



● POLITY

● ECONOMICS

● TECHNOLOGY

● ECOLOGY

Maharashtra and Jharkhand elections

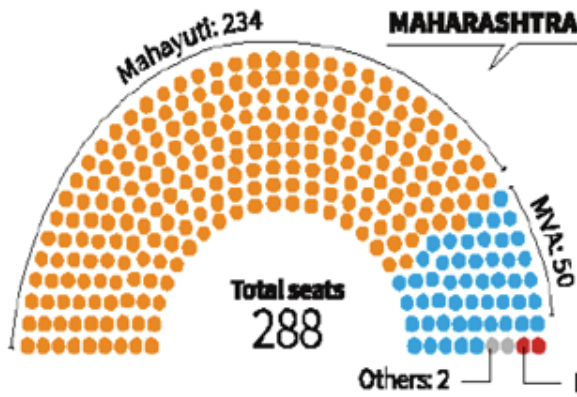
POLITY & GOVERNANCE

CONTEXT: Maharashtra saw an unprecedented electoral sweep, with the ruling Mahayuti winning 234 of the 288 seats in the Assembly election and BJP emerging as the single largest party, winning 132 seats on its own. The Mahayuti is slated to form the government within the next three days. Senior BJP leader and Union Minister Rajnath Singh is likely to be in Mumbai on Sunday as the central observer of the party, a role he had played after the 2014 State election as well.

The Opposition Maha Vikas Aghadi was routed and won just 50 seats. The Maharashtra Assembly is not likely to have a Leader of the Opposition, as none of the three MVA parties have been able to win even 10 % of the total seats. The Shiv Sena (Uddhav Balasaheb Thackeray) won the highest number of seats (20), followed by the Congress with 16, and the Nationalist Congress Party (Sharad Pawar) with 10 seats, all below the 29 seats mandated for the LoP position, as per legislative rules. The current Assembly's term ends on November 26.

Huge win in a big State

The Mahayuti alliance has secured a majority by winning 234 out of 288 seats, while the Maha Vikas Aghadi (MVA) won 50 seats



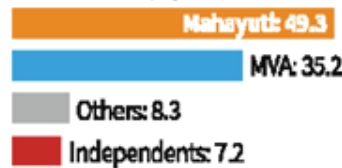
Mahayuti: BJP: 132 (26.8%), SHS: 57 (12.4%), NCP: 41 (9%), JSS: 2 (0.6%), Rashtriya Yuva Swabhiman Party: 1 (0.3%), RSVA: 1 (0.2%)

MVA: SS(UBT): 20 (10%), INC: 16 (12.4%), NCP(SP): 10 (10%), SP: 2 (0.4%), PWP: 1 (0.8%), CPI(M): 1 (0.3%)



In bloom: BJP women workers hold lotuses while celebrating NDA's win in Nagpur. PTI

VOTE SHARE (%)



The Pawar family battle for the Baramati seat was decisively won by Nationalist Congress Party chief Ajit Pawar with a lead of over one lakh votes against his nephew Yugendra Pawar. The BJP's strike rate is unprecedented in Maharashtra since the 1980s. It contested 148 seats and won 132 of them, thereby giving it a strike rate of 89%. Among its alliance partners, the Shiv Sena won 56 seats, while the NCP won 41 seats.

The Jharkhand Mukti Morcha-led INDIA bloc on Saturday returned to power in Jharkhand for the second consecutive time, winning 56 of the 81 Assembly seats in the State.

The More You Learn, The More You Earn



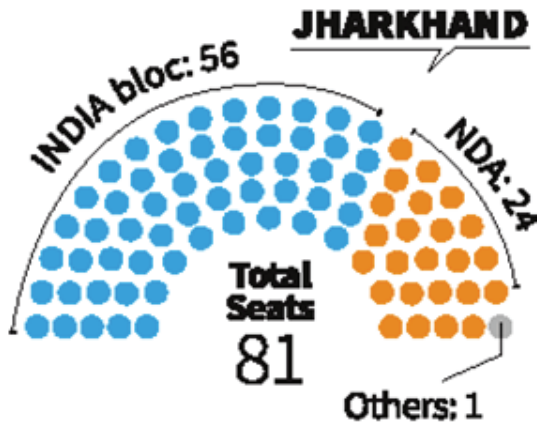
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INDIA emerges as victor

The JMM-led INDIA bloc has bagged wins in 56 out of 81 constituencies, with the NDA securing 24 seats



Poll power: Congress supporters in Ranchi celebrate INDIA bloc's win in the Assembly election ANI



VOTE SHARE (%)



INDIA bloc: JMM: 34 (23.4%), INC: 16 (15.6%), RJD: 4 (3.4%), CPI(M)(L): 2 (1.9%)
NDA: BJP: 21 (33.2%), AJSUP: 1 (3.5%), JD(U): 1 (0.8%), LJP(RV): 1 (0.6%)

The JMM won 34 seats, the Congress 16, the RJD four, and the CPI(ML) Liberation two seats. This is also the JMM's best electoral performance in the State. In the NDA, the BJP won 21 seats, and its alliance partners, the All-Jharkhand Students Union, the Lok Janshakti Party (Ram Vilas), and the Janata Dal(U) bagged one seat each.

The rhetoric of "infiltration by Bangladeshis", corruption, and demographic changes in the Santal Pargana region appears to have backfired for the BJP, with none of these issues bringing it favour. The result is a humiliating defeat for the BJP as its top leaders, including Prime Minister Narendra Modi, campaigned in the State.

Mr. Soren's impactful Maiya Samman Yojana, a cash transfer scheme of ₹ 1,000 per month, four instalments of which were provided before the election,

drew women voters to the INDIA bloc. Tribals and Muslims, considered the JMM's biggest vote banks, supported the INDIA bloc, leading to the JMM's highest vote share of nearly 24 %.

A mighty king remembered

HISTORY, ART & CULTURE



CONTEXT: The birth anniversary of the legendary Chola emperor Raja Raja Chola I is celebrated every year during the Sadhaya Vizha in Thanjavur of Tamil Nadu.

Revered as Raja Raja the Great, Chola Emperor Raja Raja Chola I was born as Arulmozhi Varman in 947 CE, rising to become one of history's most illustrious and visionary rulers. Chola Emperor Raja Raja Chola I inherited the legacy of his ancestors and crafted an empire that flourished both militarily and culturally. His life is famously depicted in Kalki Krishnamurthy's 1955 Tamil novel Ponniyin Selvan, which was later adapted to a motion picture series under the same title.

Raja Raja's reign, from 985 to 1014 CE, was marked by military prowess and profound administrative vision. The

Sadhaya Vizha, which takes place in the Tamil month of Aippasi (mid-October to mid-November), honours the legacy of a ruler whose influence stretched to Sri Lanka and the Maldives. The heart of the celebration is at the iconic Brihadeeswarar Temple. The temple itself, a masterpiece of Chola architecture, is a tribute to Raja Raja's devotion to Lord Shiva, revered here as Peruvudaiyar.

The event begins with religious ceremonies, including the sacred abhishekam (holy bath) to Lord Peruvudaiyar, followed by the mesmerising perundeepa vazhipaadu, where lamps are waved in reverence, and the swami purappadu, a procession that carries the deity through the temple. Devotees from all over the region gather to partake in the two-day

festivities, which feature cultural performances such as classical dance and hymn singing by odhuvars. Beyond Thanjavur, the celebrations stretch to Udaiyalur near Kumbakonam, where Raja Raja Chola's mortal remains are believed to be interred.

Brihadeeswarar Temple is also a trove of Tamil inscriptions, skilfully engraved on stone. The inscriptions detail the temple's construction, daily rituals, offerings, and special worship ceremonies. This inscription, running to 107 paragraphs, is said to describe how Raja Raja Chola personally oversaw the temple's planning and construction, recorded the gifts offered by him, his sister Kundavai, his queens, and others, and outlined the rituals to be performed.

U.S. SEC summons Adani, nephew Sagar

INTERNATIONAL RELATIONS

CONTEXT: Adani Group founder and chairman Gautam Adani and his nephew Sagar Adani have been summoned to explain their stand on the U.S. Securities and Exchange Commission (SEC) allegation of paying \$ 265 million (₹ 2,200 Cr) in bribes to secure lucrative solar power contracts.

Mr. Adani and Mr. Sagar have been asked to reply to the SEC within 21 days. A notice sent through the New York Eastern District Court summoning to serve on the plaintiff (SEC) an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. Separately, the U.S. SEC has also charged the duo and Cyril Cabanes, an executive of Azure Power Global, for "conduct arising out of a massive bribery scheme". The Adani Group has denied the allegations and said it will seek all possible legal resources.

In Supreme Court spotlight, CAQM shows four-year statistics to argue dip in farm fires

INTERNATIONAL RELATIONS

CONTEXT: The Supreme Court directed the Centre for Air Quality Management (CAQM) to respond to allegations of hiding information of stubble-burning aware about the timings of satellites tasked to spot fires.

The Centre for Air Quality Management (CAQM) constituted through 2021 through the Commission for Air Quality Management in National Capital Region (NCR) and Adjoining Areas Act, 2021 argued its interventions to have reduced crop burning in Punjab by 71 % and 44 % in Haryana over the past four years. The incidents of stubble burning in Punjab numbered 70,856 and 6,464 in Haryana, respectively.

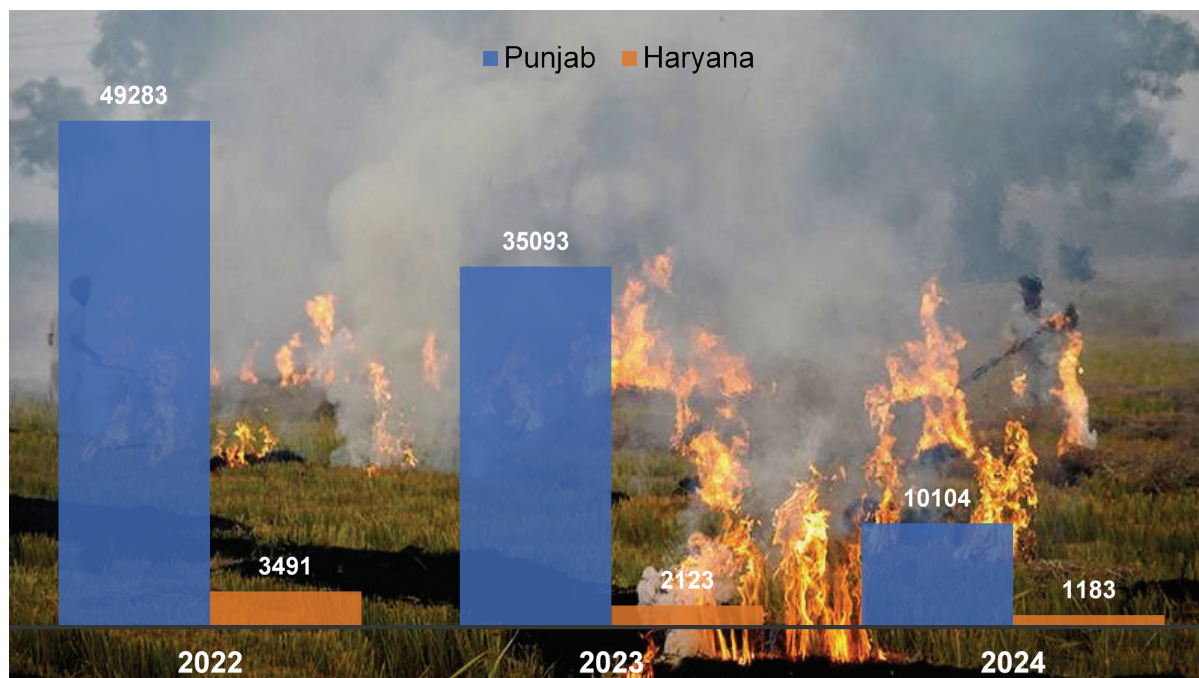


FIGURE: Bar chart representation of stubble burning incidents in Punjab and Haryana.

Facing criticism in court that it had gone soft on violators, CAQM said it has inspected 9,304 fields in Punjab and 1,153 in Haryana as on November 19. It said the cumulative number of cases in which environmental compensation has been imposed were 4,915 and 545 in Punjab and Haryana, respectively. The CAQM affidavit informed that ₹1,13,67,500 and ₹12,52,500 was realised as environmental compensation from

the two respective States till November 19.

The statutory body said it was not enforcing a "toothless" law, and had registered 5,038 FIRs in Punjab and 574 FIRs

in Haryana under Section 223 (disobeying the order of a public servant) of the Bharatiya Nyaya Sanhita (BNS). Further, 111 officials in both Punjab and Haryana have been prosecuted under Section 14 of the 2021 Act for acting in contravention of its provisions.

Additional Solicitor-General Aishwarya Bhati, appearing for CAQM, said it was “trying to develop a protocol for burnt area assessment” to capture the exact number of farm fires from the blackened fields. The CAQM asked the Indian Space Research Organisation (ISRO) to develop a burnt area protocol which is currently been developed and is under test.

‘Unforeseen situations’

Interestingly, while the CAQM agreed with the court that Graded Response Action Plan-3 and -4 restrictions ought to be put in place in advance well before the air quality gets worse, it argued that the court must also take into consideration certain “unforeseen” situations because of which the enforcement of these “disruptive” restrictions may get delayed a bit.

What can CAQM do to improve Delhi air?

ECOLOGY & ENVIRONMENT

CONTEXT: Delhi's air pollution has remained in the 'severe' and 'severe plus' category for most of the past 10 days. The Supreme Court criticized the Commission for Air Quality Management (CAQM) for its insufficient response to controlling pollution during this period.

Commission for Air Quality Management (CAQM)

An ordinance in 2020 and later by a Commission for Air Quality Management (CAQM) in the National Capital Region (NCR) and nearby areas Act, 2021 constituted the Commission for Air Quality Management (CAQM) in the National Capital Region (NCR) and nearby areas. The Commission for Air Quality Management (CAQM) initially comprising of 15 members and presently comprising of 27 members and led by Rajesh Verma aims to coordinate, research, and address air quality issues. The CAQM replaced the Supreme Court-formed Environmental Pollution (Prevention and Control) Authority (EPCA) of 1998, which lacked statutory backing and enforcement power. Many measures, such as the Graded Response Action Plan (GRAP) to control air pollution, were initiated under the EPCA and are now continued by the CAQM.

Powers of CAQM

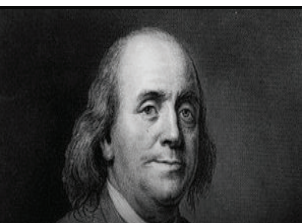
- CAQM Act, 2021: Take all measures, including issuing directions and entertaining complaints, as it deems necessary, for the purpose of protecting and improving the quality of air in the NCR and adjoining areas.
- Section 14 – CAQM Act, 2021: Initiate stringent actions against officers for not following its orders.

Why did the SC pull up the CAQM?

The Supreme Court has criticized the Commission for Air Quality Management (CAQM) for its ineffectiveness in enforcing its directives under the 2021 Act, noting widespread non-compliance by stakeholders. The Court observed that while CAQM has taken steps, its efforts have failed to produce tangible results in reducing pollution. On November 18, the Court reprimanded CAQM for its delayed implementation of Stage IV restrictions under the Graded Response Action Plan (GRAP), meant to address severe air quality conditions. The CAQM was faulted for waiting for the air quality to improve instead of taking pre-emptive action, despite the Air Quality Index (AQI) already reaching the 'severe plus' level.

Is the CAQM to blame for Delhi's pollution?

The CAQM develops plans and coordinates with agencies, but implementation is their responsibility. CAQM officials highlight improved coordination on stubble burning, starting discussions with State officials as early as February. In 2022, it worked with Punjab and Haryana to prepare and update action plans to manage stubble burning. Despite past efforts focusing heavily on stubble burning, the CAQM now plans to address multiple pollution sources, including dust and vehicular emissions. Anumita Roychowdhury of the Centre for Science and Environment stresses the need for proactive GRAP implementation and more accurate pollution forecasting methods.



“If you invest more in your education, then you are likely to get more interest in it.”

–Benjamin Franklin

How should India tackle diabetes load?

POLITY & GOVERNANCE

CONTEXT: On International Diabetes Day (November 14), a paper published in the *The Lancet*, based on a global study, recorded over 800 million adults living with diabetes, with more than half not receiving treatment.

The global population of adults with Type 1 or Type 2 diabetes has exceeded 800 million, a fourfold increase since 1990. India accounts for over a quarter of this total (212 million), followed by China with 148 million. Type 1 diabetics are a small proportion of the total diabetes cases in India, and it is Type 2 diabetes that poses problems for the future. The Indian Council of Medical Research's INDIAB study last year estimated India's diabetic population at just over 100 million, highlighting a significant discrepancy.

Why is there a discrepancy in numbers?

The *Lancet* study, conducted by NCD-RisC and WHO, analyzed data from over 140 million adults across 1,000+ studies to estimate diabetes trends and treatment in 200 countries from 1990 to 2022. It used fasting glucose, HbA1C, or three-month glycosylated haemoglobin averages, depending on data availability. In contrast, the ICMR study relied on fasting glucose and a two-hour postprandial value to identify individuals with elevated blood sugar levels.

The variation in diabetes estimates arises from differing measurement methods. While many countries use HbA1C, India relies on fasting and two-hour postprandial readings with the Oral Glucose Tolerance Test (OGTT) as the gold standard. The diabetes count would be halved, if only OGTT values were used. HbA1C uses a 6.5 % cutoff, but factors like anaemia, aging, and glycation variability can affect results, sometimes including nondiabetic individuals. Mohan highlights that HbA1C-based studies can double diabetes prevalence figures, reinforcing OGTT's accuracy.

What are the areas of concern?

India faces a significant diabetes burden, with 100 to 200 million people requiring treatment and being at risk of severe complications such as heart disease, kidney damage, and vision loss. Beyond debating numbers, the *Lancet* study underscores the urgent need for widespread prevention and treatment efforts. It also highlights global inequalities in diabetes care, with treatment rates stagnating in low- and middle-income countries where diabetes prevalence is rising. Majid Ezzati of Imperial College warns that younger patients in these countries face lifelong complications or premature death without effective treatment.

No country can handle the financial and logistical burden of treating diabetes complications, such as kidney failure, which could affect millions. The urgency of combating diabetes through war-like efforts, including mass awareness campaigns on nutrition and physical activity, and stricter regulations on high-carb diets and sugary beverages. Ahead of World Diabetes Day, Peter Schwarz of the International Diabetes Federation highlights prevention as the most critical strategy, urging repeated and focused efforts to halt the rising tide of diabetes cases.

The need for India to prioritize vulnerable groups, including the lower middle class, semi-urban, and rural populations. The importance of educating women, who face increased obesity risks post-pregnancy and during menopause, contributing to diabetes. Addressing abdominal obesity, a key diabetes risk factor among Indians, requires sustained efforts and a long-term, 10-year vision.

What can individuals do?

The *Lancet* paper identifies obesity and poor diets as important drivers of the rise in Type 2 diabetes rates. Diabetes rate was either already high or increased more in some of the regions where obesity was or became prevalent between 1990 and 2022, compared to many high-income countries, especially those in the Pacific and western Europe, where, in general, obesity and diabetes rates did not rise or rose by a relatively small amount. The writing is on the wall: a measure of mindful eating and exercising have a proven effect in preventing diabetes, and controlling blood sugar levels.

The challenge for governments, however, is to make it possible for people to exercise these healthy choices, and for people to demand it of their rulers. As Anjana Ranjit, a collaborator on the ICMR-INDIAB study, says: "We need to see more ambitious policies that restrict unhealthy foods, make healthy foods affordable. Opportunities to exercise must be ensured, besides promoting safe places for walking and exercising, including access to public parks and fitness centres, subsidies provided for healthy foods and free, healthy school meals."

WE AIM TO INSPIRE YOU

Why is there a row over climate finance?

ECOLOGY & ENVIRONMENT

CONTEXT: The 29th edition of the Conference of Parties (COP) was scheduled to conclude on November 22 after 11 days of negotiations aimed at addressing rising carbon emissions.

What is the significance of COP29?

Developing countries have called for at least a trillion dollars per year from 2025-2035 to meet emission targets, which would form the New Collective Quantified Goal (NCQG) on climate finance. This goal involves financial support from developed countries to help developing nations transition away from fossil fuels and reduce emissions. While developed countries mobilized \$115 billion in 2021-22, a higher target than \$100 billion must be set by 2025 according to the Paris Agreement. However, the talks in Baku have seen a significant divide between developed and developing countries regarding the amount and details of the NCQG.

What do developing countries want?

Developing countries, including China, India, and the Group of 77, along with coalitions like the LMDC, LDC, and SIDS, largely agree that developed countries should bear the bulk of climate finance. They argue that this funding should not only help countries meet their Nationally Determined Contributions (NDCs) but also address existing climate threats and compensate for past climate damage. The NCQG, they contend, should be based on developed countries' historical contributions to carbon emissions and their per capita GDP. Despite voluntary commitments to reduce emissions, current plans would only lead to a 2 % reduction, while carbon emissions are projected to rise by 0.8 % in 2023.

What does the developed world say?

Developed countries, led by the European Union, argue that the demands from developing countries for climate finance are too high. They propose a collective target of \$1.3 trillion per year by 2035, but their own commitment is only \$250-300 billion per year by 2035. This would come from a mix of public, private, bilateral, multilateral, and alternative sources. This proposal does not fully address the developing countries' demand for most of the funding to be in the form of grants or low-cost loans.

Have any concrete agreements been made?

A week before COP29, China, as part of the BASIC group (Brazil, South Africa, India, China), requested that the conference address "climate-change related unilateral restrictive trade measures," specifically targeting the European Union's Carbon Border Adjustment Mechanism (CBAM). The CBAM imposes a tax on imports into the EU that do not meet its carbon-emission standards, with full implementation set for January 2026. On the first day of the conference, an agreement was reached on carbon markets, which would be supervised by the UN, allowing countries to trade carbon credits based on emission caps set by individual nations.

The carbon market discussed at COP29 is based on Article 6 of the Paris Agreement, which allows countries to trade carbon credits bilaterally (Article 6.2) or participate in a global carbon market (Article 6.4). While the framework for this market, overseen by the UN, has been in place since 2022, concerns remain over ensuring the authenticity and transparency of carbon credits. Although environmentalist groups criticize the lack of discussion on these issues, the mechanism aims to facilitate climate finance. India is exploring bilateral carbon trading agreements, and an agreement at COP29 could help activate its own carbon trading market.

From underground to government

INTERNATIONAL RELATIONS

CONTEXT: Anura Kumara Dissanayake was elected President of Sri Lanka in September, and his National People's Power [NPP] alliance swept the General Elections held on November 14.

President Dissanayake reassured Sri Lankans on November 21 that the country's ongoing IMF programme and debt treatment plans, initiated by his predecessor, would continue smoothly, dispelling concerns about economic instability. The National People's Power (NPP), a coalition of 21 groups including political parties, youth, trade unions, and civil society, is led by the Janatha Vimukthi Peramuna (JVP), founded by Rohana Wijeweera. Dissanayake, who established the NPP in 2019 to broaden the party's appeal, recently achieved a significant political victory. The JVP, formed in 1965 as a Marxist-Leninist revolutionary party, emerged from splits within the Ceylon leftist movement, particularly following the breakdown of the Lanka Sama Samaja Party (LSSP) and the Communist Party during the 1940s and 1960s.

'Five classes'

Rohana Wijeweera joined the Communist Party of Sri Lanka's Peking wing in 1964 but was expelled in 1965 after challenging its leadership on class politics and revolution. His faction became the Janatha Vimukthi Peramuna (JVP). Wijeweera and his followers educated rural Sinhala youth through "Five Classes," which analyzed Sri Lanka's social and political landscape, Indian influence, the reformist left, coalition politics, and the parliamentary road to socialism. The JVP's rise in the late 1960s and its eventual decline were shaped by two major events: President J.R. Jayewardene's economic reforms in 1977 and the onset of the civil war after the 1983 anti-Tamil pogrom, which Jayewardene wrongly blamed on left-wing parties, including the JVP.

The JVP's first insurrection in 1971 was driven by frustration with the Sirimavo Bandaranaike-led government's failure to address the needs of educated, unemployed youth and change the colonial-era social and political systems. The insurgents attacked police stations to seize weapons. The second insurrection, from 1987 to 1989, aligned with the JVP's shift towards Sinhala nationalism, opposition to Tamil self-determination, and rejection of the 1987 India-brokered peace accord. While the JVP did not engage in anti-Tamil violence, it was seen as Sinhala chauvinist by Tamils in the north. The state's brutal counter-insurgency during the second uprising led to tens of thousands of deaths and disappearances, including the execution of Wijeweera in 1989. Somawansa Amarasinghe, the only surviving politburo member, fled to India and Europe. After years of underground activity, the JVP returned to politics, winning one seat in the 1994 general election and gradually integrating into the political mainstream.

Two splits

The JVP's recent trajectory has been shaped by two major splits, primarily influenced by its relationship with Mahinda Rajapaksa, who became a dominant political figure in the early 2000s. Tensions arose over the party's shift from a focus on leftist ideology to embracing Sinhala-Buddhist nationalism (patriotism), and disagreements over Rajapaksa's pro-war stance. While the JVP supported Rajapaksa's military approach to the Tamil question and the defeat of the LTTE, they opposed his "family-rule" and socio-economic policies. In 2008, Wimal Weerawansa, the JVP's parliamentary leader, broke away with a quarter of its legislators to form the National Freedom Front, aligning with Rajapaksa. Four years later, a Marxist faction within the JVP also split from the party.

In 2014, Mr. Dissanayake became the leader of the JVP, a party that had restructured itself after shedding both its racist right-wing and dissenting left-wing factions. These splits allowed the party to reinvent its image, becoming known for its bold criticism of corruption, nepotism, and its advocacy for the rule of law and liberal democratic values. However, the JVP remains cautious about taking a clear stance on the unresolved ethnic issue and avoids using class-based political language. In a December 2023 interview, Dissanayake emphasized that labels often create misunderstandings and stated that the party focuses on serving the majority of the people rather than adhering to ideological labels.

Study shows fatal spread of H5N1 from ferrets to suckling kits

SCIENCE & TECHNOLOGY

CONTEXT: During 2020, the highly pathogenic avian influenza A(H5N1) virus of clade 2.3.4.4b emerged and rapidly spread across many parts of Africa, Asia, and Europe. In 2021-2022, the 2.3.4.4b clade of H5N1 first spread to North America and then to South America where it caused large-scale mortality of seabirds.

The H5N1 virus, previously rare in infecting mammals, began spreading to marine mammals along the coasts of Peru and Chile in 2022-2023, killing 30,000 sea lions and affecting dolphins, otters, and other species. In Argentina, it killed over 17,000 elephant seals, including nearly 97 % of pups. By March 2024, the virus was detected in cattle in Texas, and a farm worker in the U.S. was confirmed to have contracted it in April after exposure to infected dairy cattle. As of November 22, 2024, 58 human cases of H5N1 have been reported in the U.S., and the virus has spread to 616 dairy herds across 15 states, with California having 402 affected herds.

Causing disease

The H5N1 virus of the 2.3.4.4b clade, which infects the mammary glands of cows, has raised concerns about milk as a potential transmission route for the virus to offspring and humans. Due to challenges in studying the infection in cows, researchers used ferrets to investigate the virus's impact. They found that lactating ferrets infected with the 2.3.4.4b clade could transmit the virus to their pups, resulting in 100% mortality. These findings were posted on a preprint server, pending peer review. Additionally, a study published in Nature on October 28 showed that the virus caused severe disease and

From lactating ferrets to suckling pups

H5N1 virus of 2.3.4.4b clade shows a marked preference for the mammary gland

■ H5N1 viruses were once considered to rarely infect mammals and not likely to spread among mammals. But that has changed since 2022

■ H5N1 virus of 2.3.4.4b clade has infected a variety of mammals — sea lions, dolphins, otters, elephant seals and cows

■ As on November 18, 55 H5N1 cases have been reported in humans in the U.S., and the 2.3.4.4b clade of H5N1 has spread to 553 dairy herds across 15 States in the U.S.

■ The presence of virus in the mammary gland suggests active viral replication within the gland



Viral spread: Viral RNA titers significantly increased in milk over time and remained high in the mammary gland tissue

■ The virus had spread from lactating ferrets to suckling pups; the pups had significantly increased viral RNA in the oral and nasal cavity

■ Viral RNA levels in the lungs were low in the lactating ferrets but high in the suckling pups

■ H5N1 virus caused 100% fatality in lactating ferrets and suckling pups

100% mortality in infected ferrets, spreading efficiently through direct contact but not via respiratory droplets or surfaces.

In a study on H5N1 virus (2.3.4.4b clade) transmission from lactating ferrets to their pups, researchers inoculated the virus into the mammary glands of lactating ferrets. They found that viral RNA levels significantly increased in the milk over time and remained high in the mammary gland tissue. Suckling kits showed elevated viral RNA in their oral and nasal cavities, with the virus spreading to their lungs. The infection caused mastitis-related disease in the lactating ferrets and resulted in 100% mortality among the pups within four to six days. The study concluded that the virus actively replicated in the mammary glands, as evidenced by increasing viral RNA levels in the milk.

Significant increase

The study found that viral RNA levels in the oral cavity of suckling ferret pups significantly increased, peaking four days post-inoculation, indicating viral transmission through milk. While the lactating ferrets initially showed no viral RNA in their nasal cavities, prolonged contact with the pups led to an increase in viral RNA in the mothers. The findings suggest that the pups developed respiratory infections from H5N1-positive milk, which was then transmitted to the mothers. The study concludes that intramammary H5N1 infection causes more severe disease in both lactating ferrets and their pups compared to H1N1.

Govt. unfazed by high import bills and trade deficit spikes

SCIENCE & TECHNOLOGY



CONTEXT: The Centre is non-plussed about the recent spate of record high import bills and is not actively mulling any import compression measures, attributing the rising import tallies to India's relatively faster growth vis-à-vis the rest of the world, and the use of some incoming goods like precious metals and electronics as inputs for exported items.

India's goods imports reached record highs in August and October, with October's tally hitting \$ 66.34 billion, driven by increases in gold and oil imports. The merchandise trade deficit for October was \$ 27.14 billion, the third highest on record. Between April and October, goods imports rose by 5.8 % to \$ 416.9 billion, while exports grew more modestly by 3.2 % to \$ 252.2 billion, widening the trade deficit to \$ 164.6 billion. A senior Commerce

Ministry official emphasized that rising imports should not be seen negatively, pointing out that trade is a two-way process and the nature of imports matters more than simply having a trade surplus.

India's rising imports, particularly in sectors like electronics, are seen as necessary for building value chains to boost

exports in the future, similar to the automotive sector. Commerce Minister Piyush Goyal emphasized that many imports, such as components for mobile phones and gems, directly support exports. He noted that India's imports mainly consist of essential items like pulses, edible oils, crude petroleum, and coal, with gold also accounting for a significant portion. Despite the increasing trade deficit, India's growing services exports and manageable current account deficit (around 1 % of GDP) are not seen as a major concern. The government believes India's strong economic growth, alongside foreign exchange reserves, remittances, and FDI inflows, ensures the country can comfortably handle its import needs.

NATO chief discusses 'global security' with bloc-sceptic Trump

INTERNATIONAL RELATIONS

CONTEXT: NATO chief Mark Rutte held talks with U.S. President-elect Donald Trump in Florida on the "global security issues facing the alliance".

Mr. Trump In his first term aggressively pushed Europe to step up defence spending and questioned the fairness of the NATO transatlantic alliance. Mark Rutte, former Dutch Prime Minister wanted to meet Mr. Trump two days after Mr. Trump was elected on November 5, and discuss the threat of increasingly warming ties between North Korea and Russia.

Mr. Trump's thumping victory to return to the U.S. presidency has set nerves jangling in Europe that he could pull the plug on vital Washington military aid for Ukraine. NATO allies note that keeping Kyiv in the fight against Moscow is key to both European and American security.



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