

CURRENT AFFAIRS

WITH MINDMAPS

HINGLISH



Astrosat-India's First Observatory ✓✓

Maize ✓✓

UNGA ✓

Editorial

Food Wastage and Climate change ✓✓

Practice Questions-Polity ✓✓

Which of the following statements are correct about the Forty-Second Amendment Act, 1976?

1. It shifted education from the Concurrent List to the State List. ✗
2. It made the President bound by the advice of the Cabinet. ✓
3. It added new Directive Principles for the protection of environment, forests and wildlife. ✓
4. It added the terms socialist, secular and integrity to the Preamble to the constitution. ✓

Select the correct answer using the code given below:

- (a) ~~1 and 2 only~~
- (b) ~~1 and 3 only~~
- (c) 2 and 4 only
- (d) 2, 3 and 4 only ✓

d

निम्नलिखित में से कौन-से कथन संविधान (बयालिसवाँ संशोधन अधिनियम, 1976) से संबंधित सही हैं? ✓

1. इसने शिक्षा को समवर्ती सूची से राज्य सूची में स्थानांतरित किया।
2. इसने राष्ट्रपति को मंत्रिपरिषद की सलाह से बंधा हुआ बना दिया।
3. इसने पर्यावरण, वन और वन्यजीवों की सुरक्षा हेतु नए निदेशक सिद्धांत (Directive Principles) जोड़े। ✓
4. इसने संविधान की प्रस्तावना में समाजवादी, पंथनिरपेक्ष और अखंडता शब्द जोड़े। ✓

नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए:

- (a) केवल 1 और 2
- (b) केवल 1 और 3
- (c) केवल 2 और 4
- (d) केवल 2, 3 और 4

Which of the following Amendments to the Constitution of India accorded a special status to the Union Territory of Delhi by designing it as the National Capital Territory of Delhi?

- (a) The Fifty-Second Amendment Act, 1985
- (b) The Sixty-Ninth Amendment Act, 1991 ✓
- (c) The Eighty-Fourth Amendment Act, 2001
- (d) The Ninetieth Amendment Act, 2003

भारत के संविधान के निम्नलिखित में से किस संशोधन अधिनियम ने दिल्ली केंद्रशासित प्रदेश को विशेष दर्जा प्रदान किया और उसे राष्ट्रीय राजधानी क्षेत्र (National Capital Territory of Delhi) के रूप में निर्दिष्ट किया?

- (a) बावनवाँ संशोधन अधिनियम, 1985
- (b) उनहत्तरवाँ संशोधन अधिनियम, 1991 ✓
- (c) चौरासीवाँ संशोधन अधिनियम, 2001
- (d) नब्बेवाँ संशोधन अधिनियम, 2003

Which of the following statements is/are correct?

1. The Indian Constitution provides for both positive rights and negative rights. ✓
2. The Indian Constitution provides for both individual rights and group rights. ✓

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2 ✓
- (d) Neither 1 nor 2

निम्नलिखित में से कौन-सा/से कथन सही है/हैं?

1. भारतीय संविधान में सकारात्मक अधिकार (positive rights) और नकारात्मक अधिकार (negative rights) दोनों का प्रावधान है।
2. भारतीय संविधान में व्यक्तिगत अधिकार (individual rights) और सामूहिक अधिकार (group rights) दोनों का प्रावधान है।

नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए:

- (a) केवल 1
- (b) केवल 2
- (c) 1 और 2 दोनों
- (d) न तो 1 और न ही 2

Which of the following statements is/are correct?

1. The 25th Constitution Amendment laid down that any law giving effect to Article 32 would not be void even if it comes into conflict with any of the Fundamental Rights. ✗
2. The 96th Constitution Amendment virtually transferred Article 46 legally enforceable under Part III in the form of Article 21A. ✗
3. The 44th Constitution Amendment converted the Fundamental Right to property into a Constitutional Right. ✓✓

Select the correct answer using the code given below:

- (a) 3 only ✓
- (b) 1 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

a

निम्नलिखित में से कौन-सा/से कथन सही है/हैं?

1. 25वाँ संविधान संशोधन अधिनियम ने यह प्रावधान किया कि अनुच्छेद 32 को प्रभावी बनाने वाला कोई भी कानून, यदि मौलिक अधिकारों के साथ टकराव में भी हो, तो वह शून्य नहीं होगा।
2. 96वाँ संविधान संशोधन अधिनियम ने वस्तुतः अनुच्छेद 46 को भाग III के अंतर्गत अनुच्छेद 21A के रूप में विधिक रूप से लागू कर दिया। ✗
3. 44वाँ संविधान संशोधन अधिनियम ने संपत्ति के मौलिक अधिकार को एक संवैधानिक अधिकार में परिवर्तित कर दिया। ✓

नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए:

- (a) केवल 3 ✓
- (b) केवल 1 और 3
- (c) केवल 1 और 2
- (d) 1, 2 और 3

a

Which of the following statements is/are correct about the Sub-Committee on Fundamental Rights?

→ J.B

1. It was headed by Sardar Vallabhbhai Patel.
2. It had representation of the diverse sections of the society, including the women.
3. Its suggestions were rejected unanimously by the Constituent Assembly. ✗

Select the correct answer using the code given below:

@

- (a) 2 only ✓
- (b) 1 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

मौलिक अधिकारों पर उप-समिति के संबंध में निम्नलिखित में से कौन-सा/से कथन सही है/हैं?

1. इसकी अध्यक्षता सरदार वल्लभभाई पटेल ने की थी।
2. इसमें समाज के विभिन्न वर्गों का प्रतिनिधित्व था, जिसमें महिलाएँ भी शामिल थीं। ✓
3. इसके सुझावों को संविधान सभा ने सर्वसम्मति से अस्वीकार कर दिया था। ✗ → स्वीकार

नीचे दिए गए कूट का प्रयोग कर सही उत्तर चुनिए:

- (a) केवल 2
- (b) केवल 1 और 3
- (c) केवल 1 और 2
- (d) 1, 2 और 3

Astrosat, India's first space observatory, completes a decade among the stars

The Hindu Bureau
BENGALURU

India's first dedicated space astronomy observatory, AstroSat, completed a decade of operations on Sunday.

Ten years ago, on September 28, 2015, the PSLV-C30 (XL) rocket carrying AstroSat lifted off from the Satish Dhawan Space Centre in Sriharikota. Though the designed mission life of AstroSat was five years, it continues to provide valuable data.

In the last decade, the multi-wavelength space observatory with five payloads aboard has made major interesting discoveries.

Commemorating the milestone in a post on X, the Indian Space Research Organisation said, "On this day 10 years ago, AstroSat, India's first multi wave-



Keen explorer: Though the designed mission life of AstroSat was five years, it continues to provide valuable data.

length astronomy observatory was launched by ISRO. From black holes to neutron stars, from the nearest star Proxima Centauri to first time detection of FUV photons from galaxies 9.3 billion light years away, AstroSat enabled groundbreaking insights across the electromagnetic spectrum from UV/Visible to

high energy X-rays. Congratulating AstroSat for a successful decade and wishing many more years of exciting results and discoveries."

Five payloads

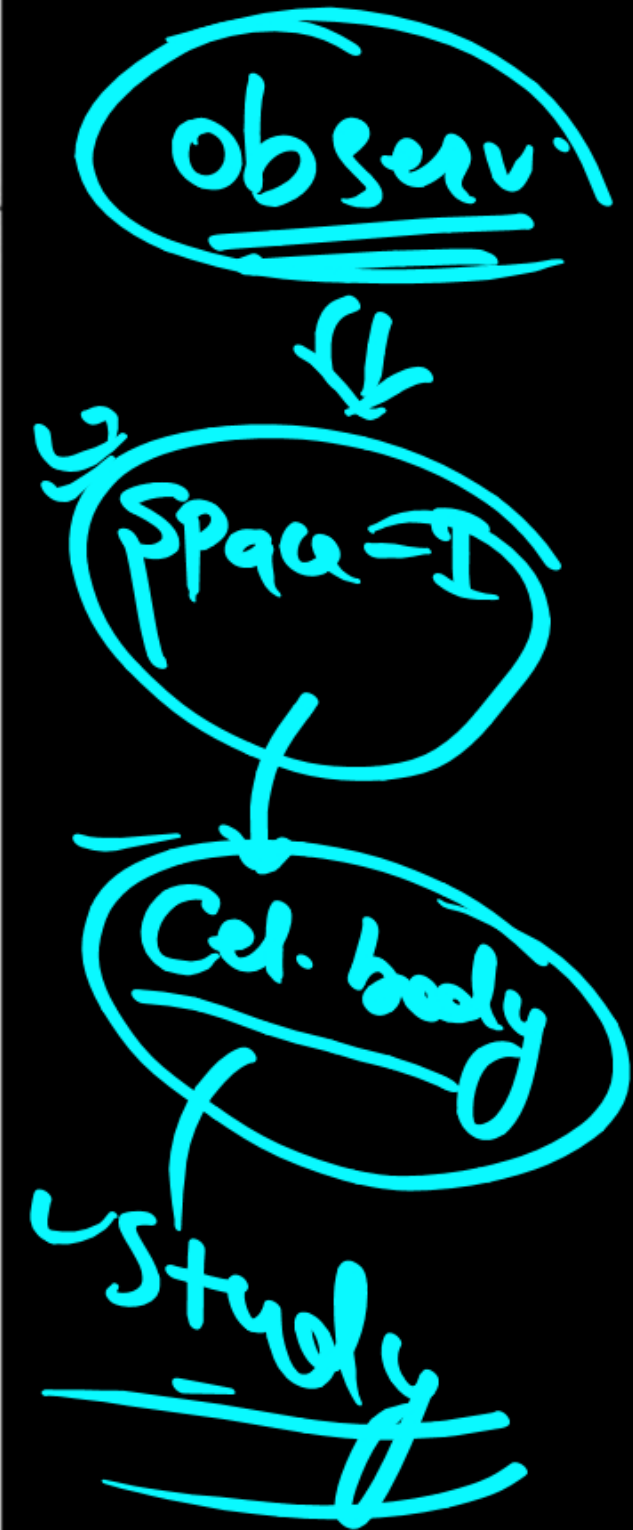
AstroSat was designed to observe the universe in the visible, ultraviolet, low and high energy X-ray regions

of the electromagnetic spectrum simultaneously with the help of its five payloads.

The five payloads are the Ultra Violet Imaging Telescope (UVIT), Large Area X-ray Proportional Counter (LAXPC), Cadmium-Zinc-Telluride Imager (CZTI), Soft X-ray Telescope (SXT), and the Scanning Sky Monitor (SSM).

Collaborative effort

Astrosat was realised by the ISRO with the participation of all major astronomy institutions, including the Inter University Centre for Astronomy and Astrophysics, Tata Institute of Fundamental Research, Indian Institute of Astrophysics, and the Raman Research Institute (RRI), some universities of India and two institutions from Canada and the U.K.







Astrosat: India's first space observatory launched successfully

The Polar Satellite Launch Vehicle (PSLV), in its 31st flight (PSLV-C30), successfully launched India's first dedicated space observatory, Astrosat, into orbit on Sep 28, 2015. The flight also launched four US nanosatellites, a microsatellite from Indonesia and a nanosatellite from Canada

ASTROSAT

- The scientific mission endeavours for a more detailed understanding of the universe
- One of the unique features of Astrosat mission is that it enables the simultaneous multi-wavelength observations of various astronomical objects with a single satellite
- India gains entry into the select club of nations having its own observatory after the US, Japan, Russia and Europe



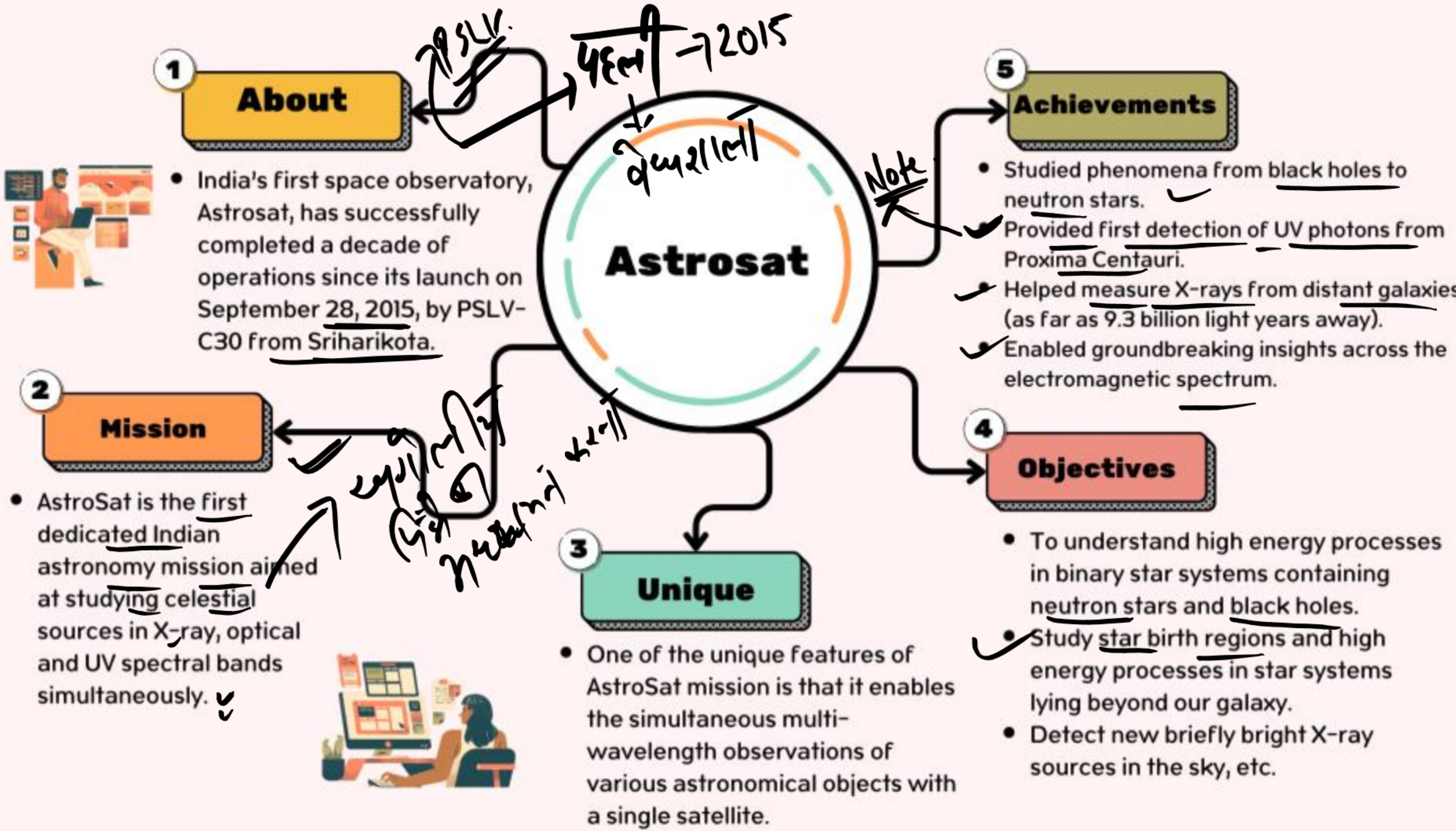
Lift-off mass: 1,513 kgs	Dry mass: 1,470 kgs	Physical dimensions: 1.96 m X 1.75 m X 1.30 m	Mission life: 5 years
-----------------------------	------------------------	--	--------------------------

PSLV-C30

Lift-off weight: 320.2 tonnes	Height: 44.4 metres	Diameter: 2.8 metres	1 st PSLV flight: Sept 20, 1993	Stages: Four (solid and liquid propulsion alternatively)
----------------------------------	------------------------	-------------------------	---	--



- Launch-PSLV
- 2015
- 7L75yr



Clustering maize plants together can improve their insect resistance

In search of sustainable solutions, researchers at China's Zhejiang University, in collaboration with partners from the Netherlands and Switzerland, have uncovered an unexpected and powerful form of plant communication that could strengthen crop resilience to insect attacks; their findings were published in *Science*

Neelanjana Rai

Maize (*Zea mays*) has long stood at the intersection of human culture and the natural world. Originating from teosinte, a wild grass domesticated in Mesoamerica over 9,000 years ago, it was gradually transformed through centuries of selective breeding by Indigenous farmers. From a small-eared plant with a handful of hard kernels, maize thus evolved into the high-yielding, single-stalked crop recognised worldwide today.

Today, maize is the world's most widely grown grain. Beyond food, it underpins global economies as animal feed, biofuel, and a raw material for countless industrial products.

However, its dependence on large-scale, high-density monocultures leaves it vulnerable to pests and diseases. These challenges have been intensified by climate change, especially rising temperature and unpredictable weather. Experts have projected the average global maize productivity could fall by up to 24% by the late 21st century under SSP585, a high-emissions scenario consistent with continued fossil-fuel use.

Warning signals

In search of sustainable solutions, researchers from Zhejiang University in China in collaboration with partners from



Researchers noted that farmers could harness the linalool-driven feedback to cut chemical use. Representative image. MARKUS SPISKE/UNSPLASH

The researchers found a complex mechanism driving this enhanced defence. When a maize plant was exposed to linalool, it activated jasmonate signalling in the roots. Jasmonates are stress-response hormones in plants, central to the "fight" mode that activates when plants detect pests, wounding, or certain environmental stresses. This, in turn, upregulated genes that triggered the release of a defensive metabolite called



Now that we know linalool is a signal, we can engineer plants to either be unresponsive to pests that are not a problem or to provide the signal externally, from a farmer, when plants must be prepared for a pest

JAMES SCHNABLE

genome to predict which maize varieties in breeding programs are likely to exhibit greater or lesser responses to linalool."

"It appears the linalool-triggered signalling described in this study is altering the growth/defence trade-off, which all crop and wild plants have to navigate," Dr. Schnable said about the broader implications of the findings.

"Plants can prepare strong defences against insects and pathogens, but these

THE GIST

Maize underpins global economies as animal feed, biofuel, and a raw material for industrial products. However, its dependence on high-density monocultures leaves it vulnerable to pests and diseases. Experts project that maize productivity could decline by 24%

To increase survivability, researchers focused on linalool and a plant-soil feedback mechanism, in which a plant alters the soil. When maize is attacked by insects, those in crowded fields release linalool, triggering defensive responses

Exposure to linalool activates jasmonate, which triggers the release of HDMBOA-Glc into the soil. HDMBOA-Glc enriched beneficial bacteria induce salicylic acid signalling in plants, priming them for threats. The response is broad-spectrum and renders plants less susceptible to pests and pathogens



Consider the following

1. Maize originates in the Andean region of Central America.
2. India is the 5th Largest producer of maize
3. India is 14th Largest exporter of Maize in the world.

How many of the statements is/are above **Incorrect?**

- a) Only one
- b) Only two
- c) All three
- d) None

d

निम्नलिखित पर विचार कीजिए-

1. मक्का (Maize) की उत्पत्ति मध्य अमेरिका के एंडीज़ क्षेत्र में हुई।
2. भारत मक्का का पाँचवाँ सबसे बड़ा उत्पादक है।
3. भारत विश्व में मक्का का 14वाँ सबसे बड़ा निर्यातक है।

ऊपर दिए गए कथनों में से कितने गलत हैं?

- (a) केवल एक
- (b) केवल दो
- (c) सभी तीन
- (d) कोई नहीं

d

Which of following state are the Major producer of Maize?

- a) Karnataka ✓
- b) Telangana
- c) Maharashtra
- d) Andhra Pradesh,

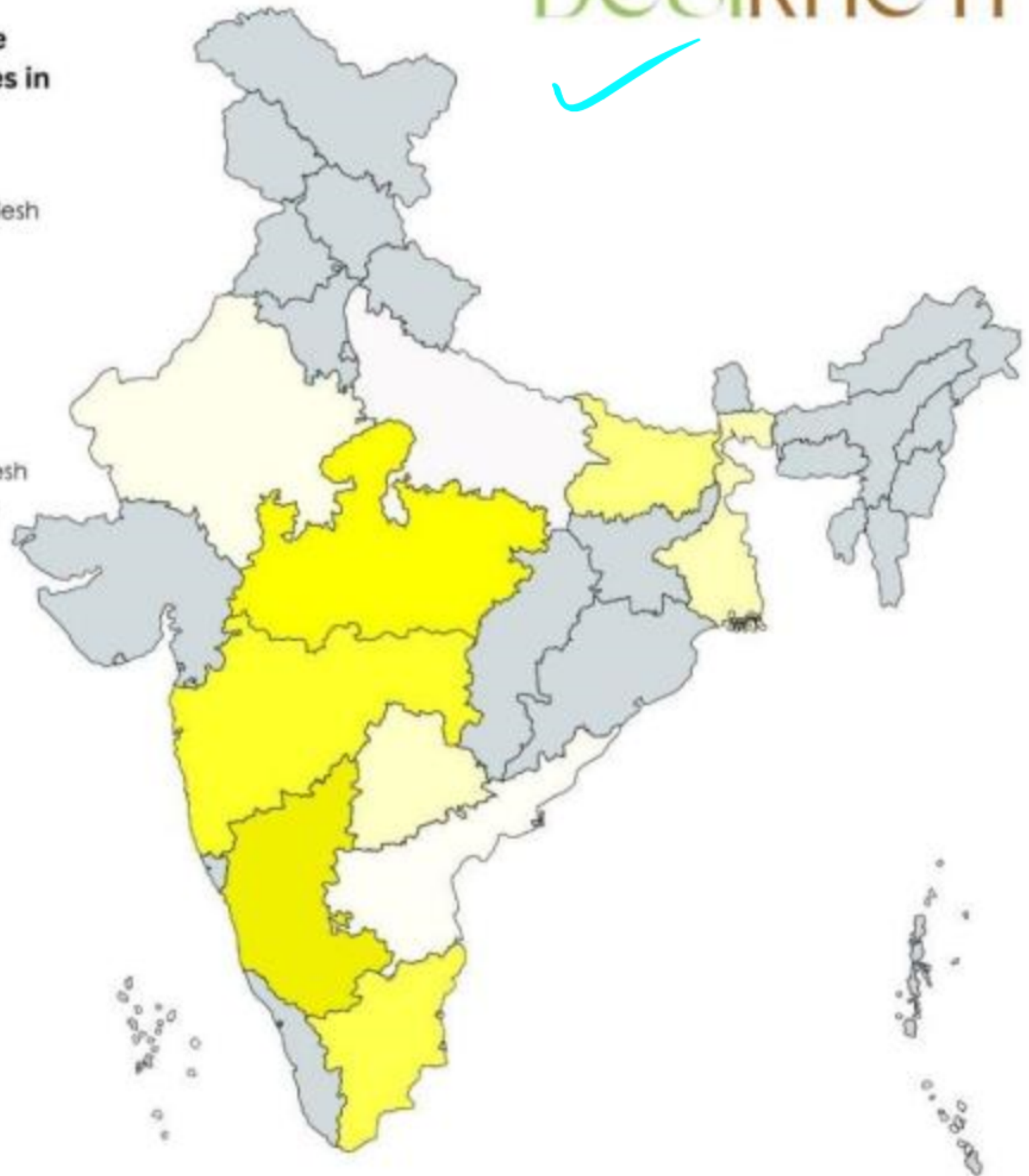
①

Maize Anantapur MS



Top 10 Maize Producing States in India

- Karnataka
- Madhya Pradesh
- Maharashtra
- Tamil Nadu
- Bihar
- West Bengal
- Telangana
- Rajasthan
- Andhra Pradesh
- Uttar Pradesh



India, Pakistan spar at UN over terrorism and Pahalgam attack

UNGA
10

After Pakistan objects to Jaishankar's speech, Indian diplomat exercises right of reply, referring to the neighbouring country as 'Terroristan'

Sriram Lakshman
UNITED NATIONS

India and Pakistan engaged in a back and forth on Saturday evening following India's address to the United Nations General Assembly (UNGA) in the afternoon.

External Affairs Minister S. Jaishankar had, in his UNGA statement, accused Pakistan, without naming the country, of being a hub of terrorism, and emphasised that it was behind the Pahalgam terror attack in April.

India also referred to Pakistan as "Terroristan" in its reply.

Exercising Pakistan's right of reply, a diplomat for the country accused India of maligning Pakistan and said New Delhi had not provided evidence to Islamabad about its involvement in the Pahalgam attack.

India responded to Pakistan's intervention.

"It is telling that a neighbour, who was not named,



chose to nevertheless respond and admit their longstanding practice of cross-border terrorism," Rentala Srinivas, a Second Secretary at India's UN mission, said, exercising India's right of reply on Saturday evening.

"Pakistan's reputation speaks for itself. Its fingerprints are so visible in terrorism across so many geographies. It is a menace not only to its neighbours but to the entire world," the diplomat said,

adding, "No arguments or untruths can ever white-wash the crimes of Terroristan."

Pak. response

Pakistan's representative made a second intervention, criticising India for distorting its name, calling it a "deliberate attempt to malign and insult an entire people".

He accused India of engaging in destabilising neighbouring countries via its intelligence agencies.



General Assembly

United Nations

What an empty plate of food should symbolise

On September 29, the world observes the International Day of Awareness of Food Loss and Waste (IDAFLW), which will draw attention to a silent crisis that undermines both food and climate security. Globally, nearly one-third of all food produced is either lost or wasted.

As one of the world's largest food producers, India is not immune to this challenge, facing substantial post-harvest losses across multiple sectors. A study in 2022 by NABARD Consultancy Services (NABCONS) – a subsidiary of the National Bank for Agriculture and Rural Development (NABARD) – commissioned by the Ministry of Food Processing Industries (MoFPI), showed that such losses remain alarmingly high throughout the agricultural spectrum.

The economic toll is staggering. Post-harvest losses are estimated to cost India nearly ₹1.5 trillion annually – about 3.7% of agricultural GDP. Fruits and vegetables are the most vulnerable, with losses reaching 10%-15%, while even staples such as paddy (4.8%) and wheat (4.2%) experience significant wastage. Each tonne of food lost represents not only foregone nutrition but also wasted water, energy and labour – at a time when ecosystems are under pressure and the climate crisis is deepening. Scaled to India's vast production volumes, these percentages amount to millions of tonnes of food lost every year, with serious consequences for farmer incomes, national food availability, environmental sustainability and climate stability.

Food loss impacts vary across crops, value chains and regions. Identifying where losses occur and quantifying their greenhouse gas (GHG) emissions is vital for targeted interventions. Addressing these inefficiencies is not only crucial for ensuring food security but also central to India's climate commitments.

The climate connection

In response to this challenge, the Government of India has conducted three rounds of nationwide post-harvest surveys across more than 50 crops, generating valuable insights into value-chain losses at a global scale. The inclusion of



Takayuki Hagiwara

is the Food and Agriculture Organization of the United Nations (FAO) Representative in India

International Day of Awareness of Food Loss and Waste will highlight the crisis undermining food and climate security – the tonnes of food being lost

Sustainable Development Goal (SDG) indicator 12.3.1 (Global Food Loss and Waste) in the National Indicator Framework further strengthens accountability by enabling systematic monitoring and alignment with international targets, while expanding the knowledge base for food systems transformation.

Building on this foundation, a recent collaborative study by the Food and Agriculture Organization of the United Nations (FAO) and the National Institute of Food Technology Entrepreneurship and Management (NIFTEM), with support from the Green Climate Fund (GCF), provides the first detailed sector-, state-, and operation-wise estimates of greenhouse gas (GHG) emissions from post-harvest loss and retail waste in India. The study covered 30 crops and livestock products.

The findings are striking. Even modest percentage losses in cereals, particularly paddy, translate into more than 10 million tonnes of carbon dioxide (CO₂)-equivalent emissions annually, owing to the high methane intensity of rice. Losses of livestock products are equally damaging because of their heavy resource footprint. In total, food loss from these 30 commodities generates over 33 million tonnes of CO₂-equivalent emissions each year – a preventable burden that could be reduced through more efficient and resilient food systems.

The study shows that in India, most losses occur early in the supply chain – during handling, processing, and distribution – unlike high-income countries where they are consumer-driven. This highlights India's core challenge of gaps in infrastructure, limited technology use and fragmented supply chains.

Practical solutions

The scale of India's food loss challenge is daunting, but solutions are well within reach. A multi-pronged approach that leverages technology, partnerships, private sector commitments, and a shift to a circular economy can drive real change.

Food loss largely stems from weak infrastructure. Strengthening cold chains, from

pre-cooling to refrigerated transport and modern storage, is vital for perishables such as fruits, vegetables, dairy and meat. Programmes such as Pradhan Mantri Kisan SAMPADA Yojana (PMKSY) are already working to modernise this backbone of food logistics (SAMPADA is Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters which was subsequently renamed PMKSY).

Alongside major infrastructure, affordable technologies are key. Solar cold storage, low-cost cooling chambers, crates for perishables and moisture-proof silos for grains can help smallholders cut spoilage significantly.

Digital tools such as IoT sensors and Artificial Intelligence (AI)-driven forecasting can improve storage, transport and distribution, removing bottlenecks and cutting losses. The FAO Food Loss App (FLAPP), launched in 2023, allows farmers, organisations and governments to track losses across the value chain. It is used in more than 30 countries.

At the retail end, surplus food can be redirected to food banks and community kitchens, while unavoidable waste can be converted into compost, feed, or bioenergy. Scaling these circular solutions requires strong policy support, including subsidies, credit guarantees and low-interest loans.

A shared responsibility

Food loss spans the entire supply chain, demanding shared responsibility. Governments must integrate loss reduction into climate strategies and invest in resilient infrastructure, while businesses adopt circular models and scale innovations. Civil society and academia can drive research and awareness, and consumers can cut waste through mindful choices and support for redistribution.

The observance of IDAFLW is more than symbolic. It is a call to action. The challenge is immense, but so is the reward. Saving food means saving the climate, conserving resources, and protecting livelihoods. An empty plate should symbolise a meal enjoyed, not resources squandered.

29th Sept.

The global theme for World Food Day in 2025 is "Hand in Hand for Better Food and a Better Future" ✓

FOOD WASTE

CLIMATE CHANGE

$\frac{1}{3}$ rd

waste \Rightarrow 1.26 billion

Food

GHG↑

Plastic \Rightarrow 28%

CO₂



HIGHLIGHTS

NABARD Consultancy Services (NABCONS) study (2022):

- Annual post-harvest food loss in India = ₹1.5 trillion (~3.7% of GDP).
- Fruits & vegetables are most vulnerable (10-15% loss).
- Staples like paddy (4.8%) and wheat (4.2%) also face wastage.
- Losses mean not only nutritional deficit, but also waste of water, energy, labour, and land.

FAO

It is estimated that the food that is lost and wasted could feed 1.26 billion hungry people every year.

one-third of the total of the total emissions that have led to today's climate crisis.

CAUSE

- Improper storage
- Over-Preparing
- Large Portions
- Overbuying
- Poor Planning
- Lack of freezing

SCHEMES

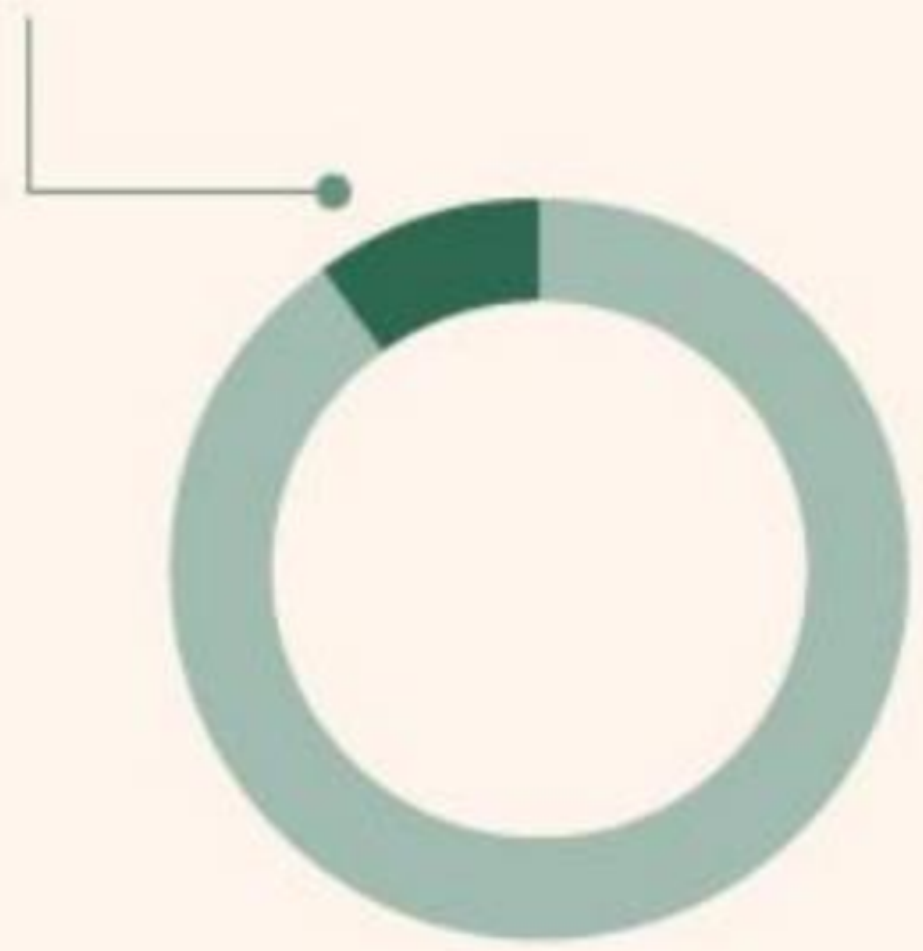
- MEGA FOOD PARKS
- AGRO PROCESSING CLUSTER
- Pradhan Mantri Kisan Sampada Yojana
- Kisan Rail

frug

Food waste causes
between 8%
and 10% of
greenhouse gases



GHG





इतना ही लो
थाली में

व्यर्थ न जाए
नाली में..

**SAVE
FOOD**



" भोजन बचाओ "

CA Batch - Wed.

Anant

Latmitat Regular ch + Preamble
LH-1 same

Daily Targets

Thank

you

