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Delhi Must Look Beyond H-1B GS 2 (International Relations)

• Why in News:

Oponald Trump's potential return to the White House has sparked significant debate in India, with discussions often focused narrowly on the H-1B visa controversy.

Delhi must look beyond H-1B controversy.

- However, while the export of Indian technical talent to the United States remains an important issue, the broader implications of Trump's technology policies warrant closer examination.
- These policies are poised to reshape not only the domestic and global technology landscape but also the geopolitical dynamics between major powers, including India, China, and the United States.

An Assessment of Different Aspects of H-1B Visa Debate

- The Centrality of H-1B Visas in India-U.S. Relations
 - The H-1B visa program is a cornerstone of India's engagement with the United States.
 - It enables highly skilled Indian professionals, particularly in technology, to contribute significantly to America's innovation and economic growth.
 - However, the intensifying debate surrounding this program reflects deeper divisions within American society about immigration policies,

encompassing economic, political, and cultural dimensions with implications for India.

Economic Imperatives Driving the H-1B Debate

- At its core, the H-1B visa debate revolves around balancing economic benefits with domestic concerns about immigration.
- Technology companies and industries reliant on skilled labour advocate for expanding the program, highlighting its role in addressing labour shortages, driving innovation, and ensuring America's competitive edge.
- As India supplies a significant proportion of H-1B workers, the program creates a mutual benefit for both nations.
- o Anti-Immigration Sentiments and Political Polarisation
 - Critics argue that reliance on foreign workers suppresses wages for American citizens, perpetuating income inequality and favouring corporations over labour.
 - This sentiment is shared by the traditional left, which opposes immigration on economic grounds, and the liberal left, which supports immigration from a humanitarian perspective rather than an economic one.

Trump's Dual Approach to Immigration Policies

- While emphasising stricter oversight and prioritising American workers, his administration also acknowledged the strategic importance of skilled immigration for maintaining America's scientific and technological leadership.
- This dual approach, supporting legal, high-skill immigration while restricting illegal and low-skill entry, resonated with many American voters.



Email: iasncsc@gmail.com

Opportunities and Challenges for India

- The U.S. technology sector's continued demand for Indian talent reinforces India's role as a vital source of skilled labour.
- However, addressing American concerns, such as illegal immigration, can bolster India's credibility in advocating for an expanded and efficient H-1B program.

The Strategic Significance of Skilled Immigration

- Beyond the immediate concerns of the H-1B program, this debate underscores the broader strategic context of India-U.S. relations.
- Skilled immigration is not merely an economic issue but a reflection of deeper interdependencies between the two nations.
- As America navigates its internal divisions on immigration, **India must position itself as a reliable** partner, advocating for policies that benefit both countries while addressing mutual concerns.

Key Features of Trump's Potential Second Term

- The Domestic Political Shift in Technology
 - Recent years have revealed that technology is far from politically neutral, significantly influencing ideological battles in Western democracies.
 - Conservatives, including Trump supporters, have accused social media platforms of bias against their views.
 - Figures like Elon Musk, through initiatives like X (formerly Twitter), and Mark Zuckerberg, by shifting Facebook's policies, have sought to address these concerns
 - This ideological struggle extends beyond the U.S., as Musk's involvement in European politics highlights a broader conflict between conservative and liberal ideologies
 - The resulting polarisation has profound implications for democracies worldwide, including India, where technology often intersects with political and societal narratives.

The Rise of Techno-Libertarianism

- Leaders like Elon Musk and Vivek Ramaswamy, alongside figures such as Peter Thiel, represent
 a push to dismantle bureaucratic constraints and accelerate innovation.
- This philosophy diverges from President Biden's emphasis on safety, ethics, and accountability in Al
- Instead, Trump and his allies may prioritise unleashing the full potential of AI and other technologies, even at the expense of regulatory oversight.
- This shift could position the U.S. as a global leader in unregulated technological innovation, creating opportunities and challenges for India.
- While India's burgeoning tech ecosystem may benefit from collaboration, it must also navigate the ethical and security implications of such policies.

Intensified Competition with China

- A defining feature of Trump's first term was the reorientation of U.S.-China relations, emphasising technological competition.
- Under Biden, this strategy evolved into extensive sanctions, reshoring supply chains, and forging technological alliances.
- Trump's return is likely to intensify this competition, with a focus on military AI development and Manhattan Project-style initiatives.
- However, Trump's penchant for bold, transactional diplomacy, exemplified by his pursuit of a grand bargain with Xi Jinping, adds an element of unpredictability.
- While structural contradictions between the U.S. and China may limit such deals, the role of tech entrepreneurs with vested interests in China could influence policy.

• The Way Forward for India: Look Beyond H-1B

- o Strengthening Diplomatic and Policy Engagement
 - India's first step is to enhance diplomatic channels to ensure sustained dialogue with U.S.
 - This includes advocating for the interests of its technology workforce and addressing concerns about illegal immigration.

- By demonstrating a commitment to orderly and merit-based immigration, India can bolster its position as a valuable partner.
- Engaging with key figures in the U.S. administration, including policymakers with ties to the tech industry, can help India influence the conversation around immigration reform and skilled workforce policies.
- Deepening Bilateral Technological Collaboration
 - India should prioritise expanding its bilateral collaboration with the U.S. in strategic technology sectors.
 - **By participating in initiatives like defence technology development,** Al research, and space exploration, **India can strengthen its position as a key partner.**
 - This includes leveraging platforms such as the Quad and I2U2 (India, Israel, UAE, and the U.S.) for minilateral cooperation, which can help India secure a role in shaping regional and global technological ecosystems.
- o Capitalising on 'Friendshoring' and Supply Chain Diversification
 - Trump's emphasis on reshoring and 'friendshoring' supply chains presents India with an
 opportunity to position itself as a reliable alternative to China in global manufacturing and
 technology supply chains.
 - India must focus on building the infrastructure, regulatory frameworks, and economic incentives necessary to attract American and multinational companies seeking to diversify their operations.
 - Special economic zones, tax benefits, and investment-friendly policies can make India a
 preferred destination for tech manufacturing and innovation.
- Balancing U.S.-China Competition
 - While aligning with U.S. technological and geopolitical priorities, India must also maintain a calibrated approach to its relationship with China.
 - The ongoing border tensions and trade disputes with China provide India with a strategic rationale for closer ties with the U.S., but it must avoid becoming overly dependent on American policy shifts.
 - Maintaining its strategic autonomy while leveraging U.S. partnerships will ensure that India's interests remain safeguarded.

Conclusion

- O Donald Trump's potential second term in office carries profound implications for global technology policy and geopolitics.
- While the H-1B visa issue remains important, India must adopt a broader perspective, recognising the transformative potential of U.S. technology policies under Trump.
- By aligning its strategic and technological priorities with the U.S., India can secure its place as a key player in the evolving global order.

2. Understanding India's Natural Catastrophe Risks and Economic Impacts **GS 3 (Disaster Management)**

Why in News:

o India has witnessed a sharp rise in economic losses due to natural catastrophes, reflecting both the increasing frequency of extreme weather events and the 'India suffered economic losses of over country's vulnerabilities.

o In 2023, natural disasters caused an estimated \$12 billion in economic losses, significantly exceeding the annual average of \$8 billion over the past decade, according to a report by global insurance giant Swiss Re.

Key Events in 2023:

- Floods in Northern India and Sikkim (July 2023):
 - Affected Areas: Himachal Pradesh, including Shimla, and Delhi.
 - Impact: Caused extensive damage due to heavy rains between July 10-15, disrupting daily life and infrastructure.

Tropical Cyclone Biparjoy (June 2023):

- Landfall: Category 3 cyclone struck Kutch, Gujarat, impacting Maharashtra and Rajasthan as well.
- Damage: Shut down major ports like Kandla and Mundra, causing extensive damage due to strong winds, heavy rainfall, and storm surges.

Tropical Cyclone Michaung (December 2023):

- Landfall: Hit Chennai, Tamil Nadu.
- Impact: Brought extreme rainfall, resulting in significant economic losses and urban disruption.

India's Unique Vulnerabilities:

- **Monsoon-Driven Floods:**
 - Contribution to Losses: Over the past two decades, floods have accounted for an average of 63% of annual economic losses.
- Monsoon Influence: India's geography and climate expose it to heavy rainfall during:
 - Summer Monsoon (June-September): Causes severe flooding, as seen in Kerala (2018) and Uttarakhand (2013).
 - Northeast Monsoon (October-December): Responsible for floods like Chennai (2015).

Economic and Industrial Exposure:

- States like Gujarat, Maharashtra, and Tamil Nadu are highly industrialized, contributing 36.8% of India's total industrial output. These states also face heightened risks:
- Gujarat: Prone to floods, tropical cyclones, and earthquakes.
- Maharashtra: Susceptible to floods and cyclones, especially in Mumbai.
- Tamil Nadu: Regularly impacted by monsoon floods and cyclones, particularly in Chennai.

Earthquake Risks:

- Urban centres like **Delhi** and **Ahmedabad** face significant earthquake hazards.
- A major earthquake in the Himalayas or near urban centres like Mumbai could result in catastrophic losses, potentially surpassing the devastation caused by the 2001 Bhuj earthquake in Gujarat.

Challenges in Resilience and Insurance:

- Despite the scale of economic losses, underinsurance remains a critical issue:
 - Protection Gaps: Over 90% of households and businesses are under- or uninsured, leaving them financially vulnerable.
 - **Costliest Flood Events:**
 - Mumbai floods (2005): Losses of \$5.3 billion (2024 prices)
 - Chennai floods (2015): Losses of \$6.6 billion (2024 prices)

₹IL cr in natural catastrophes in 2023' GEORGE MATHEW



• Building Resilience: A Three-Step Approach

 Swiss Re outlines a strategic framework to address underinsurance and reduce the impact of natural catastrophes:

Hotspot Identification:

- Identify regions most prone to disasters using granular data.
- Prioritize mitigation measures in high-risk areas like Ahmedabad, Mumbai, and Chennai.

Risk Assessment:

- Employ advanced models to assess potential exposure and risk accumulation.
- Incorporate recent and detailed data for accurate evaluations.

Reinsurance Solutions:

- Design targeted reinsurance programs to close protection gaps.
- Promote affordable insurance coverage for households and businesses.

• Conclusion:

- o India's rapid economic growth has outpaced its ability to mitigate the vulnerabilities posed by natural catastrophes.
- The increasing frequency of extreme weather events highlights the urgent need for robust disaster preparedness, improved insurance penetration, and strategic resilience-building measures
- By addressing these challenges, India can better safeguard its economy and citizens from the mounting risks of natural disasters.

3. <u>Border fencing row with Bangladesh</u> GS 2 (International Relations)

Why in News:

 India summoned Bangladesh's Acting High Commissioner over border security and fencing issues after Bangladesh expressed concerns

Bangladesh expressed concerns
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about alleged violations by the

Border Security Force (BSF).

 Bangladesh had earlier summoned India's High Commissioner in Dhaka, Pranay Verma, over BSF's activities, claiming they breached a bilateral agreement.



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- The tension escalated when Border Guards Bangladesh (BGB) attempted to obstruct fencing construction along the West Bengal-Malda border.
- The India-Bangladesh border remains a longstanding source of disputes over barbed wire fencing and border management.

India – Bangladesh Border (IBB)

- o The India-Bangladesh border is India's longest border measuring 4096.7 km.
- It passes through West Bengal (2216.7 km), Assam (263 km), Meghalaya (443 km), Tripura (856 km) and Mizoram (318 km).
- The entire border consists of varied geographical features like plains, hills, riverine stretches, and forests with hardly any natural obstacles.
- The India-Bangladesh border is highly porous and a hotspot of illegal immigration, cattle smuggling, human trafficking and other illegal cross border activities.

• Status of Fencing Along the India-Bangladesh Border

Overall Fencing Coverage

 Out of 4096.7 km of the India-Bangladesh border, 3,141 km have been fenced, covering all eastern states, including West Bengal

Fencing in West Bengal

- As of 2023, 81.5% of west Bengal- Bangladesh border had been fenced, with small patches remaining unfenced due to:
 - Objections from villagers.
 - Challenging terrain.
 - Ongoing negotiations with Bangladesh.

Challenges in Fencing Completion

- The Ministry of Home Affairs highlighted delays caused by:
 - Non-cooperation from the West Bengal government
 - Pending land acquisition in the state.
- Riverine Borders Over 900 km of the border is riverine, making fencing impossible
 - These areas are secured by the BSF's water wing.

Recent Fencing Incident India – Bangladesh Border

- Fencing Incident in Malda's Kaliachak Block
 - The Central Road Works Department and BSF were constructing a single-row fence in Malda's Kaliachak No. 3 block, near Bangladesh's Shibganj in Rajshahi district.
 - Border Guards Bangladesh (BGB) objected to the construction. These objections were addressed, and construction continued without further disruption.

Fencing Dispute in Mekhliganj, Cooch Behar

- On January 10, villagers in Mekhliganj began fencing the boundary of the Bangladeshi enclave Dahagram-Angarpota, supported by the BSF.
- The four-foot-high barbed-wire fence was intended to prevent cattle from Bangladesh from grazing on Indian crops.
- BGB intervened to halt the fencing, raising tensions once again.

India-Bangladesh border guidelines

- 1975 Border Guidelines Between India and Bangladesh
 - The 1975 Joint India-Bangladesh Guidelines prohibit constructing defence structures within 150 yards of the international boundary (zero line).
 - India does not classify wire fencing as defence structures, but Bangladesh and Pakistan do.

Challenges Due to Border Complexity

- The border in West Bengal is marked by villages, rivers, and enclaves, complicating fencing construction.
- Villages and houses often lie within the fencing line or directly on the international border.
- For example, the Dahagram-Angarpota enclave in Jalpaiguri, a Bangladeshi territory within India, has fencing on the zero line.

Exceptions to the 150-Yard Rule

- In cases where terrain, population, or water bodies make fencing at 150 yards impractical, construction near the border is negotiated with Bangladesh.
- Villages located within 20 yards of the boundary are not relocated; instead, fencing is built close to the zero line.

Facilitation for Residents

- Gates are installed along the fencing to ensure residents' movement, with timings determined in consultation with villagers and local administration.
- In emergencies, BSF soldiers have standing instructions to open gates immediately.

Negotiation and Approval for Fencing

- The BSF informs the BGB when exceptions to the guidelines are necessary.
- After mutual agreement, fencing construction begins in sensitive or challenging areas.

• Reasons for the Dispute

O Violation of the 1975 Agreement

- Bangladesh opposes fencing within 150 yards of the international border, citing the 1975 India-Bangladesh guidelines.
- They argue that even **single-row fencing (SRF)** breaches this agreement.

o Impact on Border Residents

• Fencing causes inconvenience to residents living along the border, restricting their movement and activities.

o Indian Perspective on SRF

- SRF is intended to control animal movement and curb trans-border crimes, not as a defence structure.
- Unlike concrete walls, bunkers, or ditch cum bandh (DCB), SRF has no defence potential.

Objection to Smart Fencing

- Bangladesh objects to smart fencing, which includes CCTV and electronic surveillance, claiming it enables India to monitor their territory.
- Smart fencing is primarily installed in areas where villages are within 150 yards of the border or on the boundary itself.

Issue of Trans-Border Crimes

- Around 60% of trans-border crimes occur in areas without fencing, especially where villages are located on the international boundary.
- India argues that fencing would help reduce such crimes, but Bangladesh remains unyielding.

Ongoing Discussions

 The fencing issue has been under discussion for over five years, with frequent objections raised by BGB during flag meetings

4. National Turmeric Board

Recent events of importance

Why in News: Recently, the Union Minister for Commerce and Industry inaugurated the National Turmeric Board in New Delhi.

About National Turmeric Board:

o It will **provide leadership on turmeric related matters**, augment the efforts, and facilitate greater coordination with Spices Board and other Government agencies in development and growth of the turmeric sector.

Composition of Board:

- A Chairperson to be appointed by the Central Government.
- A Secretary to be appointed by the Department of Commerce.
- Members from the Ministry of AYUSH, Departments of Pharmaceuticals, Agriculture & Farmers
 Welfare, Commerce & Industry of the Union Government.
- Representatives from the top two turmeric growing states of **Maharashtra and Telangana** and from the state of Meghalaya. States will be represented on the **Board by rotation**.
- Select national/state institutions involved in research, representatives of turmeric farmers and exporters.

Mandate

- The Board will focus on key areas such as research and development, value addition to turmeric products, and promoting awareness of the spice's medicinal and essential properties.
- It will also work on **improving turmeric yield**, enhancing logistics and supply chains, and exploring new international markets for turmeric.
- Ensuring quality and safety standards for turmeric production and exports will also be a critical aspect of the Board's mandate.
- Headquarter: Nizamabad, Telangana

• Status of Turmeric in India:

- o Turmeric is often referred to as **the "Golden Spice,"** holds immense economic potential for Indian farmers
- o **India is responsible** for over **70% of the world's turmeric production**, with 30 varieties of turmeric being grown in the country.
- o The largest producing states of Turmeric are Maharashtra, Telangana, Karnataka and Tamil Nadu.

o The leading export markets for Indian Turmeric are Bangladesh, UAE, USA and Malaysia

5. Shikari Devi Wildlife Sanctuary

GS 3 (Environment)

• Why in News: The Government of India has designated areas around Shikari Devi Wildlife Sanctuary, located in Mandi district, as eco-sensitive zones (ESZs) to reduce the impact of urbanisation and developmental activities on the surrounding protected areas.

• About Shikari Devi Wildlife Sanctuary:

- o Nestling in the foothills of the Himalayas, it is located in the district of Mandi in Himachal Pradesh.
- o It covers the **middle altitudinal range** from 1,800 to 3,400 m **of the Himalayas**, showing the **transition** from pine through oak to alpine meadow.
- This sanctuary is **named after the goddess Shikari Devi**, to whom a **temple** is dedicated and the place is considered sacred by Hindus.
- The temple is positioned in the middle of snow-capped mountains and dense pine trees at an elevation of 2850 m above sea level.
- An area of 7,200 ha surrounding the temple was declared a sanctuary in 1962.
- Flora: Owing to great variation in altitude, the sanctuary has seven forest types, according to the classification by Champion and Seth (1968): Alpine Pasture, Sub-alpine Forest, Moist Temperate Deciduous Forest, West Himalayan Upper Oak/Fir Forest, Kharsu Oak Forest, Western Mixed Coniferous Forest, and Ban Oak Forest.

o Fauna:

- It is home to different species of animals and birds, including the goral, monal, black bear, barking deer, musk deer, cat leopard, and the Himalayan black bear.
- We can also see the Himalayan palm civet, barking deer, marten, Indian porcupine, Kashmiri flying squirrel, musk deer, common langur, leopard, common squirrel and snow leopard inhabiting the sanctuary.

6. Zombie Deer Disease

GS 3 (Environment)

• Why in News: Scientists express concern over the possibility of the deadly and incurable 'zombie deer' disease affecting humans.

About Zombie Deer Disease:

 Known scientifically as Chronic Wasting Disease (CWD), it is a progressive and fatal neurological disease which primarily affects deer, elk, moose, and reindeer.

What causes CWD?

- It is caused by infectious proteins called prions.
- Prions are misfolded proteins that cause other proteins in the brain to likewise misfold, ultimately leading to brain damage.
- Once these proteins accumulate in the brain, they create spongy holes in the tissue, **resulting in severe neurological dysfunction.**

o Transmission:

- CWD prions are highly contagious and spread through body fluids such as saliva, faeces, blood, or urine, either by direct contact or environmental contamination.
- Once present in an area, prions remain infectious in soil, water, and plants for years, posing long-term risks to animal populations.

Symptoms:

- It has an extended incubation period averaging 18–24 months between infection and the onset of noticeable signs. During this time frame, animals look and act normal.
- The most obvious sign of CWD is progressive weight loss.

- Numerous behavioral changes also been reported, including decreased social interaction, loss of awareness, and loss of fear of humans.
- Diseased animals also may exhibit increased drinking, urination, and excessive salivation.
- o Treatment: It is always fatal in infected animals. There is no vaccine or treatment.
- o Can Humans Get CWD?
 - So far, there has been no confirmed case of CWD transmission to humans. However, experts remain cautious.

