

12/04/2024

TOPICS COVERED

1. ADB projects India's GDP growth at 7% this year (12 April) (GS Paper III: Economy)
2. Most Indians' believe in country's plurality: survey (12 April) (GS Paper II: Plurality)
3. Jama Masjid (A&C)
4. Apple changes hacking alert wording after India 'pressure' (12 April) (GS Paper III: Cyber Security)
5. Sound and stable Sino-Indian relations serve the interests of both sides, region, says Beijing (12 April) (GS Paper II: IR)
6. In poll season, the perils of scorching bilateral ties (12 April) (GS Paper II: IR)
7. Finality and justice: On the Delhi Metro Rail Corporation case (12 April) (GS Paper II: Curative Petition)
8. A battle to save Ladakh, and all of humanity (12 April) (GS Paper III: Environment)
9. ISRO's 'zero orbital debris' milestone (GS Paper III: S&T)

Postal ballot system in India

1. **Eligibility:** Certain categories of voters are eligible to cast their votes through postal ballots. These include members of the armed forces, central armed police forces, and state police personnel who are posted outside their constituencies during elections. Additionally, voters who are above the age of 80, persons with disabilities, and those employed in essential services may also be eligible for postal ballots.
2. **Requesting a Postal Ballot:** Eligible voters who wish to vote via postal ballot need to apply for it to the concerned election authorities. The application process typically involves submitting a request form along with necessary documents to prove eligibility.

3. **Dispatch and Receipt of Ballots:** Once the application for a postal ballot is approved, the election authorities dispatch the ballot papers to the registered address of the voter. The voter receives the ballot papers by mail at the provided address.
4. **Marking and Returning Ballots:** Upon receiving the postal ballot papers, the voter marks their choices on the ballot papers in accordance with the voting instructions provided. The marked ballot papers are then sealed in the provided envelope and returned to the election authorities by mail within the specified deadline.
5. **Verification and Counting:** Election officials verify the validity of returned postal ballots, ensuring that they comply with the prescribed procedures and deadlines. The counting of postal ballots typically takes place alongside the counting of votes cast in person on election day.
6. **Security Measures:** Various security measures are in place to safeguard the postal ballot system in India. These may include verification of the voter's identity, authentication of the ballot papers, and secure handling of the returned ballots to prevent tampering or fraud.
7. **Legislation and Regulations:** The postal ballot system in India is governed by provisions of the Representation of the People Act, 1950, and the Conduct of Elections Rules, 1961. These laws outline the eligibility criteria, application procedures, deadlines, and security protocols related to postal voting.
8. **Recent Developments:** In recent years, there have been discussions and initiatives to expand the use of postal ballots to facilitate voting for certain categories of voters, particularly in light of the COVID-19 pandemic. However, specific updates or changes to the postal ballot system may be available through official announcements from the Election Commission of India or other relevant authorities.

ADB projects India's GDP growth at 7% this year (12 April) (GS Paper III: Economy)

- The Asian Development Bank (ADB) predicts that India's economy will remain strong over the next two years.
- However, the GDP growth rate is expected to slow down from 7.6% in 2023-24 to 7% in the current year, before picking up to 7.2% in 2025-26.
- The ADB forecasts a decrease in retail inflation to 4.6% this year and 4.5% in 2025-26.
- Food inflation, which has been persistent, is expected to drop to 5.7% as farm output returns to normal trends this year.
- The resurgence of inflation in the United States in March may affect Asia's inflation outlook, leading to a 'higher for longer' interest rate regime, which could slightly dent growth.

More impact on India

- **The impact of inflation on India would be more pronounced and persistent due to its higher sensitivity to exchange rate fluctuations and greater reliance on imported goods.**
- Persistent shipping cost spikes caused by conflicts in the Red Sea could further add to inflation pressures across developing Asia.
- A projected normal monsoon in India this year is expected to revive rural consumption, which was subdued last year due to erratic rainfall affecting the farm sector.

- **Greater demand for work under the Mahatma Gandhi National Rural Employment Guarantee Act scheme** is expected, indicating resultant stress.
- India's growth is forecast to remain strong, supported by rising consumption and continued investment growth.
- **India accounts for 80% of South Asia's GDP and remains the fastest-growing sub-region**, with improving domestic demand as prices moderate in most economies.
- South Asia is expected to grow by 6.3% this year and 6.6% in 2025.
- Higher incomes will drive consumer demand, and confidence levels among urban consumers have improved, leading to an expected rise in demand from urban areas.
- However, increased imports to meet domestic demand could moderately widen the Current Account Deficit to 1.7% of GDP this year and next year.

Muted exports

- India's growth will be driven by both public and private sector investment demand, along with gradual improvement in consumer demand as the rural economy improves.
- **Exports are expected to be relatively muted this year due to slower growth in major advanced economies**, but they are anticipated to improve in 2025-26.
- **Foreign direct investment (FDI) inflow may remain subdued** in the near term due to tight global financial conditions, but it is projected to pick up in 2025-26, especially with higher industry and infrastructure investment.
- Price and financial market stability are crucial for consumer and business confidence, which are essential for India's economic outlook.
- **Downside risks to the economic projections include global shocks such as a spike in crude oil and energy prices leading to higher global inflation and tighter financial conditions.**
- Domestically, there is a **risk of underperformance in agriculture** due to weather shocks, which could affect demand and inflation.
- Upside risks include faster-than-expected foreign direct investment inflow, particularly into manufacturing, which would enhance output and productivity.
- Better-than-expected global growth could also boost exports and overall economic growth.

Most Indians' believe in country's plurality: survey (12 April) (GS Paper II: Plurality)

- According to the CSDS-Lokniti poll, **79% of respondents believe that "India belongs to all religions equally, not just Hindus,"** while only 11% believe that "India belongs only to Hindus."
- This belief in plurality was more pronounced in urban areas (85% in towns and 84% in cities) and higher among the educated (83%) compared to those with no schooling (72%).
- Despite this, only 8% of respondents said the Ram Mandir was their most important concern, but 22% mentioned it as the "most liked action" of the BJP-led government.
- Additionally, 48% of respondents expressed the belief that the Ram Mandir will consolidate Hindu identity.

- The survey also found that **58% of respondents expressed some level of distrust in the Election Commission.**
- Nearly **45% of respondents suggested the likelihood that Electronic Voting Machines (EVMs) could be manipulated by the ruling party.**

Jama Masjid (A&C)

- **One of India's Largest Mosques:** The Jama Masjid is one of India's largest and most important mosques.
- **Commissioned by Mughal Emperor Shah Jahan:** Its construction began in 1650 and was completed in 1656.
- **Architectural Significance:** A masterpiece of Mughal architecture, it reflects the artistic and engineering feats of the period.



Key Features:

- **Materials:** Built primarily of red sandstone and white marble.
- **Layout:** Features a vast courtyard that can accommodate around 25,000 worshippers.
- **Minarets:** Two towering minarets rise approximately 40 meters high.
- **Domes:** Three grand domes adorn the mosque.
- **Calligraphy:** Intricate carvings and Quranic verses decorate the interiors.

Significance:

- **Active place of worship:** It remains a significant place of worship and draws large congregations for prayers, especially on Fridays and during Eid.
- **Tourist Destination:** A major tourist attraction, offering insights into Mughal history, architecture, and India's Islamic heritage.
- **Symbol of Delhi:** An iconic landmark integrated into the fabric of Old Delhi and the city's history.

Apple changes hacking alert wording after India 'pressure' (12 April) (GS Paper III: Cyber Security)

- Apple, Inc. has changed its language regarding "state-backed attackers" to "mercenary" hackers in email alerts to affected customers and on its support documentation on its website.
- This change comes after reports of pressure from the Indian government to provide deniability for hacking attempts on political leaders, journalists, and activists.
- Users have repeatedly been alerted to unauthorized intrusions into their phones from spyware such as Pegasus, which the Indian Intelligence Bureau acquired in 2017.
- The change in language coincided with reports of a fresh batch of hacking notifications sent to users in India and 91 other countries. However, no users in any of these countries have publicly reported receiving such alerts.
- Last November, Apple and the Indian government claimed that users in 150 countries received hacking alerts, but only users in India reported receiving them that week.

- An Apple spokesperson declined to comment on the change in language, and users in India who previously received alerts did not receive any in the last day.
- Rights group Amnesty International has opened a digital security helpline for individuals who received the alert.
- The Washington Post reported that senior Modi administration officials called Apple's India representatives to demand that the company help soften the political impact of the warnings regarding the November alerts.
- At least two individuals who received the alerts in November found traces of the Pegasus spyware on their phones in separate forensic examinations.

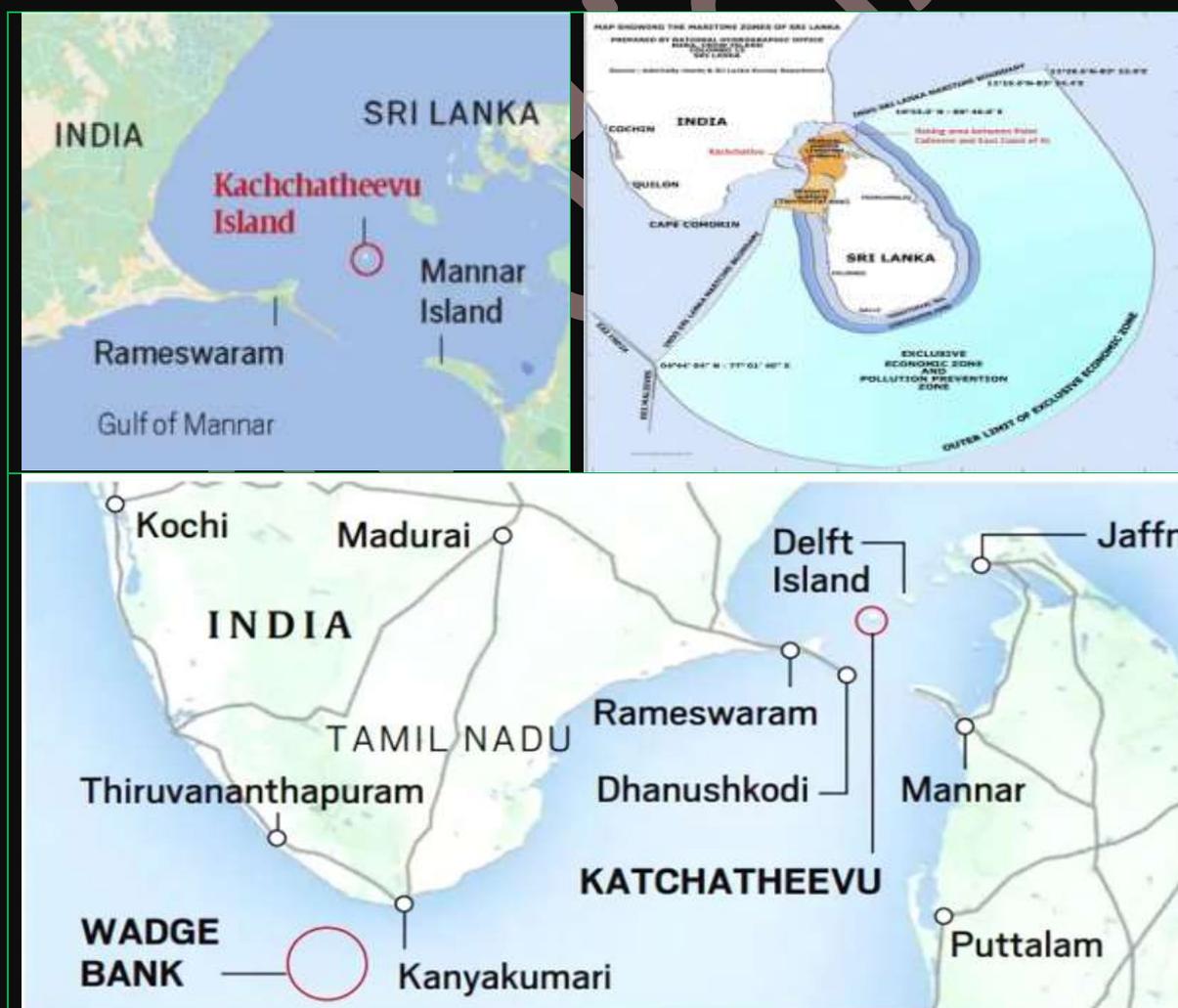
Sound and stable Sino-Indian relations serve the interests of both sides, region, says Beijing (12 April) (GS Paper II: IR)

- Prime Minister Narendra Modi's comments regarding tensions at the Line of Actual Control (LAC) are considered highly significant by Indian foreign affairs experts.
- China's Ministry of Foreign Affairs (MFA) reacted to Modi's remarks, calling for India to work with China to improve bilateral relations.
- In an interview with Newsweek, Modi broke his silence on India's ties with China and the standoff at the LAC since April 2020.
- Modi emphasized the need for urgent resolution of the border situation and constructive engagement between the two countries at diplomatic and military levels.
- Chinese MFA spokesperson Mao Ning acknowledged Modi's comments, stating that sound and stable China-India relations are in the common interest of both countries.
- However, Mao clarified that the boundary question does not represent the entirety of China-India relations.
- Pankaj Saran, former Deputy National Security Advisor, described Modi's comments as an important signal to China, the US, and the world, suggesting that Modi may prioritize addressing issues with China if re-elected for a third term in the upcoming general election.
- Senior US officials recently visited Beijing, and Chinese President Xi Jinping is scheduled to visit France next month, marking his first trip to Europe since 2019.
- Indian Prime Minister Narendra Modi has refrained from directly mentioning China or commenting on the state of India-China relations in public or in Parliament over the past four years.
- However, External Affairs Minister S. Jaishankar has made several tough statements, **accusing China of violating agreements with India by deploying troops at the Line of Actual Control (LAC).**
- Defence Minister Rajnath Singh **criticized China for renaming places in Arunachal Pradesh** and hinted at India doing the same, while also blaming Beijing for deteriorating ties.
- Home Minister Amit Shah asserted that due to India's vigilance, Chinese troops had not been able to seize any Indian territory.

In poll season, the perils of scorching bilateral ties (12 April) (GS Paper II: IR)

Election campaign rallies and media conferences are not the places to be making vociferous statements on sensitive foreign policy issues

- In the era of populism, foreign policy decisions often consider their impact on domestic politics.
- Prime Minister Narendra Modi and External Affairs Minister S. Jaishankar criticized the 1974 India-Sri Lanka agreement, particularly regarding the recognition of Katchatheevu island as part of Sri Lankan territory.
- They raised concerns about the situation of Tamil Nadu fishermen affected by the agreement.
- There has been debate over the merits and drawbacks of the 1974 agreement and the 1976 exchange of letters, which involved the "loss" of Katchatheevu and the "gain" of the oil-rich Wadge Bank.



- Some government statements and RTI replies contradict Jaishankar's criticism of the 1974 agreement.
- These statements are likely aimed at influencing the upcoming general elections in India, particularly in Tamil Nadu.
- However, there are concerns about the long-term impact on bilateral ties with Sri Lanka, which is also heading for presidential and parliamentary elections.
- **India has recently strengthened ties with Sri Lanka by providing significant financial support to help the country deal with its economic crisis.**
- Strains in bilateral relations over campaign issues could diminish the goodwill between the governments of India and Sri Lanka.

Credibility could take a hit

- The government's hints about revisiting the 1974 agreement with Sri Lanka raise international questions.
- There are concerns about whether other agreements based on the 1974 settlement could also be revised.
- Examples include negotiations such as the maritime boundary settlement with Bangladesh, accepted by India in 2014 after a UN tribunal verdict, and the land boundary agreement with Bangladesh to exchange enclaves.
- **Revising these agreements could be challenging due to the recognition of maritime agreements by international bodies like UNCLOS.**
- It may also **raise doubts about India's credibility as a negotiating partner if it chooses to pursue this line after the general election.**
- India has faced challenges in revising agreements before, such as the **1960 Indus Waters Treaty with Pakistan.**
- Despite threats to revoke the treaty and calls for renegotiation, progress on this matter has been slow.

On the CAA, transnational involvement

- The government's decision to notify rules for the **Citizenship (Amendment) Act (CAA)** just before the general election has domestic implications that could affect ties with neighboring countries.
- The CAA, passed in 2019, excludes Muslims from neighboring countries like Afghanistan, Bangladesh, and Pakistan, accusing them of persecuting minorities.
- **This exclusionary nature of the CAA has been seen as discriminatory by countries in the neighborhood, particularly Bangladesh.**
- Implementation of the **National Register of Citizens (NRC)** following the CAA could potentially render hundreds of thousands stateless, further straining ties with Dhaka.
- **Protests against the CAA were most vociferous in Bangladesh, resulting in casualties during Mr. Modi's visit to Dhaka in 2021.**
- While there's been no official comment from the Sheikh Hasina government on the recent decision regarding the CAA, it could pose challenges for India's diplomats in Dhaka if fully implemented.

- Besides government actions, the Opposition has been raising concerns about India's standoff with China at the Line of Actual Control (LAC), particularly regarding the PLA's control of land since April 2020.
- **Allegations of transnational killings by Indian agencies have emerged as an international issue during the ongoing general election.**
- The trial of an Indian national in the United States for an alleged assassination plot targeting a Sikh political activist is set to commence soon.
- **Canada has accused Indian agents of assassinating a Sikh community leader in British Columbia, aligning with similar claims made by Pakistan.**
- Pakistan has endorsed a British media report suggesting Indian intelligence involvement in the killing of Sikh and Islamist separatist operatives in Pakistan.
- Despite Pakistan's responsibility to explain the presence of these individuals on its soil, New Delhi faces discomfort due to its varied responses to Canada, Pakistan, and the U.S.
- Defence Minister Rajnath Singh's statement about government policy to "kill terrorists that go into Pakistan" contradicts India's dismissal of Canadian allegations and retaliatory measures against Canadian diplomats.
- India's acceptance of U.S. government claims regarding an assassination attempt on Gurbhawan Singh Pannun includes agreeing to examine U.S. evidence and initiating a high-level inquiry panel, aligning with India's national security interests.

Discretion the key

- Resolving complex international issues requires discreet, closed bilateral negotiations rather than public campaign rallies or press conferences.
- **Statements made by the government attract the attention of neighboring countries, particularly regarding territorial and sovereignty matters.**
- The Nepal government objected to the Indian gazette map of a reorganized Jammu-Kashmir and a mural depicting "Akhand Bharat" in India's new Parliament building.

Modern Day	Ancient Name
Afghanistan	Uppanathan
Kabul	Kubha Nagar
Peshawar	Purushpur
Multan	Moolsthan
Tibet	Trivishtap
Sri Lanka	Singhaldweep
Myanmar	Brahmadesh



- Pushback from neighboring countries like Colombo, Dhaka, or Kathmandu on cartographic disputes during the campaign season can have lasting consequences.
- Sacrificing bilateral ties for domestic political gains during the election season may lead to prolonged negative repercussions.

A three-pronged race: On Telangana and the general election 2024 (12 April)

As the BRS slips, the Congress stays ahead in Telangana

- Telangana is expected to be heavily contested in the upcoming general election.
- The Congress and Bharat Rashtra Samithi (BRS) are key contenders, with the BRS losing ground after a decade in power.
- In the 2023 Assembly election, **Congress improved its vote share by 14%, while BRS declined by a similar margin.**
- **Swing against BRS benefited both BJP in Adivasi-dominated areas and Congress in Muslim-dominated regions.**
- Under Congress Chief Minister A. Revanth Reddy's rule, there's been a change in public perception, with focus on inclusivity.
- Recent high-profile defections from BRS to Congress, including trusted lieutenant K. Keshava Rao, weaken BRS's position.

- BJP's vote share doubled from 7% to 14% between 2018 and 2023, indicating a three-pronged race in Telangana.
- All India Majlis-e-Ittehadul Muslimeen (AIMIM) remains a major player without any formal alliance, with its supporters' voting behavior in non-contested seats being a key factor.

Finality and justice: On the Delhi Metro Rail Corporation case (12 April) (GS Paper II: Curative Petition)

DMRC dispute flags need for arbitrators to be more mindful of fact and law

- The Supreme Court of India reversed its own judgment from 2021, relieving the Delhi Metro Rail Corporation (DMRC) of a ₹7,687 crore burden.
- The dispute involved the DMRC and Delhi Airport Metro Express Private Ltd. (DAMEPL), the former concessionaire for a metro line.
- DAMEPL invoked termination clause in 2012 due to alleged DMRC failures, leading to arbitration.
- A single judge of the Delhi High Court upheld the arbitration award against DMRC, but a Division Bench set it aside.
- In 2021, the Supreme Court restored the award, but a review petition was rejected.
- A curative petition, filed after the apex Court refuses to review its judgment, is an extraordinary remedy.
- Grounds for a curative petition include preventing abuse of process and gross miscarriage of justice.
- India's arbitration law allows setting aside an award on limited grounds, but prolonged litigation can deter arbitration.
- The DMRC case highlights the importance of arbitrators and judges getting both fact and law right, ensuring justice and discouraging prolonged litigation.

Review Petition:

- Article associated: Article 137 of the Constitution of India.
- A review petition is a legal remedy available to parties aggrieved by a judgment or order of the Supreme Court of India or a High Court.
- The purpose of a review petition is to seek a re-examination of the final judgment or order passed by the court, based on the discovery of new and important evidence or an error apparent on the face of the record.
- A review petition can only be filed by parties to the original case, and it must

Curative Petition:

- Article associated: Not explicitly mentioned in the Constitution, but the concept of curative petition was evolved by the Supreme Court in the case of Rupa Ashok Hurra vs. Ashok Hurra & Another (2002).
- A curative petition is a legal remedy available in exceptional cases to address gross miscarriages of justice and prevent abuse of the judicial process.
- Unlike a review petition, a curative petition can be filed after the dismissal of a review petition, and it is the last

be based on grounds such as an error of law or fact, miscarriage of justice, or violation of principles of natural justice.

- The review petition is usually heard by the same bench of judges that delivered the original judgment, and it is discretionary for the court to either accept or reject the petition after considering its merits.

resort available to correct a manifest error resulting in the violation of fundamental rights or the principles of natural justice.

- A curative petition is heard by a bench of the three senior-most judges of the Supreme Court, along with the judges who delivered the original judgment.
- The petitioner must demonstrate that the matter raises issues of constitutional importance and that there was a failure of natural justice in the proceedings leading to the final judgment.
- The court has the discretion to admit or reject a curative petition, and if admitted, it may review the judgment to prevent a grave miscarriage of justice.

A battle to save Ladakh, and all of humanity (12 April) (GS Paper III: Environment)

Sonam Wangchuk climate fast has highlighted the larger issue of the fragility of the Himalayan ecosystem

- Sonam Wangchuk, a climate activist and winner of the **Ramon Magsaysay award in 2018**, spoke to a crowd of 30,000 people in Leh, Ladakh on March 6, 2024.
- He announced a 21-day climate fast during his address.
- Ladakh, located between Pakistan and China, is situated at an altitude of 11,500 feet and is **inhabited by 97% indigenous tribes**.
- The region relies heavily on **farming and animal rearing for livelihood**.
- **Ladakh faces various challenges due to climate change, including floods, droughts, landslides, greenhouse gases, and other pollutants.**
- **The Himalayan region, where Ladakh is located, is home to about 15,000 glaciers, often referred to as the Third Pole.**
- **These glaciers play a crucial role in the hydrological cycle by releasing meltwater to major rivers like the Indus, Ganga, and Brahmaputra during spring and summer.**
- However, Himalayan glaciers are at risk of melting due to global warming and climate change, which will impact both the mountain region's residents and downstream communities.

Infrastructure boom

- In 2008, the Indian government launched **eight Missions as part of the National Action Plan on Climate Change (NAPCC)**.
- One of these missions, the **National Mission for Sustaining the Himalayan Ecosystem (NMSHE)**, falls under the Ministry of Science and Technology.

National Action Plan on Climate Change (NAPCC)

The National Action Plan on Climate Change (NAPCC) is a key initiative of the Government of India to combat climate change.

Origin and Vision:

- Launched in 2008 by the Prime Minister's Council on Climate Change (PMCCC).
- Aims to promote sustainable development strategies that address both climate mitigation (reducing greenhouse gas emissions) and adaptation (preparing for the impacts of climate change).

Eight National Missions:

The NAPCC comprises eight National Missions, each focusing on specific sectors and goals:

1. **National Solar Mission (NSM)**: Promotes large-scale adoption of solar energy.
2. **National Mission for Enhanced Energy Efficiency (NMEEE)**: Aims to improve energy efficiency across various sectors.
3. **National Mission on Sustainable Habitat (NMSH)**: Focuses on promoting sustainable practices in urban development.
4. **National Mission for Sustainable Agriculture (NMSA)**: Aims to enhance agricultural productivity while adapting to climate change.
5. **National Mission on Green India (GIM)**: Large-scale afforestation program to increase forest cover.
6. **National Mission for Sustainable Water Management (NMSWM)**: Encourages water conservation and efficient water use practices.
7. **National Mission for Sustaining the Himalayan Ecosystem (NMSHE)**: Focuses on protecting the fragile Himalayan ecosystem.
8. **National Mission on Strategic Knowledge for Climate Change (NMSKCC)**: Supports research and capacity building on climate change issues.

- The main objective of NMSHE is to scientifically assess the vulnerability of the Himalayan region to climate change and monitor the health status of the ecosystem.
- However, despite its mandate, NMSHE appears to have neglected its role in protecting the Himalayan region.
- Following the establishment of Ladakh as a Union Territory, several large-scale infrastructure projects were initiated rapidly.
- These projects include the construction of bridges, road widening, tunnels, railway lines, solar projects, and a new airport terminal, aimed at boosting tourism.
- Notable projects include the Zojila tunnel, Kargil-Zaskar National Highway, and a massive solar energy project covering thousands of acres in the Changthang region.

Flash Floods

- **Rapid Flooding**: Flash floods occur when a sudden volume of water overwhelms an area in a very short amount of time (usually within 6 hours, often much sooner).
- **Causes**:
 - Intense rainfall from thunderstorms or tropical cyclones.
 - Dam or levee failures.
 - Sudden release of water from a glacial lake outburst or ice jam.
- **High-Risk Areas**:

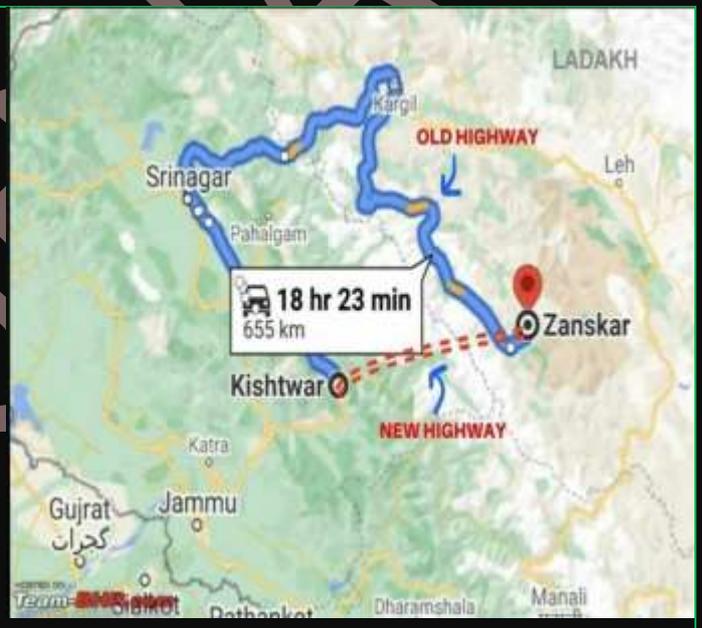
- Urban environments with poor drainage.
- Mountainous regions and canyons.
- Areas downstream from dams.
- Burn scars and deforested areas (lack of vegetation to absorb water).

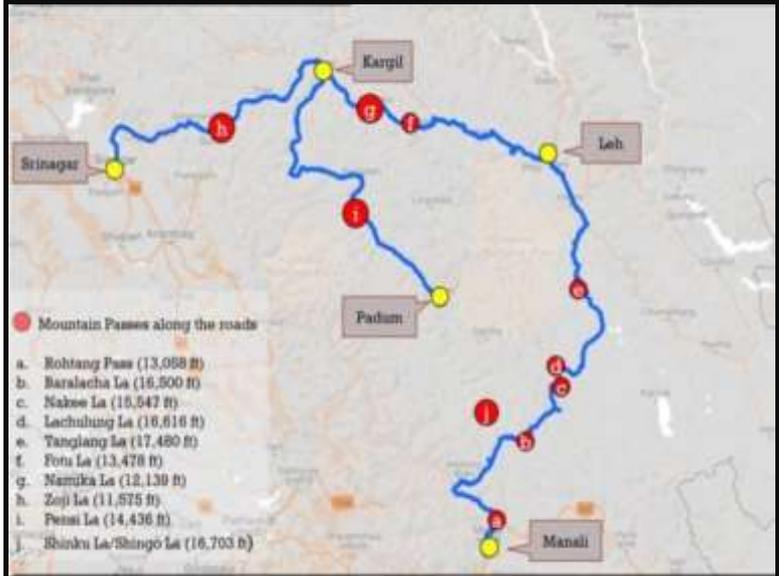
Why are Flash Floods Dangerous?

- **Speed and Force:** They occur quickly, with minimal warning time. The water can carry debris and reach high speeds, causing devastating impacts.
- **Unpredictability:** Flash floods can occur even without visible heavy rainfall in the immediate area, especially downstream from high-intensity storms occurring elsewhere.

Safety During Flash Floods

- **Heed warnings:** Pay attention to weather alerts and evacuate if advised by authorities.
- **Move to higher ground:** Don't wait, seek higher ground immediately.
- **Avoid driving or walking through floodwaters:** Just a few inches of moving water can be dangerous and sweep vehicles away.
- **Turn around, don't drown:** If you encounter a flooded road, don't attempt to cross it.





Border Roads Organisation (BRO):

- **Function:** A paramilitary force under the Ministry of Defence, India.
- **Role:**
 - Constructs and maintains border infrastructure, including roads, bridges, airfields, and defences along India's borders.
 - Provides logistical support to the

National Highways & Infrastructure Development Corporation Ltd. (NHIDCL):

- **Function:** A Public Sector Undertaking (PSU) under the Ministry of Road Transport and Highways (MoRTH).
- **Role:**
 - Develops national highways, other infrastructure projects, and promotes regional connectivity.
 - Focuses on economically important areas, including those bordering neighboring countries.
- **Established:** Incorporated in 2014.
- **Focus:** Develops national highways, including those in hilly and challenging terrains of North-East India, the Himalayas, and island territories.
 - Works on projects with high economic and social impact.

Key Differences:

Feature	BRO	NHIDCL

<p>Indian Army in border areas.</p> <ul style="list-style-type: none"> • History: Established in 1960 in the wake of the Sino-Indian War to improve border connectivity. • Focus: Primarily caters to strategic needs in strategically important areas. <ul style="list-style-type: none"> ○ Operates in challenging high-altitude and remote 	<p>Ministry</p>	<p>Ministry of Defence</p>	<p>Ministry of Road Transport and Highways</p>
	<p>Primary Focus</p>	<p>Strategic border infrastructure</p>	<p>National highways and other infrastructure projects</p>
	<p>Established</p>	<p>1960</p>	<p>2014</p>
	<p>Operational Areas</p>	<p>Primarily remote and high-altitude border areas</p>	<p>Primarily economically important areas, including some border regions</p>

Overlaps and Collaboration:

- Both organizations contribute to national infrastructure development.
- In some instances, NHIDCL takes over completed BRO projects for ongoing maintenance.
- Collaboration can occur on projects of mutual interest, like the Special Accelerated Road Development Programme for the North Eastern Region (SARDP-NE).

- The **Ladakh (UT) Industrial Land Allotment Policy of 2023** aims to attract investment to the region.
- The **Border Roads Organisation (BRO)** and the **National Highways & Infrastructure Development Corporation Ltd. (NHIDCL)** are leading many of these infrastructure projects.
- The NHIDCL's vision includes fast-tracking highway construction in strategic areas like Jammu and Kashmir, Ladakh, Uttarakhand, and Andaman & Nicobar islands, all of which are vulnerable to climate change-related disasters.

A region that has seen disasters

- Despite past disasters in the Himalayan region, government bodies are sanctioning and executing infrastructure projects at a rapid pace without heeding warnings.
- Since 2010, there have been several disasters in the Himalayas resulting in loss of lives and livelihoods.
- **In 2013, a cloudburst at Kedarnath led to flash floods**, claiming thousands of lives.
- **In January 2023, water gushed down a mountain slope in Joshimath**, submerging parts of the town.
- **In November 2023, 41 workers were rescued from a collapsed tunnel project** in the Himalayas, drawing international attention.
- **Uttarakhand**, where many tragedies occurred, has witnessed numerous infrastructure projects despite warnings from experts.

- A Supreme Court-appointed expert committee recommended limiting pilgrim numbers visiting the Char Dham shrines to protect the ecosystem, but pilgrim numbers continue to rise.
- Some experts suggest avoiding hydroelectric projects in the para-glacial zone to prevent further environmental damage.
- When disasters occur, migrant workers and residents, tourists, and pilgrims bear the human cost, while government bodies and developers avoid accountability.

Scant review

- Climate change activists are frustrated because their recommendations are not being implemented, despite approaching courts and forming expert committees.
- Mega projects in the mountains lack due diligence, including risk assessment, safety measures, and geological and seismic analysis.
- Development should not come at the expense of upsetting the fragile balance in the Himalayan ecosystem and its biodiversity.
- It is the responsibility of everyone to ensure the protection of the Himalayas and the people living in the region.
- Sonam Wangchuk's battle for environmental protection extends beyond Ladakh; it is a battle for the future of humanity and its generations to come.

MAINS PRACTICE QUESTION: GS PAPER III:

Question 1: 'Climate Change' is a global problem. How India will be affected by climate change? How Himalayan and coastal states of India will be affected by climate change? (250 Words/15 Marks) (UPSC 2017)

Question 2: Define the concept of carrying capacity of an ecosystem as relevant to an environment. Explain how understanding this concept is vital while planning for sustainable development of a region. (250 Words/15 Marks) (UPSC 2019)

ANSWER APPROACH

- Introduce the answer with Definition of carrying capacity of an ecosystem and highlight its relevance for environmental considerations.
- Then bring the Factors influencing carrying capacity.
- Further discuss the Importance for Sustainable Development:
- Then Conclude by Reiterating the crucial link between carrying capacity and sustainable development.

ANSWER

The carrying capacity of an ecosystem is the maximum population size of a species that it can support indefinitely, given available resources and environmental constraints. It is a dynamic concept, influenced by factors like technology, resource distribution, and human behavior, underscoring the link between environmental health and societal development.

Understanding carrying capacity is vital for sustainable development planning for several reasons:

- **Recognizing Resource Limits:** Carrying capacity reminds us that natural resources are finite. Sustainable development must focus on efficient resource use, recycling, and renewable alternatives to avoid exceeding an ecosystem's ability to regenerate.
- **Preventing Environmental Degradation:** Exceeding carrying capacity leads to pollution, resource depletion, habitat destruction, and biodiversity loss. Planning within carrying capacity helps prevent irreversible environmental damage.
- **Informing Development Decisions:** Population growth, urbanization, and industrial development put pressure on ecosystems. Carrying capacity assessments guide infrastructure planning (housing, sanitation) and land-use decisions to ensure long-term sustainability.
- **Responsible Consumption:** Understanding carrying capacity encourages conscious consumption patterns, waste reduction, and a transition to a circular economy, minimizing pressure on ecosystems.
- **Promoting Resource Equity:** Sustainable development requires fair access to resources for both present and future generations. Carrying capacity considerations help address issues of resource distribution and social inequality.

Thus, Sustainable development cannot be achieved without respecting ecological limits. The concept of carrying capacity compels us to adopt development models that harmonize economic growth, social wellbeing, and the long-term health of our planet. Policies promoting regenerative practices, resource efficiency, and population management in line with environmental capacities are essential for a truly sustainable future.

2nd Way to write the same answer

Carrying capacity refers to the maximum population size of a species that the environment can sustain indefinitely, given the available resources and the prevailing environmental conditions. Understanding this concept is vital for planning sustainable development in a region.

- Carrying capacity is crucial for environmental considerations as it determines the maximum sustainable population or activity level that an ecosystem can support without causing degradation or depletion of resources.
- In Ladakh, where 97% of the population comprises indigenous tribes heavily reliant on farming and animal rearing, understanding the carrying capacity is essential to ensure that the region's resources are not overexploited, leading to environmental degradation and loss of livelihoods.

Factors Influencing Carrying Capacity:

- Factors such as climate change, infrastructure development, population growth, and economic activities can influence the carrying capacity of an ecosystem.
- In Ladakh, climate change-induced events like floods, droughts, landslides, and glacier melting directly impact the region's carrying capacity by affecting water availability, agriculture, and overall ecosystem health.

Importance for Sustainable Development:

- Planning for sustainable development requires assessing and managing activities in line with the ecosystem's carrying capacity to avoid exceeding its limits.
- In Ladakh, rapid infrastructure development and industrialization without considering the region's carrying capacity can exacerbate environmental vulnerabilities and lead to disasters like floods and landslides.

- By understanding the carrying capacity, policymakers can make informed decisions about land use, resource management, and infrastructure development to ensure long-term sustainability and resilience in the face of climate change.

Thus, concept of carrying capacity is indispensable for ensuring sustainable development in Ladakh and other regions facing environmental challenges. By integrating this understanding into planning and decision-making processes, stakeholders can promote development that respects the limits of nature, preserves biodiversity, and safeguards the well-being of present and future generations.

Question 1: Consider the following statements about the Himalayan region:

1. It is the source of the world's highest mountain peaks.
2. It contains the largest concentration of glaciers outside the polar regions.
3. It is the origin of major South Asian rivers.

Which of the above statements are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2, and 3

Question 2: Which of the following terms is associated with the large store of ice and snow found in the Himalayan region?

- a) Cryosphere
- b) Lithosphere
- c) Hydrosphere
- d) Atmosphere

Question 3: The nickname "Third Pole" is often used for the Himalayan region due to:

- a) The presence of the third-highest mountain in the world.
- b) Its location at the northernmost point of the Indian subcontinent.
- c) Its vast reserves of freshwater in the form of glaciers.
- d) The unique biodiversity found in its high-altitude ecosystems.

Question 4: Which of the following rivers does NOT originate in the Himalayas?

- a) Brahmaputra
- b) Indus
- c) Narmada
- d) Ganges

Question 5: Which of the following is the most common cause of flash floods?

- a) Prolonged periods of light rainfall
- b) Sudden failure of a dam or levee
- c) Intense rainfall in a short period
- d) Rapid snowmelt in mountainous regions

Question 6: Flash floods are particularly dangerous because they:

- a) Occur mostly in predictable locations
- b) Are always preceded by warning signs
- c) Develop quickly with little warning
- d) Primarily cause damage to infrastructure

Question 7: Which of the following geographical features is NOT particularly susceptible to flash floods?

- a) Urban areas with impervious surfaces
- b) Mountainous canyons and valleys
- c) Dry riverbeds and desert washes
- d) Vast agricultural plains

Question 8: Consider the following statements regarding flash floods:

1. They can be caused by the collapse of natural ice dams.
2. They are more predictable than traditional river floods.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Question 9: Which of the following maritime zones extends up to 12 nautical miles from a nation's baseline?

- a) Exclusive Economic Zone (EEZ)
- b) Contiguous Zone
- c) Territorial Sea
- d) High Seas

Question 10: Under UNCLOS, the "right of innocent passage" applies to which of the following?

- a) Commercial fishing vessels in the EEZ
- b) Submarines navigating in the contiguous zone
- c) Ships of all states within a nation's territorial sea
- d) Research vessels surveying the continental shelf

Question 11: Which of the following institutions was established under UNCLOS for the management of deep seabed resources in areas beyond national jurisdiction?

- a) International Seabed Authority (ISA)
- b) International Maritime Organization (IMO)
- c) International Tribunal for the Law of the Sea (ITLOS)
- d) Commission on the Limits of the Continental Shelf (CLCS)

Question 12: Consider the following statements about UNCLOS:

1. It entered into force in the year 1982.
2. It provides a mechanism for the compulsory settlement of disputes related to its interpretation.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Question 1: Consider the following statements about the Himalayan region:

1. It is the source of the world's highest mountain peaks.
2. It contains the largest concentration of glaciers outside the polar regions.
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Which of the above statements are correct?

- a) 1 and 2 only
- b) 2 and 3 only

Answer: (d) 1, 2, and 3

Explanation: All three statements highlight key features of the Himalayan region – home to the tallest mountains, the "Third Pole" with its enormous glacial reserves, and the source of vital river systems supporting billions of people.

<p>c) 1 and 3 only d) 1, 2, and 3</p>	
<p>Question 2: Which of the following terms is associated with the large store of ice and snow found in the Himalayan region?</p> <p>a) Cryosphere b) Lithosphere c) Hydrosphere d) Atmosphere</p>	<p>Answer: (a) Cryosphere Explanation: The cryosphere refers to the frozen parts of the Earth, encompassing glaciers, snow cover, ice sheets, and permafrost. The Himalayas are a prime example of this.</p>
<p>Question 3: The nickname "Third Pole" is often used for the Himalayan region due to:</p> <p>a) The presence of the third-highest mountain in the world. b) Its location at the northernmost point of the Indian subcontinent. c) Its vast reserves of freshwater in the form of glaciers. d) The unique biodiversity found in its high-altitude ecosystems.</p>	<p>Answer: (c) Its vast reserves of freshwater in the form of glaciers. Explanation: While the other options may be partially true, the "Third Pole" designation primarily refers to the massive amount of ice and snow found in the region, mirroring the ice caps of the Arctic and Antarctic Poles.</p>
<p>Question 4: Which of the following rivers does NOT originate in the Himalayas?</p> <p>a) Brahmaputra b) Indus c) Narmada d) Ganges</p>	<p>Answer: (c) Narmada Explanation: The Narmada River originates in the Amarkantak plateau in central India, while the others have their source in Himalayan glaciers.</p>
<p>Question 5: Which of the following is the most common cause of flash floods?</p> <p>a) Prolonged periods of light rainfall b) Sudden failure of a dam or levee c) Intense rainfall in a short period d) Rapid snowmelt in mountainous regions</p>	<p>Answer: (c) Intense rainfall in a short period Explanation: While all options can cause flooding, flash floods are specifically characterized by their sudden onset due to intense, localized bursts of rainfall.</p>
<p>Question 6: Flash floods are particularly dangerous because they:</p> <p>a) Occur mostly in predictable locations b) Are always preceded by warning signs c) Develop quickly with little warning d) Primarily cause damage to infrastructure</p>	<p>Answer: (c) Develop quickly with little warning Explanation: The rapid and unexpected nature of flash floods poses a significant risk, as there's often limited time to evacuate or take protective measures.</p>
<p>Question 7: Which of the following geographical features is NOT particularly susceptible to flash floods?</p> <p>a) Urban areas with impervious surfaces b) Mountainous canyons and valleys c) Dry riverbeds and desert washes d) Vast agricultural plains</p>	<p>Answer: (d) Vast agricultural plains Explanation: Plains generally have a lower risk due to their flat topography. The other options are prone to flash floods: impervious surfaces limit water absorption, steep terrain leads to rapid runoff, and dry areas can be quickly overwhelmed by sudden downpours.</p>
<p>Question 8: Consider the following statements regarding flash floods:</p> <p>1.They can be caused by the collapse of natural ice dams. 2. They are more predictable than traditional river floods. Which of the above statements is/are correct?</p>	<p>Answer: (a) 1 only Explanation: The collapse of ice or debris dams can release a sudden surge of water, leading to flash floods. Flash floods are generally less predictable than river floods due to their dependence on localized, intense rainfall events.</p>

<p>a) 1 only b) 2 only c) Both 1 and 2 d) Neither 1 nor 2</p>	
<p>Question 9: Which of the following maritime zones extends up to 12 nautical miles from a nation's baseline? a) Exclusive Economic Zone (EEZ) b) Contiguous Zone c) Territorial Sea d) High Seas</p>	<p>Answer: (c) Territorial Sea Explanation: The Territorial Sea is the zone where a coastal state exercises full sovereignty, similar to its land territory.</p>
<p>Question 10: Under UNCLOS, the "right of innocent passage" applies to which of the following? a) Commercial fishing vessels in the EEZ b) Submarines navigating in the contiguous zone c) Ships of all states within a nation's territorial sea d) Research vessels surveying the continental shelf</p>	<p>Answer: (c) Ships of all states within a nation's territorial sea Explanation: Innocent passage is a fundamental principle of UNCLOS, ensuring that ships can traverse another nation's territorial sea without undue hindrance for peaceful navigation.</p>
<p>Question 11: Which of the following institutions was established under UNCLOS for the management of deep seabed resources in areas beyond national jurisdiction? a) International Seabed Authority (ISA) b) International Maritime Organization (IMO) c) International Tribunal for the Law of the Sea (ITLOS) d) Commission on the Limits of the Continental Shelf (CLCS)</p>	<p>Answer: (a) International Seabed Authority (ISA) Explanation: The ISA is charged with regulating and sharing the benefits from mineral resources located on the seabed beyond any single nation's control ("the Area").</p>
<p>Question 12: Consider the following statements about UNCLOS: 1.It entered into force in the year 1982. 2.It provides a mechanism for the compulsory settlement of disputes related to its interpretation. Which of the above statements is/are correct? a) 1 only b) 2 only c) Both 1 and 2 d) Neither 1 nor 2</p>	<p>Answer: (c) Both 1 and 2 Explanation: UNCLOS was concluded in 1982 but entered into force in 1994. It offers several dispute resolution options, including binding ones, through bodies like ITLOS.</p>