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U.S. President Donald Trump signed an Executive Order to end "citizenship by birth," impacting Indian professionals on H-1B and other temporary visas.

Trump declares end to U.S. citizenship by birth

Democratic-led States challenge order that could affect thousands of Indians in the U.S.; President also threatens 100% tariffs on BRICS countries if they attempt to move to 'non-dollar' transactions

Suhasini Haidar
NEW DELHI

Shortly after being sworn in on Monday, U.S. President Donald Trump signed an Executive Order cancelling the provision of "citizenship by birth", which could directly affect thousands of Indian professionals working in the U.S. under H-1B and other temporary visas, who hoped to raise their families there.

Mr. Trump also said he planned to levy "100% taxes" on BRICS countries for attempting to move to "non-dollar" transactions, referring to the 10-nation grouping of emerging economies that includes India.

"As a BRICS nation, they'll have a 100% tariff if they so much as even think about doing what they thought, and therefore they will give it up immediately," he said, erroneously referring to Spain as a BRICS member.

In addition, Mr. Trump's plans to crack down on undocumented and illegal immigrants could hit about 7.25 lakh Indians, of which nearly 18,000 are already on a "final list for removal" or deportations.

Move challenged

A coalition of 18 Democratic-led States along with the District of Columbia and city of San Francisco filed a lawsuit in federal court in Boston on Tuesday arguing that the Republican President's effort to end birthright citizenship was a flagrant violation of the U.S. Constitution.

As concerns grew in India over the announcements, External Affairs Minister S. Jaishankar was set to meet incoming U.S. Secretary of State Marco Rubio to discuss priorities for the India-U.S. bilateral relationship and the Quad.

The one-on-one meeting, which would be Mr. Rubio's first with any foreign dignitary, was due to take place on Tuesday afternoon in Washington, following a meeting of the Quad Foreign Ministers, including Australia's Penny Wong and Japan's Iwaya Takeshi.

The Quad Foreign Ministers are expected to discuss dates for the Quad Summit to be held in India later this year, while during the bilateral meeting Mr. Jaishankar and Mr. Rubio would discuss Mr. Trump's visit to India and taking forward the strategic partnership, as well as the concerns over immigration and tariffs.

According to the public schedule released by the U.S. State Department for the U.S. Secretary of State's first day, after he was confirmed by the Senate on Monday, Mr. Rubio will meet State Department employees and then hold talks with all Quad Foreign Ministers. The meeting of the Indo-Pacific grouping, that China has criticised, is significant as it is Mr. Rubio's first foreign policy engagement.

INAUGURAL DRAMA
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Signing spree: U.S. President Trump throws pens used to sign executive orders to the crowd in Washington on Monday. AP

Indian stocks hit as Trump hints at 100% tariffs on BRICS nations

Lalatendu Mishra
MUMBAI

U.S. President Donald Trump's first day in office proved to be a torrid Tuesday for the Indian stock markets with the benchmark indices sinking to their lowest point in about seven months, and all sectoral gauges ending up sharply in the red.

The BSE Sensex plunged 1,235 points to close at 75,838, a level last seen on June 6, 2024, and the NSE Nifty fell 320 points to 23,024. Analysts attributed the sharp downturn to concerns about Mr. Trump's plans to enhance import tariffs and his warning of a 100% duty on products from BRICS nations.

Midcap and smallcap stock indices snapped a five-day rising streak, dropping 2.3% on the NSE.

More on the news:

- A coalition of 18 Democratic-led States filed a lawsuit claiming that ending birthright citizenship violates the U.S. Constitution.
- Further, President Trump announced plans to impose 100% tariffs on BRICS countries transitioning to "non-dollar" transactions.
- The U.S. government's crackdown on undocumented immigrants could affect 7.25 lakh Indians, with 18,000 already on a deportation list.
- Indian External Affairs Minister S. Jaishankar planned discussions with U.S. Secretary of State Marco Rubio on immigration, tariffs, bilateral ties, and Quad priorities.

What is birthright citizenship in the US?

- Birthright citizenship in the U.S. means that anyone born on U.S. soil automatically becomes a U.S. citizen, regardless of their parents' immigration status.
- This principle is based on the 14th Amendment to the U.S. Constitution, which guarantees citizenship to all individuals born or naturalized in the country.
- It is often referred to as "jus soli," meaning "right of the soil."This policy has allowed children of immigrants, including undocumented ones, to gain U.S. citizenship.
- Does India have birthright citizenship? India does not provide unconditional birthright citizenship like the U.S.
- Under the Citizenship Act, 1955.A person is granted citizenship by birth only if at least one parent is an Indian citizen and the other is not an illegal migrant.

On January 3, 2025, the Ministry of Electronics and Information Technology released the draft rules for the implementation of the Digital Personal Data Protection (DPDP) Act, 2023.

What do draft data protection rules state?

Will major tech companies such as Meta, Google, Apple, Microsoft, and Amazon be affected by the new rules on data localisation? How does Rule 22 augment Section 36 of the Digital Personal Data Protection Act, 2023? Will the new rules compromise end-to-end encryption of messages?

EXPLAINER

Aaratrika Bhaumik

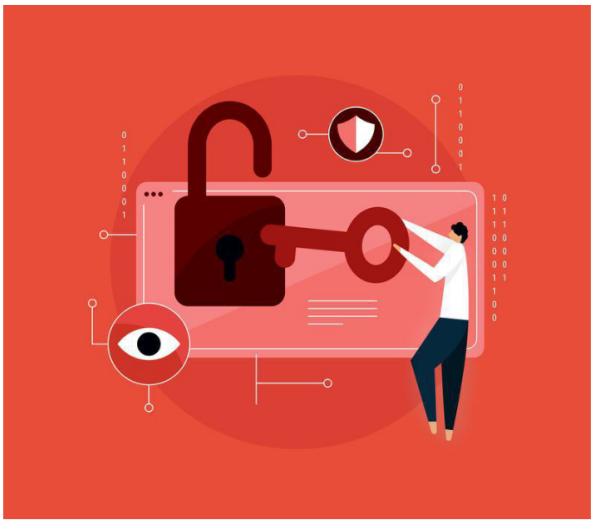
The story so far:

The Ministry of Electronics and Information Technology on January 3, 2025, released the draft rules for implementing the Digital Personal Data Protection (DPDP) Act, 2023 – 16 months after the law was notified in August 2023. The Union government is currently soliciting feedback on the draft rules through a fiduciary framework that effectively precludes both public disclosure and the submission of counter-comments. "The draft rules, coupled with the existing legislation, are inadequate for establishing a comprehensive data privacy framework... Moreover, the government should consider submitting the rules to a parliamentary standing committee for scrutiny," Amar Patnaik, advocate and former MP, told *The Hindu*.

What is the data localisation mandate?

The draft rules introduce a data localisation mandate that extends beyond the original scope of the legislation. Data localisation refers to measures that restrict the flow of data within a jurisdiction's borders. While the DPDP Act permits the government to limit personal data transfers, it confines such restrictions to specific notified countries.

In contrast, the rules propose the creation of a government-appointed committee to define which classes of data cannot be exported from India. This mandate will apply to significant data fiduciaries (SDFs), as designated by the government based on the volume and sensitivity of the personal data they process. Major tech companies, such as Meta, Google, Apple, Microsoft, and Amazon, are expected to fall within this classification. The localisation provision likely stems from the challenges law enforcement agencies face in accessing cross-border data during investigations. In 2018, the Reserve Bank of India implemented a similar mandate, requiring payment data operators to localise their data within the country. Currently, financial, payment, and insurance data must be stored domestically, with copies of payment data allowed overseas solely to facilitate international transactions.



GETTY IMAGES

However, the government has clarified that the proposed committee is envisioned as a central body that will collaborate with other ministries and sectoral regulators to ensure the effective implementation of local data storage without disrupting industry operations. This approach could also help prevent ad hoc data localisation mandates from government departments working in silos. Union Minister of Information and Broadcasting Ashwini Vaishnaw earlier told media portals that the government plans to provide the industry with a two-year timeline to establish the necessary systems for compliance.

According to Aparajita Bharti, a founding partner at TQH Consulting, which advises tech companies on compliance with Indian laws, data localisation mandates could present substantial operational challenges for both large tech companies and start-ups. "It is extremely difficult for companies to segment different sets of data and determine the appropriate data centre for each tool. This will restrict business operations and result in higher operational costs," she said.

What about executive overreach?

Section 36 of the DPDP Act, read in conjunction with Rule 22, empowers the Union government, through the designated authorised person, to demand "any" information from a data fiduciary or intermediary (entities processing personal data) in the interest of India's sovereignty, integrity, or national security. Experts have cautioned that such sweeping discretionary powers are susceptible to misuse, potentially enabling surveillance or the suppression of dissent.

Additionally, these provisions could compel social media intermediaries to compromise end-to-end encryption of messages – a concern raised by Meta-owned WhatsApp last year in its challenge to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021. Rule 22 prohibits companies from disclosing information about such government demands if doing so could "prejudicially affect the sovereignty and integrity of India or the security of the State."

Apar Gupta, advocate and co-founder of Internet Freedom Foundation, told *The Hindu* that this provision stands in stark contrast to the recommendations of the Group of Experts on Privacy, headed by Justice (retd.) A.P. Shah, in 2012.

"The committee categorically recommended that individuals subject to interception should be notified. There is ample evidence of interception orders being misused by police departments under political influence. This provision effectively creates a giant backdoor for the government to requisition information without any checks and balances," he said.

Ms. Bharti agreed, highlighting the absence of adequate restraints on the government. "The government should consider adopting safeguards akin to those under the Information Technology Act, 2000, to ensure that citizens are not left unaware of the nature and extent of data requisitioned by the government from data fiduciaries. Such expansive governmental discretion could also hinder commercial interests," she said.

THE GIST

- Data localisation refers to measures that restrict the flow of data within a jurisdiction's borders. While the DPDP Act permits the government to limit personal data transfers, it confines such restrictions to specific notified countries.
- Section 36 of the DPDP Act, read in conjunction with Rule 22, empowers the Union government, through the designated authorised person, to demand "any" information from a data fiduciary or intermediary.
- The Union government is currently soliciting feedback on the draft rules through a fiduciary framework that effectively precludes both public disclosure and the submission of counter-comments.

Introduction to Digital Personal Data Protection (DPDP) Draft Rules

- These rules were introduced 16 months after the DPDP Act was notified in August 2023.
- The government is seeking public feedback on these draft rules.

Concerns Over the Data Privacy Framework

- Critics argue that the DPDP Act, along with the draft rules, is insufficient to establish a comprehensive data privacy framework.
- Concerns include the need for further scrutiny and review of these rules by a parliamentary standing committee before final approval.

Data Localisation Mandate

- The draft rules propose a data localisation mandate that goes beyond what was initially intended by the DPDP Act.
- Data localisation refers to restrictions on transferring data outside the country's borders.
- The rules suggest that a government-appointed committee will define which types of data cannot be exported.
- Significant data fiduciaries (SDFs), such as large tech companies, are likely to be affected by this rule.
- The main motivation for this provision is to help law enforcement access cross-border data for investigations more easily, as seen with the Reserve Bank of India's 2018 mandate for payment data localisation.
- A two-year timeline is proposed for the industry to set up systems for compliance with data localisation requirements.

Challenges of Data Localisation

- Data localisation could pose operational challenges for both large tech companies and start-ups.
- Companies may face difficulties in segmenting and determining which data to store where, leading to higher operational costs and limitations on business operations.
- The process could be complex and costly for businesses to comply with, especially for international companies with vast data needs.

Executive Overreach and Government Powers

- Section 36 of the DPDP Act grants sweeping powers to the government to demand information from data fiduciaries or intermediaries in the name of national security, sovereignty, or integrity.
- These powers could be misused for surveillance or political control, with concerns about compromising privacy.
- Rule 22 also prevents companies from disclosing government demands for information if it could harm national security, raising fears of government overreach and lack of transparency.

Concerns Over Lack of Safeguards

- Critics argue that these provisions give the government excessive discretion without proper checks and balances.
- There are concerns that the government could access data without notifying individuals involved, undermining transparency and accountability.
- Some suggest that the government should adopt safeguards, similar to those in the Information Technology Act, 2000, to protect citizens' privacy while ensuring the proper management of data requisition by authorities.

Conclusion

- The draft rules, although aimed at enhancing data protection, raise concerns about operational challenges, government overreach, and the absence of adequate privacy safeguards.
- The industry and legal experts recommend more scrutiny and proper checks before final implementation.

UPSC Mains Practice Question

Ques : Rather than fostering a comprehensive data privacy framework, the draft rules for the Digital Personal Data Protection (DPDP) Act, 2023, introduce challenges. Analyze the implications of the data localisation mandate and executive powers granted under the Act. **(250 Words /15 marks)**

Page 11 : GS 2 : Social Justice – Health

On New Year's Day, a five-year-old girl in Karnataka died from a snakebite due to delays in antivenom treatment and unsafe conditions at her anganwadi.India records an estimated 58,000 snakebite deaths annually, making it the "snakebite capital" of the world.

Why are antivenoms not easily accessible in India?

A landmark 2020 study by researchers from Canada, India, and the U.K. estimated that between 2001 and 2014, a staggering 1.2 million snakebite deaths and three-times as many cases of disability occurred in India

R.N.V. Krishna Deepak

On New Year's Day, five-year-old Mayuri lost her life to a snakebite in Uttara Kannada district in Karnataka. The delay in receiving antivenom and the unsafe conditions at her anganwadi tragically sealed her fate. She became one of the estimated 58,000 Indians who die every year from venomous snakebite, a terrible number that renders India the 'snakebite capital' of the world and highlights the scale of this preventable crisis. What makes snake venom so deadly, and how does antivenom neutralise its effects?

What are antivenoms?

Antivenoms, or antivenins, are life-saving medicines used to treat snakebites. They are produced by injecting small amounts of venom into animals, usually horses, which then produce antibodies as part of their immune response. These antibodies become antivenoms.

Snake venom is one of nature's most lethal weapons, a complex cocktail of toxic proteins, each tailored by evolution to immobilise, and in some cases to digest, prey and defend against threats. When a sufficient quantity of venom is injected during a snakebite, the toxins wreak havoc on the human body in multiple ways. Haemotoxins destroy blood cells and disrupt clotting. Neurotoxins block nerve signals and paralyse. Cytotoxins dissolve tissue at the bite site. The effects are often fatal without medical intervention.

Antivenoms are the frontline defence. They work by specifically binding to the venom toxins to render them ineffective, allowing the body's natural defence systems to clear them safely over time. But for antivenom treatment to succeed, responders need to know which snake species inflicted the wound and how much venom it injected.

Polyvalent antivenoms (PVAs) currently used in India target multiple species. However, their efficacy varies against less common snakes. Understanding each venom's complexity and the mechanisms of antibody production remains central to improving treatments.

How do antivenoms work?

The production of antivenom is a remarkable interplay of human ingenuity, animal resilience, and immunological mastery, dating back to the pioneering work of French physician Albert Calmette in the 1890s. He developed the first antivenom using horses, a practice that continues today.

To produce antivenom, healthy and mature venomous snakes are first captured from the wild by trained experts who then "milk" the snakes to extract the venom. Next, they immunise horses with increasing doses of venom over many weeks, allowing their immune systems to produce antibodies. The dose of venom injected into horses is critical: too little and the immune response will be weak; too much and the horse's body could be damaged.

Over time, the horses develop a robust immune response, producing antibodies that neutralise venom toxins. The antibodies thus produced are very specific to the type of toxins injected, like a lock and its key. This process mirrors how humans develop resistance to familiar pathogens like the flu or common-cold viruses – through repeated exposure or vaccination. The experts extract these antibodies from the horse's blood and purify and formulate them as antivenoms.

Dangerous process: A snake-catcher extracts venom from a cobra at the venom extraction centre of the Irula snake-catchers cooperative near Mahabalipuram in 2024. B. VELANKANNI RAJ

Several companies in India, including Bharat Serums and Vaccines, Haffkine Bio-pharmaceutical Corporation, and ViNS Bioproducts, produce antivenom this way. The Irula tribe of Tamil Nadu plays a crucial role in this process. The Irular people are skilled snake-catchers and can safely extract venom from snakes in controlled environments. Their expertise ensures a steady supply of high-quality venom for antivenom production in India. Without their contribution, the supply chain for these drugs would collapse.

How common is snakebite in India?

India is home to more than 300 species of snakes, of which more than 60 are venomous, ranging from mild to high. The so-called Big Four – Indian cobra (Naja naja), common krait (Bungarus caeruleus), Russell's viper (Daboia russelii), and the saw-scaled viper (genus Echis) – account for most snakebite deaths. The venom extracted from these four species is used to produce PVAs in India.

On the flip side, this means other venomous snakes – including the king cobra, monocled cobra, banded krait, Sochurek's saw-scaled viper, hump-nosed viper, and several species of pit vipers – are not covered by existing PVAs and continue to pose significant risks. As a result, victims bitten by these species often receive ineffective treatment, leading to poor outcomes.

A landmark 2020 study by researchers from Canada, India, and the U.K. estimated that between 2001 and 2014, a horrifying 1.2 million snakebite deaths and three-times as many cases of permanent disability occurred in India. The study also said one in 250 Indians were at risk of dying from snakebite before the age of 70.

These staggering mortality numbers reflect a pernicious combination of ecological, social, and systemic factors. People in rural India like agricultural workers are disproportionately affected and face a constant threat, particularly during the monsoon, when snakes become more active. Rapid, often unplanned urbanisation, poor garbage management, and urban floods have increased encounters between humans and snakes, making even city-dwellers vulnerable.

Why are antivenoms hard to get?

India is the world's largest producer and consumer of antivenoms in the world. However, access to timely medical care remains a significant challenge for many Indians. People in remote areas often undertake long journeys to reach a healthcare facility equipped with antivenoms.

Even when antivenom is available, improper administration and inadequate facilities exacerbate the crisis. Logistical issues, unequal access to care, superstitious beliefs, and cultural practices often delay proper treatment in many parts.

Antivenoms often need to be transported in cold storage, however, India's rural parts lack the supporting infrastructure and power supply. Facilities that 'make do' with the resources available can cause the antivenoms to degrade in storage and become ineffective.

The high cost of manufacturing antivenom limits accessibility for the economically-disadvantaged. This mismatch highlights the need for tailored solutions, underscoring the importance of targeted research and innovation.

How are antivenoms changing?

Antivenoms of the future are more promising. Researchers are using recombinant DNA technology to produce lab-engineered, synthetic antivenoms that are free from animal-derived proteins and offer greater safety and efficacy. Computer-designed proteins could accelerate development by helping researchers to optimise antibodies for different clinical settings.

For example, on January 15, researchers from Denmark, the U.K., and the U.S., led by 2024 Nobel laureate David Baker, reported successfully using Artificial Intelligence (AI) to design synthetic antivenoms. Their and other breakthroughs promise greater effectiveness, availability, and the potential to replace century-old methods to produce antivenoms.

Region-specific antivenoms are another promising avenue. The work of Karthik Sunagar at the Indian Institute of Science, Bengaluru, has already shed light on cross-species and geographic variability in venoms.

By mapping the toxins' compositions, scientists are attempting to create tailored antivenoms, holding the promise for more precise treatments. Portable venom-detection kits and rapid diagnostic tools are also helping guide effective antivenom use. With continued investment in research, public education, and infrastructure, India can address its snakebite crisis, with reason to hope tragedies like Mayuri's will become a thing of the past.

R.N.V. Krishna Deepak studies snake venoms using computational methods at Azim Premji University, Bengaluru.

What Are Antivenoms?

- Antivenoms are life-saving medicines used to treat snakebites.
- They are made by injecting small amounts of venom into animals, usually horses, which produce antibodies that neutralize venom toxins.

How Snake Venom Affects the Body

- Snake venom contains haemotoxins, neurotoxins, and cytotoxins that damage blood cells, paralyze nerves, and dissolve tissue.
- Without medical intervention, venom can lead to death.

How Antivenoms Work

- Antivenoms work by binding to venom toxins and rendering them inactive.
- They are produced by injecting venom into horses, and the antibodies are extracted and purified.

Challenges in Accessing Antivenoms

- Despite India being the largest producer of antivenoms, many people in rural areas struggle to access timely treatment.
- Issues like poor storage conditions, high costs, and logistical problems worsen the situation.

Future of Antivenoms

- Future antivenoms may be synthetic, using AI and recombinant DNA technology for improved safety and effectiveness.
- Region-specific antivenoms could provide more precise treatments.

Conclusion

- India's snakebite crisis requires improved access to timely medical care, better antivenom storage, and advanced research for more effective treatments.
- Continued innovation and infrastructure are essential for saving lives.

UPSC Mains Practice Question

Ques : India is considered the 'snakebite capital' of the world, with thousands of fatalities every year. Discuss the challenges in snakebite treatment in India and suggest measures to address this crisis. **(150 Words /10 marks)**

- Honda Motor Co. Ltd. Chief Engineer Hiroya Ueda highlighted the potential of bioethanol and renewable energy-based electrification for India to achieve carbon neutrality.

Introduction to Bioethanol and Challenges

- Bioethanol and renewable energy-based electrification can help India achieve carbon neutrality.
- However, the high running costs of bioethanol fuel due to lower fuel efficiency remain a significant barrier.
- The government must create mechanisms to make bioethanol more affordable for consumers.

Making Bioethanol Pricing Affordable

- Although bioethanol reduces carbon emissions, its higher cost of operation compared to conventional fuels is an issue.
- A key strategy to make bioethanol viable is through policy changes that ensure affordable pricing for users.
- The government should focus on reducing fuel costs to make it economically competitive with gasoline.

Improving Fuel Efficiency

- Vehicle manufacturers must work on improving fuel efficiency to lower the cost per kilometer of ethanol-powered vehicles.
- Maintaining or reducing the fuel cost per kilometer is essential for ethanol to remain competitive with gasoline.

Proposed Price Rductions

- A potential solution is to reduce the price of ethanol (E100) from ₹95 per liter to ₹65 per liter to lower vehicle running costs.
- Improving vehicle mileage is another way to reduce the overall cost of ethanol-based transportation.

'Need policy for affordable bioethanol'

Crucial point: In affordability, lies wider adoption, says Honda Motor Co.'s chief engineer Ueda .GETTY IMAGES/ISTOCK

Press Trust of India
NEW DELHI

India has the advantage of achieving carbon neutrality through bioethanol and renewable energy-based electrification but the government needs to create a mechanism to make prices of bioethanol fuel more affordable to make it economically viable for users, Honda Motor Co Ltd. chief engineer Hiroya Ueda said on Tuesday.

Speaking at auto industry body SIAM's 3rd International Symposium for Thriving Eco-Energy in Mobility event, Mr. Ueda said ethanol had an edge over existing fuels in terms of cutting carbon emissions but the running cost was higher due to low fuel efficiency.

'Improve fuel efficiency'

Stating that the running cost of fuel will be an issue and few initiatives could be taken to raise the use of bioethanol, he said, "The government should create a mechanism to make fuel pricing more affordable and maintain economic viability for users through its policies."

At the same time, he said vehicle manufacturers should continue to take initiatives to improve fuel efficiency.

"For the ethanol fuel to remain economically viable the fuel cost per km must be kept the same or lower compared with gasoline vehicles. To achieve this, initiatives including reducing tax on ethanol should be considered," Ueda said.

Reducing price

He further said, "One way could be to reduce the price of E100 (ethanol 100) from ₹95% litre to ₹65 per litre just to bring down the vehicle running cost." Parallelly, he added, "OEMs also need to improve the vehicle mileage to achieve this."

Mr. Ueda also pointed out promotion of ethanol fuel will have a beneficial impact on the farmers of India, where agriculture is prevalent and majority of the population is in rural areas.

It is important to keep in mind the socio-economic development of the rural community, he said.

"Since ethanol can be supplied through existing gasoline stations, it seems that availability will not be an issue," Mr. Ueda said, adding that for CNG, the infrastructure is gaining momentum but expansion will be gradual.

Asserting that in terms of the environmental benefit, ethanol has an edge, he said, "From a long-term perspective both flex-fuel vehicles and electric vehicles will be required for India's carbon neutral commitment.

Increasing ethanol concentration results in decreased fuel economy while if the price of ethanol remains the same as that of gasoline customers will have to bear higher running costs.

Arguing that ethanol has an edge over other existing fuels in terms of cutting carbon emissions, he said, "It is important to further promote the use of bioethanol fuel."

In terms of electrification, he said with the adoption of renewable energy in the near future electricity would become more environmentally friendly and hence it is also important for OEMs to work on delivering electric vehicles.

On Honda's bioethanol initiative in India, he said learning from the company's experience in Brazil, the company has launched the CBF300 Flex Fuel in the country.

Economic Benefits for Farmers

- Promoting ethanol fuel will have positive socio-economic impacts, particularly in rural India, where agriculture is a major livelihood.
- The use of bioethanol can support farmers and contribute to rural development.

Availability of Bioethanol

- Ethanol can be distributed through existing gasoline stations, ensuring its widespread availability.
- In comparison, infrastructure for other alternative fuels like CNG is still developing, which makes ethanol more accessible in the short term.

Environmental Benefits of Ethanol

- Bioethanol has an environmental advantage over other fuels by significantly reducing carbon emissions.
- Both flex-fuel vehicles and electric vehicles are necessary for achieving long-term carbon neutrality goals.

Conclusion

- To make bioethanol a sustainable and viable fuel option, India needs support from the government, manufacturers, and farmers.
- Affordable pricing and infrastructure improvements are critical for the success of ethanol in the Indian market.

UPSC Mains Practice Question

Ques : Bioethanol fuel has the potential to contribute significantly to India's carbon neutrality goals. Discuss the challenges associated with its widespread adoption, and suggest measures to make it economically viable for users. **(250 Words /15 marks)**

In News : Indus Waters Treaty Dispute Over Kishenganga and Ratle Projects

The World Bank-appointed Neutral Expert has upheld India's stance on the dispute resolution mechanism under the Indus Waters Treaty (IWT) concerning the Kishenganga and Ratle hydroelectric projects.

Analysis of the news:

What is Indus Water Treaty (IWT)?

- Indus Waters Treaty was signed on September 19, 1960, between India and Pakistan and was brokered by the World Bank.
- The treaty sets out a mechanism for cooperation and information exchange between the two sides on the use of the water of the Indus River and its five tributaries Sutlej, Beas, Ravi, Jhelum, and Chenab.

Neutral Expert's Decision

- The Neutral Expert validated India's position that the seven questions referred to him fall under his jurisdiction per Paragraph 7 of Annexure F of the treaty.
- This aligns with India's consistent claim that only the Neutral Expert has the competence to decide these issues.
- The decision marks the beginning of the merits phase, which will evaluate the specific technical differences and lead to a final decision.

India's Stand

- India welcomed the Neutral Expert's decision, emphasizing its commitment to the sanctity of the IWT and rejecting the parallel proceedings initiated by Pakistan in the PCA, which India deems "illegally constituted."
- The Ministry of External Affairs (MEA) reiterated India's readiness to cooperate within the Neutral Expert process to resolve differences consistent with treaty provisions.

Pakistan's Position and Actions

- Pakistan had initially sought the appointment of a Neutral Expert in 2015 but later unilaterally withdrew the request in 2016, opting instead for arbitration through the PCA.
- This shift, according to India, violated the graded dispute resolution mechanism stipulated in Article IX of the IWT.

Broader Context of Disputes

- India is constructing the Kishenganga hydroelectric project on the Kishenganga River (a tributary of Jhelum) and the Ratle hydroelectric project on the Chenab River.
- Pakistan has raised technical objections, citing potential violations of the IWT. In response, India has invoked Article XII (3) to initiate reviews and potential modifications to the treaty, reflecting its evolving water management priorities and the need to address procedural ambiguities.

Conclusion and Implications

- The Neutral Expert's decision reinforces the treaty's dispute resolution mechanism and validates India's adherence to its provisions.
- Moving forward, the merits phase will be critical in resolving technical differences.
- The case highlights the enduring challenges in Indo-Pak relations concerning shared water resources under the IWT framework.

UPSC Prelims PYQ 2021

Ques : With reference to the Indus river system, of the following four rivers, three of them pour into one of them which joins the Indus directly. Among the following, which one is such a river that joins the Indus direct?

(a) Chenab

(b) Jhelum

(c) Ravi

(d) Sutlej

Ans: (d)

Time to seize the promise of the U.S.-India nuclear deal

Raymond E. Vickery, Jr.

is a Senior Associate (Non-resident) at the Chair on India and Emerging Asia Economics, Center for Strategic and International Studies (CSIS), Washington, DC. He also worked with the Coalition for Partnership with India on the U.S.-India Civil Nuclear Initiative. He previously served as Assistant Secretary of Commerce for Trade Development, where he launched the U.S.-India Commercial Alliance

Sixteen years ago, this writer and other organisers of the Coalition for Partnership with India rejoiced at the final approval of the United States-India civil nuclear deal through the U.S. Congress. The long struggle for passage of the necessary U.S. legislation began in 2005, and it was only in late 2008 that the Coalition succeeded in working with the George W. Bush administration and U.S. Congressional leaders to make the deal legal under U.S. law.

The Coalition for Partnership with India was a loose association of businesses, Indian-Americans, and academics that supported U.S. approval of the deal in the face of fierce opposition that stipulated that the deal would promote the proliferation of nuclear weapons. As a consultant to the U.S.-India Business Council, this writer was privileged to recruit and act as a liaison among Coalition components, plan strategy, and advocate before the Congress.

A game-changing deal

The U.S.-India civil nuclear deal was a watershed moment and opened a whole new era in defence and strategic cooperation for the two democracies that had become estranged during the Cold War. Without the trust engendered by the willingness to cooperate in dealing with the most powerful and potentially most destructive technology ever seen, the present level of U.S.-India interaction on defence purchases and manufacturing, military exercises, technology transfer, intelligence sharing, and crisis management would never have occurred.

And yet, the energy and commercial promises of the U.S.-India deal have never been fulfilled. Those of us who supported and advocated for the deal envisaged the augmentation of the Indian civil nuclear sector with many plants being built using U.S. equipment, technology, and allied services. Employment would be created both in the U.S. and India. More electricity would be generated by plants to fuel Indian industry and benefit the average Indian. This energy would not generate greenhouse gases and help wean India away from an over-reliance on climate changing, and often toxic, fossil fuels. Even though U.S. President Barack Obama announced in 2016 that Westinghouse would build six new nuclear plants in India, this has not happened yet.

Jake Sullivan, in his last trip to India as U.S. President Joe Biden's National Security Adviser, announced, "... the United States is now finalizing the necessary steps to remove long-standing regulations that have prevented civil nuclear cooperation between India's leading nuclear entities and U.S. companies." Will this development be the mechanism that breaks the logjam that has prevented the U.S.-India deal from fulfilling its true potential? If only it were so simple.

There are major challenges that limit the full fruition of the deal, but the Trump administration can iron them out

At the conclusion of the civil nuclear deal in 2008, there were approximately 200 Indian entities on the so-called "Entity List" kept by the U.S. Department of Commerce. In general terms, U.S. companies are prohibited from doing business with companies on this list unless a special licence is granted. In practice, such licences are seldom granted. After the U.S.-India civil nuclear deal, all but a handful of Indian companies dealing with nuclear matters were removed from the list. This was one of the benefits of the deal. Among those remaining, were those that were mainly involved in research and development and thought to involve the risk of nuclear technology leakage into military uses and other security issues, including leakage to Russia and other adversaries of the U.S. Mr. Sullivan, in his speech in New Delhi, made oblique reference to this concern when he said, "As we see more and more new technologies diverted to unfriendly actors, the United States and India will also need to ensure that valuable dual-use technologies don't fall into the wrong hands. This means aligning our export control systems...."

Apparently, the Biden Administration decided that the few remaining Indian nuclear entities on the U.S. Entity list no longer present the kind of security concerns that landed them on that list in the first place. This is all well and good and can be considered progress, although it remains to be seen whether the security and foreign policy agencies under Mr. Trump will agree with that assessment. However, this is not the heart of the problem preventing the U.S.-India civil nuclear deal from reaching its full potential.

The liability risk issue

In 2010, India enacted the Civil Liability for Nuclear Damage Act. This Act was fuelled in Parliament by those who had lost the attempt to block the deal and their anti-foreigner rhetoric, including invocation of the infamous Bhopal/Union Carbide tragedy. The result was India departing from international civil nuclear liability norms and placing major liability obligations not on the operators of a civil nuclear facility but on the suppliers. Neither of the major U.S. suppliers – GE and Westinghouse – was willing to assume these liability risks, and neither the U.S. nor India was willing at that time to step in to ameliorate these liability concerns.

The Indian Government did attempt later to provide some relief from liability risks in conjunction with the resumption of Russian participation in the Indian civil nuclear expansion. Through India's public sector General Insurance Corporation, and four other government companies, a 20-year insurance premium would be charged to cover the supplier's liability for an accident. The Russians accepted this risk amelioration in large part because their overseas civil nuclear entities are government owned, will have a defence of sovereign immunity, and in any case will be protected by the Russian government from liability that might otherwise put them out of business. And the Russians saw their increased participation in Indian civil nuclear development as bearing significant geopolitical dividends. The Russians are now moving forward with India on civil nuclear expansion. The U.S. companies have been unwilling so far to accept this insurance amelioration. Thus, the Trump administration will have to find means to cut the Gordian knot of liability before there will be significant U.S. company involvement in Indian civil nuclear expansion.

Hurdles such as technology, consumer costs

There are other significant barriers to the full involvement of U.S. companies in Indian civil nuclear expansion that have arisen since the 2008 conclusion of the U.S.-India civil nuclear deal. Civil nuclear technology has evolved rapidly. For U.S. companies to be fully involved, they must show that they can offer the latest technology. Most importantly, this technology and its implementing equipment must be offered at a reasonable price that will not increase electricity costs to the Indian consumer. Indian civil nuclear officials are acutely aware of the disastrous cost overruns that have doomed the latest civil nuclear facilities in the U.S. and left ratepayers to shoulder unwelcome costs without improvements in either quantity or quality of services.

All these challenges limit the full fruition of the U.S.-India civil nuclear deal. But they cannot be met by U.S. companies acting alone. The Trump administration can work with Indian and U.S. nuclear companies not just on regulatory issues but also those involving liability, technology, and cost as well. The hour is late, but the benefits to seizing the full promise of the U.S.-India civil nuclear deal will be tremendous.

GS Paper 02 : International Relations

UPSC Mains Practice Question: Discuss the challenges impeding the full implementation of the U.S.-India civil nuclear deal and suggest measures to overcome these hurdles**. (250 Words /15 marks)**

Context :

- The U.S.-India civil nuclear deal, finalized in 2008, aimed to enhance bilateral relations but faces challenges in liability, technology, and cost barriers.

A Transformative Agreement

- The U.S.-India civil nuclear deal was approved by the U.S. Congress in 2008 after years of negotiation since 2005.
- The deal marked a new era in the U.S.-India defense and strategic cooperation.
- It fostered trust in handling advanced technologies and paved the way for collaborations in defense, technology transfer, and intelligence sharing.

India – US Civil Nuclear Deal (123 Agreement)

- **Background:** Signed in 2008, the deal marked a major shift in US policy, ending India's nuclear isolation since its 1974 nuclear tests.
- **Key Objective:** To facilitate civil nuclear energy cooperation while ensuring non-proliferation commitments.
- **Nuclear Supplier Group (NSG) Waiver:** India received a special waiver to engage in global civil nuclear trade despite not being a signatory to the Nuclear Non-Proliferation Treaty (NPT).
- **Provisions:**
    - US agreed to provide nuclear fuel, technology, and reactors for India's civilian nuclear energy program.
    - India committed to separating its civil and military nuclear facilities and placing civil facilities under International Atomic Energy Agency (IAEA) safeguards.
    - Strategic Significance: Strengthened India-US strategic partnership.Boosted India's energy security and nuclear power capacity.Positioned India as a responsible nuclear power.

Unrealized Promises of the Deal

- The expected benefits in the energy and commercial sectors have not materialized.
- The deal envisioned the construction of nuclear plants using U.S. technology, creating jobs and producing clean energy.
- Westinghouse's plan to build six nuclear plants in India, announced in 2016, has yet to materialize.

Recent Developments in Regulatory Frameworks

- U.S. National Security Adviser Jake Sullivan announced efforts to remove barriers to civil nuclear cooperation.
- Initially, around 200 Indian entities were on the U.S. Entity List, limiting business opportunities.
- Most entities were removed post-deal, but concerns over technology leakage kept some on the list.

The Liability Risk Issue

- India's Civil Liability for Nuclear Damage Act, 2010, placed liability on suppliers rather than operators, unlike international norms.
- This discouraged major U.S. companies like GE and Westinghouse from participating.
- To address liability concerns, India introduced an insurance scheme involving General Insurance Corporation and other government entities.
- While Russian companies accepted this arrangement, U.S. companies have not.

Challenges in Technology and Costs

- Rapid advancements in nuclear technology have created challenges for U.S. companies to meet India's expectations.
- Cost overruns in U.S. nuclear projects have raised concerns about affordability for Indian consumers.
- Indian officials remain cautious about projects that might lead to increased electricity costs without sufficient benefits.

Need for Joint Efforts

- U.S. companies alone cannot overcome the challenges related to liability, technology, and cost.
- Collaboration between the U.S. government, Indian authorities, and nuclear companies is essential.
- Achieving the deal's full potential could yield immense benefits, including clean energy and stronger U.S.-India ties.

Conclusion

- The U.S.-India civil nuclear deal represents a milestone in bilateral relations, but significant barriers remain.
- Resolving issues related to liability, technology, and cost is crucial to realizing its promise.