

JUNE

26

CRUX 10

10 News. 10 Sources. One Place



 **The Indian EXPRESS** live **mint** **पॉइंट**

DownToEarth
FORTNIGHTLY ON POLITICS OF DEVELOPMENT,
ENVIRONMENT AND HEALTH

**Science
Reporter**



MK Yadav Sir

Table of Contents

- 1 State of Marginal Farmers of India
- 2 Deputy Speaker of Lok Sabha
- 3 Rain-shadow Effect
- 4 UNESCO Recognition of Kozhikode
- 5 eSakshya (e-evidence) Systems
- 6 Priority Sector Lending (PSL)
- 7 Saipan
- 8 Mediation Council of India (MCI)
- 9 Javelin Anti-tank Guided Missile Sys
- 10 Chang'e-6

More than 50% marginal farmers blame crop loss on extreme weather: Survey

SANJEEB MUKHERJEE
New Delhi, 25 June

More than 50 per cent of marginal farmers reported losing at least half of their standing crops due to extreme weather conditions, according to a recent survey. Extreme weather events include excessive or unseasonal rains, prolonged winter conditions, droughts, and floods.

The findings are part of the second Annual Survey on the 'State of Marginal Farmers of India 2024' by the Development Intelligence Unit (DIU), a collaborative enterprise of Sambodhi Research and Transform Rural India Foundation (TRIF). The survey was commissioned by the Forum of Enterprises for Equitable Development (FEED), an organisation dedicated to advocating for marginal farmers.

A total of 6,615 marginal farmers participated in the study. They were selected from a large pan-India panel of farmers.

The first round of the survey was conducted in 2023, and the respondents were selected based on their landholding size through tele-calling from samples drawn from 21 states.

According to government records, a marginal farmer is someone with up to 1 hectare of agricultural land where they do agricultural activities as a proprietor, sharecropper, or tenant.

Marginal farmers constitute the largest segment of India's agricultural sector but own only about 24 per cent of the crop area. They have an average



FIGHTING THE ODDS

No. of times marginal farmers reported extreme weather events in their villages in last five years ending 2023 (%)

	Once	Twice	Thrice	4 times*
Floods	54.7	31.4	9.6	4.3
Cyclone	51.2	30.8	10.5	7.5
Extreme heatwave	50.7	33.9	11.7	3.7
Rise in day temp above normal	51.5	35.7	10.2	2.6
Prolonged summer/increased no. of hot days	41.7	30.8	16.2	11.3
Prolonged winter	46.2	31.4	13.9	8.5

*and more

Source: Report on 'Impact of Climate Change on Marginal Farmers'

Govt to buy 2 millet varieties from MP at MSP

Union Agriculture Minister Shri Singh Chauhan on Tuesday announced that the Centre would soon start procurement of *Kodo* and *Kutki* (two millet varieties produced in the tribal areas of Madhya Pradesh) at a Minimum Support Price (MSP) of ₹4,290 per quintal. He also announced that the process of purchasing summer moong will be started soon in the state. The announcements were made after his meeting with MP Chief Minister Mohan Yadav.

BS REPORTER

The study also found that compared to the crop loss reported in the last extreme weather event, the cumulative trend over the past five years shows that a higher proportion of farmers are losing at least one-third to half of their crops due to these events. The survey demonstrated that 50 per cent of paddy farmers and over 40 per cent of wheat farmers consistently lost more than half of their crops over the past five years. For all other crops, 45-65 per cent of the

per cent of their crops.

In terms of actual quantum of loss, the survey indicated that assuming the average landholding size of a marginal farmer in India was 0.38 hectares, the proportion of income loss for 50 per cent marginal farmers who grew only paddy in kharif season was around 72 per cent.

Similarly, if the landholding is between 0.40 and 1 hectare, then the proportion of loss of paddy crop stood at 76 per cent. This pattern was also

for wheat crops during the rabi season.

Regarding the accessibility of marginal farmers to various government initiatives to mitigate risks against climate change, the survey found that the Pradhan Mantri Fasal Bima Yojana (PMFBY) played a crucial role in promoting agricultural resilience and economic stability, with around 35 per cent of the surveyed marginal farmers enrolled in this scheme.

Additionally, close to 83 per cent of the marginal farmers surveyed had received government grants or subsidies, primarily through the Kisan Samman Nidhi, directly in their bank accounts.

The survey also found that 69 per cent of marginal farmers confirmed the absence of cold storage facilities within 10 km radius of their village, while 15 per cent had access to a cold storage facility within the same radius but had

STATE OF MARGINAL FARMERS OF INDIA

(Syllabus: GS Paper 3 – Economy)

Context: According to the State of Marginal Farmers of India 2024 survey, over 50% of marginal farmers have reported losing at least half of their standing crops due to severe weather conditions.

Key findings of Report

- **Participant Demographics:** A total of 6,615 marginal farmers participated, selected from a pan-India panel.
- **Survey Methodology:** The survey began in 2023, using tele-calling to select respondents based on landholding size from 21 states.
- **Definition of Marginal Farmer:** Marginal farmers, as per government records, hold up to 1 hectare of agricultural land for farming activities.
- **Impact of Extreme Weather:** Over the past five years, a higher percentage of farmers are experiencing significant crop losses compared to previous extreme weather events.
- **Crop-Specific Losses:** Significant crop loss percentages were reported: 50% of paddy farmers and over 40% of wheat farmers consistently lost more than half of their crops.
- **Government Initiatives:**
 - **Role of PMFBY:** The Pradhan Mantri Fasal Bima Yojana (PMFBY) supported agricultural resilience, with approximately 35% of surveyed marginal farmers enrolled.
 - **Role of PMKSNY:** About 83% of surveyed farmers received government grants or subsidies, primarily through the Kisan Samman Nidhi.
- **Cold Storage Accessibility:** 69% of farmers lacked cold storage facilities within 10 km, while 15% had access but never used them.
 - 27% of households accessed bank loans in the past, according to surveyed farmers.
- **Recommendations:** The study proposed strategies like reservoir buffering and groundwater recharge through check dams and watersheds to enhance agricultural water resilience.

State of Marginal Farmers of India 2024

- **About:** This report is focused on rapid understanding of the state of marginal farmers in India.
- **Released by:** Development Intelligence Unit (DIU), a collaborative enterprise of Sambodhi Research and Transform Rural India Foundation (TRIF).
- **Commissioned by:** Forum of Enterprises for Equitable Development (FEED), an organization dedicated to advocating for marginal farmers.

Post of the Deputy Speaker

This constitutional post was vacant from 2019 to 2024. Opposition wants it now — election is scheduled to be held after the Speaker is elected today. How often has an Opposition leader been Deputy Speaker?

LALMANI VERMA
NEW DELHI, JUNE 23

WITH THE Opposition's increased strength in Lok Sabha, its members are hoping to get the post of Deputy Speaker. There was no Deputy Speaker for the 17th Lok Sabha (2019-24). M Thambis Durai of the ADMK, BJP ally at the time, was Deputy Speaker of the 16th Lok Sabha (2014-19).

Congress MP Rahul Gandhi said on Tuesday that the Opposition was willing to support the NDA's candidate for Speaker provided the government followed parliamentary convention and gave the Deputy Speaker's post to the Opposition. The Opposition had the post of Deputy Speaker continuously from 1980 through 2014.

The government has sought support from the Opposition for Om Birla, its candidate for Speaker, but has been unwilling to extend any assurances on the post of Deputy Speaker. The INDIA bloc has, therefore, forced a contest by nominating K Suresh of the Congress as its candidate for Speaker. It is unclear, however, whether the Trinamool Congress will support Suresh.

What does the Constitution say about the Deputy Speaker?

According to Article 95(1), the Deputy Speaker performs the duties of the Speaker if the post is vacant. The Deputy Speaker has the same general powers as the Speaker when presiding over the House, and presides over the House in the absence of the Speaker.

Both the Speaker and Deputy Speaker may be appointed "as soon as may be". Article 93 states that "The House of the People shall, as soon as may be, choose two members of the House to be respectively Speaker and Deputy Speaker".

Article 178 contains the corresponding provision for the Speaker and Deputy Speakers in the state Assemblies.

Is it mandatory under the Constitution to have a Deputy Speaker?

The Constitution does not specify a time frame for making the appointments. It is this gap in the provision that sometimes allows governments to delay or avoid appointing a Deputy Speaker.

However, constitutional experts have pointed out that both Article 93 and Article 178 use the words "shall" and "as soon as may be" — indicating that not only is the election of the Speaker and Deputy Speaker mandatory, it must be held at the earliest.



DEPUTY SPEAKERS SINCE THE FIRST LOK SABHA

Deputy Speaker	Term	Party	Status in L.S.
M Ananthasayanam Ayyangar	1952-1956	Congress	Presiding
Hukam Singh	1956-1957	Congress	Presiding
Hukam Singh	1957-1962	Congress	Presiding
S. Hanumanth Rao	1962-1967	Congress	Presiding
R K Phadnis	1967-1969	Congress	Presiding
G G Swell	1969-1970	APMC	Opposition
G G Swell	1971-1977	APMC	Opposition
Guday Murari	1977-1978	DMK	Opposition
G Lakshmanan	1980-1984	DMK	Opposition
M Thambis Durai	1984-1989	AIADMK	Opposition
Shivaji V Patil	1990-1991	BJP	Opposition
S. Mahalingam	1991-1995	BJP	Opposition
Suresh Bhan	1995-1997	BJP	Opposition
P M Suresh	1998-2004	BJP	Opposition
P M Suresh	2004-2009	BJP	Opposition
Chandrabhai Singh	2009-2014	BJP	Opposition
Karaya Munda	2014-2019	BJP	Opposition
M Thambis Durai	2019-2024	BJP	Opposition

*APMC: All Party Hill Leaders Conference
*Source: Lok Sabha and Election Commission of India

What are the rules for the election of the Deputy Speaker?

Generally speaking, the practice in both Lok Sabha and state Assemblies has been to elect the Speaker in the first session of the new House — usually on the third day, after the oath-taking and affirmations have taken place over the first few days.

The election of the Deputy Speaker usually takes place in the second session, even though there is no bar on having this election in the first session of the new Lok Sabha or Assembly. But the election of Deputy Speaker is generally not delayed beyond the second session unless there are some genuine and unavoidable constraints.

In Lok Sabha, the election of Deputy Speaker is governed by Rule 8 of the Rules of Procedure and Conduct of Business. Accord-

ing to Rule 8, the election "shall be held on such date as the Speaker may fix". The Deputy Speaker is elected once a motion proposing his or her name is carried. Once elected, the Deputy Speaker usually continues in office until the dissolution of the House.

Under Article 94 and Article 179 for state Assemblies, the Speaker or Deputy Speaker "shall vacate his office if he ceases to be a member of the House of the People". They may also resign (to each other), or "may be removed from office by a resolution of the House of the People passed by a majority of all the then members of the House".

Has a Deputy Speaker ever had to fill in for an absent Speaker?

After the first Speaker, G V Manu Lakshmi, died in 1956 before his term ended, Deputy



(Left) BJP's Munda was Dy Speaker during UPA II. P M Suresh held post when Vajpayee was PM.

Speaker M Ananthasayanam Ayyangar filled in for the missing tenure of Lok Sabha Speaker in 1956 to 1957. Ayyangar was later elected as Speaker of the second Lok Sabha. Again, after G M C Balagangadhar Tilak, Deputy Speaker in the 13th Lok Sabha, passed away in 2002, Deputy Speaker and Congress MP P M Suresh became acting Speaker for two months until Manohar Jiri of the Shiv Sena was elected Speaker.

How often has the Opposition had the post of Deputy Speaker of Lok Sabha?

During the Congress-led UPA-II (2004-09) and UPA-II (2009-14) governments, the Deputy Speaker's post went to the Opposition — first with Charanjit Singh Anand of the Shiromani Akali Dal, and then with Kartya Munda of the BJP.

When Atal Bihari Vajpayee was Prime Minister from 1998 to 2004, Suresh held the post. Suresh was also Deputy Speaker during the BJP government from 1996 to 1998.

There was no Deputy Speaker during the United Front government led by I K Gujral from 1997 to 1998. Between 1996 and 1997, the BJP's Saral Bhan held the post, whereas H C Dene Gowda was Prime Minister.

In the 10th Lok Sabha (1991-96), when I V Narasimha Rao was PM, S Mahalingam of the BJP was Deputy Speaker. When Chandra Shekhar was PM (1990-91), Shivaji Patil (Congress) was Deputy Speaker.

Under Article 94 and Article 179 for state Assemblies, the Speaker or Deputy Speaker "shall vacate his office if he ceases to be a member of the House of the People". They may also resign (to each other), or "may be removed from office by a resolution of the House of the People passed by a majority of all the then members of the House".

Has a Deputy Speaker ever had to fill in for an absent Speaker?

After the first Speaker, G V Manu Lakshmi, died in 1956 before his term ended, Deputy

DEPUTY SPEAKER OF LOKSABHA

(Syllabus GS Paper 2 – Polity)

Context: With the Opposition's increased strength in Lok Sabha, its members are hoping to get the post of Deputy Speaker.

Deputy Speaker

- **About:** It serves as the Second-in-Command Presiding Officer of the Lower House of Parliament of India – the Lok Sabha.
- **Article 95(1):** The Deputy Speaker performs the duties of the Speaker if the post is vacant.
- **General Powers:** The Dy. Speaker has the same general powers as the Speaker when presiding over the House.
- **Appointment Timeline:** The Constitution does not specify a time frame for making the appointments. This gap in the provision allows governments to delay or avoid appointing a Deputy Speaker.
- **Election:** Article 93 states that "The House of the People shall, as soon as may be, choose two members of the House to be respectively Speaker and Deputy Speaker".
- **State Assemblies Provision:** Article 178 contains the corresponding provision for the Speakers and Deputy Speakers in the state Assemblies.
- **Term of Office:** Like the Speaker, the Deputy Speaker remains in the office usually during the life of the Lok Sabha.
- **Removal Process:** Under Article 94 (and Article 179 for state Assemblies), the Speaker or Deputy Speaker must vacate office if they cease to be a member of the House. They may also resign to each other or be removed by a resolution of the House passed by a majority.

Analysing Maharashtra's water crisis

Why do different regions of Maharashtra experience varied levels of water stress? Why is sugarcane production not suited for regions with less rainfall? What is meant by the rain-shadow effect? How can supply-side solutions help the situation?

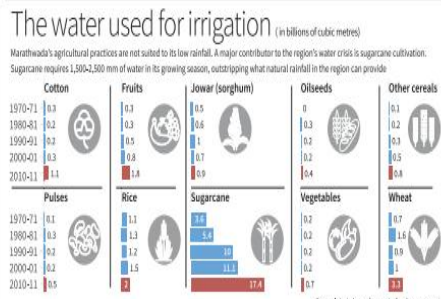
EXPLAINER

Vivek Goyal
Yasna Shivdasani

The story so far: After the deficient monsoon last year, the Maharashtra government declared many parts of the State to be drought-hit. The impact of the deficiency manifested across the region this summer as wells ran dry and officials brought tankers to provide drinking water and water for irrigation. This situation is in sharp contrast with the State's coastal areas, where rainfall has often been in excess, leading to severe flooding. Maharashtra's predicament is shaped by its location, topography, soil type, agricultural practices, and crop choices.

What is the rain shadow effect? Marathwada lies in the rain-shadow region of the Western Ghats. When moist winds from the Arabian Sea encounter these mountains, they rise and cool, causing heavy rainfall (2,000-4,000 mm) on the western side. But by the time these winds cross the Ghats and descend into Western Maharashtra and Marathwada, they lose most of their moisture, leaving Marathwada much drier (600-800 mm). A 2016 study by IIT Gandhinagar researchers said climate change is worsening the situation in central Maharashtra. The region has experienced an increasing trend in drought severity and frequency of late. As a result, Marathwada and North Karnataka have emerged as the second driest regions in India after Rajasthan.

How does this affect crops? Marathwada's agricultural practices are not well suited to its low rainfall. A major contributor to the region's water crisis is sugarcane cultivation. Sugarcane requires 1,500-2,500 mm of water in its growing season. While pulses and millets require four or five irrigations across their crop



THE GIST

The Maharashtra government has declared many parts of the State to be drought-hit. This situation is in sharp contrast with the State's coastal areas, where rainfall has often been in excess.

Long-standing government support for sugarcane pricing and sales has expanded water-intensive sugarcane irrigation, restricting the irrigation of more nutritious crops.

In a low-rainfall region, managing water demand includes practising water-efficient irrigation, cultivating drought-resistant crops, and diversifying livelihoods. We must also control sugarcane production, if not reduce it.

life, sugarcane needs to be irrigated almost every day. The area under sugarcane increased steadily between the 1950s and the 2000s, plateauing in the last decade. Today, the crop occupies 4% of the total cropped area in the region and consumes 61% of the irrigation water. As a result, the average river outflow in the upper Bhima basin has almost halved. Long-standing government support for sugarcane pricing and sales has expanded sugarcane irrigation, restricting the irrigation of more nutritious crops. Since December 2012, the government has been promoting sugarcane-joker-based ethanol production, which may be unwise for this water-starved area. 82% of the sugar grown in Maharashtra comes from low-rainfall areas. The Maharashtra Water and Irrigation Commission in 1999 recommended that sugarcane should be banned in areas that receive less than 1,000 mm of rainfall a year; yet production has increased.

How do soil, topography matter? Marathwada has predominantly clayey black soil, locally called "regur". It is

fertile and retains moisture well. However, it has a low infiltration rate: when it rains, the water is either logged or runs off, but doesn't percolate down to recharge groundwater. To capture this high run-off, Maharashtra has been building many dams – such that it is today the State with the most large dams in the country (1,645). The soil also has low hydraulic conductivity and holds on to the water for a long time after rains. WELL Labs' work in the region has found that farmers face crop loss as a result. Down within Marathwada, water scarcity is not uniform. The area has parallel tributaries of the Godavari and the Krishna flowing southeast. Each tributary flows in the valley and is separated by a gently sloping hill. The valley has perennial groundwater while the uplands have seasonal groundwater. This is because groundwater slowly moves underground from upland areas to the valleys. The wells in upland areas dry up a few months after the monsoons, and is where the water scarcity is most acute. They are at a natural disadvantage and deserve special support.

Can Marathwada be water resilient? Supply-side solutions are about making the most of available resources. They include classical watershed management work (such as building water conserving structures like contour trenches, earthen bunds, poly plugs, etc.). Second, rainwater that runs off agricultural fields carries the very soil that doesn't allow the water to percolate. So many of these structures accumulate silt. Funds under the Mahatma Gandhi National Rural Employment Guarantee Scheme could be used to design silt trapping mechanisms and organise training programmes for farmers on periodic desilting. In a low-rainfall region, managing water demand includes practising water-efficient irrigation, cultivating drought-resistant crops, and diversifying livelihoods. Marathwada must also shift to other high-value, low-water using crops, while sugarcane production must move to Uttar Pradesh, Bihar, and West Bengal.

Vivek Goyal is managing partner (technical consulting) at WELL Labs. Yasna Shivdasani is the executive director of WELL Labs.

Rain-Shadow Effect

- **Geographical Context:** Marathwada lies in the rain-shadow region of the Western Ghats.
- **Meteorological Process:** Moist winds from the Arabian Sea rise and cool when they encounter the Western Ghats, leading to heavy rainfall (2,000-4,000 mm) on the windward side.
- **Impact on Marathwada:** After crossing the Western Ghats, these winds descend into Western Maharashtra and Marathwada, losing moisture and resulting in much lower rainfall (600-800 mm) in Marathwada.
- **Impact of Climate Change on Water Availability**
 - **Research Findings:** A 2016 study by IIT Gandhinagar highlights worsening drought severity and frequency in central Maharashtra.
 - **Regional Context:** Marathwada and North Karnataka are now among the driest regions in India after the northwest, due to climate change impacts.
- **Effect of Water Demand for Crops**
 - **Agricultural Practices:** Traditional crops like cotton, pulses, and millets are better suited to Marathwada's low-rainfall environment.
 - **Challenges with Sugarcane:** Sugarcane cultivation, demanding 1,500-2,500 mm of water, exacerbates the water crisis in Marathwada.
 - **Water Consumption:** Despite occupying only 4% of the cropped area, sugarcane consumes 61% of irrigation water, reducing river outflow in the upper Bhima basin.

Context: Following last year's deficient monsoon, the Maharashtra government has declared several parts of the state drought-hit earlier this year, with significant areas in Marathwada receiving less than 75% of their average rainfall.

Kozhikode is India's first UNESCO 'City of Literature': What does it mean? Why Kozhikode?

Context: Recently, Kozhikode in north Kerala, known for its rich cultural heritage, was officially declared as India's first UNESCO 'City of Literature'.

UNESCO Recognition of Kozhikode

- **About:** Kozhikode secured a place in the 'Literature' category of UNESCO Creative Cities Network in October 2023.
 - This recognition highlights the city's cultural and literary contributions on a global platform.
 - Gwalior and Kozhikode from India are among the 55 new cities which have joined the UCCN.
- **Historical and Cultural Significance:** Kozhikode, historically known as Calicut, has a rich literary tradition dating back centuries.
 - It has been a pivotal hub connecting various civilizations, including Persians, Arabs, Chinese, and Europeans.
- **Literary Infrastructure:** Kozhikode boasts over 500 libraries and 70 publishing houses.
 - These establishments contribute significantly to the city's literary culture by publishing hundreds of books annually.
- **Honours:** The city actively promotes its writers through prestigious awards such as the P.A. Lalitha Award, S.K. Pottekkatt Literature Award, and Mathrubhumi Literary Award.
- **Celebrating 'City of Literature' Day:** Starting next year, June 23 will be celebrated as 'City of Literature' Day in Kozhikode.
 - Special awards will be announced across six categories to honor outstanding literary achievements in the city.

Other Indian Creative Cities:

- Mumbai, Maharashtra - Film
- Chennai, Tamil Nadu - Music
- Hyderabad, Telangana - Gastronomy
- Varanasi, Uttar Pradesh - Music
- Jaipur, Rajasthan - Crafts and Folk Art
- Srinagar, Jammu and Kashmir - Crafts and Folk Art.

UNESCO CREATIVE CITIES NETWORK

- **About:** It is to promote cooperation among cities which recognized creativity as a major factor in their urban development.
- **Launch:** Year 2004
- **Eligibility:** UNESCO's member states and associate members
- **Update Time:** Once every 2 years

Ahead of roll-out of the new criminal laws, Union Home Ministry tests eSakshya App

Vijaita Singh
NEW DELHI

Days ahead of the implementation of the three criminal laws, the Union Ministry of Home Affairs (MHA) is testing eSakshya (e-evidence), a mobile-phone application to help police record scene of crime, search and seizure in a criminal case and upload the file on the cloud-based platform. The police official will have to upload a selfie after the procedure is complete. Each recording could be maximum four minutes long and several such files could be uploaded for each First Information Report (FIR), according to the details shared with State police departments.

The Bharatiya Nyaya Sanhita (BNS) that replaces the Indian Penal Code, 1860; the Bharatiya Sakshya (BS) which replaces the Indian Evidence Act, 1872; and the Bharatiya Nagarik Suraksha Sanhita (BNSS) that replaces the Code of Criminal Procedure, 1898

The mobile application will be available to all police stations to download and register

are all set to come into force from July 1.

Conviction rate

The BNSS mandates compulsory audiovisual recording of search and seizure in each criminal case and mandatory forensic examination in all cases where an offence attracts punishment of seven years or more. Procuring hardware and cloud space is an expensive affair and many States do not have enough resources, said an official, adding that it will also help uniformity in investigations, thereby increasing the conviction rate.

The mobile application developed by the National Informatics Centre (NIC) will be available to all police stations which register and download the app.

A senior government of-

ficial said the app was under final stages of trial and the police were given two options. "If there is connectivity issue, the police can record the crime scene on their own device such as personal mobile phones and generate a hash value, come back to the police station and upload the file. The other method is they can directly upload through eSakshya for which good Internet speed is required," explained the official.

Another police officer cautioned that the sanctity of the chain of evidence submission will have to be adhered to, else, it could benefit an accused.

"Many accused escape the clutches of law due to procedural infirmities. The new laws make everything digital; if there is slightest of issue in procuring digital evidence, it could lead to criminals walking free. Forensic evidence is not always challenged on the grounds of quality but on the chain of command," said the officer.

Context: Days before the implementation of three new criminal laws, the Union Ministry of Home Affairs (MHA) is currently testing eSakshya (e-evidence) systems.

eSakshya (e-evidence) Systems

- **About:** It is a mobile-based application to help police record scene of crime, search and seizure in a criminal case and upload the file on the cloud-based platform.
- **Procedure:** Upon completing the procedures, police officials are required to upload a selfie through the application.
- **File Specifications:** Each recording made through eSakshya can be a maximum of four minutes long. Multiple files can be uploaded for each First Information Report (FIR).
- **Developed by:** National Informatics Centre (NIC), eSakshya will be accessible to all police stations upon registration and download of the application.
- **Alternative Uploading Method:** Alternatively, police can upload files directly through eSakshya, requiring good internet speed for efficient uploading.

Note

- The Bharatiya Nyaya Sanhita (BNS) that replaces the Indian Penal Code, 1860; the Bharatiya Sakshya (BS) which replaces the Indian Evidence Act, 1872; and the Bharatiya Nagarik Suraksha Sanhita (BNSS) that replaces the Code of Criminal Procedure, 1898.

RBI revises priority sector lending norms

Context: The RBI recently revised its priority sector guidelines to encourage banks to provide small loans in economically disadvantaged districts with low average loan sizes.

Priority Sector Lending (PSL)

- **About:** PSL mandates banks to allocate a minimum percentage of their loans to sectors crucial for development or facing difficulties in loan access.
- **Regulatory Updates:** RBI periodically revises eligible sectors and loan limits under PSL regulations.
- **Categories of Priority Sectors:** Agriculture, Micro, Small, and Medium Enterprises, Export Credit, Education, Housing, Social Infrastructure, Renewable Energy and Others.
- **Targets under PSL:** Domestic SCBs and foreign banks with ≥ 20 branches: 40% of ANBC or CEOBE.
 - Foreign banks with < 20 branches: 40% of ANBC or CEOBE, with specific sub-targets.
 - Regional Rural Banks and Small Finance Banks: 75% of ANBC or CEOBE.
 - Primary (Urban) Co-operative Banks: Increasing to 75% from FY2025-26.
- **Methods to Meet Targets:** Banks fulfill PSL obligations through loans, credit facilities, financial products, and investments in eligible instruments.
- **Priority Sector Lending Certificates:** PSLCs are certificates issued against priority sector loans, enabling banks to meet PSL targets by purchasing these instruments.
- **Function:** Banks use PSLCs to cover deficits in priority sector lending, while also incentivizing increased lending to these sectors.

Revised RBI Guidelines:

- Loans in districts with low credit availability ($< \text{Rs } 9,000$ per person) receive 125% weight.
- High availability districts ($> \text{Rs } 42,000$ per person) receive 90% weight.
- Other districts maintain the current weightage, except outliers.

WHY IS JULIAN ASSANGE FLYING TO THE PACIFIC ISLAND OF SAIPAN?

BETTER KNOWN for its sandy beaches and World War II wrecks, the tropical Pacific island of Saipan will soon host the final act of Julian Assange's 14-year legal odyssey. Assange is en route to a courtroom on the island, where he is expected to plead guilty on Wednesday to a single criminal charge in a plea deal that will see him walk free and return home to Australia.

Where is Saipan?

Saipan is the capital of the Northern Mariana Islands (NMI), a US commonwealth in the western Pacific, which begins roughly 70 km north of Guam and stretches across 14 islands.

Like territories such as Guam or Puerto Rico, the Northern Mariana Islands are part of the US without the full status of a state.

The roughly 51,000 residents are US citizens but cannot vote in presidential elections. Crucially, some, like Saipan, also host US district courts.

The US took control of Saipan during World War II. After decades under US control, residents in 1975 voted to join the US as a territory. The territory has a permanent delegate in the US House of Representatives.

Tourism is the mainstay of Saipan's economy – the island and its surroundings are dotted with World War II memorials and wrecks popular with divers. Saipan, which is home to most of the Northern Mariana's residents, is popular with Korean and Chinese tourists. It is the only part of the US that Chinese citizens can enter without a visa.

That unique status has opponents in Congress, who worry about the risk of espionage by Chinese nationals.

Why is Assange heading there?

US prosecutors said Assange wanted to go to a court close to his home in Australia, and not in the continental United States.

Saipan has the advantage of being relatively close to Assange's home – it is roughly 3,000 km away. Hawaii is more than twice as far away.

"He has to front up to charges that



WikiLeaks founder Julian Assange on Tuesday. Reuters

have been brought under US law," said Emily Crawford, a professor at the University of Sydney's law school.

"It had to be US territory but it had to be the US territory closest to Australia that wasn't a US state like Hawaii."

What happens next for Assange?

US prosecutors said Assange has agreed to plead guilty to a single criminal count of conspiring to obtain and disclose classified US national defence documents in exchange for a sentence of 62 months already served.

If the judge approves his plea, Assange is expected to return to Australia after the hearing, US prosecutors said.

REUTERS

Context: Julian Assange is heading to a courtroom in Saipan to plead guilty to a single criminal charge as part of a plea deal. This agreement will allow him to walk free and return home to Australia after a 14-year legal battle.

Saipan

- **About:** It is the capital of the Northern Mariana Islands, a U.S. commonwealth in the western Pacific which begins roughly 70 kilometers north of Guam and stretches across 14 islands.
- **U.S. Commonwealth Status:** Like territories such as Guam or Puerto Rico, the Northern Mariana Islands are part of the U.S. without the full status of a state.
- **Citizenship and Voting Rights:** The roughly 51,000 residents are U.S. Citizens but cannot vote in presidential elections. Crucially, some, like Saipan, also host U.S. district courts.
- **Historical Background:** The U.S. took control of Saipan during World War II. After decades under U.S. control, residents in 1975 voted to join the U.S. as a territory. The territory has a permanent delegate in the U.S. House of Representatives.

Northern Mariana Islands

- **About:** It is a self-governing commonwealth in association with the United States.
- **Composition:** It is composed of 14 islands and islets in the western Pacific Ocean.
- **Principal Islands:** These are Saipan, Tinian, and Rota.

Govt to form mediation council by year-end to boost businesses

The council will issue rules for dispute resolution to improve ease of doing business

Manas Pimpalkhare
manas.pimpalkhare@hindustantimes.com
NEW DELHI

The government is likely to establish the Mediation Council of India (MCI) by the end of this year to improve out-of-court dispute resolution, and enhance ease of doing business, according to two people aware of the matter.

Mediation involves parties appointing a mediator to help them reach a consensus. Unlike other out-of-court dispute resolution mechanisms, mediation does not result in a binding award or judgment. Instead, a mediator helps parties reach a mutually agreeable settlement. "We are trying our best to finish the process for formation of the MCI by December," one of the people told *Mint*.

Council members may be directly appointed by the Centre, or on the advice of a special search-cum-selection committee, he added. "There is a

definite push for mediation right now," the second person said.

The MCI will be formed under the aegis of the Mediation Act, which was passed by the government last year and mandates mediation proceedings to be completed within 180 days, according to a Rajya Sabha disclosure.

The council will issue the guidelines for the mediation process. It will also oversee training, assessment, and certification of the mediators by recognized institutions, and will lay down standards for the conduct of mediators.

The council will have three members, including the chairperson, who are experts in mediation, as per the Act. It will also have a chief executive officer and a representative of a recognised

commerce and industry body, appointed by the central government.

The establishment of the council will be the first step towards making mediation a preferred method for dispute resolution, especially for corporates, experts said. "Formation of the MCI is a

It will oversee training, assessment and certification of mediators by recognized institutes, and lay down standards for their conduct

milestone, although a step in a long journey that lies ahead," said Namita Shah, co-founder of Presolv360, a dispute resolution platform offering e-mediation services. "We're

seeing a renewed focus on mediation, especially online mediation. The formation of MCI will add to this momentum. ODR institutions are key to growth of online mediation. With MCI, ODRs will be growing faster and more strategically to make India a hub for online mediation," said Shah.

Context: The government is likely to establish the Mediation Council of India (MCI) by the end of this year to improve out of court dispute resolution, and enhance ease of doing business.

Mediation Council of India (MCI)

- **Council Appointment:** Council members may be directly appointed by the Centre or through a special search-cum-selection committee.
- **Composition of the Council:** The council will consist of three members, including a chairperson, experts in mediation, alongside a chief executive officer and a representative from a recognized commerce and industry body.
- **Formation:** The MCI is established under the Mediation Act, recently passed by the government, mandating completion of mediation within 180 days.
 - The Mediation Act, 2023 aims to foster a link between the mediation and the arbitration of commercial disputes, thus reducing the burden on Indian courts
- **Guidelines Issuance:** The council will issue guidelines for the mediation process, ensuring consistency and clarity.
- **Training and Certification:** The council will oversee training, assessment, and certification of mediators by recognized institutions, setting standards for mediator conduct.
- **Preferred Dispute Resolution:** Establishing the council marks a significant step towards promoting mediation, particularly for corporate disputes.

WHAT IS MEDIATION?

Mediation is a voluntary process in which parties try to settle disputes with the assistance of an independent third person known as the mediator. According to the act, mediation includes the process of dispute resolution whereby parties attempt to reach an amicable settlement of their dispute with the assistance of a third person referred to as mediator.

India, US discussing co-production of Javelin anti-tank missiles

Context: India and the US held discussions on the co-production of American javelin missiles in India to meet the requirements of the Indian military.

Javelin Anti-tank Guided Missile (ATGM) System

- **About:** This system developed jointly by Raytheon and Lockheed Martin, prominent American defense contractors.
- **Target Capability:** Designed primarily to defeat heavily armored vehicles like main battle tanks, as well as lighter-skinned military vehicles.
 - Also effective against fortifications, bunkers, and helicopters due to its versatile targeting capabilities.
- **Service:** Entered service with the U.S. military in 1996, marking its deployment and operational use in combat scenarios.

Features of the Javelin ATGM System:

- **Physical Dimensions:** Measures approximately 1.2 meters in length and 127 mm in diameter.
 - Weighs 22.1 kg, making it portable yet powerful for its intended purposes.
- **Warhead Composition:** Carries a single 8.4 kg tandem-charge, high-explosive antitank (HEAT) warhead, optimized for armor penetration.
- **Maximum Range:** 2,500 meters, ensuring effective engagement capabilities over significant distances.
- **Guidance System:** Utilizes "fire-and-forget" technology, employing automatic infrared guidance.
 - Capable of autonomously guiding itself to the target without requiring external commands or additional target designation.
- **Combat Applications:** Can be employed in direct attack mode for precise destruction of ground targets.
- When fired upwards, it can intercept and neutralize low-flying aircraft such as helicopters.
- **Operational Efficiency:** Reload and reacquire time is minimal, approximately one minute, facilitating rapid reengagement during combat operations.

Why the success of China's sample return lunar mission matters

ALIND CHAUHAN
NEW DELHI, JUNE 25

CHINA'S CHANG'E-6 on Tuesday became the first spacecraft to bring back samples from the far side of the Moon – the part that the Earth never gets to see.

The lander descended on the Moon's surface on June 1 and spent two days collecting rocks and soil from one of the oldest and largest of lunar craters – the 2,500 km-wide South Pole-Aitken (SPA) basin – using a robotic arm and drill.

The lander then launched an ascent module that transferred the samples to the Chang'e-6 orbiter that was orbiting the Moon. On June 21, the orbiter released a service module that brought back the samples to Earth.

Is this the first time a spacecraft has brought lunar samples to Earth?

No. Back in July 1969, the US Apollo 11

mission brought 22 kg of lunar surface material, including 50 rocks, to Earth. In September 1970, the Soviet Luna 16 mission – the first robotic sample return mission – too, brought pieces of the Moon to Earth. In recent years, Chang'e-5, the predecessor of Chang'e-6, brought back 2 kg of lunar soil in December 2020.

All these samples, however, came from the near side of the Moon. Difficult terrain, giant craters, and the difficulty in communicating with ground control made it technically challenging to land a spacecraft on the side that never faces the Earth. The Moon is tidally locked with Earth; thus we see only one side of our nearest space neighbour.

Chang'e-6 overcame these difficulties in 2019, putting the Yutu-2 rover on the far lunar surface. Now, Chang'e-6 has not only landed on the far side, but also returned with samples from there. "This is a great achievement by China... Recovering any samples from the Moon is difficult, but doing so from the far side, where communications are particularly difficult, is a step taken by no other agency. A real technological feat," Martin Barstow, a professor of astrophysics and space science at the University of Leicester, told *The Guardian*.

But why are sample return missions significant in the first place?

A sample return mission such as Chang'e-6 aims to collect and return samples from an extraterrestrial location like the Moon or Mars to Earth for analysis. The sample can be rocks or soil – or even some molecules.

In situ robotic explorations – in which landers, orbiters, and rovers carry out experiments in space or on heavenly bodies – can carry only miniature instruments that are not very sophisticated or accurate, and answer only certain types of questions. For instance, they can't determine the origin or age of a rock.

If the samples can be brought to Earth, on

the other hand, scientists can examine them using extremely sensitive laboratory instruments. They can study the "chemical, isotopic, mineralogical, structural, and physical properties of extraterrestrial samples from the macroscopic level down to the atomic scale, frequently all on the very same sample," Lori S Glaze, director of NASA's planetary science division, wrote in January 2020.

Also, returned samples can be preserved for decades, and can be examined by future generations using ever more advanced technology. The samples brought back by the Apollo

missions in the 1960s and 1970s are still being studied by scientists, who are extracting information on the history of the Moon, Earth, and the inner solar system.

India's Chandrayaan-4 mission, which is currently under development by the Indian Space Research Organisation (ISRO), will also be a sample return mission. Chandrayaan-3 landed about 600 km from the South Pole of

the Moon last year.

What can the lunar samples brought by Chang'e-6 reveal?

The lunar far side is geologically different from the near side. It has a thicker crust, more craters, and fewer plains where lava once flowed. But scientists do not know why the two sides are so different – and an examination of the Chang'e-6 samples could throw up some answers.

Samples collected from the SPA basin can also reveal the timeframe for lunar cratering. The collision that created the basin may have excavated enough material from the Moon's lower crust and upper mantle, which could give insights into the Moon's history and, possibly, its origins.

The samples can also suggest ways to use lunar resources for future lunar and space exploration. For instance, lunar soil could be used to produce bricks to build future lunar research bases through 3D printing. Scientists are also interested in the potential presence of

ice at the Moon's poles. Ice can be harvested for water, oxygen and hydrogen – and the latter two can be used in a rocket propellant.

Why is there a new 'race' to the Moon?

In 2023, India, China, Japan, the US, and Russia launched lunar missions. By 2030, more than 100 Moon missions by both governments and private companies are expected, according to the European Space Agency.

Countries such as China and the US also want to put astronauts on the Moon by 2030. The success of Chang'e-6 is seen as an important step towards achieving this goal by China.

However, unlike the US-USSR space race of the 20th century, which aimed for technological and intellectual superiority, today's lunar missions are about exploring ways to stay for long on the Moon and to use its resources in situ. It is also expected that the Moon can be used in the near future as a launchpad to travel deeper into space and to other extraterrestrial bodies.

History of Lunar Sample Return Missions

- **Apollo 11 Mission:** In 1969, Apollo 11 brought 22 kg of lunar surface material, including 50 rocks, back to Earth.
- **Soviet Luna 16 Mission:** Luna 16 marked the first robotic sample return mission, bringing pieces of the Moon to Earth.
- **Chang'e-5 Mission:** Chang'e-5 successfully returned 2 kg of lunar soil, demonstrating China's capability in lunar sample return.

Context: China's Chang'e-6 on Tuesday became the first spacecraft to bring back samples from the far side of the Moon, the part that the Earth never gets to see.

Chang'e-6

- **About:** It is a lunar lander and sample return mission that landed on the far side of the Moon within the South Pole Aitken Basin.
- **Launched by:** China's National Space Administration spearheads the Chang'e 6 mission.
- **Carried by:** The mission is propelled into space by the Long March-5 Y8 rocket from the Wenchang Space Launch Site in Hainan.
- **Components:** The spacecraft comprises four modules, a service module, lander, ascent vehicle, and reentry capsule.
- **Objective:** To collect about 2 kg of material from the far side of the Moon within about two days of landing and bring it back to Earth.
- **Significance:** This mission marks the first attempt in human lunar exploration history to collect and return samples from the moon's surface.
- **Chang'e 4:** Landed in the Von Karman crater in the South Pole-Aitken Basin in 2019, making history with the Yutu-2 rover's successful soft landing on the moon's far side.
- **Chang'e 5:** Its descender and lander touched down on Mons Rumker, a vast volcanic plain on the moon.

FREE



Download PDF



Login to theiashub.com



**Aaj Ka
Quality Enrichment**
(Toppers' Favourite PDF)



News-CRUX-10
(10 News. 10 Sources. One Place)



Monthly Editorials
(The Hindu & Indian Express)



Daily Quiz (Prelims)



**Government Schemes &
Ministry Wise Year End
Review**



Free Enrichment PDFs
(Tailor Made Crisp Study Material)

FREE

**India's Best Answer Writing Sessions
with**



Ritika Jindal



Simi Karan



Gaurav Budania



Mridul Shivhare

IAS OFFICERS

Log On To Our Unique
Free Answer Writing Sessions with Toppers (FAST) Portal
& Start Practicing!



**SCAN
HERE**



9560082909



t.me/theiashub



www.theiashub.com



/mkyadav



www.theiashub.com