessel damage, nudging the brain toward cognitive decline, especially in people who already carry the high-risk ApoE4 gene.

ApoE4 gene

ApoE4 is the primary genetic risk factor for sporadic <u>Alzheimer's disease (AD).</u>

Expressed in - 40-65% of all AD patients.

Associated to - Many pathological processes possibly linked to cognitive impairment, such as amyloid- β (A β) and tau pathologies.

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Report on WASH (2000 - 2024)

Title - Progress on Household Drinking Water and Sanitation 2000–2024: Special focus on inequalities.

It presents updated *national, regional and global estimates* on water, sanitation and hygiene (WASH) for the period 2000–2024.

Launched by - World Health Organization (WHO) and United Nations Children's Fund (UNICEF) during World Water Week (August 24-28, 2025).

Focused particularly on - Inequalities in access to safe drinking water, sanitation and hygiene, which continue to impede the achievement of UN-mandated Sustainable Development Goal (SDG) 6.

Key highlights -

Open defecation in low-income countries remained 4 times higher than the global average.

To meet 2030 targets, low-income countries would need <u>a 7-fold increase in access to safe</u> water and an 18-fold increase in sanitation.

World Water Week

It is the leading annual conference on global water issues.

Annually held - since 1991

Organised by - Stockholm International Water Institute (SIWI).

Aim - To accelerate progress in international processes related to water, development, and climate.

Theme 2025 - "Water for Climate Action".

India Water Week

It is a 5-day conference and exhibition which is India's international water resources event.

Started in - 2012, conducted biannually

Lasted edition in - 2024.

Next edition will be conducted in - 2026.

Organized by - Ministry of Jal Shakti.

Aim - To focus on "Partnerships and Cooperation for Inclusive Water Development and Management".

