







# डेली करंट अफेयर्स की पाठशाला



The Economist





#### PLEA FOR 100% VERIFICATION WITH VVPAT

### SC rejects return to ballot paper, poses questions on EVMs, counting process

We have seen, we have not forgotten... don't try to bring down system: Bench

#### **ANANTHAKRISHNANG**

NEW DELHI, APRIL 16

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"Fortunately, we are now in our sixties. We have seen what used to happen earlier. Have you forgotten that? If you have forgotten that, I am sorry, I have not forgotten," Justice Sanjiv Khanna, presiding over a two-judge bench, told Advocate Prashant Bhushan who appeared for petitioner-NGO Association for Democratic Reforms seeking 100% verification of EVM votes with VVPAT slips. At present, 5 EVMs are randomly verified against VVPAT slips per Assembly segment.



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To this, Justice Khanna said, "Forget about booth capturing. What happens when ballot CONTINUED ON PAGE 2

#### EXPLAINED SCIENCE

## INDIA-ORIGIN GOPI THOTAKURA HEADS TO SPACE: WHAT IS SPACE TOURISM?

GOPI THOTAKURA, an entrepreneur and a pilot, is set to become the first person of Indian origin to go to space as a tourist on the NS-25 mission of Blue Origin — a company founded by leff Bezos. who is also the founder of Amazon. Thotakura has been selected as one of the six crew members for the mission. The launch date of the mission is yet to be announced.

In recent years, space tourism has grown in popularity. In 2023, the space tourism market was estimated to be worth \$848.28 million. It is expected to grow to \$27,861.99 million by 2032. However, there are several challenges that may limit the industry's growth.

#### What is space tourism?

Space tourism is a form of space travel, which is done for recreational or business purposes. There are two main types of space tourism, sub-orbital and orbital.

The sub-orbital spacecraft takes passengers just beyond the Kármán line — it lies nearly 100 kilometres above our heads and is considered to be the boundary between Earth's atmosphere and outer space. The passengers get to spend a few minutes in outer space and then come back to Earth. The NS-25 mission, which Thotakura is a part of, is a sub-orbital mission.

Orbital spacecraft take passengers much farther than the Kármán line. Usually, passengers can spend from a couple of days to more than a week at an altitude of up to 400 km.

In 2021, Space X's Falcon 9 took four passengers to an altitude of 160 km, where



Gopi Thotakura, LinkedIn

they spent three days orbiting the Earth.

#### What are the challenges?

Currently, space tourism is expensive. A passenger generally has to pay at least a million dollars to reach outer space. This is mainly because of high manufacturing costs and the cost of fuel.

Studies have found that space tourism may cause environmental damage as rockets emit gaseous and solid chemicals directly into the upper atmosphere.

A 2022 study published in the journal Earth's Future found that soot emissions from rocket launches are far more effective at warming the atmosphere compared to other sources.

Safety is also a concern. A total of 676 people have flown into space and 19 of them have died as of November 2023, according to a report by Astronomy Magazine. This means that approximately 3% of astronauts died during their space flight which is a high fatality rate.

#### PLEA AGAINST PATANJALI

### Ready to give public apology: Balkrishna, Ramdev in SC

EXPRESS NEWS SERVICE NEW DELHI, APRIL 16



"I am willing to give a public apology to show contrition and to tell the public that its not that I am doing some lip service in court..." Senior Advocate Mukul Rohatgi, appearing for Ramdev and Balkrishna, told a bench of Justices Hima Kohli and Ahsanuddin Amanullah.

In response to queries from the bench on why he did not refrain from disparaging other systems of medicine and announce his claims by parading patients on the stage instead of approaching the interdisciplinary medical committee with evidence to back his claims, Ramdev said, "Aage se mein is tathya ke prati 100 per cent jagrook rahunga (I will be 100 per cent alert to this fact hereafter). It's not good for me too that such things happen. It happened in zest for work. Will not do it in future."

The court had pulled up the voga guru over a press conference he held on November 22, 2023 in Haridwar and an advertisement issued by the company on December 4, 2023, in alleged violation of a November 21, 2023 undertaking to the court that "henceforth there shall not be any violation of any law(s), especially relating to advertising or branding of products manufactured and marketed by it (Patanjali Avurved) and, further, that no casual statements claiming medicinal efficacy or against any system of medicine will be released to the media in any form".

Taking note of the submissions on Tuesday, the bench adjourned the hearing till April 23. It said in the order, "Senior advocate Mukul Rohatgi appearing for the proposed contemnors submits that to redeem themselves and demonstrate their bonafides,





Yoga guru Ramdev, Patanjali MD Acharya Balkrishna. File

they (Ramdev and Balkrishna) propose to take some steps...and request one week's time to revert on the aforesaid aspect. This court has interacted with the proposed contemmors and heard their submissions. At the request of the respondents, list on April 23 (next hearing)."

The bench told the duo it had not decided yet whether it should forgive them as it had to consider their previous history too. "At this moment we are not saying they are off the hook either." Justice Kohli told Rohatzi.

During the interaction with the bench in Hindi, Ramdev said at the very outset that he had already tendered an "unconditional and unqualified" apology for the "mistakes".

Justice Kohli then told him that Ayurveda had been going on since the time of Maharishi Charak. Pointing out that there are also other systems of medicine like Siddha and Unani, she asked if it was necessary to speak ill of other systems of medicines to promote Ayurveda.

Ramdev replied it was never his intention to disrespect the court. He said that Patanjali had done a lot to make Ayurveda an evidence-based practice and that he did not want to criticise any other system of medicine.

Justice Kohli told him that he should have approached the interdisciplinary medical committee set up under the Union of Indiaif he had some evidence on curative effects of a drug, instead of parading someone on stage and announcing that he had been cured of all illnesses.

Justice Kohli added that no one had the right to speak ill of other systems to promote their own. Ramdev agreed, and assured to take care in the future.

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#### •SC rejects return to ballot paper, asks about EVMs, vote counting process

papers are... anyway. Let's not enter into a debate."

Bhushan had brought up the idea of ballot papers when the bench, also comprising Justice Dipankar Datta, asked him what alternative he had in mind to the EVMs.

"Earlier, there used to be ballot papers. There can be ballot papers. Most European countries have gone back to ballot papers." Bhushan said. He said the German constitutional court had given a judgment on why EVMs cannot be trusted and, therefore, paper ballots should be resorted to.

Junking the suggestion, Justice Datta said the conduct of elections in India is "a humongous task. Not possible for any European country to conduct. Let's not draw analogies and comparisons from Germany and other countries. My home state West Bengal has more population than what Mr Bhushan said about Germany's population. It's a very small state... We have to repose some trust and confidence in somebody. Of course, they are accountable...But don't try to bring down the system like this."

The bench also posed a series of searching questions on the working of the EVMs and the process of storing them and counting the votes.

It also guestioned the ADR

submission that "majority of voters don't trust EVMs" and asked Bhushan who made the submission "where do you get that" from.

Bhushan replied that it was a CSDS-Lokniti poll. "Poll! "Let's not believe in these private polls," Justice Datta said, Justice Khanna said, "This type of argument may not be acceptable because there is no data with regard to that. A private poll will not be able to... It's possible somebody else will take out a poll to the contrary. Let's not go into all that."

To an intervenor who contended that EVMs are manufactured by a Public Sector Undertaking and the technical person there is not accountable, Justice Khanna said, "You will be happy with the private sector manufacturing the machines?... If the private sector was manufacturing, you would have come here and said it should not be manufactured by the private sector."

The bench said, "As far as when we have to examine whether the EVMs are functioning properly, we will have to go by the data. With regard to what is the total number of votes polled in a particular year-on-year together, and whether they have tallied it with the total number of votes counted later on, how many cases there were discrepancies. How many cases ultimately the

candidates request for counting of the paper slips were done, how much discrepancies were found in that. That will give us the true picture whether the EVMs are being manipulated or the chances of manipulation or not. That data they will provide. We will ask them for that data."

Bhushan said, "We are not saying that EVMs are being manipulated or have been manipulated. What we are saying is that EVMs can be manipulated because both EVM as well as the VVPAT have a programmable chip."

He said the other suggestions were to allow voters to physically take the VVPAT slip and deposit it in the ballot box so that they can be sure that their vote has been recorded correctly and to replace the opaque mirrored glass on the EVM with a transparent glass so that one can see what is happening inside.

According to the petitioners, the Election Commission of India had said it would take 12 days if all VVPAT slips were to be counted.

Bhushan said the Election Commission had said it cannot share the source code of the EVM chips citing intellectual property rights of the maker, and this casts a greater suspicion about the machines. He said the EVMs are assembled by two PSUs — Electronics Corporation of India Ltd and Bharat Electronics — which have many BJP office bearers as Directors.

Senior Advocate Gopal Sankaranarayanan cited a news report about ECI data on the mismatch in the number of votes cast on EVMs and the number of votes counted in some constituencies during the 2019 Lok Sabha polls. He said there were "serious discrepancies... in 373 constituencies which went to polls in the first phase of the election".

But the bench said there may be some discrepancy sometimes because the button may not have been pressed immediately but in such cases the candidates would have the data and would ask for counting of VVPAT slips. "If there is any such discrepancy... each candidate will be given that data... the candidates would have immediately challenged it," lustice Khanna said.

Sankaranayanan said the data came subsequently, but the bench did not agree. He also raised apprehensions about the rule that a voter asking for VVPAT slip will have to give a declaration that he is aware of the consequences if his claim is found to be untrue which includes imprisonment up to 6 months and fine up to Rs 1,000. This, he said, acts as a deterrent.

Hearing in the matter will resume April 18.

भारत में ईवीएम का पहली बार इस्तेमाल 1982 में केरल के 70-पारुर विधानसभा क्षेत्र में किया गया था जबिक 2004 के लोकसभा चुनाव के बाद से भारत में प्रत्येक लोकसभा और राज्य विधानसभा चुनाव में मतदान की प्रक्रिया पूरी तरह से इलेक्ट्रॉनिक वोटिंग मशीन द्वारा ही संपन्न होती है. एक पायलट परियोजना के तौर पर 2014 के लोकसभा चुनाव में 543 में से 8 संसदीय निर्वाचन क्षेत्रों में मतदाता-सत्यापित पेपर ऑडिट ट्रायल (वीवीपीएटी) प्रणाली वाले ईवीएम का इस्तेमाल किया गया था.

### भारतीय इलेक्ट्रॉनिक वोटिंग मशीन का इतिहास क्या है? (History of EVM in India)

पहले भारतीय ईवीएम का आविष्कार 1980 में "एम बी हनीफा" के द्वारा किया गया था जिसे उसने "इलेक्ट्रॉनिक संचालित मतगणना मशीन" के नाम से 15 अक्तूबर 1980 को पंजीकृत करवाया था। एकीकृत सर्किट का उपयोग कर "एम बी हनीफा" द्वारा बनाये गये मूल डिजाइन को तिमलनाडु के छह शहरों में आयोजित सरकारी प्रदर्शनियों में जनता के लिए प्रदर्शित किया गया था।

भारत निर्वाचन आयोग द्वारा 1989 में "इलेक्ट्रॉनिक्स कॉर्पोरेशन ऑफ इंडिया लिमिटेड" के सहयोग से भारत में ईवीएम बनाने की शुरूआत की गई थी। ईवीएम के औद्योगिक डिजाइनर "औद्योगिक डिजाइन सेंटर, आईआईटी बॉम्बे" के संकाय सदस्य (faculty members) थे।

### ईवीएम की संरचना और तकनीक (Technology used in the EVM)

एक ईवीएम में दो भाग होते हैं- नियंत्रण इकाई और मतदान इकाई। दोनों भाग एक पांच मीटर लंबे केबल से जुड़े होते हैं। नियंत्रण इकाई, "पीठासीन अधिकारी" या "मतदान अधिकारी" के पास रहता है जबिक मतदान इकाई को मतदान कक्ष के अंदर रखा जाता है। मतदाता को मतपत्र जारी करने के बजाय नियंत्रण इकाई के पास बैठा अधिकारी मतदान बटन (Ballot Button) को दबाता है। जिसके बाद मतदाता "मतदान इकाई" पर अपने पसन्द के उम्मीदवार के नाम और चुनाव चिह्न के सामने अंकित नीले बटन को दबाकर मतदान करता है।

ईवीएम में नियंत्रक के रूप में स्थायी रूप से सिलिकन से बने "ऑपरेटिंग प्रोग्राम" का इस्तेमाल किया जाता है। एक बार नियंत्रक का निर्माण हो जाने के बाद निर्माता सहित कोई भी इसमें बदलाव नहीं कर सकता है।

### भारत में EVM का निर्माण (Manufacturing of EVM in India)

ईवीएम 6 वोल्ट के एक साधारण बैटरी से चलता है जिसका निर्माण "भारत इलेक्ट्रॉनिक्स लिमिटेड, बंगलौर" और "इलेक्ट्रॉनिक्स कॉर्पोरेशन ऑफ इंडिया लिमिटेड, हैदराबाद" द्वारा किया जाता है। चूंकि यह बैटरी से चलता है जिसके कारण इसे पूरे भारत में आसानी से उपयोग में लाया जाता है, साथ ही कम वोल्टेज के कारण ईवीएम से किसी भी मतदाता को बिजली का झटका लगने का भी डर नहीं रहता है।

एक ईवीएम में अधिकतम **3840 मतों** को रिकॉर्ड किया जा सकता है और एक ईवीएम में अधिकतम **64 उम्मीदवारों** के नाम अंकित किए जा सकते हैं। एक "मतदान इकाई" (Ballot Unit) में 16 उम्मीदवारों का नाम अंकित रहता है और एक ईवीएम में ऐसे 4 इकाइयों को जोड़ा जा सकता है। यदि किसी निर्वाचन क्षेत्र में 64 से अधिक उम्मीदवार होते हैं तो मतदान के लिए पारंपरिक **"मतपत्र या बॉक्स** विधि" का प्रयोग किया जाता है।

ईवीएम मशीन के बटन को बार-बार दबाकर एक बार से अधिक वोट करना संभव नहीं है, क्योंकि मतदान इकाई में किसी उम्मीदवार के नाम के आगे अंकित बटन को एक बार दबाने के बाद मशीन बंद हो जाती है।

यदि कोई व्यक्ति एक साथ दो बटन दबाता है तो उसका मतदान दर्ज नहीं होता है। इस प्रकार ईवीएम मशीन "एक व्यक्ति, एक वोट" के सिद्धांत को सुनिश्चित करता है।

#### **PLEA AGAINST PATANJALI**

### Ready to give public apology: Balkrishna, Ramdev in SC

#### EXPRESS NEWS SERVICE

NEW DELHI, APRIL 16

YOGA GURU Ramdev and Patanjali Ayurved Managing Director Acharya Balkrishna on Tuesday tendered their apologies in person to the Supreme Court for holding a press conference and publishing advertisements in violation of court orders, and said they were willing to give a "public apology to show contrition".

"I am willing to give a public apology to show contrition and to tell the public that its not that I am doing some lip service in court...," Senior Advocate Mukul Rohatgi, appearing for Ramdev and Balkrishna, told a bench of Justices Hima Kohli and Ahsanuddin Amanullah.

In response to queries from the bench on why he did not refrain from disparaging other systems of medicine and announce his claims by parading patients on the stage instead of approaching the interdisciplinary medical committee with evidence to back his claims, Ramdev said, "Aage se mein is tathya ke prati 100 per cent jagrook rahunga (I will be 100 per cent alert to this fact hereafter). It's not good for me too that such things happen. It happened in zest for work. Will not do it in future."

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During the interaction with the bench in Hindi, Ramdev said at the very outset that he had already tendered an "unconditional and unqualified" apology for the "mistakes".

Justice Kohli then told him that Ayurveda had been going on since the time of Maharishi Charak. Pointing out that there are also other systems of medicine like Siddha and Unani, she asked if it was necessary to speak ill of other systems of medicines to promote Ayurveda.

Ramdev replied it was never his intention to disrespect the court. He said that Patanjali had done a lot to make Ayurveda an evidence-based practice and that he did not want to criticise any other system of medicine.

Justice Kohli told him that he should have approached the interdisciplinary medical committee set up under the Union of India if he had some evidence on curative effects of a drug, instead of parading someone on stage and announcing that he had been cured of all illnesses.

Justice Kohli added that no one had the right to speak ill of other systems to promote their own. Ramdev agreed, and assured to take care in the future.

#### न्यायालय की अवमाननाः

- न्यायालय का अवमानना अधिनियम, 1971 (Contempt of Court Act, 1971) के अनुसार, न्यायालय की अवमानना का अर्थ किसी न्यायालय की गरिमा तथा उसके अधिकारों के प्रति अनादर प्रदर्शित करना है।
- इस अधिनियम में अवमानना को 'सिविल' और 'आपराधिक' अवमानना में बाँटा गया है।
  - **सिविल अवमानना:** न्यायालय के किसी निर्णय, डिक्री, आदेश, रिट, अथवा अन्य किसी प्रक्रिया की जान बूझकर की गई अवज्ञा या उल्लंघन करना न्यायालय की **सिविल अवमानना** कहलाता है।
  - **आपराधिक अवमानना:** न्यायालय की आपराधिक अवमानना का अर्थ न्यायालय से जुड़ी किसी ऐसी बात के प्रकाशन से है, जो लिखित, मौखिक, चिह्नित , चित्रित या किसी अन्य तरीके से न्यायालय की अवमानना करती हो।
- हालाँकि किसी मामले का निर्दोष प्रकाशन, न्यायिक कृत्यों की निष्पक्ष और उचित आलोचना तथा न्यायालय के प्रशासनिक पक्ष पर टिप्पणी करना न्यायालय की अवमानना के अंतर्गत नहीं आता है।

#### न्यायालय की अवमानना के लिये दंड का प्रावधान:

- सर्वोच्च न्यायालय तथा उच्च न्यायालय को अदालत की अवमानना के लिये दंडित करने की शक्ति प्राप्त है। यह दंड छह महीने का साधारण कारावास या 2000 रूपए तक का जुर्माना या दोंनों एक साथ हो सकता है।
- वर्ष 1991 में सर्वोच्च न्यायालय ने यह फैसला सुनाया कि उसके पास न केवल खुद की बल्कि पूरे देश में उच्च न्यायालयों, अधीनस्थ न्यायालयों तथा न्यायाधिकरणों की अवमानना के मामले में भी दंडित करने की शक्ति है।
- उच्च न्यायालयों को न्यायालय की अवमानना अधिनियम, 1971 की धारा 10 के अंतर्गत अधीनस्थ न्यायालयों की अवमानना के लिये दंडित करने का विशेष अधिकार प्रदान किया गया है।

#### अवमानना अधिनियम की आवश्यकता:

- न्यायालय का अवमानना अधिनियम, 1971 का उद्देश्य न्यायालय की गरिमा और महत्त्व को बनाए रखना है।
- अवमानना से जुड़ी हुई शक्तियाँ न्यायाधीशों को भय, पक्षपात और की भावना के बिना कर्त्तव्यों का निर्वहन करने में सहायता करती हैं।

### संवैधानिक पृष्ठभूमि:

- अनुच्छेद 129: सर्वोच्च न्यायालय को स्वंय की अवमानना के लिये दंडित करने की शक्ति देता है।
- अनुच्छेद 142 (2): यह अनुच्छेद अवमानना के आरोप में किसी भी व्यक्ति की जाँच तथा उसे दंडित करने के लिये सर्वोच्च न्यायालय को सक्षम बनाता है।
- अनुच्छेद 215: उच्च न्यायालयों को स्वंय की अवमानना के लिये दंडित करने में सक्षम बनाता है।

### अवमानना से जुड़े अन्य मुद्दे :

- संविधान का अनुच्छेद-19 भारत के प्रत्येक नागरिक को अभिव्यक्ति एवं भाषण की स्वतंत्रता प्रदान करता है परंतु न्यायालय का अवमानना अधिनियम, 1971 द्वारा न्यायालय की कार्यप्रणाली के खिलाफ बात करने पर अंकुश लगा दिया है।
- कानून बहुत व्यक्तिपरक है, अतः अवमानना के दंड का उपयोग न्यायालय द्वारा अपनी आलोचना करने वाले व्यक्ति की आवाज़ को दबाने के लिये किया जा सकता है।

### न्यायालय का अवमानना अधिनियम, 1971

#### (Contempt of Court Act, 1971):

- यह अधिनियम अवमानना के लिये दंडित करने तथा न्यायालयों की प्रक्रिया को नियंत्रित करने की शक्ति को परिभाषित करता है।
- इस कानून में वर्ष 2006 में धारा 13 के तहत 'सत्य की रक्षा' (Defence of Truth) को शामिल करने के लिये संशोधित किया गया था।

#### **EXPLAINED SCIENCE**

# INDIA-ORIGIN GOPI THOTAKURA HEADS TO SPACE: WHAT IS SPACE TOURISM?

GOPI THOTAKURA, an entrepreneur and a pilot, is set to become the first person of Indian origin to go to space as a tourist on the NS-25 mission of Blue Origin — a company founded by Jeff Bezos, who is also the founder of Amazon. Thotakura has been selected as one of the six crew members for the mission. The launch date of the mission is yet to be announced.

In recent years, space tourism has grown in popularity. In 2023, the space tourism market was estimated to be worth \$848.28 million. It is expected to grow to \$27,861.99 million by 2032. However, there are several challenges that may limit the industry's growth.

#### What is space tourism?

Space tourism is a form of space travel, which is done for recreational or business purposes. There are two main types of space tourism, sub-orbital and orbital.

The sub-orbital spacecraft takes passengers just beyond the Kármán line — it lies nearly 100 kilometres above our heads and is considered to be the boundary between Earth's atmosphere and outer space. The passengers get to spend a few minutes in outer space and then come back to Earth. The NS-25 mission, which Thotakura is a part of, is a sub-orbital mission.

Orbital spacecraft take passengers much farther than the Kármán line. Usually, passengers can spend from a couple of days to more than a week at an altitude of up to 400 km.

In 2021, Space X's Falcon 9 took four passengers to an altitude of 160 km, where



Gopi Thotakura. LinkedIn

they spent three days orbiting the Earth.

#### What are the challenges?

Currently, space tourism is expensive. A passenger generally has to pay at least a million dollars to reach outer space. This is mainly because of high manufacturing costs and the cost of fuel.

Studies have found that space tourism may cause environmental damage as rockets emit gaseous and solid chemicals directly into the upper atmosphere.

A 2022 study published in the journal Earth's Future found that soot emissions from rocket launches are far more effective at warming the atmosphere compared to other sources.

Safety is also a concern. A total of 676 people have flown into space and 19 of them have died as of November 2023, according to a report by Astronomy Magazine. This means that approximately 3% of astronauts died during their space flight which is a high fatality rate. **ENS**