

Mains Master

The great Indian Internet shutdown: how access to the world wide web is curtailed

Context:

- **Landmark Supreme Court Ruling (2020):** Recognizing internet access as a fundamental right in the **Anuradha Bhasin vs Union of India** case. This established clear guidelines for any restrictions:
 - **Temporary:** Short-lived and not indefinite.
 - **Limited:** Focused on specific areas or services, not blanket shutdowns.
 - **Lawful:** Based on proper legal procedures and justifications.
 - **Necessary:** Demonstrating a genuine need for the restriction.
 - **Proportionate:** The restriction's impact balanced against the threat addressed.
- **Despite the ruling:**
 - **India leads in internet shutdowns:** Maintaining the dubious title of "internet shutdown capital" globally.
 - **Concerns about compliance:** Frequent reports of non-adherence to SC guidelines.

Importance of the Internet:

- **Multifaceted role:** Essential for various aspects of life, including:
 - **Information and communication:** Access to news, education, and social interaction.
 - **Economic activity:** E-commerce, online businesses, and livelihoods dependent on the internet.
 - **Healthcare and education:** Telemedicine, online learning platforms, and access to essential resources.
- **Economic impact:**
 - **Significant contribution to GDP:** Shutdowns cause tangible economic losses, exceeding \$2.8 billion in 2020.
 - **Digital divide widens:** Marginalized communities disproportionately affected due to limited access to alternative technologies.

Key Issues:

- **Non-compliance with SC guidelines:**
 - **Lack of transparency:** Orders often not published, making legal challenges difficult and hindering public scrutiny.

- **Legal ambiguity:** Absence of statutory recognition of SC directions creates confusion and inconsistency in implementation.
- **Official awareness lacking:** Insufficient understanding of SC guidelines among authorities leads to potential misuse.
- **Excessive use of shutdowns:**
 - **Wide range of justifications:** Employed for various reasons, including protests, exams, and even rumors.
 - **Questionable necessity and proportionality:** Critics argue many shutdowns lack justification or exceed necessary measures.
 - **Disproportionate impact:** Marginalized communities with limited broadband access are most affected by mobile data restrictions.
- **Limited alternatives:**
 - **Predominance of mobile data:** 97% of internet users rely on mobile data, making restrictions highly impactful.
 - **Accessibility issues:** Broadband remains expensive and unavailable to many, creating unequal access during shutdowns.

Supreme Court Rulings:

- **Anuradha Bhasin judgment (2020):** Established internet access as a fundamental right and outlined principles for any restrictions.
- **Telecom Suspension Rules amendment (2020):** Limited the maximum duration of internet shutdowns to 15 days, but fell short of addressing publication and review mandates as per SC guidelines.

Comprehensive Outlook:

- **Ensuring compliance with SC guidelines:**
 - **Transparency:** Mandatory publication of suspension orders for accountability and legal challenges.
 - **Clarity and enforcement:** Statutory recognition of SC directions to eliminate ambiguity and ensure adherence.
 - **Official training:** Raising awareness among authorities to prevent misuse and misinterpretations.
- **Minimizing internet shutdowns:**
 - **Exploring alternatives:** Utilizing targeted measures like website blocking or specific service restrictions before resorting to complete shutdowns.
 - **Proportionality and necessity:** Carefully assessing the severity of the situation and tailoring restrictions accordingly.
 - **Bridging the digital divide:** Investing in affordable and accessible broadband infrastructure to mitigate the impact on marginalized communities.



Rising tensions in the Korean peninsula

Historical Background:

- **Post-WWII Division:** After World War II, the Korean peninsula was divided into North and South, with the North falling under Soviet influence and the South under U.S. influence.
- **Korean War:** The Korean War (1950-53) ensued due to ideological differences, reflecting the broader Cold War tensions. The conflict ended with an armistice, leaving the peninsula divided.

Nuclear Ambitions:

- **Intermittent Programs:** North Korea's nuclear program witnessed intermittent agreements and breakdowns. Efforts by the international community aimed to curb its nuclear weapons development.
- **Missile Tests:** Despite periodic agreements, North Korea conducted six nuclear tests, showcasing advancements in its nuclear capabilities and delivery systems.

Diplomatic Attempts:

- **Trump-Kim Meetings:** In 2018-19, North Korean leader Kim Jong Un and then-U.S. President Donald Trump held three meetings in an attempt to pursue peace talks and denuclearization. However, these talks were ultimately unsuccessful.
- **Consistent Missile Testing:** North Korea, under Kim Jong Un's leadership, continued to demonstrate its missile capabilities through consistent testing, including advancements in delivery systems.

Recent Escalation:

- **Reunification Goal Scrapped:** On January 15, Kim Jong Un declared the abandonment of North Korea's decades-old goal of reunifying with the South and formally labeled South Korea as an enemy state.
- **Symbolic Monument Removed:** A landmark monument in Pyongyang symbolizing the reunification ideal was taken down, reflecting a shift in North Korea's official stance.

Military Actions:

- **Diverse Missile Tests:** North Korea intensified its military activities by testing various missile systems, notably a solid-fueled missile carrying a hypersonic warhead, showcasing advancements in strategic capabilities.
- **Joint Drills:** South Korea responded to North Korea's actions with joint military drills alongside the U.S. and Japan, aimed at enhancing their collective defense capabilities against North Korean threats.

Political Shift in South Korea:

- **Election of President Yoon Suk Yeol:** The conservative Yoon Suk Yeol assumed the presidency in South Korea, adopting a hawkish stance towards North Korea.
- **Trilateral Cooperation:** South Korea, the U.S., and Japan engaged in trilateral cooperation, coordinating efforts to deter and counter North Korea's aggressive moves.

International Alliances and Conflicts:

- **Sino-Russian Axis:** North Korea deepened its ties with the Sino-Russian axis, aligning itself with these major powers.
- **Russian Engagement:** Russia increased engagement with North Korea, offering assistance in enhancing its space capabilities in exchange for arms supplies.
- **China's Support:** China, as North Korea's largest trading partner, expressed unwavering support amidst rising tensions, reinforcing their longstanding alliance.

Global Concerns:

- **Intersection with Global Conflicts:** Tensions in the Korean Peninsula coincided with other global conflicts, including Russia-Ukraine and China-Taiwan.
- **Distraction Strategy:** North Korea's actions were perceived as a potential distraction in the global strategic competition, particularly as major powers focused on other conflicts.

Potential Consequences:

- **Unintended Escalation:** Concerns rose regarding unintended consequences and the possibility of further escalation in the Korean Peninsula.
- **Involvement of Major Powers:** The involvement of major powers increased the stakes, with alliances and nuclear weapons playing a significant role in the dynamics.

Overall Implications:

- **Geopolitical Impact:** North Korea's actions and alliances reshaped the geopolitical landscape in the region.
- **Intersection with Global Rivalries:** Tensions in the Korean Peninsula intersected with broader global rivalries and conflicts, contributing to an increasingly complex international scenario.

Prelims Booster

Kangaroo lizard species discovered in Western Ghats

A new species of tiny lizards, *Agasthyagama edge*, has been discovered in the Western Ghats.

The maximum snout-vent length of the *Agasthyagama edge* is 4.3 cm.

The species was discovered in the southern Western Ghats at Kulamavu in Idukki.



New find: *Agasthyagama edge* or the northern kangaroo lizard.
SPECIAL ARRANGEMENT

The lizards are poor climbers and are mostly terrestrial, found in areas with dense leaf litter cover.

The findings have been reported in the Vertebrate Zoology, a scientific journal published by the Senckenberg Museum in Germany.

The species has been named after the Evolutionary Distinct and Globally Endangered (EDGE) programme of the Zoological Society of London.

The research team includes scientists from various institutions in India and abroad.

First Lok Sabha without Deputy Speaker

Constitutional Provisions:

- Article 93 and 178 mandate the election of a Deputy Speaker in the Lok Sabha and Legislative Assembly respectively.
- Article 93 specifies the Deputy Speaker's role in the absence of the Speaker.

Historical Precedents:

- Traditionally, the government supports an opposition candidate for Deputy Speaker.
- Previous Deputy Speakers include Charanjit Singh Atwal, Kariya Munda, and M. Thambidurai.

Role and Importance of Deputy Speaker:

- Shares responsibility with the Speaker in running the House.
- Holds the same powers as the Speaker and is the constitutional authority in the Speaker's absence.

Appointment Process:

- Normally held within a week of the Speaker's election.
- Involves consultations with all parties to decide a consensus candidate.

- Current Scenario and Concerns:**
 - Delay in Deputy Speaker Election since Speaker Om Birla's election in June 2019.
 - Concerns raised about the Modi government's delay, possibly to avoid an opposition Deputy Speaker.
- Supreme Court Intervention:**
 - The Supreme Court issued notices to the Union government and five state assemblies for failing to elect a Deputy Speaker, citing constitutional provisions and emphasizing the mandatory nature of the election.
- Public Debate and Media Coverage:**
 - The delay in electing a Deputy Speaker has sparked public debate and media coverage, highlighting constitutional requirements and concerns about breaching democratic norms.

After four years of survey, India's snow leopard count put at 718

- Geographical Distribution:**
 - Ladakh: Home to the maximum number of snow leopards, with an estimated 477.
 - Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Sikkim, and Jammu and Kashmir also host significant populations.
- Global Context:**
 - The estimated 718 snow leopards in India represent 10-15% of the global population.
 - Classified as 'vulnerable' by the IUCN, facing threats from free-ranging dogs, human-wildlife conflicts, and poaching.
- Survey Methodology:**
 - Utilized 1,971 camera traps and covered 13,450 km of trails surveyed for signs.
 - Employed statistical methods by the Wildlife Institute of India to estimate individuals not captured on camera.
- Comparison with Tiger Surveys:**
 - Utilized a statistical approach akin to tiger surveys, providing a scientifically established baseline.
 - Rigorously tested equations, minimizing reliance on guesswork.
- Collaborative Initiative:**
 - The survey involved collaboration between the World Wide Fund for Nature-India, Nature Conservation Foundation, Mysuru, and the Wildlife Institute of India.
 - Initiated in 2019, the survey aimed to comprehensively assess the snow leopard population.
- Conservation Significance:**
 - The surveys have led to numerous sightings and increased interest from the Indian Environment Ministry and global conservation efforts.
 - Provides a crucial baseline for future conservation efforts and contributes valuable data to the global understanding of snow leopard populations.

India nominates 12 forts of Marathas for UNESCO World Heritage List

- Components of the Nomination:**
 - Includes a network of forts in Maharashtra and the Gingee Fort in Tamil Nadu.
- Extraordinary Fortification and Military System:**
 - Developed during the 17th to 19th centuries, showcasing distinctive fortification and military systems.

- Distributed across diverse regions, integrating landscape and unique physiographic characteristics.
- Nominative Forts and Protection:**
 - 12 forts chosen for the nomination, with eight protected by the ASI and four by the Directorate of Archaeology and Museums, Government of Maharashtra.
- Historical Context:**
 - Originated during the reign of Chhatrapati Shivaji Maharaj in the 17th century and extended through subsequent rules until the Peshwa rule in 1818 CE.
- Cultural Property Nomination:**
 - Falls under the category of cultural property, emphasizing the historical and cultural significance of the Maratha Military Landscapes.
- Recognition and Tentative List:**
 - The "Maratha Military Landscapes" is the sixth cultural property nominated for World Heritage status from Maharashtra.
 - Included in the Tentative List of World Heritage sites in 2021.

Astronomers spot unusual object that falls within the black hole 'mass gap'

- Discovery Context:**
 - Astronomers have made a unique discovery challenging easy explanation, likely sparking discussions.
 - The finding revolves around neutron stars, with potential implications for understanding extreme matter.
- Neutron Stars and Black Holes:**
 - Neutron stars, among the densest objects, can collapse into black holes if sufficiently heavy.
 - The study focuses on the boundary between neutron stars and black holes, aiming to find objects at this tipping point.
- Discovery Details:**
 - Location: Star cluster NGC 1851.
 - Object Pair: A millisecond pulsar and a massive, invisible object.
 - Observation: Conducted using the MeerKAT radio telescope in South Africa.
- Millisecond Pulsar as a Tool:**
 - Millisecond pulsars act as cosmic atomic clocks with stable spins, aiding precise measurements.
 - Their stability allows for the detection of changes in spin influenced by gravitational fields or motion.
- Observation Results:**
 - The system, named NGC 1851E, revealed significant details about its orbits and mass.
 - Combined mass of almost four times that of the Sun, falling within the "black hole mass gap."
- Black Hole Mass Gap:**
 - This gap lies between the heaviest neutron stars and the lightest black holes formed from stellar collapse, posing outstanding questions in astrophysics.
- Possible Explanations:**
 - The system suggests a pulsar orbiting around the remains of a merger of two neutron stars.
 - Crowded stellar environment in NGC 1851 facilitates dynamic interactions among stars, potentially leading to such configurations.
- Ongoing Work:**
 - Continued efforts to identify the true nature of the companion are underway, holding promise for revealing insights into extreme environments in the universe.
- Implications and Speculation:**
 - Speculation surrounds whether the discovery represents the lightest black hole, the most massive neutron star, or an unknown astrophysical object.
 - The system provides a unique opportunity to explore matter in extreme conditions.