



IAS PARLIAMENT

Information is a Blessing

A Shankar IAS Academy Initiative

MAINSTORMING 2021

NATIONAL SECURITY

- | | |
|---|---|
| <input checked="" type="checkbox"/> Defence | <input checked="" type="checkbox"/> Border Management |
| <input checked="" type="checkbox"/> Role of Media | <input checked="" type="checkbox"/> North-East Insurgency |
| <input checked="" type="checkbox"/> Cyber Security | <input checked="" type="checkbox"/> Development vs Extremism |
| <input checked="" type="checkbox"/> Security Forces | <input checked="" type="checkbox"/> Terrorism & Organised Crime |



SCAN TO
DOWNLOAD



SINCE 2004

www.shankariasacademy.com

www.iasparliament.com

INDEX

MAINSTORMING 2021.....3

1. LINKAGES BETWEEN DEVELOPMENT AND SPREAD OF EXTREMISM3

- 1.1 Chhattisgarh Maoist Attacks 3
- 1.2 Stalled Salwa Judum Judgement 4
- 1.3 Tackling the Maoists 5
- 1.4 Anti-Maoist Operations – Army and CAPF..... 6

2. BORDER MANAGEMENT.....7

- 2.1 Assam-Mizoram Border Dispute 7
- 2.2 Land Ports - Border Trade..... 8
- 2.3 India-China Relations: Border Disputes 10
- 2.4 Disengagement Agreement in Eastern Ladakh. 11
- 2.5 Restoring normalcy in the border..... 14
- 2.6 UNSC Debate on Maritime Security 14

3. TERRORISM & ORGANISED CRIME.16

- 3.1 Constant Vigilance - Threats in Kashmir 16
- 3.2 Jammu Drone Attack 16

4. NORTH EAST INSURGENCY.....17

- 4.1 Karbi Anglong Agreement..... 17
- 4.2 Militants' Surrender in Assam - Karbi Insurgency 18

5. CYBER SECURITY20

- 5.1 Chinese state-backed Cyber Attack Attempts ... 20
- 5.2 Building Cyber Resilience 22
- 5.3 Banks on Cybersecurity..... 23
- 5.4 Israeli Spyware Pegasus..... 25
- 5.5 Pegasus Revelations - Need for Surveillance Reforms..... 27

6. ROLE OF MEDIA AND SOCIAL NETWORKS.....28

- 6.1 India's IT Rules 2021 28
- 6.2 Big tech vs State - Social Media Platforms..... 31
- 6.3 Humans are still core to Digital India – Intermediaries 32
- 6.4 WhatsApp's New Privacy Policy – Violations.. 33
- 6.5 The Antitrust Suit against Facebook..... 34
- 6.6 Media Regulation - The starting point for self-regulation 36

7. SECURITY FORCES.....37

- 7.1 AF's Role in Ladakh 37
- 7.2 In Need of Full-Time Heads 39

8. DEFENCE.....40

- 8.1 INS Karanj - Scorpene-class Submarine 40
- 8.2 CAG Report on Defence Offsets 41
- 8.3 Pinaka Missile System 42

MAINSTORMING 2021

NATIONAL SECURITY

(DECEMBER 2020 to SEPTEMBER 2021)

1. LINKAGES BETWEEN DEVELOPMENT AND SPREAD OF EXTREMISM

1.1 Chhattisgarh Maoist Attacks

Why in news?

Recently in Chhattisgarh in a massive security operation 23 jawans got killed in Maoist ambush.

What was the security operation?

- It was a massive operation which included the Special Task Force (STF), District Reserve Guard (DRG) and District Force of the Chhattisgarh Police, the CRPF and its elite COBRA unit.
- About 1,000 personnel were deployed from Bijapur alone where in 10 teams were launched— two from Sukma district and eight from three camps in Bijapur.
- Six of the eight Bijapur teams were launched from the Tarrem camp while the other two were from Usur and Pamed camp.
- Of the six teams, three — one comprising of DRG and STF, another of DRG team and one COBRA team — were launched.
- The operational plan was to travel to Alipuda and Jonaguda, 11 and 12 kilometres south of Tarrem respectively.

How was the intelligence gathered?

- The Chhattisgarh Police said that the operation was launched based on intelligence inputs of the commander of lethal Battalion 1 of the Maoists.
- The operational plan was based on information from the state SIB on the presence of 60 to 70 Maoists in Silger, IB inputs of 40-50 Maoists at Bodaguda and other local intelligence inputs.
- One of the primary sources of information is the intercepts of information from a receiver police who was placed on a hill in Dantewada.
- In Minpa region, the Maoists know forces are listening to their code.

How did the plan fail?

- The two villages that the security personnel passed, Jhiragaon and Teklagudem, were completely empty.
- When the forces didn't find anything at the original target, they returned back.
- During the course of return, the Naxals covered the forces from all sides and attacked them who had sophisticated weapons and used in abundance.
- The kind of fire which came and the positions the naxals took was well-planned.
- The gunbattle began in Tekulugudam, around 12 km from the Tarrem camp.
- Once driven down the Tekulugudam hill, some of the security personnel sought shelter in the houses but were attacked by bullets, UBGLs, along with hand grenades.
- Following this, the personnel were chased down the hill into the open plains.

Why it failed?

- The entire concept of large 1,000-personnel-plus operations needs to be relooked as this needs concerted thought which the security personnel haven't done.

- When there are large troop movements in a large operation, senior officers fly in and fly out, travel between camps happen often and it is too unwieldy to be kept quiet.
- So the Maoists had much time to strip the security forces and their weapons.
- In successful operations like the Greyhounds, there were small teams that hit based on solid human intelligence.
- This has to be done in the upcoming operations else the game of death and loss will keep happening.
- Hence there should be deep consideration of Maoist tactics and security forces and not knee-jerk response and ill-planned operations.

1.2 Stalled Salwa Judum Judgement

What is the issue?

- The Salwa Judum judgement was delivered 10 years ago in 2011.
- But nothing has been done so far to implement it.

What is the Salwa Judum judgement?

- It directed that the existing SPOs be redeployed in traffic management or other such safe duties.
- Other matters were left pending.
- These included prosecution of security forces and others involved in human rights violations, and rehabilitation of villagers who had suffered violence.
- The State had been asked to submit comprehensive plans for these.

How was the State's response?

- Ten years on, nothing has been done to implement the judgment.
- Instead, the State government has merely renamed the SPOs.
- They are now known working as the District Reserve Guard (DRG).
- Most of the DRG members are captured or surrendered Maoists.
- They are given automatic weaponry as soon as they join the police force.
- Some of them get one-three months of training, and some not even that.
- They commit the most excesses against their former fellow villagers.
- They suffer the most casualties in any operation.
- But, they are paid much less than the regular constabulary.
- These were all the reasons the judges had outlawed their use, but all of them continues.
- A contempt petition filed in 2012 in this regard is still awaiting hearing.

What are the excesses committed over the years?

- At its peak between 2005 and 2007, the Judum involved forcing villagers into government-controlled camps.
- Those who refused were punished by having their villages burnt.
- Hundreds of people were killed, and their deaths were not even recorded as 'encounters'.
- Villagers fled to neighbouring States or into the forests around their villages.

WHAT IS SALWA JUDUM MOVEMENT?

- It is a vigilante movement started in 2005 sponsored by the Chhattisgarh and Central government to fight against the Maoists.
- The surrendered Maoists and untrained villagers were used in frontline counter-insurgency operations as Special Police Officers (SPOs).



- On July 5, 2011, the Supreme Court, in a historic judgment, banned Salwa Judum and ruled this practice as unconstitutional.



- Sangham members were either jailed or compelled to join the security forces as SPOs.
- [Sangham members are the active but unarmed Maoist sympathisers.]
- Thousands of innocent villagers were arrested en masse by the police as suspected Maoists.
- They spend long years in jail before being acquitted.
- For such villagers, meeting their families is difficult and hiring lawyers drains their meagre resources.
- Even as a few dedicated human rights lawyers have tried to help, the scale of arrests is massive.
- Deaths in encounters between jawans and Maoists periodically hit the national headlines.
- But extrajudicial killings of villagers and Maoists and killings of suspected informers by Maoists continue at a steady pace without much notice.

What is the present condition?

- Today, the Judum camps are virtually empty.
- Only the former SPOs and their families are remaining, in now permanent houses.
- Villagers split between those who went to the camp and those who went to the forest are now reconciled.
- People have come back and started cultivation.
- An entire generation has grown up and have embarked on new struggles.
- Across the region, villagers are demanding schools and health centres.
- Instead, what they have got in abundance are CRPF camps at intervals of less than 5 km.
- Roads are being bulldozed through what were once dense forests.
- The government and security forces have been indicted in some cases by independent inquiries.
- But no steps have been taken to prosecute those responsible.
- Moving forward, both sides should get serious about peace talks.

1.3 Tackling the Maoists

Why in news?

According to the data provided by Ministry of Home Affairs, the geographical influence of Maoists has contracted from 96 districts in 10 States to 41 districts in 2010.

How has the CPI (M) evolved?

- The People's War Group and the Maoist Communist Centre of India merged into the CPI (Maoist) in 2004.
- It managed to consolidate its presence across "Red Corridor" spanning across the central and north-central India, marked by rural deprivation.
- The CPI (Maoist) has sought to project itself as a revolutionary political movement that sought to rebuild after the failures of the earlier Naxalite movement.
- Rather than focussing on socio-economic struggles, Maoists relied on waging a military battle against the state to capture power resulting in militarisation of these areas.
- It led to repression of tribal people both by state actions such as creation of Salwa Judum (disbanded by judicial order) and Maoist authoritarianism.

How Red Corridor region is classified?

- The Red Corridor area is the area under the influence of Left Wing Extremists (LWE) or Maoists.
- It is spread across 10 states — Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Telangana, Uttar Pradesh, West Bengal and some northern fringes of Tamil Nadu
- These Maoist-affected areas were first classified in 2006.
- The districts were assessed on parameters like —

1. Violence profile,
2. The kind of logistical and other support provided to maoist cadres

What are the governments' measures?

- The governments of the states deployed additional resources and are trying their best to check Maoists' expansion.
- A number of awareness campaigns were organised in remote areas which are most vulnerable to Maoist influence.
- Arrangements for villagers' training were made and government employment for hundreds was facilitated.
- Financial aid of around Rs.30 crore annually is given to the districts for various developmental works.
- Road Connectivity Project for Left Wing Extremism (LWE) Affected Areas has been undertaken by the government.
- After the killing of 25 CRPF personnel in Sukuma district of Chhattisgarh in 2017, "**SAMADHAN doctrine**" has been formulated to counter naxalism.
- Fortified Police Station Scheme was launched by the central government in 10 States to enhance the security of police personnels.
- Under the Special Infrastructure Scheme, around 120 crores was given to strengthen the special forces.
- The Home Ministry has provided support to security forces for other facilities such as Helicopters, UAVs etc.
- The Maoist insurgency still has potency in South Bastar in Chhattisgarh, Andhra-Odisha border and in some districts in Jharkhand.

What are the effects of Left wing extremism (LWE)?

- Frequent skirmishes have affected the security forces.
- It has left many tribal civilians caught in the crossfire.
- Human rights' violations were reported in naxal prone areas.
- It has added to the alienation among the poor in these areas.
- It also has its effect on the government exchequer.
- LWE widened the backwardness in terms of social and economic development.
- It affected the democratic setup by hindering the elections.

How can the issue be tackled?

- Empowerment of tribal people and civil society activists to promote peace in these areas.
- Expansion of welfare and rights paradigms to limit the movement.
- Surrendered LWE cadre should be used for intelligence collection to the maximum possible.
- The trade in minor forest produce needs a closer look in Maoist-affected areas to break the contractor-Maoist nexus.
- Hence, the country's best weapon against ultras is extending the welfare state to areas it hasn't quite reached.

1.4 Anti-Maoist Operations – Army and CAPF

What is the issue?

Appointing army officials as advisers for anti-Maoist operations in the Home Ministry needs a rethink.

What is the popular suggestion made in this regard?

- Whenever the Central Armed Police Forces (CAPF) personnel suffer reverses, there is immediate hue and cry, particularly from Army veterans.
- They say that training and skills of CAPF personnel need to be made better.
- They also suggest that ex-servicemen from the Army should be inducted into the CAPF.

- But the allegations that CAPF personnel are not well-trained falls flat given the history of the paramilitary forces.

How significant have paramilitary forces been?

- Border Security Force (BSF) and Central Reserve Police Force (CRPF) personnel were in the battlefront in the 1971 India-Pakistan war.
- As part of the Indian Peace Keeping Force in Sri Lanka, CRPF personnel fought the militants there.
- The CRPF personnel have made record contributions over the years in the war history of India.
- Especially, at Sardar Post in the Raan of Kutch in 1965, a small CRPF contingent repulsed a Brigade strength attack of the Pakistan Army.
- It was highly appreciated as a paramilitary force could inflict heavy casualties on a regular Army Brigade.
- Likewise, if the north-eastern States enjoy peace and tranquillity these days, the credit goes in large measure to the CAPF personnel.
- They are deployed in every State in the region.
- Several operations conducted jointly by the CRPF and the Kashmir Police in J&K are also significant.
- Trained initially by State police officers, the Greyhounds is a specialised commando outfit of erstwhile Andhra Pradesh.
- It was able to inflict heavy casualties on Maoists.
- The elite Commando Battalion for Resolute Action (CoBRA) has played a stellar role in killing some top Maoist leaders.

How valid is the suggestion?

- The Army has never fought against the Maoists, and they lack exposure and experience to combat Maoists.
- The CAPFs in the field, on the other hand, have spent a major part of their lives combating insurgents and extremists.
- The CAPFs have well-established training centres across the country with instructors of high calibre.
- It would thus be absurd to appoint army officials as advisers for anti-Maoist operations.

2. BORDER MANAGEMENT

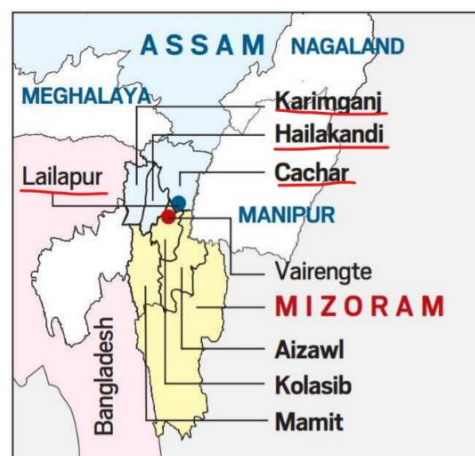
2.1 Assam-Mizoram Border Dispute

Why in news?

The old boundary dispute between Assam and Mizoram exploded in violent clashes at a contested border point.

What led to the violence and clashes?

- The violence highlights the long-standing inter-state boundary issues in the Northeast, particularly between Assam and the states that were carved out of it.
- Mizoram borders Assam's Barak Valley.
- Both the States border Bangladesh.
- Status quo should be maintained in no man's land in the border area.
- This was the understanding according to an agreement between governments of Assam and Mizoram some years ago.
- But people from Lailapur, Assam broke the status quo.
- They allegedly constructed some temporary huts.



- People from Mizoram side went and set fire on them.
- Officials say that the contested land belongs to Assam as per the state's records.
- According to Mizoram officials, the land claimed by Assam has been cultivated for a long time by residents of Mizoram.
- On the other hand, Mizoram's civil society groups blame "illegal Bangladeshis" (alleged migrants from Bangladesh) on the Assam side for the disturbances.

What is the origin of the boundary dispute?

- The boundary between present-day Assam and Mizoram is 165 km long.
- The heart of the dispute dates back to the colonial era.
- Back then, Mizoram was known as Lushai Hills, a district of Assam.
- The dispute stems from a notification of 1875 that differentiated the Lushai Hills from the plains of Cachar.
- [This was derived from the Bengal Eastern Frontier Regulation (BEFR) Act, 1873.]
- Another notification of 1933 demarcates a boundary between the Lushai Hills and Manipur.
- The Mizo society was not consulted prior to the 1933 notification.
- So, Mizoram believes the boundary should be demarcated on the basis of the 1875 notification.
- But the Assam government follows the 1933 demarcation.
- This is the point of conflict between the two states.

What led to the two differing notifications?

- British tea plantations surfaced in the Cachar plains during the mid-19th century.
- [It covers the Barak Valley - now comprises the districts of Cachar, Hailakandi and Karimganj.]
- Their expansion led to problems with the Mizos whose home was the Lushai Hills.
- In August 1875, the southern boundary of Cachar district was issued in the Assam Gazette.
- The Mizos say this was the fifth time the British had drawn the boundary between the Lushai Hills and the Cachar plains.
- But this was the only time when it was done in consultation with Mizo chiefs.
- This demarcation also became the basis for the Inner Line Reserve Forest demarcation in the Gazette two years later.
- But in 1933, the boundary between Lushai Hills and the then princely state of Manipur was demarcated.
- This notification said the Manipur boundary began from the trijunction of Lushai Hills, Cachar district of Assam and Manipur state.
- The Mizos do not accept this demarcation, and point to the 1875 boundary which was drawn in consultation with their chiefs.
- In the decades after Independence, many states and UTs were carved out of Assam:
 1. Nagaland (1963)
 2. Arunachal Pradesh (UT 1972, formerly NEFA)
 3. Meghalaya (UT 1972)
 4. Mizoram (UT 1972)
- Now, with different interpretations of the border question, clashes erupt often. The earlier one was in October 2020.
- In the current clashes, at least six Assam Police personnel were killed.

2.2 Land Ports - Border Trade

What is the issue?

Safe and secure border is sine qua non for enhanced trade and integration. Here is how land ports have contributed to this.

What are the contributions so far?

- The LPAI has developed till date a total of 9 ICPs (Integrated Check Posts), which are located across India's international land border.
- These are:
 1. Attari - Handling India's trade with Pakistan
 2. Agartala, Petrapole, Srimantapur and Sutarkandi - All handling India's trade with Bangladesh
 3. Raxaul and Jogbani - Both handling India's trade with Nepal
 4. Moreh - Handling India's trade with Myanmar
- Several new ICPs are coming up and their total number is likely to touch 24 by 2030.
- India's border management ecosystem with land ports is very much in sync with the obligations of the WTO Trade Facilitation Agreement.

LAND PORT TRADE

- Land port is an area on the international borders including portions of national, State highways and other roads, & railways.
- It is notified as land Customs station or immigration check post under the Customs Act, 1962 or the Foreigners' Act, 1946.
- In 2012, India set up the Land Ports Authority of India (LPAI) through the LPAI Act, 2010, under the Ministry of Home Affairs.

What is the role of a LPAI?

- Manages the ICP properties.
- Develops, sanitizes and manages the facilities for cross-border movement of passengers and goods at designated points.
- Puts in place systems, which address security imperatives at the ICPs.
- Wide range of security equipment - Handheld metal detectors, door frame metal detectors, barriers and rotary mirrors which discourage manual frisking and verification by security forces.

How have land ports helped?

- Trade and infrastructure have a self-reinforcing relationship.
 1. With ICPs in place, India's trade with her immediate neighbours (BBMNP countries) has gone up from 487% in 2012-13 to 63.59% in 2020-21.
 2. In value terms - Rs. 327 billion in 2012-13 to Rs. 954.89 billion.
 3. The output shift - Rs. 6.55 crore per vehicle in 2012-13 to Rs. 257 crore per vehicle in 2020-21
- Creating a seamless passenger experience by facilitating cross-border passenger movement of over 1.26 crore people.
- Channelising informal trade to formal trade - Potential for replication in several African land ports experiencing large informal trading activities.

What are the unfinished tasks?

- Enhancing and upgrading cross-border trade infrastructure at land borders:
 1. Access and Surveillance Control Systems
 2. Full Body Truck Scanners for non-intrusive scanning and Radiation Detection Equipment at ICPs which shall considerably reduce dwell time at ports.

- Once some of India's connectivity corridors such as the Trilateral Highway become operational, ICPs (particularly in eastern neighbourhood) require further capacity expansion.

2.3 India-China Relations: Border Disputes

What is the issue?

- It has been a year since the news of tensions between Indian and Chinese troops on the Line of Actual Control (LAC) in Ladakh first broke (May-June 2020).
- With this, here is an assessment of the developments so far, the present conditions and the future challenges.

What happened back then?

- The crisis involved Chinese ingressions and violent clash with soldiers of the People's Liberation Army (PLA) in mid-June 2020.
- It eventually involved seven places: Depsang plains, Galwan, Gogra, Hot Springs, North bank of Pangong Tso, Kailash range and Demchok.
- With agreements to disengage from the Pangong lake area, it was planned to convene meeting of the senior commanders to address and resolve all other remaining issues.
- The last such meeting of commanders was held in April 2021, but the Chinese have refused to even discuss the remaining issues.
- Modi government seemed keen to announce a closure of the border crisis by creating the impression of an honourable solution against a major power.
- But, no such closure is in sight yet.

What is the current situation?

- The PLA troops deny India access to territories it controlled by patrolling.
- With this, the government's asserted aim of restoring the status quo ante as of April 2020 remains unfulfilled.
- Even on the north bank of Pangong, a new status quo has been created where the patrolling rights are yet to be restored.
- Similarly, the Kailash range has seen neither de-escalation nor de-induction so far.
- So, in all, there have been no further deaths after June 2020 and no firing after early September 2020.
- But, the peace on the border is both unstable and unsustainable.
- Ongoing tensions, with massive deployments on each side, belie any hope of tranquillity.
- Cognisant of the volatility and risk, Indian Army has undertaken a major reorientation of its units and formations towards the China border.
- China-India ties are thus moving into a zone of problems even as New Delhi grapples with pandemic-related issues.

How is COVID-19 and geopolitics playing now?

- India's geopolitical concerns have been exacerbated by the devastation caused by the mismanagement of COVID-19.
- Through its 'Vaccine Maitri' programme, New Delhi was presenting itself as a better alternative to Beijing's vaccine diplomacy, particularly in South Asia.
- But this trust was shaken, as the government has backtracked on existing contractual commitments to supply vaccines to its friendly neighbours.
- So, countries such as Bangladesh and Sri Lanka have started procuring vaccines from China.
- They are further casting doubts on India's reliability as a partner and raising questions about its ability to act as a counter to China.
- Sensing the opportunity, Beijing also moved in quickly, organising a meeting with all South Asian countries except India, to deal with the pandemic.

- New Delhi was also the lynchpin of the Quad's pledge to deliver a billion doses of COVID-19 vaccine throughout the Indo-Pacific by the end of 2022.
- But, India is now trying to import vaccines for its own population.
- Failing on its commitments to other poor countries under GAVI's COVAX scheme, the proposal now seems to be on a weak footing.

What is the larger impact?

- The failure of the government to anticipate and deal with a public health crisis has affected India's image as an emergent power.
- A weaker India is not only less attractive as a partner globally, it makes New Delhi more dependent on the US to deal with China.
- This will only confirm China's presumptions that India had been acting at the behest of the U.S. and further strain India-China ties.
- Meanwhile, the threat of a two-front collusive threat after the Ladakh crisis forced the Modi government to seek peace with Pakistan.
- This led to the announcement of the ceasefire on the Line of Control, and Pakistan awaits the steps on Kashmir promised by the Modi government.
- But no political environment has been created in India for any such step so far.
- It is hard to predict the Pakistani course of action hence.
- In all, an assertive China and a vengeful Pakistan acting in concert on the land borders is a serious threat to India.

How are the pandemic-related India-China terms?

- Beijing's efforts to offer aid to India to deal with the pandemic have been largely confined to private companies and donations from the Red Cross and Red Crescent societies.
- These are largely commercial contracts between private companies and not that of the Chinese government.
- Nevertheless, the fact remains that India is heavily dependent on China for crucial medical supplies.
- State-owned Sichuan Airlines had suspended cargo flights to India, but the supply chains have since been kept open by Beijing.
- This is in tune with the Indian demand from Beijing that the supply chain should remain open.
- But the other demand to ensure stable product prices has not been met.

How does the future look?

- Soldiers of both armies are facing each other in Ladakh and there is lack of trust between the two countries.
- With this, it is clear that the China-India bilateral relationship is moving into a zone of increasing disruptions and clashes on the disputed border, amidst the challenges of the pandemic.

2.4 Disengagement Agreement in Eastern Ladakh

Why in news?

Chinese and Indian troops on the southern and northern shores of Pangong Tso began "synchronized and organized disengagement."

What is the significance?

- The move comes as the first major breakthrough in talks to resolve the nine-month military standoff along the Line of Actual Control (LAC) in Ladakh.
- The disengagement began in line with the consensus reached at the 9th round of China-India Corps Commander Level Meeting.
- The agreement is a promising start towards restoring peace in the border areas.

What is the new disengagement plan in eastern Ladakh?

- Troops from both sides have started disengaging from the Pangong Tso area in eastern Ladakh.
- As of now, the disengagement process seems restricted to the north and south banks of Pangong Tso.
- The process has started with the pulling back of certain columns of tanks from the south bank region by both sides.
- At the moment, there is no pullback of troops from the friction points and the heights they are positioned on.
 - That will happen in a phased and verified manner.
- The ground commanders have started meeting, to figure out the nitty-gritty of the process.

What does this disengagement process entail?

- Both sides will remove the forward deployment in a phased, coordinated and verified manner.
- China will pull its troops on the north bank towards the east of Finger 8.
- Similarly, India will also position its forces at its permanent base at the Dhan Singh Thapa post near Finger 3.
- Similar action will be taken by both the parties in the south bank area as well.
- Both sides have also agreed that the area between Finger 3 and Finger 8 will become a no-patrolling zone temporarily.
 - This will be till both sides reach an agreement through military and diplomatic discussions to restore patrolling.
- Further, all the construction done by both sides on the north and south banks of the lake since April 2020 will be removed.
- It is expected that this will restore the situation to before the standoff of 2020.
- The process, as announced, will send Indian and Chinese troops back to their traditional bases on the north bank.
- While India has its traditional base at the Dhan Singh Thapa Post, just west of Finger 3, China has had its base east of Finger 8.

Why is this area important?

- The north and south banks of Pangong Tso are two of the most significant and sensitive regions when it comes to the current standoff in the Ladakh.
- The clashes here marked the beginning of the standoff, which makes the areas around the shores of the lake so sensitive and important.
- It is one of the areas where the Chinese troops had come around 8 km deep west of India's perception of the LAC.
- China had positioned its troops on the ridgeline connecting Fingers 3 and 4, while according to India the LAC passes through Finger 8.
- Further, in the south bank of the lake, Indian forces in an action in late August 2020 had gained strategic advantage by occupying certain peaks, outwitting the Chinese.
- Indian troops had positioned themselves on heights of Magar Hill, Mukhpari, Gurung Hill, Rezang La and Rechin La, which were unoccupied by either side earlier.
 - Since then, the Chinese side had been particularly sensitive.
 - This is because these positions allowed India to dominate Spanggur Gap.
 - The Spanggur Gap is a two-km wide valley that can be used to launch an offensive, as China had done in 1962.
 - The positions also allow India a direct view of China's Moldo Garrison.
- After this action India had also re-positioned its troops on the north bank to occupy heights overlooking Chinese positions on the north bank as well.

Why has an agreement taken so long?

- Since September 2020, China has insisted that India first pull its troops back from the south bank of Pangong Tso, and the Chushul sub-sector.
- However, India has been demanding that any disengagement process should include the entire region.
- It also insisted that the troops should go back to their April 2020 positions.
- However, it seems that for now both sides have agreed to first disengage from the Pangong Tso area only.
- In the earlier military and diplomatic discussions with China, India had told that it wanted a solution to the issue on the basis of three principles:
 1. LAC should be accepted and respected by both the parties.
 2. Neither party should attempt to change the status quo unilaterally.
 3. All agreements should be fully adhered to by both parties.

Does the agreement resolve the standoff?

- The Pangong Tso region is just one of the friction areas.
- There are other friction points, all north of the Pangong Tso, where the troops have been face-to-face since last year (2020).
- So, there are still some outstanding issues that remain regarding deployment and patrolling on LAC.
- Reportedly, India's attention will be on these issues in further discussions.
- Both sides agree that complete disengagement under bilateral agreements and protocols should be done as soon as possible.
- Both sides have agreed that within 48 hours of complete disengagement from Pangong Lake, senior commanders-level talks should be held.
 - And the remaining issues should be resolved.

What delays a permanent resolution?

- Two of the main hurdles in finding a permanent resolution are lack of trust and lack of clarity on intent.
- The events of 2020 have notably left enormous distrust.
- Any permanent resolution will include -
 - i. disengagement of troops from the frontlines from all friction points
 - ii. de-escalation that will entail sending the troops from the depth areas to their original bases
- Both sides have around 50,000 troops in the region, along with additional tanks, artillery and air defence assets.
- As the standoff progressed in the months of May, June and July of 2020, there was a mirrored military build-up from both sides.
- So, a resolution has to include sending these troops and military equipment where they came from on both sides.
- But neither side had been willing to take the first step to reduce their troop or military strength, as it does not trust the other side.
- Moreover, China's intent for diverting its troops in May 2020 from their traditional exercise in the region to the LAC, which led to the standoff, is not known.
- Also, the situation in Depsang Plains continues to be a concern.

What is the way forward?

- The success of the new disengagement plan will finally depend on whether it is implemented on the ground in letter and in spirit.
- Both sides should keep in mind what is at stake for the broader relationship between the two most populous countries, which ultimately hinges on peace on the border.

2.5 Restoring normalcy in the border

Why in news?

In December 2020, after the disengagement talks with china, India asserted that peace across the border needs to be prevailed.

How serious was the standoff earlier?

- In Early May, China brought about 10,000 soldiers in full military preparation mode across the Ladakh (LAC).
- At least 20 Indian soldiers were killed during a violent clash with Chinese troops in the Galwan Valley.
- External Affairs Minister acknowledged that relationship between countries is profoundly disturbed in comparison to the last 30 to 40 years.

How has China responded?

- China has again blamed India for the current crisis & said India is totally responsible for the standoff.
- It also said that china has strictly abided the border agreements.
- But this is in contrast with unprecedented mobilisation of Chinese troops to various points across the LAC since early May.

How has India responded?

- The Ministry of External Affairs asked China to match its words with actions.
- External Affairs Minister said that full disengagement will not take place very soon.
- He also cited the **Sumdorong Chu crisis** of 1986 that took nine years to resolve.

What is the road ahead?

- Other aspects of the relationship with China—from trade to growing links in fields like investment & education—rests upon Peace in the border.
- There is no road map yet to a return to the status quo across the border.
- The slow-moving talks on the LAC also raise the questions about the China's willingness to restore the status quo.
- India must insist that china needs to abide by the past agreements.
- The government should be far more forthcoming than it has been earlier on the LAC.
- Public needs to be fully aware about the border situation and the state of the relationship with China.
- Transparency should take precedence over political expediency

2.6 UNSC Debate on Maritime Security

What is the issue?

- India convenes an open debate of the UN Security Council (UNSC) on enhancing maritime security.
- In this regard, here is a look at the challenges and priorities for India with respect to the security of the Indian Ocean Region (IOR).

What are the challenges?

- The Indian Ocean region transports 75% of the world's maritime trade and 50% of daily global oil consumption.
- India has a long coastline of over 7,500 km.
- Climate-related events and piracy threats.

What is the SAGAR policy in this regard?

- India's Security and Growth for All (SAGAR) policy, unveiled in 2015, proposes an integrated regional framework to meet the security objectives in the Indian Ocean.
- 5 pillars of the SAGAR policy are:

1. India's role as a net security provider in the Indian Ocean region (IOR).
2. Active engagement with friendly countries in the IOR.
3. Developing a network to take effective collective action for advancing peace and security.
4. More integrated and cooperative focus on the future of the IOR; enhance the prospects for the sustainable development of the IOR countries
5. The primary responsibility for peace, stability and prosperity in the IOR would be on those "who live in this region".

What are the highlights of the UNSC debate?

- It revives focus on the enforcement of UNCLOS's provisions on freedom of navigation, sustainable exploitation of maritime resources, and peaceful resolution of disputes.
- There were allegations of abuse of maritime resources and disrespect of territorial sovereignty rights of nations.
- These were mainly against the U.S., on the one hand, and China and Russia on the other.
- The debate brought to the fore new challenges to peace and security including from non-state actors.
- India brought to the forum a five-prong plan to enhance maritime security worldwide through cooperation. These are:
 1. removing barriers to legitimate maritime trade
 2. settling maritime disputes peacefully and based on international law
 3. jointly facing natural disasters and maritime threats created by non-state actors
 4. preserving maritime environment and resources
 5. encouraging responsible maritime connectivity

What are the key priorities in enhancing maritime security?

- **Securing the sea lanes of communication (SLOCs)** - The debate must focus on ensuring equal and unrestricted access to SLOCs by states, while resolving differences through peaceful means.
- In the Indian Ocean, 3 major SLOCs that play a crucial role in the energy security and economic prosperity –
 1. SLOC connecting the **Red Sea to the Indian Ocean** through the Bab al-Mandab (transports the bulk of Asia's international trade with its major trading partners in Europe and America)
 2. SLOC connecting the **Persian Gulf to the Indian Ocean** through the Strait of Hormuz (transporting the bulk of energy exports to major import destinations like India, ASEAN, and East Asia)
 3. SLOC connecting the **Indian & Pacific Oceans** through the Straits of Malacca (integral to the smooth flow of trade with ASEAN, East Asia, Russia's Far East and the US)
- **Sharing data on threats to commercial shipping** - India established an International Fusion Centre (IFC) for the IOR in Gurugram in 2018.
- It is jointly administered by the Indian Navy and Indian Coast Guard, and works for generating Maritime Domain Awareness on safety and security issues.
- 40 international liaison officers from partner countries will eventually be located at the IFC.
- **Others** - Increasing role of the private sector
- Using the maritime domain to provide the critical submarine fibre-optic cables to support Digital Economy.

What lies ahead?

- UNSC should endorse a multiple stakeholder approach, which would set a paradigm for upholding "multi-dimensional" security
- UNCLOS is the only comprehensive framework of laws available to maritime powers to assert their rights.
- So, India must advocate for ratification of UNCLOS by all major maritime powers, including the U.S.

3. TERRORISM AND ORGANISED CRIME

3.1 Constant Vigilance - Threats in Kashmir

What is the issue?

- The Delhi Police arrested five suspected terrorists, two of whom were allegedly involved in the recent killing of Shaurya Chakra winner Balwinder Singh in Punjab.
- This has made reflections of the long-dead and buried Khalistan movement.

What is the need for caution?

- The Delhi police have claimed that Pakistan's Inter-Services Intelligence (ISI) is seeking yet again to link up terror outfits in Kashmir with pro-Khalistan activists.
 - Three of the others among the five arrested were from Kashmir.
- These claims need to be investigated before any conclusion can be made about the presence of a link.
- Also, there is no truth in the allegation that there are pro-Khalistani sections as part of the large-scale protests led by farmers in Punjab.
- Nevertheless, the central government should not take the threat lightly.
- Notably, agencies such as the ISI have not stopped trying to stir up such violence.
- They are doing it either directly by funding fringe sections or by linking them with terror groups in Kashmir.
- Security agencies must therefore remain vigilant.

WHAT IS THE KHALISTAN MOVEMENT?

- It is a Sikh separatist movement that aims to create a separate country called Khalistan in Punjab, as a homeland for Sikhs.
- The movement is long dead with the neutralisation of the threat and the ending of the Punjab insurgency in the early 1990s.
- It has lost support from the Sikh community within India and the Sikh diaspora across the world.
- Overall, attempts to revive the movement from fringe groups have failed.

What are the other threats in Kashmir?

- Even if the Khalistan movement is no more, the threat of terror in Kashmir remains well and truly active.
- Terror incidents and fatalities since the revoking of special status and statehood for J&K in 2019 have remained high.
- Many of these incidents have occurred due to acts of terror emanating from within the Union Territory.
- However, infiltration of terrorists from Pakistan continues as well.
- This is also correlated with the increased ceasefire violations at both the Line of Control and the International Border.

3.2 Jammu Drone Attack

Why in news?

Drones were used for the first time to drop explosive devices, triggering blasts inside the Air Force Station's technical area in Jammu.

Why is this significant?

- Indian authorities reportedly suspect that it was carried out by the Lashkar-e-Taiba, which is patronised by Pakistan.
- There were no casualties at the base.

- But there were at least two more subsequent attempts to use drones to attack military targets.
- The use of drones brought to the fore a troubling new mode of terrorism for the country.
- The use of Unmanned Aerial Vehicles (UAV), autonomous weapons systems and robotic soldiers by states in warfare and policing are increasing.
- This has raised moral and practical questions that remain unresolved.
- Non-state actors have quickly adopted these new modes.

What were the similar earlier incidents?

- In 2018, Syrian rebels used homemade drones to attack Russian military bases in Syria.
- The same year, Venezuelan President Nicolas Maduro had a narrow escape after a drone flying towards him exploded a short distance away.
- In 2019, Houthi rebels claimed responsibility for bombing Saudi oil installations using drones.

What advantages do these new modes offer?

- New modes of sabotage and violence enabled by technology reduce costs, while increasing their efficacy.
- They also reduce the risk of identification for terrorists.
- Simultaneously, security agencies would find conventional tools redundant in combating terrorism.
- Terrorism may not even require organisations, as individuals with sufficient motivation and skills can carry out such attacks.
- The key international framework at present for controlling the proliferation of technology that can be weaponised include the Wassenaar Arrangement and Missile Technology Control Regime.
- These are also largely useless in the emerging scenario.

How have states dealt with terror so far?

- States including India have sought to deal with terrorism with a combination of various approaches.
- These include stringent laws, invasive surveillance, harsher policing and offensives against other countries that support terrorist groups.
- This approach has only had limited success in ensuring peace anywhere while the human and material costs have been high.

4. NORTH EAST INSURGENCY

4.1 Karbi Anglong Agreement

Why in news?

Karbi Anglong peace deal was recently signed

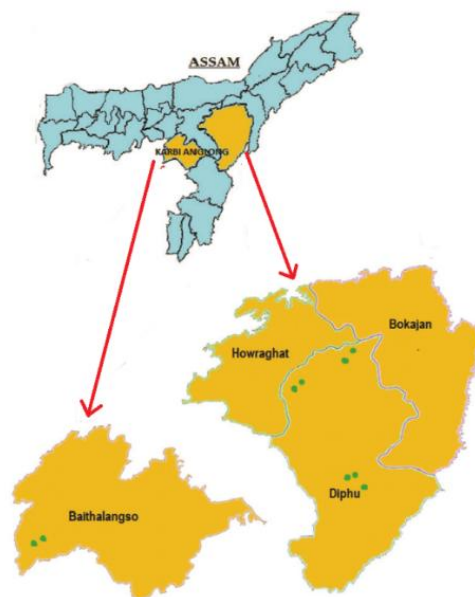
What has been the history?

- Naga insurgency has been an inspiration for separatist movements in the North-Eastern region to protect their culture.
- Bodoland movement and the ULFA movement aimed for a sovereign Assam.
- But many smaller groups have also fought to protect their distinct ethnic, linguistic and cultural identity from being subsumed within a broader Assamese identity.
- Karbi Anglong, is the largest district in Assam and comprises various tribal and ethnic groups including the Kukis, Dimasas, Garos, Rengma Nagas, Tiwas and Karbis,
- Karbis were the majority among them and demanded a separate state of Karbi Anglong and North Cachar Hills.

- But on the negative side they exploit alienation caused by an insensitive and exploitative state, and engage in extortion, ethnic violence, killings, etc.

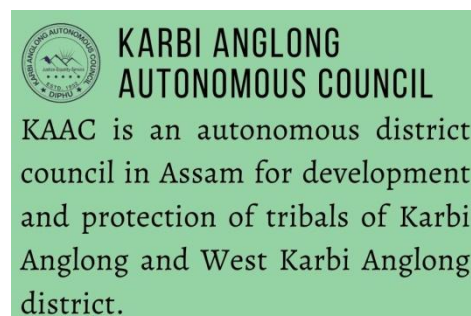
What has been the approach of Centre?

- The Centre offered autonomy under the Constitution on the one hand while using security forces to crush militancy on the other.
- Insurgents who negotiate for peace are accommodated in state legislatures or Autonomous Councils.
- This approach has had various degrees of success, in Mizoram, Tripura, the Bodo areas.
- However, Karbi Anglong separatists rejected Sixth Schedule status.
- They demanded for an autonomous state under Article 244(a) of the Constitution.



What is Karbi Anglong Agreement?

- It is tripartite agreement signed between the Centre, five insurgent groups active in Karbi Anglong, and the Assam government.
- It marks the culmination of an extended process of negotiation to end insurgency in the region.
- It will ensure greater devolution of autonomy to the Karbi Anglong Autonomous Council (KAAC).
- It proposed to notify Karbi as the official language of KAAC.
- English, Hindi & Assamese will continue to be used for official purposes.
- A Special Development Package of Rs. 1000 crores over 5 years will be given by the Union and Assam for the focussed development of KAAC areas.
- It also provides for rehabilitation of cadres of the Karbi armed groups, who have agreed to renounce violence.
- Assam Government shall set up a Karbi Welfare Council for focussed development of Karbi people living outside KAAC area.
- The Consolidated Fund of the State will be augmented to supplement the resources of KAAC.
- Over a thousand armed insurgents have surrendered their arms.



Does the agreement satisfy the local demands?

- The current Karbi Anglong agreement signed falls short of fulfilling the demand for autonomous.
- Yet it promises more autonomy than currently enjoyed by the Autonomous Council under the Sixth Schedule.
- 10 seats on KAAC has been marked for people from any community, paving the way for other community representation.
- Autonomy and funds alone may not be sufficient to improve the condition of the people.
- Autonomous Councils are often captured by vested interests, who invoke fears of a militant past.
- The enhanced development funds are often diverted to private parties.

4.2 Militants' Surrender in Assam - Karbi Insurgency

Why in news?

1,040 militants of five militant groups of Karbi Anglong district ceremonially laid down arms at an event in Guwahati in the presence of Assam CM Sarbananda Sonowal.

Who are the surrendered militants?

- The surrendered militants comprised cadres from five outfits —
 - i. Karbi People's Liberation Tiger (KPLT)
 - ii. People's Democratic Council of Karbi Longri (PDCK)
 - iii. Karbi Longri NC Hills Liberation Front (KLNLF)
 - iv. Kuki Liberation Front (KLF)
 - v. United People's Liberation Army (UPLA)
- Over 300 weapons and 11,000 bullets were surrendered by the militants.
- Among the surrendered militants is Ingti Kathar Songbijit, a primary accused in multiple cases of militancy and ethnic violence in the state.
- The developments come a year after a peace and development agreement was signed with multiple Bodo militant outfits.
- The agreement was aimed at bringing an end to a violent movement for a separate Bodoland.

How did the Karbi insurgency evolve?

- Karbi is a major ethnic community of Assam.
- The Karbi groups have several factions and splinters.
- The insurgency by Karbi groups has had a long history in Assam.
- It is marked by killings, ethnic violence, abductions and taxation since the late 1980s.
- These outfits originated from a core demand of forming a separate state.
- Today, the Karbi Anglong Autonomous Council (KAAC) is an autonomous district council.
- It is protected under the Sixth Schedule of the Indian Constitution.
- The Karbi National Volunteers (KNV) and Karbi People's Force (KPF) came together to form the United People's Democratic Solidarity (UPDS) in late 1990s.
- In November 2011, UPDS gave up arms.
- It signed a tripartite memorandum of settlement with the Centre and the government of Assam.
- They settled for enhanced autonomy and special packages for the KAAC.
- The Lok Sabha constituency here comprises of three districts of Karbi Anglong, West Karbi Anglong (split from the former in 2016) and Dima Hasao.
- The entire political discourse in this constituency revolves around the demand for -
 - i. granting of "Autonomous State" status to the region
 - ii. more autonomy and power to the KAAC and the North Cachar Hills Autonomous Council (which administers over Dima Hasao district)

What is the significance of the surrender?

- The surrender means that all insurgent outfits of Karbi Anglong district have now been brought into the mainstream society.
- Karbi Anglong is a very important district in the state, and the largest in terms of area.
- Karbi Anglong militant outfits joining the mainstream means a decline in influence of Naga militant outfits in Assam.
- With this surrender, a huge number of weapons have come overground.
- This is a major step towards peace in the state.
- It is a very significant development, not only for Karbi Anglong or Assam but also for Nagaland.

Who is Ingti Kathar Songbijit, the militant who surrendered?

- Songbijit is the self-styled chief of the outfit PDCK [People's Democratic Council of Karbi Longri].
- He is a primary accused in multiple cases of militancy and ethnic violence.
- He has been a 'most-wanted' militant in Assam. His surrender is thus very significant.
- Interestingly, Songbijit is a Karbi by birth and ethnicity but had long been related to Bodo insurgency.
- In 2012, he broke away from one faction of the National Democratic Front of Bodoland (NDFB) — the NDFB(RD).
- He then formed his own faction, NDFB(S).
- The faction is alleged to be responsible for the massacre of 70 Adivasis in Assam in December 2014.
- In 2015, Songbijit was removed as the chief of the group and B Saoraigwra took over.
- Then, Songbijit went on to form his Karbi outfit.
- Songbijit has been charge-sheeted by the NIA.
- So now it needs to be seen as to what decision will be taken on him by the NIA, the government of India and the government of Assam.

What is the way forward?

- The government's role is not limited to only bringing back the militants.
- It is also committed to ensuring a life of dignity and respect for those who have surrendered arms.
- The government should facilitate opportunities for their livelihood and employment.

5. CYBER SECURITY

5.1 Chinese state-backed Cyber Attack Attempts

Why in news?

In the latest in a series of surveillance and hacking attempts, a Chinese state-backed hacker firm has been reported to be targeting Indian vaccine makers.

What were the earlier surveillance and hacking attempts?

- **Zhenhua & its targets** - A Shenzhen-based technology company was monitoring over 10,000 Indian individuals and organisations.
- This company, the Zhenhua Data Information Technology Co, has links with the Chinese government and the Chinese Communist Party.
- The attempt was part of the company's global database of "foreign targets".
- Its task is to -
 - collect information about relevant people from the web and social media platforms
 - track research papers, articles, patents, and recruitment positions
- The company also monitors the person's digital footprint across social media platforms and maintains an "information library".
- Those monitored in this database included -
 - i. influential political and industrial figures
 - ii. bureaucrats in key positions, judges, scientists and academicians, journalists, actors, sportspersons, religious figures, activists
 - iii. hundreds accused of financial crime, corruption, terrorism and smuggling

- The collection of such data by Zhenhua does not violate any rules under the Information Technology Act of 2000 in India.
- This is because nearly all of this data is available in the public domain.
- However, Zhenhua's 24x7 watch had raised red flags with cybersecurity experts.
- They feel that the information collected could be put together for tactical manoeuvring.
- It could thereby target the individuals under surveillance or their institutions.
- **Red Echo & ShadowPad** - Recently, Massachusetts-based cybersecurity company Recorded Future published a report.
- It said that it had observed a "steep rise" in the use of resources like malware by a Chinese group called Red Echo.
- It was used to target "a large swathe" of India's power sector.
- It said 10 distinct Indian power sector organisations were targeted.
- This included four Regional Load Despatch Centres (RLDCs) that are responsible for the smooth operation of the country's power grid by balancing the supply and demand of electricity.
- The group also targeted two Indian seaports.
- Red Echo used malware called ShadowPad, which involves the use of a backdoor to access servers.
- The Ministry of Power recently confirmed these attempts.
- It had said that "no data breach/data loss" had been detected due to the incidents.
- Also, none of POSOCO's functions had been impacted.
 - POSOCO (Power System Operation Corporation Ltd) is the government enterprise in charge of facilitating transfer of electricity through load despatch centres.
- The government said it had taken action against the threats observed.

What is the recent Stone Panda & vaccines attempt?

- The attempts were highlighted by Goldman Sachs-backed cyber intelligence firm Cyfirma.
- The attempt was related with a Chinese hacker group known as Stone Panda.
- Stone Panda had "identified gaps and vulnerabilities in the IT infrastructure and supply chain software of Bharat Biotech and the Serum Institute of India (SII)."
 - These companies have developed Covaxin and Covishield, which are currently being used in India's Covid-19 vaccination campaign.
 - They are also in the process of testing additional Covid-19 vaccines that could add value to efforts around the world.
- Some Indian companies involved in Covid-19 vaccine development have also faced some issues.
- They have reportedly noticed nearly hundred-fold increase in cyberattack attempts over the last 6 months.
- These were primarily by foreign entities from countries like China and Russia.

What are the key reasons for the series of attempts?

- One major factor is the border clash between the two countries, Indian and China, in June 2020.
- As bilateral tensions continue to rise, there is likely to be continued increase in cyber operations by China-linked groups in line with national strategic interests.
- China very clearly seems to be adopting and encouraging the use of cyber offensive tools and espionage.
- Even when it is not directly in charge of an offensive operation, it seems to be consistently encouraging actors to develop this capability.
- The attempts could also be part of a long-term strategy.

How is it worldwide?

- There was an increase in cyber offensive operations and incidents around the world in the second half of 2020.
- This especially targeted the healthcare and vaccine space.
- Such incidents were often attributed to actors linked with the Chinese and Russian governments.
- When vaccine companies are targeted, the motive could be competition.
- Notably, SII and Bharat Biotech have been getting global orders for their vaccines.
- Stone Panda's attack against SII and Bharat Biotech's IT systems was possibly to extract their intellectual property and gain a competitive advantage.

5.2 Building Cyber Resilience

What is the issue?

- Many high-profile cyberattacks in the recent period has exposed vulnerabilities in the critical infrastructure of even advanced nations.
- This has reinforced the need for improved defences against actual, and potential, cyberattacks by all countries across continents.

What were the recent cyber-attacks on the U.S.?

- Towards the end of 2020, a major cyberattack, headlined 'SolarWinds,' had rocked the U.S., believed to have been sponsored from Russia.
- Following this, thousands of U.S. organisations were hacked in early 2021, by a Chinese group Hafnium.
- In quick succession, thereafter, the U.S. has witnessed three more major attacks.
- One was the ransomware attack by Russia/East Europe-based cybercriminals, styled DarkSide, on Colonial Pipeline.
- Another Russia-backed group, Nobellium, next launched a phishing attack on 3,000 e-mail accounts targeting USAID and several other organisations.
- Very recently, JBS SA, the U.S. subsidiary of a Brazilian meat processing company, faced ransomware attack.

What is the changing trend in this regard?

- Cyber attacks are often referred to as the fifth domain/dimension of warfare.
- Most nations are focusing on erecting cyber defences to protect military and strategic targets.
- The obsession of military cyber planners has been to erect defences against software vulnerabilities referred to as 'Zero-day.'
- [This has the capability to cripple a system and could lie undetected for a long time.
- A popular Zero-day software of this kind to date is Stuxnet, which almost crippled Iran's uranium enrichment programme few years back.]
- But, the above mentioned attacks were all primarily on civilian targets.
- Today, a whole new market currently exists for Zero day software outside the military domain.
- Governments and nations much prepare themselves for these new challenges, which are sure to stretch their capability and resources.
- One related problem is that the distinction between military and civilian targets is increasingly getting erased.
- The consequences of this could be indefinite.
- [E.g. the 2012 cyberattack on Aramco, employing the Shamoon virus, which wiped out the memories of 30,000 computers of the company
- This has ever since been one reason for the very frosty relations between different countries in West Asia and the Gulf region.]

- In the civilian domain, ransomware and phishing, including spear phishing, are the two key modes of cyber warfare today.

What is the impact?

- Ransomware attacks have skyrocketed, with demands and payments going into multi-millions of dollars.
- India figures prominently in this list, being one of the most affected.
- Of late, the recovery cost from the impact of a ransomware attack in India, for example, has tripled.
- Mid-sized companies, in particular, face a catastrophic situation, if attacked, and may even have to cease operations.
- Banking and financial services were most prone to ransomware attacks till date.
- Oil, electricity grids, and lately, health care, have begun to figure prominently.
- **Healthcare sector**-As the COVID-19 pandemic is raging, cyberattacks on health-care systems gains significance.
- Compromised 'health information' of individuals is proving to be a vital commodity for use by cybercriminals.
- The available data aggravates the risk not only to individuals but also to entire communities.

How significant is data protection?

- The data life cycle can broadly be classified into:
 1. data at rest (when it is being created and stored)
 2. data in motion (when it is being transmitted across insecure and uncontrolled networks)
 3. data in use (when it is being consumed)
- Constant exposure lends itself to ever increasing data thefts and abuse.
- Reportedly, more than 3 quintillion bytes of data is created everyday (some put it at over 2.5 quintillion).
- And cybercriminals are becoming more sophisticated, engaging in stealing sensitive data in targeted computers before launching a ransomware attack.
- So, cybersecurity essentially hinges on data protection.

What are the safety mechanisms available?

- Cybersecurity professionals are now engaged in building a 'Zero Trust Based Environment.'
- This is nothing but zero trust on end point devices, zero trust on identity, and zero trust on the network to protect all sensitive data.
- There are few niche companies today, which have developed/developing newer technologies to create a Zero Trust Based environment, employing:
 - i. software defined solutions for agile perimeter security
 - ii. secure gateways, cloud access security
 - iii. privileged access management
 - iv. threat intelligence platforms
 - v. static and dynamic data masking, etc.
- There is thus a need to create awareness on the availability of such firms, to ward-off cyberattacks and safeguard data.

5.3 Banks on Cybersecurity

What is the issue?

- As the world goes on to connect more and more digitally, infiltration of cybercriminals have been increasing pushing the need for stringent cybersecurity measures for digital banking.

What are the threats of digital banking?

- India was the second most cyber-attacked country in Asia-Pacific in 2020, a new study by technology major IBM has revealed. India is now ranked at No. 10 on the Global Cyber Security Index, up from No. 47 in 2019
- Malware** – Devices infected with malicious software pose a serious security risk to the bank's cyber security network, whenever they connect with it.
- Third-party services** - Numerous financial institutions employ the services of third-party vendors to serve their customers in a better manner which is an easy target for cybercriminals.
- Spoofing** - Cybercriminals try impersonating a bank's URL with a website that is quite similar to the original one(fake website) to steal the credentials.
- Phishing** - Attempt to obtain sensitive information such as credit card details for fraudulent activities, by disguising oneself as an authentic, trustworthy entity via electronic communication are known as phishing.
- Unencrypted data** - whatever data that is stored on the computers, servers or the cloud if unencrypted becomes a gateway for cybercriminals.
- Denial of Service (DoS)** – blocking access to websites

RECENT DATA BREACHES

2.5 mn

Airtel: Name, DoB, phone numbers, address, Aadhaar. Up for sale for bitcoins worth \$3,500

3.5 mn

MobiKwik: KYC info

20.0 mn

BigBasket: Personal information, address, PIN, IP addresses, etc for sale for \$40,000

22.0 mn

Unacademy: User name, password, and email

35.0 mn

Juspay: Masked card data & card fingerprint data was for sale for \$5,000 Bitcoins

Source: News reports

What are the challenges in ensuring cybersecurity?

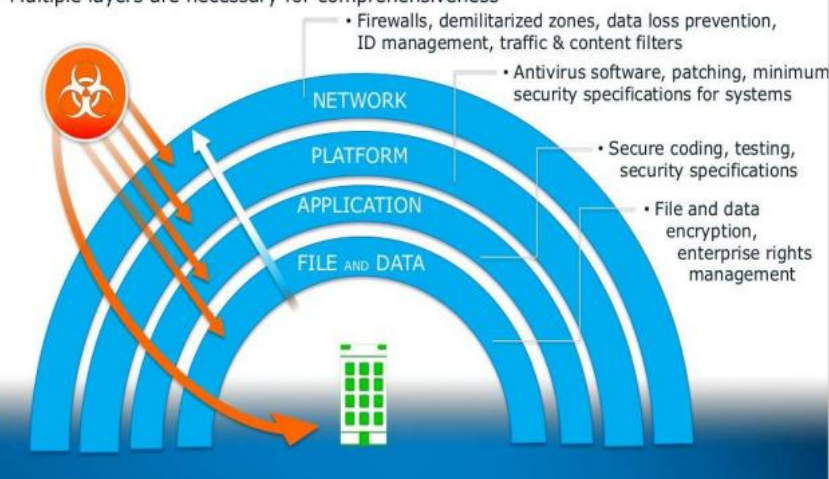
- Lack of awareness** - Digital illiteracy and lack of awareness about cybersecurity is a challenge.
- Increased use of social media** - With the advent of social media and its increased adoption, hackers have learned to exploit the medium.
- Inadequate budget and lack of management** - Budgetary allocations to cybersecurity is often neglected.
- Weak identity and access management** - Issues such as one hacked credential can give a hacker access to the entire enterprise network.
- Increase in Malware** - Recent incidents of Pegasus spyware, malware attacks on kudankulam power plant, Colonial Pipeline Cyber Attack, etc. are notable examples for their rise.

What are the solutions to address the issue?

- Integrated security with multiple layers become crucial for regulated sectors like Banking, financial services and insurance (BFSI) as various elements can work and communicate together.
- Data analytics and machine learning are essential for leveraging smart security solutions which aids BFSIs to store and assess high volumes of security-related data in real-time.
- Updated antivirus and anti-malware applications offer best protection from potentially disastrous attacks.
- Financial institutions need to invest in technologies that can enhance the endpoint protection.
- A fool-proof cybersecurity system,

Tactical Security Technology Integration: Layered Defense

Multiple layers are necessary for comprehensiveness



that doesn't compromise with data pertaining to customers and financial institutions has to be the primary focus for a rapidly digitising BFSI system.

5.4 Israeli Spyware Pegasus

Why in news?

- Cyber-attack reports are emerging from a collaborative investigation by journalists from around the world, including from India's The Wire, titled the 'Pegasus Project'.
- Accordingly, over 300 verified Indian mobile telephone numbers were targeted using spyware made by the Israeli firm, NSO Group.

How is Pegasus different from other spywares?

- Pegasus can achieve such zero-click installations in various ways.
- The over-the-air (OTA) option is to send a push message covertly that makes the target device load the spyware.
- The target remains unaware of the installation and has no control over it.
- This is "NSO uniqueness, which significantly differentiates the Pegasus solution" from any other spyware available in the market.

What kind of devices are vulnerable?

- All devices, practically, are vulnerable to Pegasus intervention.
- iPhones have been widely targeted with Pegasus.
- It is done through Apple's default iMessage app and the Push Notification Service (APNs) protocol upon which it is based.
- WhatsApp has, in 2019, blamed the NSO Group for exploiting a vulnerability in its video-calling feature.
- In December 2020, a Citizen Lab report flagged how government operatives used Pegasus.
- They used it to hack 37 phones belonging to journalists, producers, anchors, and executives at Al Jazeera and London-based Al Araby TV.
- [Citizen Lab - an interdisciplinary laboratory based at the University of Toronto]

How does it work?

- Usually, an attacker needs to feed the Pegasus system just the target phone number for a network injection.
- The rest is done automatically by the system.
- And the spyware is installed in most cases.
- In some cases, though, network injections may not work.
- E.g., remote installation fails when the target device is not supported by the NSO system, or its operating system is upgraded with new security protections.
- Next, an attacker is likely to fall back on ESEM click baits.
- All else failing, Pegasus can be "manually injected and installed in less than five minutes" if an attacker gets physical access to the target device.

What kinds of information are at risk?

- Once infected, a phone becomes a digital spy under the attacker's complete control.
- Upon installation, Pegasus contacts the attacker's command and control (C&C) servers.

WHAT IS PEGASUS?

- It is also known as Q Suite.
- It is marketed by the NSO Group, an Israeli technology firm, as a world-leading cyber intelligence solution.
- It enables national agencies to remotely and covertly extract data "from virtually any mobile device."
- It was developed by veterans of Israeli intelligence agencies.



- It receives and executes instructions and sends back the target's private data.
- These may include passwords, contact lists, calendar events, text messages, and live voice calls (even those via end-to-end-encrypted messaging apps).
- The attacker can control the phone's camera and microphone, and use the GPS function to track a target.
- To avoid extensive bandwidth consumption that may alert a target, Pegasus sends only scheduled updates to a C&C server.
- The spyware is designed to evade forensic analysis, avoid detection by anti-virus software.
- It can also be deactivated and removed by the attacker, when and if necessary.

What should the government have done?

- Indian citizens were indeed targets of a vicious and uncivil surveillance campaign.
- The evidence is strong, and the credibility of these revelations is extremely high.
- The 'by whom?' with the revelations of these extensive surveillance is still uncertain.
- But signs point to the Indian government.
- The Government of India (GoI) should have come clean and explained what it intends to do to protect citizens.
- But instead, the GoI has fallen back on a disingenuous claim that no illegal surveillance is possible in India.

What is the complexity with surveillance?

- One cannot enjoy the liberties provided under the Constitution without national security.
- And a small amount of surveillance is necessary for national security.
- But national security is not meaningful if it comes at the cost of the very liberties.
- Excessive and unaccountable surveillance shatters the bedrock of the rule of law upon which a constitutional liberal democracy is built.
- There are numerous examples of surveillance powers being misused for personal and political gain, and to harass opponents.

What are the concerns with laws in place?

- Currently, the laws authorising interception and monitoring of communications are:
 - i. Section 92 of the CrPC (for call records, etc)
 - ii. Rule 419A of the Telegraph Rules
 - iii. the rules under Sections 69 and 69B of the IT Act
- **Shortfalls** - It is unclear when the Telegraph Act applies and when the IT Act applies.
- A limited number of agencies are provided powers to intercept and monitor.
- It is also unclear which entities count as intelligence and security agencies.
- Further, there are programmes such as CMS, TCIS, NETRA, CCTNS, and so on.
- [Content management system; Telephone Call Interception System; NEtwork TRaffic Analysis; Crime and Criminal Tracking Network and Systems]
- But none of them has been authorised by any statute.
- They thus fall short of the 2017 K.S. Puttaswamy judgment.
- [The judgement clarified that any invasion of privacy could only be justified if it satisfied three tests:
 1. the restriction must be by law
 2. it must be necessary (only if other means are not available) and proportionate (only as much as needed)
 3. it must promote a legitimate state interest (e.g., national security)]

- In 2018, the Srikrishna Committee on data protection noted that post the K.S. Puttaswamy judgment, most of India's intelligence agencies are "potentially unconstitutional."
- Because they are not constituted under a statute passed by Parliament.

5.5 Pegasus Revelations - Need for Surveillance Reforms

What is the issue?

- At least a 1,000 Indian phone numbers are in a list of potential targets of surveillance using the Pegasus spyware sold by Israeli company the NSO Group.
- This necessitates a relook into India's surveillance laws and agencies.

Why are the revelations so significant?

- There are legal provisions for intercepting communication and accessing digitally stored information.
- This is allowed in the interests of national security and public safety.
- But the capture of a handheld device by Pegasus turns that into a real-time spy on the target.
- The potential targets include journalists, politicians, probably a Supreme Court judge and a former Election Commissioner.
- This does not indicate that the surveillance was necessitated by national security or public safety concerns.

What should the government have done?

- Indian citizens were indeed targets of a vicious and uncivil surveillance campaign.
- The evidence is strong, and the credibility of these revelations is extremely high.
- The 'by whom?' with the revelations of these extensive surveillance is still uncertain.
- But signs point to the Indian government.
- The Government of India (GoI) should have come clean and explained what it intends to do to protect citizens.
- But instead, the GoI has fallen back on a disingenuous claim that no illegal surveillance is possible in India.

What is the complexity with surveillance?

- One cannot enjoy the liberties provided under the Constitution without national security.
- And a small amount of surveillance is necessary for national security.
- But national security is not meaningful if it comes at the cost of the very liberties.
- Excessive and unaccountable surveillance shatters the bedrock of the rule of law upon which a constitutional liberal democracy is built.
- There are numerous examples of surveillance powers being misused for personal and political gain, and to harass opponents.

What are the earlier instances of unlawful surveillance?

- In 2012 in Himachal Pradesh, the new government raided police agencies.
- It recovered over a lakh phone conversation of over a thousand people.
- These were mainly political members, and many senior police officials.
- In 2013, India's current Home Minister Amit Shah was embroiled in a controversy dubbed "Snoopgate."
- Phone recordings alleged to be of him speaking to the head of an anti-terrorism unit were found.
- It was in relation to a covert surveillance on a young architect and her family members without any legal basis.
- In 2009, the UPA government swore in an affidavit in the Supreme Court that the CBDT had placed Niira Radia, a well-connected PR professional, under surveillance due to fears of her being a foreign spy.
- Yet, while they kept her under surveillance for 300 days, they did not prosecute her for espionage.
- Non-state actors such as the Essar group, have also been shown to engage in illegal surveillance.

- Despite such numerous examples, there are few examples of people being held legally accountable for unlawful surveillance.

What are the concerns with laws in place?

- Currently, the laws authorising interception and monitoring of communications are:
 - i. Section 92 of the CrPC (for call records, etc)
 - ii. Rule 419A of the Telegraph Rules
 - iii. the rules under Sections 69 and 69B of the IT Act
- **Shortfalls** - It is unclear when the Telegraph Act applies and when the IT Act applies.
- A limited number of agencies are provided powers to intercept and monitor.
- It is also unclear which entities count as intelligence and security agencies.
- Further, there are programmes such as CMS, TCIS, NETRA, CCTNS, and so on.
- [Content management system; Telephone Call Interception System; NEtwork TRaffic Analysis; Crime and Criminal Tracking Network and Systems]
- But none of them has been authorised by any statute.
- They thus fall short of the 2017 K.S. Puttaswamy judgment.
- [The judgement clarified that any invasion of privacy could only be justified if it satisfied three tests:
 1. the restriction must be by law
 2. it must be necessary (only if other means are not available) and proportionate (only as much as needed)
 3. it must promote a legitimate state interest (e.g., national security)]
- In 2018, the Srikrishna Committee on data protection noted that post the K.S. Puttaswamy judgment, most of India's intelligence agencies are "potentially unconstitutional."
- Because they are not constituted under a statute passed by Parliament.

What are the key priorities now?

- Unlawful and unrestrained surveillance is antithetical to the basic creed of democracy.
- There is a need for reworking on the international regulation of unaccountable sale of spyware by shadowy entities such as the NSO Group.
- While this is true, it is equally important to ensure that surveillance in India is made more accountable.
- The truth about these revelations must be unearthed through an investigation.
- This could be by a Joint Parliamentary Committee or by the Supreme Court or any other credible mechanism.
- A starting point for the Government must be in clarifying the foremost question: Has any Indian agency bought Pegasus?
- In the long term, intelligence gathering needs to be professionalised, parliamentary oversight introduced, and liberties and law protected.

6. ROLE OF MEDIA AND SOCIAL NETWORKS

6.1 India's IT Rules 2021

Why in news?

The central government has recently released the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.

What is the objective?

- The Rules also seek to -
 - i. empower the ordinary users of digital platforms to seek redressal for their grievances
 - ii. command accountability in case of infringement of users' rights
- The guidelines related to social media will be administered by the Ministry of Electronics and IT.
- The Digital Media Ethics Code relating to Digital Media and OTT Platforms will be administered by the Ministry of Information and Broadcasting.

Why now?

- The government had been working on these guidelines for over 3 years.
- The immediate push came in the form of the violent incidents at the Red Fort on January 26, 2021.
- Following this, the government and Twitter had disagreements over the removal of certain accounts from the social media platform.

INDIA'S IT RULES 2021

ABOUT THE GUIDELINES

- The guidelines related to social media will be administered by the Ministry of Electronics and IT.
- The Digital Media Ethics Code relating to Digital Media and OTT Platforms will be administered by the Ministry of Information and Broadcasting.

OBJECTIVE

- It aims to regulate social media, digital news media, and over-the-top (OTT) content providers.
- They were released following the instructions from the Supreme Court and the concerns raised in Parliament about social media abuse.
- The government wanted to create a level playing field in regulating online news and media platforms vis-à-vis traditional media outlets.

What are the key provisions related to social media?

- **Social Media Intermediaries** - Social media intermediaries are platforms that host user-generated content.
- E.g. Twitter, Facebook, YouTube, WhatsApp
- The Rules create two Categories of Social Media Intermediaries which are:
 1. social media intermediaries
 2. significant social media intermediaries
- This is to encourage innovations and enable growth of new social media intermediaries without subjecting smaller platforms to significant compliance requirement.
- The distinction is based on the number of users on the social media platform.
- Government is empowered to notify the threshold of user base for these categories.
- The Rules require the 'significant social media intermediaries' to follow certain additional due diligence.
- **Due diligence** - Section 79 of the IT Act provides a "safe harbour" to social media intermediaries.
- It exempts them from liability for the actions of users if they adhere to government-prescribed guidelines.
- The new guidelines prescribe an element of due diligence to be followed by the intermediary.
- Failing this would mean that their safe harbour provisions would cease to apply.
- **Grievance redressal** - The Rules mandates that the intermediaries, including social media platforms, should establish a mechanism for receiving and resolving complaints from users.
- These platforms will need to appoint a grievance officer to deal with such complaints.
- The officer must acknowledge the complaint within 24 hours, and resolve it within 15 days of receipt.

- In addition to a grievance officer, social media platforms will have to appoint a chief compliance officer resident in India.
- The chief compliance officer will be responsible for ensuring compliance with the rules.
- The platforms will also be required to appoint a nodal contact person for 24×7 coordination with law enforcement agencies.
- Further, the platforms will need to publish a monthly compliance report.
- This should have details of -
 - complaints received and action taken on the complaints
 - contents removed proactively by the significant social media intermediary
- The due diligence requirements will come into effect after 3 months from the notification of the rules.
- **Removal of content** - The rules lay down 10 categories of content that the social media platform should not host.
- **Penalties for violation** - In case an intermediary fails to observe the rules, it would lose the safe harbour, and will be liable for punishment.

How do the Rules benefit?

- The need for the IT Rules can hardly be disputed.
- They make accountable the “significant” internet platforms (those above 5 million users) such as Facebook, Google and WhatsApp.
- These have so far enjoyed immunity under Section 79 of the Information Technology Act under the ‘safe harbour’ clause.
- The world over, these tech giants have been associated with breach of data, national security and individual privacy.
- Besides, they have hosted incendiary stuff that can disrupt peace and harmony.
- Secondly, the OTT platforms such as Amazon Prime, Netflix and Hotstar, which carry curated content without certification can no longer continue in this manner.
- In a positive move, they will have to grade their content under various types of adult and child viewing.
- They will also have to adhere to the grievance redressal mechanisms.
- These checks and balances are necessary and go a long way in streamlining the content.

What are the concerns?

- **Free speech** - The rules force digital news publishers and OTT services to adhere to a cumbersome three-tier structure of regulation.
- It comes with a government committee at its apex.
- This, in itself, is unprecedented in a country where the news media have been given the space all along to self-regulate.
- This has been in place based on the understanding that any government presence could have an effect on free speech and conversations.
- The rules might have serious implications for freedom of expression and right to information of online news publishers and intermediaries.
- **Regulation** - Any person having a grievance regarding content published by a publisher in relation to the Code of Ethics may furnish his/her grievance.
- The grievance mechanism established by the publisher will receive them.
- So, literally anyone could force a digital platform to take up any issue.
- To note, many of the digital publishers are small entities.
- The regulations thus impose a compliance burden on such entities.

- Moreover, the Rules allow government to influence the appointment of panel members in the higher level regulatory bodies.
- All these leaves way for all kinds of interventions, and the potential for misuse is enormous.
- **Social media platforms** - The new rules have increased the compliance burden for social media platforms too.
- Such platforms in the messaging space will have to “enable the identification of the first originator of the information on its computer resource” based on a judicial order.
- Thus, the rules require messaging apps such as WhatsApp and Signal to trace problematic messages to the originator.
- The triggers for a judicial order that require such an identification are serious offences.
- Nevertheless, it raises concerns as these apps have their messages encrypted end-to-end.
- **Classification** - Digital news media has been unfairly and arbitrarily clubbed with OTT platforms and subjected to the same set of rules.
- Moreover, the purview of the IT Act, 2000, has been expanded to bring digital news media under its regulatory ambit without legislative action.
- This combination does not correspond with the provisions of the IT Act, and opens itself to legal challenge.
- Also, the new rules pertain only to digital news media, and not to the whole of the news media.
- This raises concerns as the former is increasingly becoming a prime source of news and views.

6.2 Big tech vs State - Social Media Platforms

What is the issue?

- Union Information and Technology minister Ravi Shankar Prasad recently accused Twitter of “double standards”.
- The ongoing exchange between the government and Twitter highlights the need for responsible roles by both the big techs and government.

What was the Minister's charge?

- He was referring to the alleged difference in approach taken by Twitter with respect to the events at Capitol Hill in the US and the Red Fort in India on Republic Day.
- This comes after the government issued notices seeking the blocking of some social media accounts.
 - This was for allegedly spreading misinformation and provocative content in the aftermath of the violence witnessed during the tractor march by farmers on January 26.

What was Twitter's response?

- Twitter did block some accounts.
- However, it said that the accounts it had not blocked, either on January 31 or after the February 4 notice, were consistent with their policies on free speech.
- It reiterated that the platform believed that “the notices sent to it were not consistent with laws in the country”.

What is the larger concern?

- The seeming arbitrariness of decision-making of social media platforms is not an India-specific concern.
- A few days ago, French President Emmanuel Macron expressed his displeasure of social media platforms.
- He expressed concerns at the way the platforms which had “helped President Trump to be so efficient” “suddenly cut the mic” the moment “they were sure he was out of power”.
- Such lack of consistency and the absence of clearly defined rules on part of social media platforms are worrying.
- These platforms wield immense power as they contribute to shaping online public discourse.

- Considering this, how these issues are resolved will have far-reaching effects.
- The decision of when to “cut the mic” cannot arguably be left in the hands of a private player alone.
 - This is because they are made by unelected executives with questionable incentive structures and opaque systems of accountability.
- In all, social media platforms must be neutral, transparent and consistent in their decision-making process.

What should the government do?

- The government needs to be more transparent in its decision-making.
- When it asks a social media platform to block hundreds of accounts, that must be guided by a pre-defined and publicly disclosed set of rules.
- Failing to do so would mean that the blacklist could be used to silence critical voices.
 - This would work against all the government’s talk of freedom of expression and open democratic systems.

6.3 Humans are still core to Digital India – Intermediaries

What is the issue?

- Even in ‘Digital India’, humans are significant in brokering trust between governments and citizens, and this was especially evident during the pandemic.
- It is time to accommodate intermediaries, who deliver last mile governance, into the design of e-governance programmes.

What role do intermediaries play?

- Intermediaries help citizens overcome barriers to awareness (of availability of digital services and rights from the state) and ability.
- This includes the ability to navigate these solutions with trust.
- The barriers are worse for citizens who are marginalised, with the poor, women, the elderly, and caste and gender minorities being additionally disadvantaged.
- Intermediaries support individuals by placing complaints, directing them to the right authorities, and following up.
- From people's perspective, intermediaries help them see the government.

WHO ARE THE INTERMEDIARIES?

- Intermediaries are crucial offline architectures that enable the state to do its work better.
- Offline intermediaries can be both political and apolitical, individuals and collectives, with varying motivations to do this work.
- Apolitical social workers and community leaders do their work as service.
- Partisan political individuals see their work as constituency service to secure vote bases.
- Community-based organisations and NGOs see their work as allied to their core work.

Are they being best utilised?

- During the pandemic, public came to rely on various individuals to address daily needs, even as more and more services went online.
 - During this time, eGovernments Foundation (eGov) and Aapti Institute came together to explore how digitally excluded communities engage with governance.
 - It was learnt that even in ‘Digital India’, humans are significant in brokering trust between governments and citizens.
 - These intermediaries often worked without any formal backing and role.

- But the above reality was not considered in the design of most e-governance programmes.
- For instance, intermediaries struggled with indicating that they were placing a complaint for someone else, and with communicating the impact (for example, the number of houses affected by the problem).
- Only a few States have built a cadre of individuals for last mile governance.
- Andhra Pradesh, for instance, rolled out a ward secretariat programme with over 16,000 ward secretaries and volunteers.
- They worked for delivering government services at citizens' doorstep.

What could the policy approach be?

- Leaning on intermediaries can unlock the capacity of the state to serve citizens.
- Indeed, they are a reality of everyday life for the average Indian, and incorporating this reality in design can be impactful.
- Various types and forms of intermediation emerge based on regional, social, cultural and economic contexts.
- A 'one size fits all' approach will not work.
- It is thus crucial to think about leveraging the strengths of intermediaries.
- Intermediaries are to be seen as crucial to the realisation of governance outcomes and as a natural extension of the governance model.
- At a broader level, increasing digitisation of governance across domains including healthcare, financial inclusion, justice and social services is inevitable.
- Meanwhile, during this transition, work has to be on with intermediaries to raise citizens' awareness, build intermediaries' skills and capabilities, and establish governance frameworks with suitable feedback loops.
- All these go in to supporting the process of responsible, responsive and data-driven governance across domains.

6.4 WhatsApp's New Privacy Policy – Violations

Why in news?

The Ministry of Electronics and Information Technology has asked the Delhi High Court to step in and restrain WhatsApp from rolling out its new privacy policy.

What is the policy about?

- The controversy relates to WhatsApp's decision in January 2021 to enforce a new privacy policy.
- The policy will allow it to share some data about users' interactions with business accounts with its parent company Facebook.
- The users will not have an option but to consent to the sharing if they want to keep using the application.
- The privacy policy also does not provide the opportunity to review or amend the full information submitted by a user.

What is the reason for IT Ministry's demand?

- The IT Ministry cited several Supreme Court judgments.
- The Supreme Court has placed a responsibility upon the Ministry to come out with a "regime on data protection and privacy."
- In effect, this would "limit the ability of entities" such as WhatsApp to issue "privacy policies which do not align with appropriate standards of security and data protection."
- Given this, WhatsApp must be stopped from rolling out the services.
- Thus, in a counter-affidavit, the IT Ministry has listed five major violations of the current IT rules that the policy of WhatsApp, if rolled out, could entail.

What are the violations listed by the IT Ministry?

- WhatsApp failed to specify the type of sensitive data being collected by it.
- This is a violation of Rule 4 (1) (ii) of the IT Rules of 2011.
 - It mandates a company to provide a privacy policy for handling of or dealing with personal information including sensitive personal data or information.
 - It also mandates specifying the types of sensitive data being collected.
- The second violation is with respect to collection of information.
- Rule 5 (3) of the IT Rules says that any person or corporate collecting information shall notify the user if it is collecting any sensitive information.
- It should also inform the purpose for which it is being collected, and the intended recipients of the said information.
- Besides these, the policy has also failed to provide the user an option to review or amend the users' information being collected by it.
- The changes allowed to be made are limited to the name, picture, mobile number, and "about" information.
- For the policy to be compliant with the recent IT Rules 2021, it must allow the users to exercise this option for all kinds of data collected by WhatsApp.
- The policy also fails to provide users an option to withdraw consent on data sharing retrospectively, and fails to guarantee non-disclosure by third parties.
- These again violate Rule 5 (7) and Rule 6 (4) of the IT Rules of 2011.

6.5 The Antitrust Suit against Facebook

Why in news?

- The US federal government and governments of 48 states and territories have sued Facebook for illegally crushing competition.
- The lawsuits filed have put under the scanner the acquisition by Facebook of Instagram and WhatsApp.

What are the charges against Facebook?

- The US Federal Trade Commission's (FTC) lawsuit accused Facebook of eliminating competition with the acquisitions, even though the FTC itself had approved the deals.
- The FTC has alleged that Facebook "is illegally maintaining its personal social networking monopoly through a years-long course of anticompetitive conduct".
 - The case has been filed under Section 2 of the Sherman Act, which the FTC enforces through Section 5 of the FTC Act.
 - Section 2 of the Sherman Act prohibits companies from using anti-competitive means to acquire or maintain a monopoly.
- Facebook's 2012 acquisition of Instagram for \$1 billion and the 2014 acquisition of WhatsApp for \$19 billion are being cited as attempts to illegally eliminate competition.
- The FTC has also accused Facebook of imposing "anti-competitive conditions on software developers".
- Facebook restricted its "third-party software developers' access to valuable interconnections to its platform".
 - It did this by exercising strict control over its application programming interfaces or APIs.
 - E.g. Facebook shut down API access for Twitter's short video app Vine (introduced in 2013), effectively restricting its ability to grow.
- In all, FTC says Facebook's practices have -
 - i. harmed competition and left "consumers with few choices for personal social networking
 - ii. deprived advertisers of the benefits of competition

What about Facebook's acquisition of Instagram and WhatsApp?

- **Instagram** - The FTC has noted that the acquisition of Instagram came at a time when users were switching "from desktop computers to smartphones".
 - Users were thus "increasingly embracing photo-sharing".
- Facebook quickly recognized that Instagram would be an existential threat to Facebook's monopoly power.
- So, when Facebook was not able to compete with Instagram, it "ultimately chose to buy" the app to eliminate the threat.
- Likewise, when a rising Snapchat was seen as a potential competitor to Facebook, the company made an unsuccessful attempt to buy it.
- Later, it copied Snapchat's most popular feature Stories in Instagram, followed by Facebook and WhatsApp.
- Instagram now has more than a billion users; Snapchat has around 250 million daily active users.
- **WhatsApp** - The FTC says that Facebook did the same with WhatsApp too.
- When it realised that WhatsApp was "clear global 'category leader' in mobile messaging," it bought out the competition.
- FTC notes that Facebook acquiring WhatsApp also meant that "any future threat will have a more difficult time gaining scale in mobile messaging".
- This has largely been true.
 - WhatsApp dominates the mobile messaging space, and currently has over 2 billion users globally; more than 400 million in India alone.
 - No other messaging app comes even close, except perhaps Facebook's own Messenger.
- Notably, Instagram and WhatsApp are two products that are more appealing to younger users and in new geographies.
- These are therefore crucial to driving Facebook company's growth.

What does the FTC lawsuit aim for?

- Notably, the FTC had approved the Instagram and WhatsApp deals.
- It says that it can, and often does, challenge approved transactions when they violate the law.
- But FTC says its "action challenges more than just the acquisitions".
- The aim now is to roll back Facebook's anti-competitive conduct and restore competition.
- The lawsuit seeks "divestitures of assets, including Instagram and WhatsApp".
- So if the FTC wins, Facebook might be forced to sell Instagram and WhatsApp.
- FTC also wants to "prohibit Facebook from imposing anti-competitive conditions on software developers".
- This means Facebook will have to "seek prior notice and approval for future mergers and acquisitions".

How has Facebook responded?

- The company has said it is not true that it has no competition, and named "Apple, Google, Twitter, Snap, Amazon, TikTok and Microsoft".
- It said that the lawsuits ignored the fact that users could and did move often to competing apps.
- Facebook has also questioned the "attack" on its acquisitions.
 - It recalled that the FTC had cleared the Instagram deal after an in-depth review.
 - The WhatsApp transaction had been reviewed by the European Union as well.
 - Regulators correctly allowed these deals to move forward because they did not threaten competition.
- It said the FTC has "seemingly no regard for settled law or the consequences to innovation and investment".
- Facebook has thus called the lawsuits "revisionist history".

- According to Facebook, this is not how “antitrust laws are supposed to work” and “those hard challenges are best solved by updating the rules of the Internet.”
- Regarding the API restrictions, Facebook argues that it is allowed to choose its business partners.
 - YouTube, Twitter, and WeChat have done well despite these API policies.

6.6 Media Regulation - The starting point for self-regulation

What is the issue?

- The Mumbai Police recently filed a supplementary chargesheet containing WhatsApp messages between Republic TV Editor Arnab Goswami and former Broadcast Audience Research Council CEO Partho Dasgupta.
- The incident has brought to light the shortfalls in media regulation.

What are some of the concerns?

- Since the above event, the discussions in the media have been about –
 - ethical transgressions
 - manipulating institutional arrangements to show increased audience reach
 - breaching the line meant to protect the autonomy and efficacy of regulating bodies and external research entities
- For a news ombudsman, the main issue is that an effective institution of self-regulation for the Indian media does not exist.

How does media regulation work in India?

- There are four bodies in India for media regulation.
- The first is the **Press Council of India**, created through an act of Parliament.
- It is headed by a former Supreme Court judge.
- Its mandate is to preserve the freedom of the press and to maintain and improve the standards of newspapers and news agencies in India.
- It has 28 members including editors, senior journalists, media managers, representative from a news agency.
- Besides it also has one nominee each from the Bar Council of India, the UGC, and the Sahitya Akademi as well as members of the Lok Sabha and the Rajya Sabha.
- To note, the regulatory tilt is towards the executive writ.
- The second is the **News Broadcasting Standards Authority** created by the News Broadcasters Association (NBA), an industry body.
- The broadcast industry has a third body, the **Broadcasting Content Complaints Council**.
- This is to deal with complaints against entertainment and general segment television programmes.
- A fourth body was created by those who left the NBA, called the **News Broadcasters Federation**. This is promoted by Mr. Goswami's Republic TV.
- A close examination of the functioning of these bodies reveals their inability to implement their primary mandate of ensuring freedom while adhering to agreed ethical and professional standards.

How will in-house mechanisms work?

- Self-regulation would ensure freedom not only from the government, but also from other vested interests.
- If media organisations are serious about effective self-regulation, the need of the hour is to actively build in-house mechanisms.
- For instance, the Readers' Editor (RE) of The Hindu is an independent, full-time internal ombudsman.
 - Readers and other complainants have a designated pointsperson to reach out to.
 - The RE not only examines all the complaints that are received, but also effects course correction if the paper errs.

- The Organization of News Ombudsmen and Standards Editors has spelled out the responsibility in this regard in clear terms:
 - promote the values of accuracy, fairness and balance in news reporting for the public good
 - assist media organizations to provide mechanisms to ensure they remain accountable to consumers of their news
- Many studies reveal that having an internal mechanism often helps news media organisations to improve transparency.
- It also helps in developing trust with the audience.

What is the way forward?

- The legal route rarely addresses the importance of a toxic-free information ecology.
- Unless the news-consuming public demands for an independent, internal ombudsman, the ethical conundrum will continue to haunt us.
 - E.g. A programme, 'Bindas Bol-UPSC Jihad', by Sudarshan TV was found offensive by almost everyone from the Information and Broadcasting Ministry to the apex Court.
 - But that did not prevent the spread of venom and wrath in the public sphere.

7. SECURITY FORCES

7.1 AF's Role in Ladakh

What is the issue?

- With a resolution to the standoff on the LAC still elusive, the Indian Army is preparing for extended deployment of troops.
- The Indian Air Force (IAF) will play a key role in supporting the troops in the tough terrain through the harsh winter months.

Can the IAF support the logistics of such a large force?

- One part of the logistics for the Army requires land transportation, which would have been planned for before winter sets in and the passes close.
- The IAF will be doing **very urgent missions**, for which it is well prepared with a very good transport fleet like C-130 Super Hercules, Chinook heavy-lift helicopters, etc.

What are the challenges of flying into Ladakh's advanced landing grounds (ALGs)?

- The challenge is the **altitude** of the two airfields of Leh and Thoise.
- But since IAF has been flying there for decades, the air crew are well aware of the peculiarities of these fields.
- The **landing grounds** at high altitude have their own challenges.
- It results in reduction of load-bearing capacity of the planes/choppers.
- The air crew have to call upon their skills to navigate the hills and land on the **small helipads**.
- Bad weather that accompanies the western disturbances that strike northern India in the winter months is a challenge.
- It **reduces visibility** and results in a **low cloud base**.

What effect does extreme cold have on weight-carrying aircraft?

- The lower the temperature, the better the payload.
- This is because the higher air density increases the lift-carrying capability of flying machines.
- So the loads that can be carried during winter are higher than during summer. This is a big advantage.

- Helicopters, whose load-carrying ability to extremely high helipads at altitudes of 17,000 to 20,000 feet, increases substantially in winter.
- It reduces drastically in summer.

Do the high altitude and topography pose a challenge?

- The modern navigation equipment available now overcomes most of the challenges.
- But mission accomplishment is not merely flying from place A to B.
- The aircraft has to land to complete a mission. That is where temperature and altitude plus weather become the final arbiters.
- Navigation is not a problem, but **take-offs and landings are tricky**.
- The night flying has its own challenges because of the shadows cast by hills, and the state and position of the moon relative to the hills and the aircraft.
- A moonless night poses its own challenges, and a full moon has its own.
- In the hills, air crew are specially cleared to carry out operations at night.

Do Ladakh airfields restrict operations to only certain aircraft?

- All air fields in the Ladakh area can be used by the transport aircraft, although weather requirements will vary from one aircraft to the other.
- It depends on the navigational aids on board the aircraft, and the competence of the crew.
- That is why air crews are detailed depending on the mission.
- In a long haul, the IAF will have to transport back and forth mechanised weapons etc for repair, maintenance, etc.

What kind of support does the IAF require for such an operation?

- All the air fields have enough stock of fuel, oil, and lubricants (**FOL**) for which detailed planning are done around the clock.
- There is a well-oiled logistics chain that has been fine-tuned by the IAF in the last six-seven decades of operation.
- The Army Service Corps (ASC) also plays an important part in ground positioning of fuel in forward posts.

What is the threat to aircraft when the ground forces are eye to eye?

- The Leh and Thoise airfields that support fixed wing operations are relatively in the interiors, hence not vulnerable to any ground action.
- They can be attacked by the Air Force and other aerial assets of the foe.
- But there are standard operating protocols (SOPs) in place to deal with such threats.
- However, in ALGs such as Daulat Beg Oldie (DBO), the air crew are well adept at taking tactical action to meet any threat from ground fire or shoulder-fired missiles.
- In this, the aids on board the helicopters also play an important role.

Are there any special challenges for fighter aircraft?

- Fighters flying in those altitudes have special challenges because of their high speeds, reduced air density, the closeness of the hill tops.
- Hitting the targets which are very small comprising bunkers having small number of troops requires special weapons and air crew capability.
- Fortunately, India has experienced this during Kargil.
- So, the lessons would have been passed on to the present band of pilots.
- In the present day, an individual weapon system is only as good as the overall war fighting architecture that the force designs.

7.2 In Need of Full-Time Heads

What is the issue?

Various important Central forces organisations in India are functioning without a full time head.

What are organisations facing this problem?

- The Special Director General of Central Reserve Police Force (CRPF) is given additional charge of heading the organisation.
- The Central Bureau of Investigation (CBI) has been functioning without a regular Director.
- The Director-General of Narcotics Control Bureau (NCB) is given additional charge as the Director General of the Border Security Force (BSF).
- The elite National Security Guard (NSG) too is without a regular Director General for nearly six months.
- The Director General of the Indo Tibetan Border Police (ITBP) is given in charge of heading the NSG.
- The lone research and training organisation for the police forces of the country, the Bureau of Police Research and Development (BPR&D), too, is functioning without a regular Director General.

What are the outcomes of this?

- These central force organisations play a pivotal role in maintaining India's internal security.
- The BSF is the second largest force in the country after the CRPF.
- It is unfair to give additional charge of another organisation (CRPF) when BSF is already combating militants in Jammu and Kashmir and the Northeast.
- NSG comes into action in time of crisis like 2008 Mumbai attacks & it is entrusted with the responsibility of providing security to certain high-risk personalities.
- This kind of additional charge has an adverse impact on the efficiency of these forces.
- Officers holding provisional charge will seek to avoid taking major policy decisions and prefer to leave such matters to the next person in charge.
- Moreover the heads of these organisations are appointed only when they are left with just a few months or a year to retire.
- So there is little they can do within their short tenures.

What can be done now?

- It is important that right kind of officers with the required skill and experience should be appointed in the right time.
- The government could consider announcing the next chief of these organisations at least 3 months in advance with a minimum tenure of 2 years or till superannuation, whichever is later.
- Preferably, those considered for these posts should be from among the officers who have served in these organisations earlier.
- A panel of officers cleared by the Union Public Service Commission could be always kept ready and the officers for the top posts could be chosen from this panel.
- This will go a long way in speeding up decisions and enhancing the efficiency of these forces.

8. DEFENCE

8.1 INS Karanj - Scorpene-class Submarine

Why in news?

The Indian Navy inducted its third Scorpene-class conventional diesel electric submarine, INS Karanj, into service.

What are Scorpene-class submarines?

- The Scorpene class submarines are one of the most advanced conventional submarines in the world.
- The submarine has superior stealth features, such as -
 - i. advanced acoustic silencing techniques
 - ii. low radiated noise levels
 - iii. ability to attack with precision-guided weapons on board
- The Indian Navy intends to use them for missions such as area surveillance, intelligence gathering, anti-submarine warfare, anti-surface warfare and minelaying operations.
- The submarines are armed with six torpedo-launching tubes, 18 heavy weapons, tube-launched MBDA SM-39 Exocet anti-ship missiles and precision-guided weapons.
- It can launch crippling attacks on surface and underwater enemy targets.

WHAT ARE SCORPENE-CLASS SUBMARINES?

- These are conventional diesel electric submarine.
- They were designed by French naval shipbuilding firm DCNS in partnership with Spanish shipbuilding firm Navantia.
- The attack submarines can travel at a maximum submerged speed of approximately 20 knots.
- They have the ability to remain submerged for 21 days.
- It has a diving depth of more than 350 m.



What are the other Scorpene-class submarines?

- The first submarine of the class, INS Kalvari, was commissioned in December 2017.
- The second, INS Khanderi, was commissioned in September 2019.
- A fourth submarine, Vela, was launched into the water in May 2019 and the fifth, Vagir, in November 2020, and both are undergoing sea trials.
- The sixth is in an advanced stage of outfitting.

What are the special features of INS Karanj?

- Karanj has been equipped with the best sensors in the world.
- It is fitted with an integrated platform management system to provide centralised propulsion and machinery control.
- The powerful diesel engines can quickly charge batteries for a stealthy mission profile.
- Also, its modular construction enables upgradation to air independent propulsion in future.
- It is fitted with a permanent magnetic synchronous motor, making it one of the quietest submarines in the world.
- Karanj is also said to be the first truly indigenous submarine.

What is the history of Karanj?

- The earlier version of the submarine, which belonged to the Foxtrot class, was first commissioned in 1969 at Riga in the erstwhile USSR.
- A proposal to form a submarine arm, also referred to as the silent arm, of the Indian Navy was first envisaged in 1959.

- It was only in 1964 that the Soviet government agreed for transfer by purchase of four Foxtrot-class submarines, of which INS Karanj was a part.
- All the four constituted the 8th Submarine Squadron and played a key role during the 1970-71 Indo-Pak war.

8.2 CAG Report on Defence Offsets

Why in news?

The latest CAG report on the implementation of defence offsets has been released.

What does it reveal?

- It has brought into sharp focus the broader subject of developing India's domestic industrial base.
- It also raises concerns of some bureaucratic incapacity.
- This is in contrast with an unambiguous political vision of turning India into a strong and vibrant powerhouse via Atmanirbhar Bharat.

Is the report on defence offsets new?

- The 2020 CAG report on defence offsets is not the first one.
- Previously, an earlier CAG report in 2011 outlined a number of similar problems with defence offset management in India.
- One should compare the two CAG reports, or with reported findings of the latest CBI charge sheets in the Agusta case.
- This comparison is needed to assess the number and range of mistakes made during offset contract management.
- This qualitative deterioration in defence offset guidelines around 2010-11 is probably more a case of bureaucracies changing the rules to hide their own inadequacies during defence offset contract lifecycles.
- The 2011 guidelines are in contrast to the original guidelines that were issued in 2005-06.
- The guidelines of 2005-06 were based on recommendations of Vijay Kelkar committee on defence procurement and manufacturing.

What are Kelkar Committee's recommendations?

- Kelkar Committee recommendations formed the very basis of India's Defence Offset Guidelines.
- Issued almost a decade-and-a-half ago, it contained some core guiding principles that seem to have been diluted in 2011.
- The original offset guidelines of 2005-06 **allowed direct offsets** relating to manufacturing of defence products alone.
- This is a principle that the defence bureaucracy could not stick to very long in the face of well-coordinated push by foreign vendors.
- A second core principle was **grant of offset credit** only for value-addition in India.
- This was neglected for almost a decade in offset management before it was able to make some re-entry into the Ministry of Defence's procedures.
- A third principle was to keep offset contract **duration short** enough so as to be able to see their visible impacts.
- It also insisted on submitting properly crafted offset offers rather than signing of paper promises by foreign vendors.

What does the repetition mean?

- The repetition of the same mistakes as highlighted by the CAG twice is,
 1. Reflective of a general apathy to oversight,
 2. Demonstrates to some extent bureaucrats' inability to grasp core policy principles that stakeholders draw attention to inform proper policymaking in the first place.

- The defence list is actually 24 items, but then 10 of these are rings of slightly different types.
- Such a tiny list makes one wonder if it has been issued only for demonstrating an optical compliance with the DPIIT's mandate.

What is needed?

- A reorientation of bureaucracies' attitudes should be undertaken.
- Bureaucrats should upskill technical policymaking skills, and get out of their comfort levels in remaining conservative and risk-averse.
- Navigating highly dynamic domestic and international developments requires a much more collaborative and strategic approaches, and even much more domain specialisation, than achieved so far.

8.3 Pinaka Missile System

Why in news?

The Ministry of Defence (MoD) signed contracts with three Indian companies for supply of six regiments of the Pinaka Rocket System.

What is the contract?

- The acquisition wing of MoD has signed contracts with,
 - a) Bharat Earth Movers Ltd,
 - b) Tata Power Company Ltd (TPCL) and
 - c) Larsen & Toubro (L&T).
- The six regiments would be added to the Regiment of Artillery of the Indian Army at a cost of Rs 2,580 crore.
- These Regiments will be operationalised along the Northern and Eastern Borders of our country.
- They are long range artillery systems that comprise 114 launchers with,
 - a) 45 Command Posts to be procured from L&T,
 - b) Automated Gun Aiming and Positioning System from TPCL and
 - c) 330 vehicles to be procured from BEMIL.
- The induction is planned to be completed by 2024.

What is the significance of this acquisition?

- India is facing hostilities on both fronts.
- So, the announcement enhancing the long range artillery capabilities can be looked as a strong signal to the adversaries.
- The ministry has called this step a major boost to 'Make in India.'
- This flagship project showcases public private partnership under the aegis of Government of India (DRDO and MoD).
- [DRDO - Defence Research and Development Organisation]

What is the origin of Pinaka rocket system?

- Pinaka attacks the targets prior to the close quarter battles which involve smaller range artillery, armoured elements and the infantry.
- The development of the Pinaka was started by the DRDO in 1980s.

WHAT IS PINAKA MISSILE SYSTEM?

- It is primarily a multi-barrel rocket system (MBRL) system.
- It can fire a salvo of 12 rockets over a period of 44 seconds.
- 1 battery of Pinaka system consists of 6 launch vehicles and a battery can neutralise an area 1 kilometre by 1 kilometre.
- The launchers have to "shoot and scoot" to ensure that they do not become the targets, especially due to its back blast.
- **Mark-I** version of Pinaka has a range of around 40 kilometres.
- **Mark-II** version can fire up to 75 kilometres.



- It was developed as an alternative to the multi-barrel rocket launching systems of Russian make, called like the 'Grad'.
- Pinaka Mark-1 was first used in the battlefield during the Kargil War of 1999, quite successfully.
- Subsequently multiple regiments of the system came up over the 2000s.

What are its versions?

- Over late 2010s, multiple successful tests of the Mark-II version have been carried out by the DRDO.
- This version of the rocket has been modified as a guided missile system by integrating it with the navigation, control and guidance system.
- The navigation system of the missile is linked with the Indian Regional Navigation Satellite System (IRNSS).
- In comparison to artillery guns, rockets are less accurate, but with addition of guidance and navigation systems, this aspect is taken care of.
- With its upgrades, the Pinaka Mark-II can be a key element in the "network centric warfare".
- The rocket system can operate various modes.
- They can carry different types of warheads.
