VISIONIAS
INSPIRING INNOVATION

SECURITY

MAINS 365

Classroom Study Material **2023**
(August 2022- May 2023)

SECURITY

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Previous Year Questions

A reference sheet of syllabus-wise segregated previous year questions from 2013-2022 (for the Security Section) has been provided. In conjunction with the document, it will help in understanding the demand of the exam and developing a thought process for writing good answers.

A NOTE FOR THE STUDENTS

Dear Students,

Understanding current affairs can add depth to your perception of intricate issues and help you form nuanced perspectives, especially in the context of the Mains examination.

In light of this, Mains 365 documents attempt to simplify your study process by including features that assist in creating answers, reviewing content, and retaining information.

Here are the key features we have integrated in the document:

A Topic at Glance: This offers a comprehensive view of the topic, seamlessly connecting current and static aspects while providing necessary data and facts.

Enhanced Infographics: These are designed to effectively revise as well as to be readily used in your answers, making your responses more engaging and informative.

Appendix: We have added an appendix of key data and facts at the end of each document, aiming to facilitate quick revision.

Weekly Focus Document List: A QR code linked list of relevant weekly focus documents has been added at the end of each document, ensuring a smoother journey while approaching these topics.

Previous years questions: To facilitate efficient revision, a QR code linked syllabus-wise segregated list of previous years' questions is added.

We sincerely hope Mains 365 documents will guide you effectively in your preparation and aid you in scoring better in your Mains examination.

> "Learn everything you can, anytime you can, from anyone you can. There will always come a time when you will be grateful you did."

All the Best! Team VisionIAS

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1. STATE AND NON-STATE ACTORS

1.1. LEFT WING EXTREMISM (LWE)

LEFT WING EXTREMISM (LWE) AT A GLANCE

About Left Wing Extremism(LWE) in India

- LWE also called as **Naxalism/Maoism** is a form of **armed insurgency** against the state motivated by the radical leftist/maoist ideologies.
- Naxal insurgency in India originated in a **1967** uprising in Naxalbari,West Bengal by **Communist Party of India(Marxist).**
- Operating in India's **"Red Corridor"** -Chhattisgarh, Jharkhand, Odisha, Bihar, West Bengal, Andhra Pradesh, Telangana, Maharashtra, Madhya Pradesh, and Kerala in varying degrees.
- **Incidents of LWE violence have reduced** by **76% from 2010 to 2022.**
- **Number of LWE affected districts reduced** from **35 to 25** from **2018 to 2021.**

Causes of LWE

- **Governance Related Factors**
  - ▷ **The failure to implement welfare schemes** effectively and efficiently.
  - ▷ **Malfunctioning of government machinery** in terms of inefficiency, corruption and exploitation.
  - ▷ **Weak governance** allowed Maoists to gain legitimacy in deprived areas.
- **Socio-Economic and Cultural Factors**
  - ▷ Poverty, inequality fuel **LWE support, especially in rural areas.**
  - ▷ **Land acquisition** displaces farmers/tribes, fuels LWE violence in tribes.
  - ▷ **The cultural alienation of tribal communities.**
  - ▷ **The lack of basic infrastructure,** such as roads, schools, etc.
- **Political Marginalisation** of the marginalized communities, particularly tribal populations.

Important initiatives for LWE affected states

- **Creation of LWE division** in 2006 which implements security related schemes.
- **National Policy and Action Plan** (2015) with multi-pronged strategy approach.
- **Operational strategy 'SAMADHAN'** to fight LWE launched in 2017.
- **Various sub-scheme of the Umbrella Scheme 'Modernization of Police Forces'** like Special Central Assistance (SCA).
- **Development initiatives:**
  - ▷ **Improving road connectivity** through **Road Requirement Plan-I (RRP-I) and Road Connectivity Project.**
  - ▷ **LWE Mobile Tower Project** for better mobile connectivity.
  - ▷ **Aspirational District programme** in all LWE affected districts.
  - ▷ **Residential Model Schools** in 90 LWE affected districts.
- **Operation Green Hunt** in the naxal-affected areas.

Issues in handling LWE

- Negligence of established **standard operating procedures.**
- **Sluggish Capacity building** and leadership issue in Police Forces.
- Extremist are trained in **guerrilla warfare.**
- **Inefficient technology** of deep planted mines detection.
- **Laundering of funds** by Naxals.
- **Radicalisation and use of children** by Maoists.
- **Maoists trying to revive old strong hold** like tri-junction forests of Tamil Nadu, Karnataka and Kerala.

Way Forward

- **Learning from best practices and success** stories like that of greyhounds in Andhra Pradesh.
- **Eliminating root cause** like implementing welfare schemes, presence of administration.
- **Leveraging new technologies** such as Micro/Mini UAVs.
- **Enhancing capabilities of the state police forces.**
- **Choke Funding** by breaking nexus between illegal mining/forest activities.

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1.2. INSURGENCY IN NORTH EAST

INSURGENCY IN NORTHEAST AT A GLANCE

Main reasons behind insurgency in northeast

- Large scale migration or **ethnic rivalries** with neighboring tribes.
- **Poor connectivity** and **limited infrastructure** causing lack of opportunities despite **relatively high literacy.**
- **Informal governance and economy** due to governance deficit and shortage of commodities.
- **Porous international borders** with difficult typography.
- **Sense of alienation from mainstream** due to presence of security forces presence of security forces.

Significance of maintaining peace in the Northeast for the country

- **National security** as a large section of the border of northeastern states is international in nature.
- **Strengthen cross border relationship** to act as a bridge to Southeast Asia.
- **Economic Significance**: Rich natural resources (e.g., oil and gas, hydro-power potential, forest-based products), tourism and export potential.
- **National integration:** Harmony within the northeast can help create a role model for national integration across India.

Initiatives taken by the government to restore Peace and bring Prosperity in Northeast

- **Peace deals or settlement agreements** such as the NLFT Agreement (Tripura), Bodo Peace Accord and recently Kabri Anglong Peace Agreement.
- **Fencing of borders with regional cooperation**, E.g., around 24 km of Indo-Bangladesh border in Tripura is fenced.
- **Local andregional connectivity initiatives** like-
  ▷ Priority to Northeast routes under **UDAN 4 .0** (Ude Desh Ka Aam Nagrik).
  ▷ Fast-track efforts to bring **all North east capitals on Indian Railway network.**
  ▷ **Maitri Setu,** a 1.9 km bridge over Feni River to connect Sabroom in Tripura with Ramgarh in Bangladesh.
- **Development of North east under the 'Act East Policy' via:**
  ▷ **Mandatory earmarking of at least 10% of Gross Budgetary Support** of Central Ministries/Departments for North-Eastern Region.
  ▷ Initiatives like **Swadesh Darshan Scheme, Comprehensive Telecom Development Project, Agri Export Zones, National Bamboo Mission.**
- **Celebration of local festivals** like Hornbill Festival to preserve its cultural richness.
- **Agreement with insurgent group signedto bring peace like National Liberation Front of Tripura (NLFT).**
- **Aspirational District programme.**

Challenges to Peace and Prosperity Initiatives

- **Presence of un-demarcated borders** with difficult terrain.
- **Natural challenges to the economic development and connectivity** initiatives from disaster risks.
- **Limited FDI inflows and predominance of Informal Economy** in Northeast.
- **The presence of organized crime syndicates** manifesting in recent **attack on Indian connectivity projects** in Myanmar. by rebel groups creating challenge to Act East Policy.
- **Prevailing stereotypes** about people and region among people from other regions.
- **Border disputes** between states like Assam-Mizoram border disputes.
- **Ethnic Conflicts** like in Manipur violence over Meiti community's addition in ST list.

Way ahead

- **At Socio-cultural Level,** increase awareness on culture, language, and people of Northeast among rest of Indians and outside.
- **At Economic Level,** working on light industries such as food processing, floriculture, etc.
- **At National Security Level,** continue with peace efforts with continued counter insurgency operations while respecting human rights.
- **At International Level,** sorting out un-demarcated border issues.
- **At Political Level,** engaging the Northeastern political parties and civil society for social integration in the region

1.2.1. ARMED FORCES (SPECIAL POWERS) ACT (AFSPA)

Why in news?

Central government has decided to **reduce the disturbed areas** under the **Armed Forces Special Powers Act (AFSPA)** in Nagaland, Assam and Manipur.

More on news

- Currently, AFSPA is in effect in parts of **Nagaland, Assam, Manipur,** and **Arunachal Pradesh**.
  - AFSPA is **also in effect in Jammu and Kashmir** through the Armed Forces (Jammu and Kashmir) Special Powers Act, 1990.
- Earlier, AFSPA was **completely withdrawn** in **Meghalaya** in 2018, **Tripura** in 2015 and **Mizoram** in the 1980s.

Need of AFSPA

- To **protect the borders** of the country
- To **tackle the insurgent** elements inside the country
- Boosts the **morale (mental well-being) of the armed forces**
- Provides **organisational flexibility** and effective **utilisation of security capacity** of state
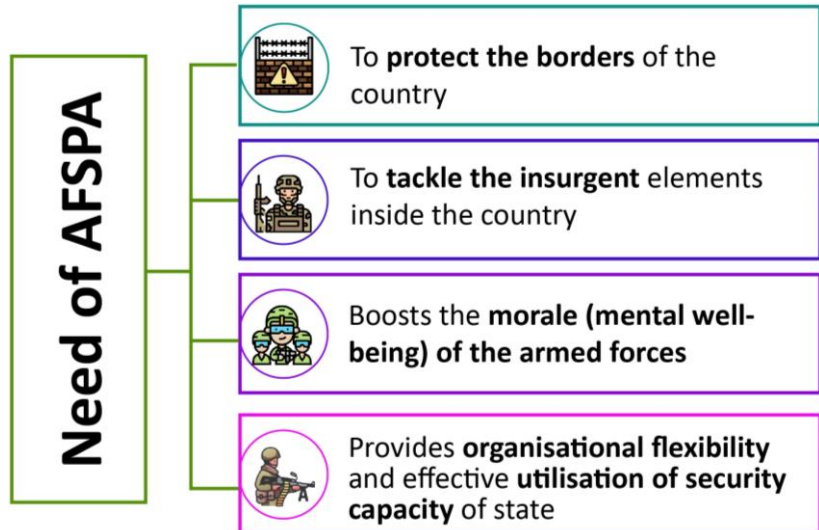
About AFSPA

- **AFSPA for North-Eastern states was passed in 1958.**
- It gives **armed forces the power** to maintain **public order in "disturbed areas"**.
  - Disturbed area is an area in such a **disturbed or dangerous** condition that the **use of armed forces in aid of the civil powe**r is necessary.
  - **Central Government, or Governor** of State or **administrator of Union Territory** can declare **whole or part of State or UT** as a disturbed area.
- **Act gives various special powers** to armed forces like:
  - To **prohibit a gathering** of five or more persons in an area.
  - Can **use force or open fire** if they feel a person is in **contravention of the law.**
  - If reasonable suspicion exists, can also **arrest a person without a warrant; enter or search a premises** and **ban the possession** of firearms.

Issues with AFSPA

- **Violation of rights:** Act violates Constitutional provisions of **right to life**, **right to remedy** and **right to be free from arbitrary deprivation** of liberty.
- **Violates International Law:** The AFSPA, in its application, **violates the Universal Declaration of Human Rights (UDHR),** the International Covenant on Civil and Political Rights (ICCPR), the Convention Against Torture and the UN Code of Conduct for Law Enforcement Officials.
- **Centre-state conflicts: Law and order** is a state subject. However, acts like AFSPA **undermine states' autonomy** in times of peace as well.
- **Misuse of powers:** Several instances have been reported where armed forces have allegedly **misused the powers given by the Act.**

> **Judicial pronouncements on AFSPA**
> - **Naga People's Movement of Human Rights v Union of India (1997):** Supreme Court **upheld the constitutionality** of AFSPA and laid out procedure:
>   - While declaring a region as "disturbed area", the **opinion of the state government** must be taken.
>   - The act has to be **reviewed every six months** by the state.
> - **Extra Judicial Execution Victim Families vs Union of India & Anr (2016):** Supreme Court held that **AFSPA is not invincible** and **ended the immunity** of the armed forces from prosecution under AFSPA.
>
> **Committees related to AFSPA**
> - **B P Jeevan Reddy committee** (2005): It called for **repeal of AFSPA** by terming it a symbol of hate and oppression. Other recommendations include
>   - Incorporation of AFSPA in the **Unlawful Activities (Prevention) Act, 1967.**
> - **Second Administrative Reforms Commission (2007): It** recommended that **AFPSA be repealed to remove the feeling of discrimination and alienation** among the people of North East.
> - **Santosh Hegde committee** (2013): It was appointed by Supreme Court to review **encounter killing** in Manipur since 1979.

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Conclusion

In the short run, there is a need to **ensure accountabilit**y with limited applicability of AFSPA. In the long run, alternative approaches to conflict resolution including dialogue and engagement needs to be explored.

1.2.2. ILLEGAL IMMIGRATION AND INTERNAL SECURITY

Why in News?

Violence between Manipur's Kuki tribe and the majority Meitei community continued in several parts of Manipur.

More on news

- Earlier, the Manipur government withdrew from the **Suspension of Operations (SoO) agreement** with two insurgent groups **Kuki National Army (KNA) and Zomi Revolutionary Army (ZRA)**.
- **Trigger point:** Manipur High Court ordered the state government to recommend a ST Tag for the community to the Ministry of Tribal Affairs.
- **Instability in Myanmar:** After the military coup in Myanmar in 2021, around 4,000 refugees are said to have entered Manipur.
  - The refugees belonging to the **Kuki-Chin-Zo ethnic group comprising the Lai, Tidim-Zomi, Lusei, and Hualngo tribes** are closely related to the communities in Mizoram and Manipur.
  - **Such illegal immigration is considered a threat to internal security for India.**

How illegal immigration is a threat to Internal Security?

- **Threat to National Security:** It is alleged that among the illegal migrants there are also militants especially groups such as NSCN-K/ULFA, who enter India to carry out terrorist activities.
- **Human trafficking:** In recent decades, **trafficking of women and human smuggling** has become quite rampant across borders.

> **SoO Pact**
> It was a ceasefire agreement signed in 2008, with the **primary objective of initiating political dialogue with Kuki insurgent groups** and meant ending violence and hostilities from all sides.
> - **Tenure: One year;** it is extendable according to the progress of its implementation.
> - **Designated camps:** The militant cadres are to b**e confined in designated camps** identified by the Government.
> - **No operations: Security forces,** including state and central forces**,** are **not to launch any operations**, nor can the **underground groups (UG).**
> - **Responsibilities of insurgents:** The signatories of UPF and KNO shall **abide by the Constitution of India**, the **laws of the land** and the **territorial integrity of Manipur.**
> - **Rehabilitation package:** As a rehabilitation package, the UG cadres are given **a monthly stipend of Rs 5000.**

> **About Kuki Insurgency**
> - The **Kukis are an ethnic group including multiple tribes** originally inhabiting the North-Eastern states of India such as **Manipur, Mizoram and Assam; parts of Myanmar, and Sylhet district and Chittagong hill tracts of Bangladesh**.
> - In Manipur, the various Kuki tribes, **currently make up 30% of the total population of the State**.
>   - The rest of the population of Manipur is **made up mainly of two other ethnic groups** —
>   - ✓ **the Meiteis (non-tribal),** who live in the valley region of Manipur, and
>   - ✓ **the Naga tribes,** live in the hilly areas of the State.
> - **In the early 1990s, the ethnic clashes between Nagas and Kukis**.
>   - There are **competing interests between the Nagas and Meitis**. The demand for Nagalim or Greater Nagaland includes the Naga inhabited areas of Manipur.
>   - On the other hand, the **Meitis want to preserve a single geographic entity for centuries.** They have also traditionally controlled both the political and economic power in the region.

- **Community tension:** The Commission on Integration and Cohesion found that tension usually exists with the presence of high levels of migration combine with other forms of social exclusion like poverty, poor housing, etc.
- **Increase financial burden**: Immigration has increased pressure on the part of the government, as the government has to increase the expenditure on education and health facilities for the immigrants.
- **Illegal voters:** Most illegal immigrants have got their names enlisted in the voting list illegally, thereby claiming themselves as citizens of the state.
- **Crisis of identity:** The influx of immigrants created a crisis of identity among the indigenous people of the region.
- **Environmental degradation:** Large areas of forestland were encroached upon by the immigrants for settlement and cultivation.
  - This **creates conflict in resource utilization** with the local communities.

Way forward for India

- **Effective policy:** The central government should frame a holistic refugee policy for management of such immigration.
- **Diplomatic Effort:** To get neighbouring countries to cooperate in resolving the issue of illegal migration.
- **Unique identity card:** Government should introduce identity cards for the borderland people who frequently used to cross borders for different reasons.
- **Fencing border:** There is a vast area of the border that is not protected by fencing. The central government should complete the border fencing.
- **Use of regional forums:** Forums like BIMSTEC can be used to discuss issues like illegal migration from neighboring countries and garner support and coordination from the members.

> **Laws in place to tackle illegal migration**
> - **Under the Foreigners Act, 1946:** The Central Government can deport illegal foreign nationals.
> - **Under the Passport (Entry into India) Act, 1920:** State Governments have been entrusted with power to remove an illegal foreigner by force.
> - **The Citizenship Act, 1955:** It provides for the acquisition and determination of Indian citizenship.

- **Better management of borders:** Border guards like BSF, and ITBP should be strengthened and a second line of defense can be created by the State government through the state police force.

1.2.3. INDO-NAGA CEASEFIRE AGREEMENT

Why in News?

National Socialist Council of Nagalim (Isak-Muivah) (**NSCN (IM))** observed 25 years of signing the "Indo-Naga" ceasefire agreement with the central government.

About "Indo-Naga" ceasefire agreement

- The NSCN-IM signed a ceasefire agreement with the Government of India on July 25, 1997, **which became effective on August 1, 1997.**
  - This **heralded the start of Indo-Naga peace talks**.
- However, even after 25 years of this agreement, **a final solution to the Naga conflict remains elusive.**
- Earlier efforts to restore peace **include Shillong Accord 1975, ceasefire agreement of 1997 and a framework agreement in 2015.**

> **About Nagas**
> - **Nagaland is almost entirely inhabited by the Naga tribes** except some Kukis, Kacharis, Garos, Mikris, Assamese etc. in the plains.
> - **Major naga tribes** include Ao, Angami, Chang, Chakesang, Kachari, Khiamniungan, etc.
> - **Nagas** speak many languages and **differ widely in dress and other cultural traits**, as well as in physical features.
> - **There is no caste system among the Nagas.** But each of the Naga tribes is divided into several clans.

Barriers to Naga Peace talks

- **Nature of demands:** NSCN's (IM) long-standing demand for a separate flag and constitution requires fundamental changes in the country's federal dynamics.
- **Finding shared goal for different ethnic groups:** There is deep rooted tribalism in Nagaland and the claims of any group representing all Nagas is disputed by other factions.

NSCN (IM) Map of Greater Nagalim

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- **Limitations of Article 371A:** In 2013, it was stated that Article 371A(1)(a) **does not confer legislative power to the Legislative Assembly of Nagaland on regulation and development of mineral oil.**
  - **Article 371A** states that no act of Parliament shall apply to the State of Nagaland in respect of the religious or social practices of the Nagas, involving ownership and transfer of land and its resources.
- **Concern from other states:** Integration of Naga-inhabited areas into a greater Nagaland (or Nagalim) would involve territories of three states — Assam, Manipur, and Arunachal Pradesh —making the process more difficult.
- **Low transparency and limited participation: Due to continued violence in the region, continuance of AFSPA and people losing faith** in the overall management of the conflict.

Way Forward

- **Negotiations should be kept away from public gaze as far as possible:** Hype, frequent proclamations that peace is round the corner, denunciation etc. have been the bane of the post-2015 negotiations.
- **Stand firm against pressure to secure a quick fix:** Time, space and sustained dialogue are necessary to rebuild trust in the Naga relationship.
- **Priority** should be on studying and working on **aspects such as autonomy in the Naga-inhabited** areas of Manipur and the **workings of a pan-Naga body**.
- **Confidence-building measures** should have the participation and acceptance of locals and not just to repair bilateral relations with the NSCN (IM).
- **People-to-people contacts need to be built up** so that real problems of the people can be voiced on a larger platform. There is a need for more cross-cultural openness among the north-eastern states.

1.2.4. BODO PEACE ACCORD

Why in News?

Recently, Prime Minister lauded the Bodo Accord, calling it the source of "long-lasting peace" in Assam.

About Bodo Peace Accord

- 3rd Bodo Peace Accord as **tripartite agreement between the Centre, Assam Government and the banned Assam-based insurgent group National Democratic Front of Bodoland (NDFB)** was signed in 2020, for bringing a lasting peace in Bodo-dominated areas in Assam.
  - Earlier the **1st and 2nd Bodo Accords were signed in 1993 and 2003**. It later split into 3 factions out of which NDFB (S) has continued violence.
  - It is a **significant move as it would promote democratic decentralization, recognize identity of the bodo people and ensure long term peace and harmony in the region**.
- **Key highlights of the accord**
  - **Bodo Territorial Areas District (BTAD)** was reorganized by including new **Bodo-dominated villages contiguous to the existing BTAD** and excluding villages with a predominantly non-tribal population.

> **Related News**
> A tripartite agreement among **five insurgent groups of Assam, the Centre and the State government** was signed to end years of violence in the Karbi Anglong region.
> **Key highlights of the deal**
> - **Rehabilitation** of more than 1,000 armed cadres who have abjured violence and joined the mainstream.
> - Centre will make available a **special development package of ₹1,000 crore over the next five years,** to undertake specific projects **for the development of Karbi areas.**
> - **Greater devolution of autonomy** to the Karbi Anglong Autonomous Council (KAAC).

  - **BTAD renamed as Bodoland Territorial Region (BTR)** with more executive, administrative, legislative and financial powers.
  - Bodos living in KarbiAnglong and Dima Hasao districts would **be conferred Scheduled Hill Tribe status.**
  - **Number of seats in Bodoland Territorial Council (BTC) will be increased** from 40 to 60.
  - **Bodo with Devnagri script would be associate official language** for entire Assam.
  - Deputy Commissioners and Superintendents of Police will be posted in consultation with the Chief Executive Member (CEM) of the BTC.
  - **A Special Development Package of Rs. 1500 crores** over three years was provided.

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Progress so far

- **Boundary commission has been formulated** to give a new shape to the BTR.
- Development work for the residents of the Bodo region is being done through various commissions and advisory committees.
- **Assam Official Language (Amendment) Bill, 2020 passed** to give due respect to the Bodo language.
- More than 1,615 **cadres of NDFB laid down arms** and **assistance of Rs. 4 lakh** has been started **for all surrendered militants**.

2. THREATS TO INTERNAL SECURITY

2.1 TECHNOLOGY AND INTERNAL SECURITY

2.1.1 MEDIA AND SOCIAL MEDIA

CHALLENGES TO INTERNAL SECURITY THROUGH MEDIA AND SOCIAL MEDIA AT A GLANCE

About Media and Social Media

- **Media,** describes all channels of communication, everything from **printed paper** to **digital data.**
- **Social media** includes Social networking platforms such as Twitter, Media transmission systems such as Youtube , Community based networks such as Linkedin.
- **Social media users** in India at the start of 2023 were equivalent to around **32.8** % of the total population.

Challenges to internal security through Social Media

- **Rise in rate of communal violence** due to fake news or videos shared on social media: For instance, mob lynchings and attacks on the migrant population.
- **Anti-national groups/elements** like some youtube channels operating from Pakistan to spread disinformation and fake news.
- **Use by Terrorist groups** like ISIS during its peak spreading propaganda material in Hindi, Tamil, etc.
- **Cyber Attacks:** Social networks have become a great vector for Trojans like mobile banking **SOVA Android Trojan.**
- **Deep Fakes: Advances in Artificial Intelligence (AI) and Machine Learning (ML)** have enabled computer systems to create synthetic videos or deep fakes to sow the seeds of polarisation, amplifying division in society, and suppressing dissent.
- **Data Colonisation** by social media global corporations which can be manipulated against India.
- **Criminal Activity and Money laundering** through social media platforms.
- **Virtual Community** is the means of attracting potential members and followers like **Lone wolf attackers.**

Steps taken by India

- **IT (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2023** established **PIB's fact-checking unit.**
- **Delhi Declaration of UNSC Counter-Terrorism Committee** flagged concerns over increased use of cyberspace and other Information Communication Technologies (ICT), including social media.
- **Banning/blocking anti-national** like recently 6 YouTube Channels were banned by PIB.
- **Strengthening the existing infrastructure:** e-Surveillance Projects like NATGRID, CERT-In, Central Monitoring System (CMS), Internet Spy System Network and Traffic Analysis System (NETRA) of India, National Critical Information Infrastructure Protection Centre (NCIPC) of India etc.

Way Forward

- **Coordination among all stakeholders i.e governments,** private sector, civil society, etc.
- Enacting a **law specifically** addressing the harms caused by misinformation in their relevant contexts (for example, health or election misinformation).
- **Changing behaviour of citizens** towards false/fake news and developing attitude of fact checking before forwarding.
- **Data Localisation** to prevent data colonization and misuse.
- **Introducing effective reporting mechanisms,** such as hotlines for various internal security threats.

2.1.2 CYBER SECURITY

CYBER SECURITY AT A GLANCE

About Cyber Security

Cyber Security is the process of securing information or assets that are contained in cyberspace from unauthorised access, use, disclosure, disruption, modification or destruction.

Need for Cyber Security

- ⊕ **National Security**
- ⊕ **Cyberspace is increasingly being used in public policies** to process and store sensitive and critical data.
- ⊕ **Need for cyber resilience** for private sector
- ⊕ **Protecting service delivery of critical public services** like railways, defense systems, banking etc.
- ⊕ **Rise in Digitalization** making individuals vulnerable to cybercrimes, such as online bank frauds, etc.
- ⊕ **Increasing role of advanced technology** such as artificial intelligence (AI), machine learning (ML), etc.
- ⊕ **Startup digital push** (India is one of the fastest growing market for digital technology).

Existing Mechanisms for Cyber Security

Legal Framework

- ▷ **National Cybersecurity Policy 2013**
- ▷ **IT Act 2000 and Amendment 2008**
- ▷ **National Digital Communication Policy 2018** for ensuring sovereignty and security of digital communications.

Institutional Framework

- ▷ **National Cybersecurity Coordination Centre**
- ▷ **India's Computer Emergency Response team.**
- ▷ **National Critical Information Infrastructure Protection Centre**
- ▷ **Indian Cyber Crime Coordination Centre** and Cyber Warrior Police Force to tackle Internet crimes. **Cyber Swachta Kendra**

Recent Initiatives

- ▷ **Operation Chakr**a by CBI against cyber-enabled crime networks.
- ▷ **Cyber Surakshit Bharat (CSB)** MeitY to spread awareness about cyber-crime.
- ▷ **KAVACH-2023,** a national level hackathon, to **identify innovative ideas.**
- ▷ **Exercise Synergy** by CERT-In.
- ▷ Army to raise **Command Cyber Operations and Support Wings (CCOSW).**

Challenges to Cyber Security In India

- ⊕ **Absence of any geographical constraints** enabling attackers to launch an attack from anywhere.
- ⊕ **Lack of uniformity in devices** used for internet access,
- ⊕ **Rapidly evolving technologies** and the investment required to cope up with it.
- ⊕ **Lack of national level comprehensive architecture for cyber security.**
- ⊕ **Lack of awareness among the local police** about various provisions of legislative framework.

Way Forward

- ⊕ **Information sharing and coordination among agencies like** DRDO, NTRO, CERT-In, RAW, IB etc.
- ⊕ **PPP Model for Cybersecurity to ensure protection of private sector Critical Information Infrastructure.**
- ⊕ **Capacity building and skill development**
- ⊕ **Learning from best practices such as Tallinn Manual** of US
- ⊕ **Data localization** for better cyber security.

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2.1.2.1 RECENT DEVELOPMENTS IN CYBER SECURITY

Why in News?

Recently multiple organizations like RBI, SEBI and CERT-In came out with various guidelines on cyber security.

About Recent Guidelines

RBI's Draft Master Directions on Cyber Resilience and Digital Payment Security Controls for Payment System Operators (PSOs).	CERT-In "Guidelines on Information Security Practices" for government entities	SEBI proposes a consolidated cybersecurity framework for SEBI-Regulated Entities (REs).
• **Coverage:** The draft directions cover governance mechanisms for the identification, assessment, monitoring, and management of cybersecurity risks. • **Aim:** To ensure that authorized non-bank PSOs are resilient to traditional and emerging information systems and cyber security risks. • **Responsibility: The board of the PSOs** will be responsible for ensuring adequate oversight over information security risks.	• These guidelines are issued under the powers conferred by **section 70B of the Information Technology Act,2000.** • It applies to all Ministries, Departments, and Offices specified in **the First Schedule to the Government of India (Allocation of Business) Rules, 1961.** • **Key guidelines** o Report security breaches within **six hours of being noticed** o Mandatory **cyber security audits every six months** o **Employees to be logged out** when inactive for more than 15 minutes o Admin access to the system only with the approval of the **chief information security officer**	• It aims at providing a **common structure for multiple approaches** to cyber security to prevent any cyber risks/incidents. • The framework is based on five concurrent and continuous functions of cyber security- Identify, Protect, Detect, Respond, and Recover. o It has been defined by the **National Institute of Standards and Technology (NIST).** o **These functions serve as the pillars** upon which the framework is built, guiding regulated entities in establishing robust cyber security protocols. • All REs shall formulate an up-to-date **Cyber Crisis Management Plan (CCMP).** • REs would also have to put in place **a comprehensive incident response management plan** and respective Standard Operating Procedures (SOPs).

2.1.2.2 RANSOMWARE

Why in news?

Ransomware Report-2022 released by Indian Computer Emergency Response Team (CERT-In).

Category of malware that gains access to systems and makes them unusable to its legitimate users

Ransomware

Crypto Ransomware– Encrypt different files on targeted systems

Locker Ransomware– Lock the system's screen unless a ransom is paid

Key highlights of the report

- Ransomware **incidents have gone up by 53% in 2022** over 2021.
- Not only money, but **Geo political conflicts also influenced** ransomware attacks this year.
- **Broadened Ransomware attacks** across critical sectors with **increased frequency** and **complexity.**
  - **IT and IT-enabled services sector** was the **most impacted sector**, followed by **finance** and **manufacturing sectors.**
    - ✓ The servers of the AIIMS are hacked for the seventh day in a row after a ransomware attack**.**
- **Lockbit** was the **most prevalent ransomware** variant in India, followed by **Makop** and **DJVU/Stop ransomware.** New variants such as **Vice Society** and **BlueSky** were noticed in **2022.**
  - **Makop** and **Phobos Ransomware families** mainly targeted medium and small organizations, while **Djvu/Stop variants** used for attacks on individuals.
- **Ransomware-as-a-service** (RaaS) ecosystem becoming prominent.
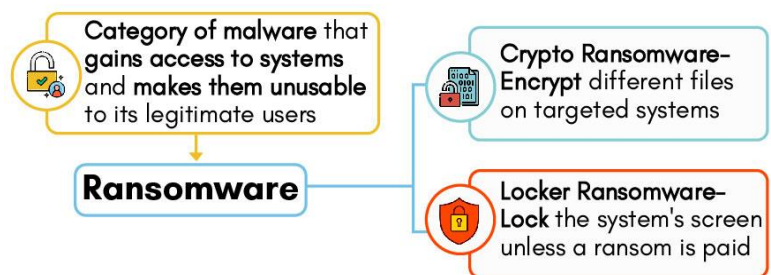
2.1.3 CRITICAL INFORMATION INFRASTRUCTURE

CRITICAL INFORMATION INFRASTRUCTURE AT A GLANCE

About Critical Information Infrastructure

- It refers to those **essential physical and information technology facilities,** which, if disrupted or destroyed, would impact health, safety, security, economic or social well-being of the nation.
  - Dams, Power and Energy, Banking and Financial services, government facilities, healthcare ,IT, transportation, nuclear reactors etc are considered parts of the Critical Infrastructure of a country.
- CII is **declared by government under Section 70 of Information Technology (IT) Act, 2000** (amended in 2008).
  - Recently, Census and National Population Register(NPR) database, ICICI and HDFC banks and NPCI's IT resources were declared as Critical Infrastructure by the government.

Threats to Critical Infrastructure

- **Natural:** Earthquake, Tsunami, Volcanic eruptions, etc.
- **Anthropogenic causes:** Terrorism, Cyber-attacks, economic espionage, etc. For eg. **RedEcho campaign** that caused a **power outage in Mumbai.**
- **Accidental or Technical:** Hazardous material accidents, transportation accidents, power grid failure etc.

Challenges in Protecting Critical Infrastructure in India

- India **lacks indigenization** in hardware as well as software cyber security tools.
- **Lack of coordination** among agencies as some report to PMO, while other report to Defence ministry.
- **Inhibition** in the private and public sector to **share information** about the vulnerability of their systems.
- Many organizations do **not have enough trained security professionals.**

Steps Taken for Critical Infrastructure protection in India

Legislative measures

- National Cyber Security Strategy 2020.
- National Cyber Security Policy, 2013.
- Information Technology Act, 2000.

Institutional Measures

- Indian Cyber Crime Coordination Centre(I4C)
- Indian Computer Emergency Response Team(CERT-In)
- National Cyber Coordination Centre (NCCC)
- Defence Cyber Agency
- National Critical Information Infrastructure Protection Centre(NCIIPC)

Way forward

- Need to evolve a **comprehensive security policy** to address the physical, legal, cyber and human dimensions of security.
- Use of new methodology like **cyber kill chain** that trace stages of a cyberattack.
- A **better understanding of vulnerabilities** is required, including interdependencies between infrastructures.
- **Comprehensive co-operation** and a functioning partnership between state and corporate sector.
- Capacity and skill development of **cyber workforce.**
- An **integrated and sustainable supply chain** security objectives must be included in business plans, contract,etc.
- Need for establishing **international norms** for protecting CII.

2.1.4 TECHNOLOGY FOR LAW ENFORCEMENT

Why in News?

Recently, the Tamil Nadu Government decided to use '**Fingerprint Analysis Tracking System**' to create a **biometric database** record of criminals.

Technology in crime and law enforcement

- **Changing nature of crimes:** The rise of **Information & Communications Technology** has changed the nature and **modus operandi** of crime. E.g.
  - The **traditional crimes** (robbery, theft etc.) are on decline while crimes like **identity theft, financial theft including ransomware, fake news, disinformation, sextortion etc. is on rise.**
  - Crimes like Drug trafficking have **started to operate online**, through the dark web.
- **Technology adoption for law enforcement:** With changed nature and methods of crime, the **law enforcement agencies** (LEAs) relationship with technology has also changed. These technologies aid in detection and prevention of crime (refer infographic).

TECHNOLOGIES USED BY LAW ENFORCEMENT AGENCIES

Hard technology (Hardware or Materials)
- It includes **new materials, devices,** and **equipment** to **control crime** such as CCTV cameras, metal detectors, baggage screening, technology-enhanced patrol cars etc.

Soft technology (Computer Software, Information Systems)
- It includes **new software programs, classification systems, crime analysis techniques, data sharing techniques** etc.

Technological initiatives taken by Indian Law Enforcement Agencies (LEAs) and its benefits

- **Crime and Criminal Tracking Network & Systems (CCTNS):** It creates a national database of crime and criminals and feeds into the **Interoperable Criminal Justice System (ICJS)** which covers **e-courts**, **e-prisons**, **forensics,** and **prosecution** for an efficient criminal justice system.
- **Technologies of Surveillance and Detection** such as biometrics, CCTV, Facial Recognition, Automatic License Plate Recognition (ALPR) etc.
- **Digital Forensic Software** to investigate and examine IT systems after security incidents or for security-related preventive maintenance.
- **Crime Mapping and Forecasting**, i.e., tracking crime trends geographically by **using AI and Big Data** that help in detecting **crime hotspots** and even predict the **likelihood of a crime**. E.g., This has been done in Delhi.
- **Crime Multi Agency Centre (Cri-MAC):** Cri-MAC was launched in 2020 by Ministry of Home Affairs (MHA) to share information on crime and criminals 24x7 with various law enforcement agencies.

BEST PRACTICES IN INDIA

Uttar Pradesh Police
An **AI enabled app** developed by startup Staqu digitizes and searches records of criminals and their associates and assists police forces with real-time information retrieval during investigations.

Odisha Police
An app named, **'MO SAATHI'** helps women who are stuck in dangerous situations to alert the police, make audio and video recording, and send it to the Modern Police Control Room.

Maharashtra Police
An **Automated Multimodal Biometric Identification System (AMBIS)** — a digital database of finger prints and photographs of criminals eliminates limitations of manual search on the biometric database.

Barriers in Use of Technology against Crime

- **High Cost of technology procurement** and the opportunity cost, especially for developing nations like India.
  - India has wide **state-wise differences in terms of resources and availability** of enabling infrastructure or technologies.
- **Technology (Reliability/Effectiveness) Risk,** i.e., technology not performing as expected or fulfills the tasks desired of it. E.g.
  - **Risk of biased outcomes or discrimination** as the predictive algorithmic systems are trained on historic crime data. As was observed in USA due to racially biased algorithms.
- **Lack of proper data security legislation** to avoid data breaches and potential misuse of these technologies.
- **Human Associated Risks,** i.e., risk of lack of adaptation or efficient use of new technologies due to inadequate training or unwillingness among officials.
- **Ethical Concerns** such as:
  - **Violation of privacy** by misusing technologies for personal data collection, unlawful surveillance, and possible security breaches.
  - **Excessive and inappropriate use** of technologies in areas where it isn't warranted.

Way Forward

- **Legality**: Development of clear legal standards and using technology within those standards.
- **Cost-effectiveness**: Fair return on investment by sponsoring research and development (R&D).
- **Technical Integrity:** Critical review of each technology before its use with performance standards.
- **Accountability:** Transparent use of technology to avoid public distrust and careful oversight to avoid the misuse of technology.
- **Personnel sensitization: Ensure fair recruitment** with proper training and supervision to address the human factors of technology adoption (e.g., reduced stress and adequate confidence in use).
- **Awareness among people** with feedback mechanism to focus on improvement and expansion of such technologies across India.

2.1.4.1. FACIAL RECOGNITION TECHNOLOGY (FRT)

Why in news?

Multiple Airports in India have recently rolled out the DigiYatra (DY) app.

More on the news

- DigiYatra (DY) app is a **Biometric Enabled Seamless Travel experience (BEST)** based on Facial Recognition Technology.
- The app **links facial features to the documents**, like ID proof, Vaccine proof and boarding pass, **automatically validating entry at all checkpoints** including entry into the airport, security check areas, aircraft boarding, etc. through E-Gate.

About Facial Recognition Technology (FRT)

- Facial recognition is a **biometric software application** capable of uniquely identifying or verifying a person by comparing and analysing patterns based on the person's facial contours.
- **Most of FRT systems use three main components:**
  - a camera;
  - a database of stored images; and
  - an algorithm that creates a **"faceprint"** from images captured to compare with the database images.

APPLICATIONS OF FRT

Law enforcement
- Tracking and **identification of criminals.**
- **Find missing persons** and victims of human trafficking

Retail sector
- **Customize** retail experiences.
- Identify known **shoplifters.**
- **"Face pay"** technology.

Airports and border control
- Hassle-free, contactless, paperless and fast **processing at checkpoints.**
- **Enhanced security.**
- Non-intrusive and automatic **Identity Verification.**

Healthcare
- Access **patient records.**
- Management of pandemics.
- Streamline **patient registration.**
- Detect emotion and pain in patients.
- Help to **identify specific genetic diseases.**

Marketing and advertising
- Creating **tailored advertisements.**
- Generating **feedback from facial expressions** of consumer.

Other uses
- **Digital security tool** for unlocking smartphones and other personal devices.
- **Management of staff and customers** for Businesses.
- **Governance:** Identifying beneficiaries.
- **Banking:** Authorize financial transactions.

Concerns about use of FRT

- **Surveillance:** Use of facial recognition along with existing setup of CCTV cameras, AI, and data analytics creates the potential for mass surveillance.
  - E.g., China uses it for tracking and control of the Uighur Muslims.
- **Inaccuracy and misidentification:** The results of FRT are **probabilistic** and are found to be **disproportionately inaccurate when used on certain groups**.
- **Risk of Function creep:** wherein a technology or system gradually widens its scope from its original purpose to encompass and fulfil wider functions.
- **May lead to violation of fundamental rights:** such as

- o **Right to privacy under Article 21** due to lack of clarity and consent on how data is being collected, stored, shared, used and by whom.
- o **Right to move freely** within the territory of India under Article 19(1)(d) by undermining privacy in public spaces.

- **Absence of data protection regulations in India** raises concerns about how datasets are collected, retained, secured and shared within public and private agencies.

- **Cybersecurity issues:** Facial data falls in the category of sensitive personal data which if compromised by hackers can lead to fraud, identity theft etc.

- **Technological limitations:** Various factors affect the technology's ability to recognize people's faces include camera angles, lighting levels, image or video quality, disguises, change in physical appearances with time etc.

> **Use cases of facial recognition systems in India**
> - **As a proof of 'life certificate' for pensioners**.
> - **As part of Operation Smile**, by Telangana Police for a periodic drive to tackle child labour and missing children.
> - **Deployment by State law agencies** (Delhi, Uttar Pradesh, Punjab etc.) **for investigation purposes.**
> - **For providing digital mark sheets** to students, by CBSE.
> - **UIDAI's pilot programme to test the functionality of FRT for financial services**, along with the National Payments Corporation.
> - **Automated Facial Recognition System (AFRS)** to be built by National Crime Records Bureau (NCRB) using police records.

Way Forward

- **Conducting privacy impact assessment** to help organisations in identifying how personally identifiable information is collected, used, shared and maintained, and privacy risks arising out of such arrangements.
- **Ensuring that use of FRT by Government agencies fulfils the thresholds of Necessity** and **Proportionality.**
- **Establishing consent-based standards and legislation** to govern use of the technology with the option to opt out and erasure of data.
- **Taking technical steps-**
  - o **Addressing racial and gender biases** in facial recognition algorithms by expanding datasets.
  - o **Decentralized identity management** to address privacy/data protection issues.
  - o **Ensuring that facial data is stored securely** by private and public authorities.
  - o **Assessing scope, structure, and process of FRT systems** to determine technical feasibility and accuracy.

2.2. MONEY LAUNDERING AND SMUGGLING

MONEY LAUNDERING AT A GLANCE

About Money Laundering

- Money laundering is the **process of making illegally-gained proceeds** (i.e "Dirty Money") appear legal (i.e "Clean").
- Three stages of Money laundering: **Placement, Layering,** and **Integration**
  - ▷ **Placement:** Illegal money is introduced into the legal and financial systems.
  - ▷ **Layering:** Carrying out multiple complex transactions and movements to create confusion and make it challenging to trace the money back to its illegal origins.
  - ▷ **Integration:** Laundered funds are integrated back into the legitimate economy, appearing as clean and lawful money.

Consequences of Money Laundering

- Loss of Tax Revenue
- Distortion of markets by allowing illegal businesses to compete unfairly with legitimate ones.
- Facilitates crime and corruption
- Can distort economy's external sector i.e. international trade
- Erode integrity of nation's financial institutions.

Challenges in curbing money laundering

- **Weak enforcement mechanism** such as under Prevention of Money Laundering Act (PMLA), prosecution complaints have been filed in only **19%** of the cases.
- **Lack of proper definition** like word **'black money'** is not defined under the IT Act, 1961 or any other act.
- **Lack of necessary political will** especially in politically connected cases.
- **Ineffectiveness of Know Your Customer (KYC)** norms
- **Poor Co-ordination among** the investigating agencies.
- **Technological advancements** like digital currencies, innovating payment systems etc.

Initiatives to prevent money laundering

Initiatives by India

- **Statutory framework like** PMLA, 2002 and PML Rules. Added new activities **to bring individuals acting as formation agents of companies and others under its ambit.**
- **Institutional framework like** Directorate of Enforcement (ED) and Financial Intelligence Unit – India (FIU-IND).
- **Empowered Regulators** like **Reserve Bank of India (RBI), Securities & Exchange Board of India (SEBI),etc.**
- **Other institutions** like **Economic Offences Wing, Central Bureau of Investigation (CBI), Income Tax Department,etc.**

Global Initiatives

- Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances **(Vienna Convention) recognises money laundering as a criminal offence.**
- Global Programme against Money Laundering, Proceeds of Crime and the financing of Terrorism **(GPML).**
- **Financial Action Task Force (FATF)** recommendations.

Way forward

- **Use of advanced technology** such as AI, Blockchain technologies to increase efficiency of the enforcement mechanism.
- **Regular Cross-Communication** like banks and law enforcement can keep each other up to date.
- **Ensuring proper risk handling** such as establishing clear channels; properly defined, documented and consistent investigative process.
- **Enhancing international coordination**

Mains 365 – Security

2.2.1 AMENDMENT TO THE PREVENTION OF MONEY-LAUNDERING (MAINTENANCE OF RECORDS) RULES, 2005.

Why in news?

Ministry of Finance notified 2023 Amendment to the **Prevention of Money-laundering (Maintenance of Records) Rules, 2005.**

Key changes in Rules

- **Tightened the definition of beneficial ownership:** Any individual or group holding 10% ownership in the client of a "reporting entity" will now be considered a beneficial owner as against the ownership threshold of 25% applicable earlier.
  - Under the anti-money laundering law, **"reporting entities" are banks and financial institutions, firms engaged in real estate and jewelry sectors.**
  - They also **include intermediaries in casinos and crypto or Virtual digital assets (VDAs).**
- **Expanded the due diligence requirement:** Rules prescribes disclosures of beneficial owners beyond current requirement of KYC norms through documents such as **registration certificates and PAN.**
  - Reporting entities are required to **register details of the client** if it's a non-profit organisations on the **DARPAN portal of NITI Aayog.**
- **Politically Exposed Persons (PEPs):** Amendment defines **PEPs** as individuals who have been entrusted with **prominent public functions** by a foreign country, including Heads of States/Governments, senior politicians etc.
- **Widened the definition of Non-profit organisations** . It now includes:
  - any entity or **organisation constituted for religious or charitable purposes** referred to in **Section 2 of the Income-tax Act, 1961.**
  - **registered as a trust or a society** under the Societies Registration Act, 1860 or any similar state legislation.
  - **a company registered under Section 8** of the Companies Act, 2013.

2.2.2 FOREIGN CONTRIBUTION REGULATION ACT

Why in news?

Ministry of Home Affairs has suspended foreign funding licence of CARE India over alleged violations of FCRA, 2010.

About Foreign Contribution Regulation Act (FCRA)

- FCRA was **enacted during Emergency in 1976**. FCRA 2010, consolidate law on **utilisation of foreign funds and prohibit their use for activities** detrimental to national interest.
- **Foreign Contribution (Regulation) Amendment Bill, 2020 amends FCRA, 2010** for tighter control and scrutiny over receipt and utilisation of foreign funds by NGOs.

Need of the Amendment

- As per CBI report, **less than 10 percent of 29-lakh registered NGOs across the country file their annual income** and expenditure.
- Also, according to report by Intelligence Bureau, **foreign-aided NGOs are actively stalling development projects** and **impacting GDP growth by 2-3% per annum.**
- In this backdrop, the amendments were introduced to FCRA to
  - **Regulate NGOs** and make them more accountable and transparent.
  - **Regulate religious conversions,** which are supported by foreign funds.
  - Ensure **foreign money is not used against national interests** or for anti-national activities.

Major provision of FCRA 2020	Concerns about amendments in FCRA 2020
• **Prohibits receipt of foreign funds by** candidates for elections; journalists and media broadcast companies; public servant, members of legislature etc. • **Prior Permission to receive foreign funds.**	• **Lacks fund accessibility:** Many **NGO's will not be able to access foreign funds** because scheme under which they receive these funds from donor agencies and larger NGOs, known as **'regranting'** has been banned.

Mains 365 – Security

- **Designated FCRA Account** in branches of **State Bank of India, New Delhi** to receive funds.
- **No funds** other than **foreign contribution** can be received or deposited in it and it can't be transferred to any other person or NGO.
- **Validity of FCRA registration is five years** and NGOs are expected to apply for renewal **within six months of date of expiry** of registration.
- **Use of funds is limited** to purpose for which it was received with a maximum limit of 20% (earlier 50%) to meet **administrative expenses**.
- **Compulsory filing of annual returns**.
- **Inquiry before renewing of license** to ensure that the person has fulfilled all conditions specified in Act.
- **Suspension of registration of a person increased** to 360 days from 180 days.

- **Restriction to explore:** Reducing administrative expenses would prohibit NGOs from employ enough staff, hire experts and implement strategies they require to grow.
- **Privacy concern due to compulsion of Aadhaar:** SC judgement on Aadhaar said to ensure greater privacy of individual's Aadhaar data and restricts governments access, while **compulsion under amendment seems contravene the judgement.**
- **Hamper delivery of social welfare schemes:** It will have **far-reaching consequences on education, health, people's livelihoods** because NGOs provide last-mile connectivity for delivery of government schemes in these sectors.

Way forward

- **Recommendations of Vijay Kumar Committee:**
  - **Modernising registration process for seamless operation** of applicable provisions of IT (Income Tax) Act and FCRA with respect to NGOs.
  - **Details of NGOs should be made available** as searchable database information.
- **2nd ARC report recommendations:**
  - **FCRA should be decentralised** and delegated to State Governments/District Administration.
  - **Fine balance between purpose of legislation and functioning of voluntary sector** to avoidsubjective interpretation of law and its possible misuse.

2.2.3. SMUGGLING AND COUNTERFEITING

SMUGGLING AND COUNTERFEITING AT A GLANCE

About Smuggling and Counterfeiting

- **Smuggling:** World Customs Organization (WCO) has defined smuggling as, "Customs offence consisting in **movement of goods across a Customs frontier in any clandestine manner,** thereby evading Customs control."
  - ▷ In India, it is **regulated by Customs Act, 1962.**
  - ▷ Commonly smuggled items include gold, currency, diamonds, drugs, electronic items etc.
- **Counterfeiting:** Defined under Section 28, IPC as: A person is said to "counterfeit" who causes one thing to resemble another thing, intending by means of that resemblance to practice deception.
  - ▷ Major counterfeit products include currency, drugs, automobiles, software, books etc.

Factors Responsible for Rise in Smuggling And Counterfeiting

- Thrives due to **huge domestic demand.**
- **Lacunae in countering supply due to** Lack of political will, Inadequate infrastructure or financial resources, Lack of stringent enforcement etc.
- Violations of Foreign Trade Policy and **misuse of Foreign Trade Agreements.**
- **Rising use of electronic platforms.**

Effects of Smuggling and Counterfeiting

- **Loss to Indian economy**- $7 billion loss due to the counterfeit market in 2019-2020.
- **Loss of jobs** - 3 million jobs lost due to illicit market.
- Government incurs **additional costs** for implementing **anti-counterfeiting measures.**
- **Loss of revenue** to government has a **direct impact on welfare spending.**
- **Harm to environment** as counterfeiters rarely follow safety **standards or guidelines .**
- **Health issues** as people from **economically weaker sections,** fall prey to **substandard goods.**
- Illicit trade generates huge profits, which go back to the crime syndicates creating a **vicious cycle.**

Steps Taken by India to counter smuggling and counterfeiting

- **Directorate of Revenue Intelligence (DRI):** apex anti-smuggling intelligence agency.
- **Automation of customs clearance at border and induction of Risk Management System (RMS).**
- **Training programmes conducted for police officials of Nepal and Bangladesh to sensitize them about** smuggling/ Counterfeiting of India Currency.
- **Terror Funding and Fake Currency (TFFC) cell** has been constituted in NIA to conduct focused investigation.
- **Amendment in Unlawful Activities (Prevention) Act 1967:** Damage to monetary stability of India by production/smuggling/circulation of fake Indian currency is declared as a Terrorist act.

Way Forward

- **Countering internal demand** like for Drugs, there should be **flying squads of Customs/NCB/Police.**
- **Comprehensive law and policy on counterfeit goods** to create a uniform legal structure, dedicated redressal structure, and time-bound disposal setup.
- **A two-pronged approach** of coordination with area experts like drug experts with Customs along with **domain expertise among border officers.**
- **Robust Know your supplier/ know your customer norms** by the component manufacturer.

2.2.3.1 SMUGGLING IN INDIA REPORT 2021-22

Why in news?

The report was released recently during 65th foundation Day celebrations of Directorate of Revenue Intelligence (DRI).

Key highlights

- Report **highlighted emerging smuggling trends during the pandemic.**
- **Record number of seizures** of **heroin** (including Mundra port seizure), **gold** and of **cocaine**, among other contraband.
  - **Myanmar became the main transit corridor** for smuggling of gold since pandemic (replacing Middle East) due to **disruption in international air traffic.**
  - **Narcotics smuggling** also changed **from passenger route to cargo route** because **political changes** in Afghanistan.
  - **Increased Fake Indian Currency Notes (FICN) Seizure** with **Bangladesh, Myanmar** being used as **staging points** to push FICN into India.
  - **Increasing challenge** due to **sophisticated concealment and extraction methods** used by smuggling syndicates.
  - **Use of cryptocurrency**, **dark net** and **physical smuggling of foreign currency** due to disruption in traditional hawala settlements act as other challenges.

2.2.3.2. COUNTERFEIT CURRENCY NOTES

Why in news?

According to Ministry of Finance, the value of the counterfeit currency has reduced in the banking system.

More on news

- The value of the counterfeit currency in the banking system has **reduced from ₹43.47 crore in 2016-17 to about ₹8.26 crore in 2021-22,** amounting to a sharp **decline of more than 80%.**
- At the same time, **notes seized by different law enforcement agencies have gone up**.
  - As per the National Crime Records Bureau (NCRB) data, the value of fake currency seized by various enforcement agencies in 2017 was ₹28 crore which shot up to **₹92 crore** in 2020.
  - **Increased Fake Indian Currency Notes (FICN) Seizure** with **Bangladesh, Myanmar** being used as **staging points** to push FICN into India.

Steps taken to prevent circulation of Counterfeit Note

Legal provisions relating to printing and circulation of counterfeit banknotes	• Counterfeiting is punishable offence under **Sections 489A to 489E of the Indian Penal Code.** • Also, under the ambit of **Unlawful Activities (Prevention) Act (UAPA), 1967.**
Anti-counterfeiting Measures by RBI	• **Incorporating Security Features in Indian Banknotes,** such as Watermark/Security Thread/Latent Image/Micro-lettering. • Continual **upgrades of banknote security features**. • **Public awareness campaigns** to educate citizens. • **Installation of note sorting machines.** • **Forged Note Vigilance Cells** at all the banks to pay focused attention to counterfeiting. • **Conduct of regular training programs.**

Measures by government for overhauling circulation of Fake Indian Currency Notes (FICN)	• **FICN Coordination Group** to share intelligence and information with the security agencies in the States and the Centre.
	• **Terror Funding and Fake Currency Cell** in the National Investigation Agency (NIA) to conduct a focused investigation of terror funding and fake currency cases.
	• **Capacity-building programmes** for various law enforcement agencies at the Centre/State level.
	• **Demonetisation of Rs.1000 and Rs.500 currency notes.**
	• **Cooperation with neighbouring countries:**
	  ○ **Training programmes for the police officers of Nepal and Bangladesh** to sensitise them about the smuggling/counterfeiting of Indian currency.
	  ○ **Joint Task Force between India and Bangladesh** for building trust and cooperation for exchange of information and analysis of smugglers of FICN.

Way ahead

Following measures are required to deal with the issue in the long term:

- **Introducing digital currency** to dent the circulation of fake notes.

- **Increase digital transactions** to avoid cash transactions.
- **Law Enforcement Considerations** for formulation of new laws and their enforcement.
- **Selection of Combinations of Features**: For example, print with photo luminescent ink on security thread.
- **Information Exchange:** Continuing exchange of information with other countries of the world about effectiveness of new features, feature durability, and new features under development.
- **Role of citizens:** People should remain vigilant about FICN and report the matter to banks/Police.

Threats of Counterfeit currency

Black Marketing and Corruption

- The shortage of supply that is created in the market due to extensive circulation of forged currency, gives rise to another grave problem, that of black marketing. This in turn gives rise to the vicious circle of corruption.

Devaluation of Currency and Inflation

- As counterfeit money makes its way into the markets; there is undesirable influx of money in circulation. This artificially increases the purchasing power of people, leading to rise in demand for goods and services and thereby inflation. This reduces the value of real money and leads to currency devaluation.

Loss of Public Confidence

- With circulation of counterfeit money, people tend to lose faith in the economy of their country and the money that they hold.

Increase in Terrorism

- Counterfeit currency has long been a source of funding for terrorism in India . For example, in the Mumbai 26/11 attacks, a significant part of the money, to fund the preliminary operations, was obtained through fake currency rackets and hawala (illegal money transfer) channels.

Economic Impacts

- Criminal networks exchange the counterfeit currency for genuine notes, which not only facilitate money laundering, but also poses a serious threat to the Indian economy.

2.2.4. DRUG TRAFFICKING

DRUG TRAFFICKING IN INDIA AT A GLANCE

About Drug Trafficking

- It is **global illicit trade** involving the cultivation, manufacturing, distribution, and sale of substances which are subject to drugs prohibition laws.
- As per World Drugs report 2023 by UNODC, **drug trafficking is expanding to other regions** outside the main markets of North America and Europe, with increased levels of trafficking to Africa and Asia.
  - ▷ Number of users grew from 240 million in 2011 to 296 million in 2021.
  - ▷ Illegal manufacture of synthetic drugs is expanding due to their low cost and ease of production.
  - ▷ Drugs trading is taking place over Internet including darknet marketplaces.

Drug trafficking characteristics in India

- India has become a **transit hub** as well as a destination for heroine and hashish produced in **Golden triangle** and **Golden Crescent.**
- India is **one of the top destinations for synthetic drug_ methamphetamine** originating in Afghanistan
- Worst affected regions are North-East (especially **Manipur**) and North West(especially **Punjab**) and major big cities.
  - ▷ NER is **close to Myanmar which is the second largest producer of opium** in the world after Afghanistan.
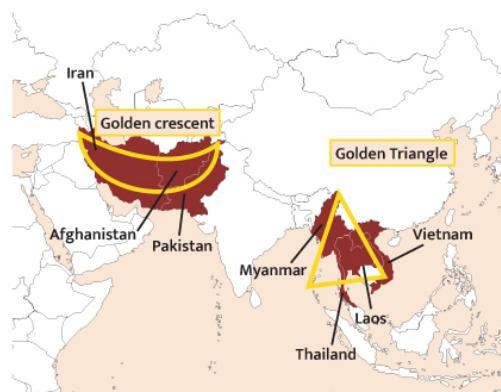
Issues associated with Drugs Trafficking

- **Significant threat to National Security**
  - ▷ **Facilitates other organized crimes** such as human trafficking, money laundering etc.
  - ▷ **Destabilises nation by Narco-Terrorism,** the nexus between drug traffickers, criminal network and terrorists.
  - ▷ Money generated by the illegal sale of narcotics and drugs is **used for financing terrorist activities** and also left wing extremism.
- **Rise in social crimes: Encourages drug consumption** thereby creating law and order problem in the society.
- **Corruption:** Drug cartels subvert, penetrate and further corrupt state institutions to control the illegal drug trade.
- **Environmental impact:** Illicit drug markets can have impacts on the environment such as carbon footprint, deforestation, waste generation etc.
  - ▷ For instance phenomenon of **narco-driven deforestation** is taking place in the Amazon basin.

Measure Taken by India

- **Operation Samudragupt** was launched by theNarcotic Control Bureau(NCB) to **combat drug trafficking in Indian Ocean Region.**
- **Enacting legislations** such as Narcotics Drugs and Psychotropic Substances(NDPS) Act, 1985.
- **Ensuring physical security of the borders** like Comprehensive Integrated Border Management System (CIBMS).
- Seizure Information Management System **(SIMS) and** National Integrated Database on Arrested Narco-offenders **(NIDAAN)** portals **for an online database of drug offences and offenders.**
- **Narco-Coordination Centre (NCORD) portal** to provide common platform for Drug law enforcement agencies.
- **Signed bilateral pacts and MoUs** with different countries for combating illicit trafficking of narcotics, drugs,etc.
- **Signatory to international conventions** like UN Single Convention on Narcotics Drugs 1961,etc.

Way Forward

- **Effective coordination and information sharing** among enforcement agencies.
- **Develop accountability mechanism and practices** for shipping and railway companies, air cargo etc.
- **Control online drug supply chain** by regulating crypto-currency markets and monitoring electronic payment.
- **Enhancement of punishment** under NDPS and other drug laws.
- **Creating awareness among citizens** through programmes like **NashaMukt Bharat Abhiyaan (NMBA).**

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2.3. TERRORISM

TERRORISM AT A GLANCE

About Terrorism

....

- ⊕ Terrorism is a **forceful and unlawful method to achieve the desired goal** (antithesis of independence).
- ⊕ As per **Global Terrorism Index (GTI) 2023,** India ranked **13th** on the index which is topped by **Afghanistan.**

Factors that Causes Terrorism

....

- ⊕ **Radical ideologies** like left-wing communism; right-wing-capitalism; and religious ideologies.
- ⊕ **Ethnic** or **nationalist aspirations** for self-determination or autonomy such as separatist movements.
- ⊕ **Globalization facilitates terrorism through increased mobility and communication.**
- ⊕ **Terrorism as Foreign Policy:** Terrorism has come to be an **alternative to war** amongst adversarial states.
- ⊕ **Poor societies with weak State structures.**
- ⊕ **International Injustice** fuels feelings of a desire for revenge. For eg- rise of ISIS.

Challenges to counter International Terrorism

....

- ⊕ **Ambiguity around definition of 'terrorism'** as there is no internationally agreed definition of the term.
- ⊕ **Lack of comprehensive international legal framework.**
- ⊕ **Inadequate domestic capacity of the nation.**
- ⊕ **Restriction of civic freedoms:** 2019 Human Rights Council report has shown how counter terrorism measures **adversely impacts** civic space.
- ⊕ **Lack of effectively counter the financing of terrorism.**

Global Initiatives to Counter terrorism

....

- ⊕ **United Nations Global Counter-Terrorism Strategy (GCTS), 2006.**
- ⊕ **UNSC Counter-Terrorism Committee (CTC):** It is tasked with **monitoring implementation of resolution 1373** (2001), to enhance ability to counter terrorist activities.
- ⊕ **Global Counterterrorism Forum (GCTF)** is an **informal, apolitical, multilateral** platform. **India is a member.**
- ⊕ **United Nations Countering Terrorist Travel Programme**
- ⊕ **Financial Action Task Force (FATF)** for Anti-Money Laundering and **Countering the Financing of Terrorism.**
- ⊕ **SCO Regional Anti-Terrorist Structure (RATS)**
- ⊕ **Proposed Comprehensive Convention on International Terrorism (CCIT)** intends to **criminalise all forms of international terrorism.**
- ⊕ **"No Money for Terror" conference** started by French government (India hosted its 3rd edition).

Initiatives by India to Counter terrorism

....

- ⊕ **Unlawful Activities (Prevention) Act, 1967.**
- ⊕ Establishment of **National Investigation Agency (NIA).**
- ⊕ **National Intelligence Grid or NATGRID**
- ⊕ Creation of **two new divisions within MHA**
  - ▷ **Counterterrorism and Counter-Radicalisation Division**
  - ▷ **Cyber and Security division**
- ⊕ **Bilateral/Regional collaborations** for counter terrorism.
- ⊕ India implemented UNSC Resolution 2396 to stem threats posed by foreign terrorist Fighters, by using biometric screening at ports of entry.

Ways Forward

....

- ⊕ **Enhance state capacity** and **identify gaps** to prevent and combat Terrorism
- ⊕ Focus on role of **Regional** and **International Organizations** in Addressing State Capacity: Share best practices, **improve compliance with international norms and obligations.**
- ⊕ Including a gender perspective in countering terrorism
- ⊕ **Protect human rights and fundamental freedoms** in the context of counter-terrorism measures
- ⊕ **Raising public awareness** about the threat of terrorism and about universal counterterrorism instruments.

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2.3.1. LONE-WOLF TERRORISM

Why in news?

Experts have raised concerns about growing threat of **lone-wolf terrorism** in India.

About Lone wolf terrorism

- **Definition**: Violent terror attacks by **extremist individuals** acting upon their **radicalized beliefs**.
- **Motive**: Their actions are either **inspired or influenced** by a specific terrorist organisation and ideology or operate within a **particular social atmosphere**.
- **Activities**: They are **different in nature from organized or networked** terror attacks like the 9/11 attack in US or 26/11 Mumbai terror attack.
  - Ranging from **threatening and intimidating** people to indiscriminate **shootings, vehicle ramming, stabbing and suicide bombings**, lone wolf terror attacks have become a grave threat.

Challenges associated with lone wolf terrorism

- **Unpredictable nature:** As a result, counter-terrorism agencies, police and intelligence organizations have **found it challenging** to tackle.
- **Use of internet**: Internet provides lone wolves with the **anonymity to communicate**.
- **Easy to carry out**: Such attacks are **becoming logistically simple**.
  - Lone wolves inspire **copycat behaviour**, become **role models** for other alienated youngsters, and **often invite band wagon attacks.**

Measures required to counter lone wolf terrorism

- **Diverse Policy measures** addressing the different nuances of terrorism.
- **Capacity building measures:** Strong **technical intelligence** capacities like **social media and cyberspace monitoring, Contingency plans** by the intelligence and counter-terrorism structures,
- **De-radicalisation and counter-radicalisation strategies:** Regular revision and tightening of laws, community engagement, professional counsellors and psychologists.
- **Strengthening international cooperation:** Strengthen **counter measures for finance of terrorism.**

What makes India vulnerable to lone wolf attacks?

- **Possibility of Pakistan** using it as a tool to advance its state-sponsored terrorism against India.
- Groups like IS visualise India's **democratic, secular and open social fabric** as a threat to their concept of an **Islamic Caliphate.**
- Heavy **concentration** of people in public areas offers a large number of **potential targets.**
- A **fast growing population,** especially youth with **access to mass media and social media,** opens limitless avenues of unrestrained radical propaganda.

Role of technology in amplifying terrorism

- **Social media:** Estimates suggests that in 2016, social media platforms played a **role in 90 per cent of radicalization cases**
- **3D Printing:** Use of online manuals and a 3D printer to print parts of gun
- **Autonomous vehicles:** Turning vehicles into a remote-controlled weapon
- **Drones:** Using drones for intelligence, surveillance, and reconnaissance missions and conducting attacks with drones carrying explosives
- **Artificial Intelligence (AI):** Will enhance cyberattacks and digital disinformation campaigns and can target vulnerable youth in many new ways
- **The Metaverse:** Extremists will be able to **do preemptive reconnaissance missions in virtual world** before engaging in the physical attacks

Steps taken by India to deal with lone wolf terrorism

- **Difficult to obtain weapons:** Unlike in US where **sophisticated weapons can be easily bought** by ordinary citizens, gaining access to such weaponry in India is **difficult** as is **ability to obtain licenses**.
- State-supervised **counselling initiatives** like Kerala's Operation-Pigeon.

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2.3.2. BIO-TERRORISM

Why in news?

With biological warfare being recognised as a looming threat to the world, Indo-US joint exercise TARKASH has for the first time included response to Biological terror attacks.

About bio-terrorism

- **What: Bioterrorism is a planned and deliberate use of pathogenic strains of microorganisms** such as bacteria, viruses to spread life-threatening diseases on a mass scale in order to devastate the population of an area.
- **Execution**: These agents are **delivered by Scud missiles, motor vehicles with spray, hand pump sprayers, book or letter, guns, remote control, robots** etc.

Bioterrorism Agents

Category A

High-priority agents that pose a risk to national security because they can be easily disseminated or transmitted from person to person, result in high mortality rates. Eg. Anthrax by Bacillus anthracis.

Category B

The second highest priority agents include brucellosis (Brucella species), glanders (Burkholderia mollei) etc.

Category C

This include emerging pathogens that could be engineered for mass dissemination in the future. Eg. Emerging infectious diseases such as Nipah virus and Hanta virus etc.

Need for Bio terrorism law in India

- **India's high vulnerability**: High population density, inadequate medical facilities, subtropical climatic conditions, etc. make India extremely susceptible for such attacks.
  - It is often difficult to monitor the origin of such diseases/attacks.
- **Control its impact on society**: Biologic weapons can cause large-scale mortality and morbidity in large population and create civil disruption.
- **To Control Access: Advancement in biotechnology and nanotechnology** has created an easy accessibility to more sophisticated biologic agents apart from the conventional bacteria, viruses and toxins.

Indian measures to counter Bio-terrorism

- Epidemic Diseases Act of 1897
- Model instrument proposed by NDMA calls for participation of both public and private sector in handling Biological disaster
- Integrated Disease Surveillance Project

International measures to counter Bio-terrorism

- Biological Weapons Convention
- INTERPOL Bioterrorism Prevention Unit
- Cartagena Protocol on Biosafety

Mechanism to counter bio-terrorism

- **Deterrence by law:** There is a need to introduce Public Health Bill on the line of **Public Health (Prevention, Control and Management of epidemics, bio-terrorism and disasters) Bill-2017**, which defined terms epidemic, isolation, quarantine and social distancing, but lapsed.
- **Prevention**: Thoroughly examining the risk of bioterror attacks, preparation and training of law enforcement personnel, and the related legal and political framework for enhanced intelligence.
- **Surveillance and assessment** by recognizing patterns of non-specific syndromes and assessing them, that could indicate the early manifestations of a biological warfare attack.
- **Laboratory investigation:** Need to develop both laboratory- and institution-wide response plans for diagnosis and characterization of the biological organism.
- **Medical management**: It should include preventive, promotive, and curative services like Chemoprevention to prevent the spread of the disease.
- **General public sensitization** through training and education, warning network at hospitals and public health agencies etc.

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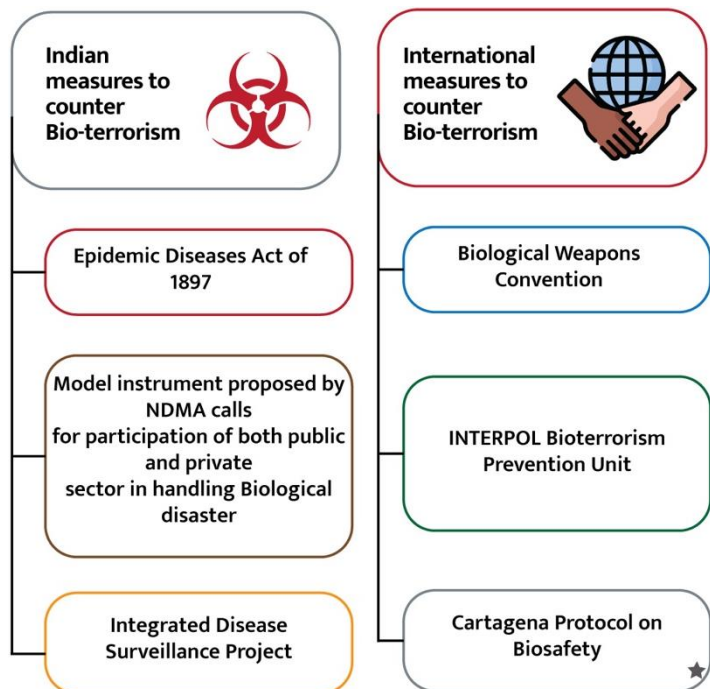
2.3.3. UNLAWFUL ACTIVITIES PREVENTION ACT (UAPA), 1967

Why in News?

The Supreme Court (SC) declared that **mere membership of a banned organisation** will be a crime under **Unlawful Activities (Prevention) Act (UAPA), 1967.**

More about news

- **Overruling the 2011 judgments:** The SC said that a person who **"is or continues to be"** even a **"mere member"** of a banned organization is criminally **liable under UAPA** for acting against the **sovereignty and integrity of India.**
    - In 2011, in 3 separate judgments {**State of Kerala vs. Raneef; Arup Bhuyan vs. State of Assam; and Sri Indra Das vs. State of Assam**} SC had ruled that mere membership of a banned organization is not sufficient to constitute an offence, **unless it is accompanied with some overt violence.**
- **Restored the doctrine of "guilt by association":** Doctrine of "guilt by association" is defined as guilt ascribed to someone not because of any evidence, but because of their association with an offender who is guilty. It is also known as the **association fallacy.**
- **Affirmed the constitutional validity of Section 10(a) (i) of UAPA, 1967:** This section makes **continued membership of a banned organization a crime** punishable with a jail **term up to two years and such person may also be liable to fine.**
    - The SC held that "Section 10(a)(i) is absolutely **in consonance with 19(1)(a) and 19(2) of the constitution** and thus in consonance with the objectives of the UAPA.
    - The SC also observed that unlike the US, the **right to freedom of speech in India is not an absolute right,** it is **subject to reasonable restrictions.**
- **Declaration of an association as unlawful:** Under, **Section 3 of UAPA,** if the Central Government is of opinion that **any association is, or has become, an unlawful association,** it may, by notification in the Official Gazette, **declare such association to be unlawful.**
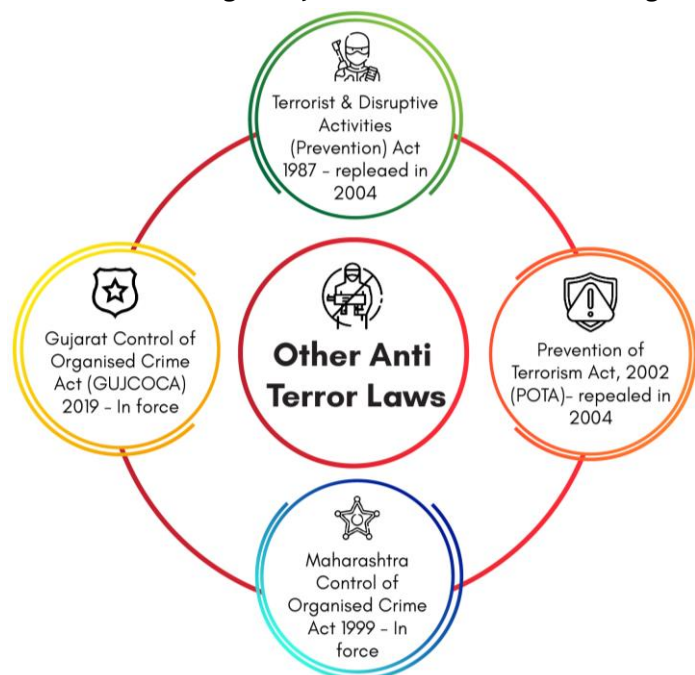
About Unlawful Activities (Prevention) Act (UAPA), 1967

- It was enacted to provide for more effective prevention of certain unlawful activities of individuals and associations, and for **dealing with terrorist activities, and related matters.**
- **Act defines Unlawful activity:** Any action taken by an individual or association that leads to cession of a part of the territory of India, questions the sovereignty of India or disrupts the integrity of India etc.

Other Anti Terror Laws

- Terrorist & Disruptive Activities (Prevention) Act 1987 – repleaed in 2004
- Prevention of Terrorism Act, 2002 (POTA)– repealed in 2004
- Maharashtra Control of Organised Crime Act 1999 – In force
- Gujarat Control of Organised Crime Act (GUJCOCA) 2019 - In force

Amendments to UAPA

- **Amendments in 2004**: Criminalized indirectly supporting a terrorist organisation by raising of funds for a terrorist act or membership of a terrorist organization etc.
- **Amendments in 2008**: Broadened the scope of the **provision of "funds"** to ensure a wider coverage of the financing of terrorism offences.
- **Amendments in 2012**: Expanded the definition of "terrorist act" to include offences that threaten the **country's economic security.**
- **Amendments in 2019:**
    - Government is empowered to **designate individuals as terrorists.** Earlier, only organisations could be designated as terrorist organisations.
    - If investigation is conducted by an officer of the NIA, **approval of Director General of NIA** would be required for seizure of property connected with terrorism. (Earlier, approval of Director General of Police was required).
    - **Empowered officers of NIA**, of rank of Inspector or above, to investigate cases (Earlier, officers of ranks DSP and above were empowered to investigate cases).
    - Added **International Convention for Suppression of Acts of Nuclear Terrorism (2005)** to the Schedule under the Act.

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- o **Powers with the government:**
  - ✓ Government can impose **all-India bans on associations** which are declared 'unlawful' under the Act.
  - ✓ **Both Indian nationals and foreign nationals** can be charged under the Act. Also, the Act holds offenders accountable in the same manner if **crime is committed on foreign land outside India.**
- o **Investigating powers**: Cases can be investigated by both State police and National Investigation Agency (NIA).
- o **Appeal mechanism**: It **provides for tribunal** to review or to hear an appeal against the ban.

Issues with UAPA

- **Broad definition of terrorist act:** No objective criterion has been laid for categorization of an individual as a terrorist.
  - o Unclear definition of terrorist **leads to stigmatisation of those inappropriately labelled as "terrorists".** Mislabeling dilutes efforts to combat actual terrorism.
- **Violation of federalism principle:** NIA's "suo motu power" (through the Central government/Ministry of Home Affairs) to transfer investigation from the State police is seen as **a violation to federalism.**
- **Low conviction rate under UAPA:** Based on the **NCRB** annual reports during 2015-2020, only **3.6% of cases registered UAPA cases resulted in conviction.**
- **Issues with recent judgement:** It is silent on procedure to find who is member of such banned organisations.

Way Forward

- **Safeguards against misuse**: The different agencies of state should ensure that **due process of law** is applied while dealing with various cases under this legislation.
- **Need for a central agency for overseeing evidence collection**: So as to aid the investigation process, especially when cases need to connect dots across the borders.
- **Police reforms:** Which should include sensitization in terms of **community, religion,** and should work towards decreasing the **massive arbitrary powers** that the police hold.
- **Compensations for innocent individuals:** Compensation should be provided to those individuals who were detained under the UAPA for a significant amount of time, **and proven innocent.**
- **Protection of political dissent:** As political dissent is a fundamental right, legislations relating to protection of political dissent should be passed, in order to properly define what constitute political dissent.

2.4 EMERGING DIMENSIONS OF WARFARE

2.4.1 HYBRID WARFARE

HYBRID WARFARE AT A GLANCE

About Hybrid Warfare

- Hybrid warfare entails an **interplay or fusion of conventional as well as unconventional instruments** of power and tools of subversion.
- These instruments or tools are **blended in a synchronised manner to exploit the vulnerabilities.**
  - ▷ It is an emerging global challenge amid the Russia-Ukraine War and has given rise to the need to develop national capabilities.

Key Domains of Hybrid Warfare

- **Political warfare:** Interference in the political activities of the countries to their detriment.
- **Technological warfare:** Using technological capabilities to inflict harm on entities.
- **Military Warfare:** Action such as use of improvised explosive, guerrilla warfare, etc.
- **Economic Warfare:** To weaken the economy by disrupting the supply chains, introducing counterfeit currency, etc.
- **Social warfare:** Exploiting already prevalent social issues and vulnerabilities via propaganda ,etc.

Reasons for growth of Hybrid warfare

- Hybrid Warfare domains are usually overlooked in **traditional threat assessments.**
- Target areas are **highly vulnerable where maximum damage can be caused.**
- Involves **state or non-state actors or both indulging** in different roles in a synchronized manner.
- **Scale and target of the attack** can be precisely controlled by stating below certain detection and response threshold.
- Hybrid Warfare campaign **may not be discovered** until it is already well underway.

Associated challenges for India

- **Encourages new forms of terrorism** such as **Lone wolf attacks, hybrid militants,** creation of **sleeper cell** that are difficult to detect.
- **Cyber-attacks:**
  - ▷ Privacy and personal data the**ft**
  - ▷ Insecure framework of **mobile apps**
  - ▷ **Cyber espionage** issue with China and Pakistan
- **Interference in electoral processes** through media and social media campaign.
- **Using disinformation** and **fake news** to create a **parallel reality** and fuel **social fragmentation.**
- **Financial influences** through investments like in unfavourable energy-supply deals.

Ways to combat Hybrid Warfare

- **Systematic and synchronized real time response:**
  - ▷ Institutional mechanism to ensure **nimble response.**
  - ▷ **Effective coordination** between different response domains.
  - ▷ Use of intelligence tools like **Real Time situational Awareness (RTSA).**
- **Institutional measures:**
  - ▷ **Conduct a self-assessment** of critical functions and vulnerabilities.
  - ▷ Enhance traditional **threat assessment activity.**
- **Strengthening the safety of digital ecosystem** to make it more secure and robust.
- **Strengthening our democracy from within:**
  - ▷ **Inclusion of Civil Society institution** to counter such threats.
  - ▷ Investing in journalism to **raise media literacy.**
- **Developing international cooperation:**
  - ▷ Developing clear **definitions and protocols.**
  - ▷ Institutionalizing **intervention stages and methods.**
  - ▷ **Mainstreaming and integrating the issue** of hybrid warfare in the prevalent security dialogues

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2.4.2. SPACE WEAPONISATION

SPACE WEAPONIZATION AT A GLANCE

About Space Weaponization

⊕ It includes **placing weapons in outer space or on heavenly bodies** as well as creating weapons that will destroy targets in space.

⊕ It **is different from the militarization of space** that assists armies on the conventional battlefield.

Reasons behind Space Weaponization

⊕ **Lack of faith in the present missile defence system** to stall an incoming ICBM (Intercontinental ballistic missile) armed with a nuclear warhead.

⊕ **To preserve own satellites in space** against other Anti-Satellite (ASAT) weapons.

⊕ It would give **supremacy to a country in the conduct of war over the land, sea and air.**

⊕ **Insufficient existing Treaties like OST.**

Implications of space weaponization

⊕ **Fear of War:** It would create an environment of uncertainty, suspicion and aggressive deployment between nations, which may lead to war.

⊕ **Against commercial and scientific interests:** It would put at risk the entire range of commercial satellites as well as those involved in scientific explorations.

⊕ **Rise in space debris:** This can even trigger Kesseler Syndrome.

⊕ Earth based **critical infrastructure will be impacted.**

⊕ **Peaceful exploration** of outer space will be impacted.

⊕ **Narrowing already scarce radio frequencies** and orbital slots.

Steps taken to prevent Weaponization of Space

Global Efforts

⊕ **Outer Space Treaty:** It emphasizes that exploration of outer space should be for peaceful purposes and claims that **one nation cannot claim national sovereignty in outer space.**

⊕ **Prevention of an Outer Space Arms Race:** for using space for peaceful purposes, avoiding an arms race etc. **Partial Test Ban Treaty (1963)**

⊕ **Others initiatives:**
  ▷ Sino-Russian proposal of **Prevention of Placement of Weapons in Outer Space and Threat (PPWT)**
  ▷ European Space Agency's **'Code'**
  ▷ US' **Artemis Accords now India is also its member.**

Steps taken by India

⊕ Mission Def-Space to develop innovative solutions for defense requirements in the space domain.

⊕ **Mission Shakti:** Anti Satellite(ASAT) Mission

⊕ **Defence Space Agency:** Tri Agency of Indian Armed Forces

⊕ **Defence Space Research Agency:** Creating space warfare weapons system and technologies.

⊕ **Navigation with Indian Constellation (NaVIC)**

⊕ **IndSpaceEx:** Simulated Space Warfare Exercise

Way forward

⊕ **Need of Legal framework** to address momentum towards the weaponization of outer space.

⊕ **Legitimate access for all States to outer space** and transfer of technology and cooperation among nations should be promoted.

⊕ **Transparency and confidence building measures** can help maintain space security.

⊕ Treating space as **Global Common** like Antarctica.

⊕ Developing **dual-use platforms** for deterrence purpose.

⊕ Secure satellite-assisted communications by **utilizing Quantum Key Distribution (QKD) technology.**

⊕ **Strengthen Space-based Intelligence,** Surveillance and Reconnaissance (ISR)

⊕ **For India:** Need for well defined national space and defence space strategy, Pass resolution on draft space activities bill.

3. SECURITY CHALLENGES AND THEIR MANAGEMENT IN BORDER AREAS

3.1. SECURITY ISSUES IN BORDER AREAS

BORDER SECURITY AT A GLANCE

Challenges along the border   **Initiatives taken**
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INDIA-CHINA

- **Border disputes** at Aksai Chin, Arunachal Pradesh, Doklam etc. with sporadic aggression.
- **Large scale smuggling** of Chinese electronic and other consumer goods
- **Inadequate infrastructure** due to difficult terrain.
- **Multiple forces** (for e.g.- ITBP, Assam rifles, Special frontier force) creating coordination issues.
- **Water-sharing issues**

- **Creating infrastructure** to cut down time for troop movement
- **Development of North East Region**
- **Army infrastructure projects** within 100 Km of LAC have been exempted from forest clearance.
- **Empowering Border Roads Organisation** to develop border road on priority.
- **Vibrant village programme** for border village development.
- **Working mechanism for consultation and coordination**

INDIA-PAKISTAN

- **Border dispute** at Sir Creek and Kashmir
- **River water sharing issue** at Indus river
- **Infiltration and Cross-border terrorism**
- **Diverse terrain** including desert, marshes, snowcapped mountain and plains.
- **Time & cost overruns** in infrastructure projects
- **Other issues** include drug smuggling, arms trafficking etc.

- **Implementation of Comprehensive Management System (CIBMS)** to establish an integrated security system.
- **Deploying National Security Guard (NSG) commandos in J&K**
- Demand of amendment of **Indus water treaty (1960).**

INDIA-NEPAL

- **Increasing Extremism and anti-India activities**
- **Fear of spread of Maoist insurgency** due to links of Nepal's Maoists in India
- **Easy escape & illegal activities** such as smuggling, fake Indian currency etc.
- **Land grabbing** on each side of the border.
- **Chinese investment** in core sector of Nepal.

- **Establishment of a new intelligence section in SSB** to ensure better operational efficiency
- **Establishment of Border District Coordination Committee**
- **Development aid to Nepal**
- **Joint Working Group (JWG) on border management.**
- **Fatehpur Border Out Post (BOP).**

INDIA-BHUTAN

- **Insurgency**
- **Smuggling of goods** such as Bhutanese cannabis.
- **Free movement of people and vehicle**

- **India-Bhutan Group** on Border Management and Security. ⊠
- **Cooperation with Bhutan's army** to prevent sanctuary to insurgents.
- **Establishing new border posts in Sikkim.**
- **General approval for the diversion of forest land** for major infrastructure projects.

INDIA-MYANMAR

- **Free movement Regime**
- **Drug trafficking** due to proximity to golden triangle.
- **No physical barrier along the border.**
- **Poor Infrastructural facilities**

- Cabinet recently **proposed to set up 13 new Integrated Check Posts (ICPs)** to encourage India's engagement with SAARC countries along with Thailand and Myanmar.
- **Free Movement Regime (FMR)** within 16kms on both sides of the border.

INDIA-BANGLADESH

- **Water disputes** with regard to Teesta river, Barak river
- **Illegal migration**
- **Inadequate border fencing**
- **Smuggling of goods** like Jamdani sarees

- **India Bangladesh Land Boundary Agreement, 2015**
- **Establishment of Border Protection Grid (BPG)**
- **Installation of Border surveillance devices** such as drones
- **Raising awareness among the locals** regarding crime prevention.
- **Joint River Commission** for solving river water dispute.
- **Comprehensive Integrated Border Management System (CIBMS)** for border.

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3.1.1. ROLE OF COMMUNITY IN BORDER MANAGEMENT

Why in news?

Prime Minister recently called **every village at the border as the first village** of the country and the people residing near the border as **country's strong guard,** thus highlighting role of **local population in border management.**

Importance of Community engagement in border management

- **To ensure a secure and safe border: It would help enhancing security and development of borders** besides providing a **sense of belonging** to these people.
- **Improved situational awareness:** Border communities hold **vast amounts of intimate knowledge** on the area, characteristics of the terrain etc.
- **Enhanced surveillance: Indian Navy and Indian Coast Guard (ICG)** regularly conduct Community Interaction Programmes (CIPs) for fishermen in coastal villages wherein they are sensitized about safety and security issues.
- **To uphold human rights:** Community involvement helps in ensuring that **security responses do not compromise human rights or inhibit unduly** the **free movement** of goods and people.
- **Utilisation of community mechanisms:** Improved interaction with local populations would allow gradual development of a new **community-based policing approach** to border management.

> **Initiatives taken for border area development**
> - **Vibrant Villages Programme (VVP):** The programme envisages **coverage of border villages** on Northern border having **sparse population, limited connectivity and infrastructure,** which often get left out from the development gains.
>   - Recently, Union Home Minister launched **VVP in Kibithoo village in Anjaw district in Arunachal Pradesh.**
> - **Border Area Development Programme (BADP):** Implemented through the State Governments/UT Administrations in habitations **located within 0-10 kms** from the first habitation at international border in 16 States and 2 UTs.
> - **Border Infrastructure and Management (BIM) Scheme:** BIM aims to strengthen the border infrastructure for improving border **management, policing and guarding the borders.**
> - **Enhanced budgetary allocation for BRO:** Government of India in its Union Budget for FY 2022-23 has increased the **capital outlay for the Border Roads Organisation (BRO),** by a record 40 percent, as compared to FY 2021-22.

Challenges in engaging local communities in border management

- **Inadequate state capacity:**
  - Poor or non-existent **border infrastructure;**
  - **Basic equipment** for transport, communications, and security control is **missing, or cannot be maintained;**
  - Law enforcement personnel are **badly paid and inadequately trained etc.**
- **Alienation of border communities:** India's border population in general quite often feel **dissatisfied, alienated and show hostile attitude** towards border security forces.
  - For instance, prevention of smuggling activities leads to a perceived feeling that a**uthorities unnecessarily interfere in the means of livelihood** of local populace.
- **Border Fencing and Connected Problems:** The construction of the fencing has also **generated many differences** between the local villagers and border authorities.
- **Agitation approach:** Local population, because of various reasons including hidden economic benefits and social pressure **comes in support of criminals with vested interests.**
- **Lacunae in mechanisms:** In many cases, cooperation between border communities and authorities already exists, but often in **an ad hoc and informal way.** This makes them **unreliable and slow.**

Measures to integrate local communities in border management

- **Taking into account local characteristics: Frameworks based on the local characteristics** can be established to create a **climate of trust** between the authorities and the communities.
- **Improving understanding of border community** by providing adequate security, improving **basic amenities and living conditions** and assisting in **generating employment opportunities.**
- **Political will:** To **replace the concept of 'border guarding' by 'border management'** at ground level, the responsibility has to be shared by the **Central as well as State Governments.**
- **Improving the Community Relations ability of border personnel:**
  - Systematic reappraisal of the **grievance redressal mechanism** against the force personnel**.**

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o   Learn **local language**, respect women folk, elderly persons and respect **local customs.**
o   Carrying out civic action programmes, sports activities, **judicious utilisation** of border population grant, etc.

3.1.2. GEOSPATIAL DATA AND NATIONAL SECURITY

GEOSPATIAL DATA AND NATIONAL SECURITY AT A GLANCE

About Geospatial Data

⊕ **Geospatial data** is information that describes objects, events or other features with a location on or near the surface of the earth.
⊕ **Captured** using photogrammetry, LIDAR, RADAR, Satellite based remote sensing, etc.
⊕ **Combines 3 types of information:**
  ➢ **Location information**-usually coordinates on the Earth.
  ➢ **Attribute information**-characteristic of the objects, event, etc.
  ➢ **Temporal information**-time or life span at which the location and attribute exist.

Significance of Geospatial Data in National Security of India

⊕ **Enhancing the precision and reliability** of intelligence, surveillance, and reconnaissance activities.
⊕ **Advancing situational awareness** for quick and secure decision making.
⊕ **Supporting military operation** in logistics management, developing tactical plans,etc.
⊕ **Tackling new and emerging** threats like cyber –attacks, hybrid warfare, etc.
⊕ **Modernizing security operation e.g.,** Crime prediction and precision guided munitions.
⊕ **Securing the Indian Ocean Region** by improving nation Maritime Domain Awareness capabilities.
⊕ **Build progressive** defence & security partnership e.g. BECA agreement between India and USA.

Steps taken by India to develop its Geospatial Capabilities

⊕ **Policy framework: National Geospatial Policy, 2022** to strengthen the Geospatial sector, **National map policy to** regulate geographic Information.
⊕ Building a **constellation of Earth Observation Satellites.**
⊕ **Establishment of dedicated institutions** like Indian Institute of Remote Sensing.
⊕ **National Spatial Data Infrastructure like** Bharatmaps platform and Bhuvan portal.
⊕ **India's indigenous navigation system "NAVIC"** (Navigation with Indian Constellation).
⊕ **Geospatial data gathering as a part of schemes in initiatives** like PM Gati Shakti and SVAMITVA.

Challenges in utilizing Geospatial Data in National Security of India

⊕ **Lack of access to comprehensive and accurate data.**
⊕ **Research outputs are usually stand-alone** and lack unanimity.
⊕ **Shortage of trained human resources** in government agencies.
⊕ **Financial constraints** in technological adoption and advancement in geospatial analytics.
⊕ **Ensuring secure storage of geospatial data,** given India's vulnerable digital ecosystem.
⊕ **Coordination issues** due to lack of clarity on data sharing with lower levels of governance.
⊕ **Lack of indigenous** software and hardware technology.
⊕ **Privacy concern** due to lack of locational privacy and confidentiality in India.

Way Forward

⊕ **Bringing cohesiveness to the Geospatial sector** by enhancing collaboration between government, academia, and industry.
⊕ **Awareness and capability building among decision makers and users.**
⊕ **Strengthening the security of digital infrastructure.**
⊕ **Promote the development of indigenous software and hardware.**
⊕ **Promoting education in specialised fields** like Geo-Informatics, big data analytics etc.
⊕ **Enhancing coordination among agencies** like state police, defence, and intelligence bureau.
⊕ **Creation of a dedicated department** for better utilization of geospatial data.
⊕ Ensuring the **privacy of citizens.**

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3.2. MARITIME SECURITY

MARITIME SECURITY AT A GLANCE

About Maritime Security

- Maritime Security classifies **issues in the maritime domain** comprising national security, marine environment, economic development, and human security.
- India recently chaired **UNSC high level open debate on** "**Enhancing Maritime Security: A case for International Cooperation**".

Significance of Maritime security for India

- Plays an important part in India's **economic development** with a direct bearing on areas like trade, fish production and strategic mineral exploration.
- Fulfilling **India's geostrategic interest** in the Indian Ocean Region (IOR) such as countering Chinese influence, becoming a net security provider and executing HADR operations.
- Dealing with **climate induced crises** such as rising sea level and environmental degradation due to developmental activities.
- **Coastal area security** preventing incident like 26/11 Mumbai terror attack.

Challenges to Maritime Security

- **Piracy and Maritime Terrorism** in the Indian Ocean region.
- **Transactional organized crimes** like smuggling and trafficking.
- **Maritime Cyber Threats** targeting maritime infrastructure, vessels, or maritime supply chains.
- **Protecting the marine environment and addressing environmental challenges**, such as oil spills, pollution, and climate change.
- **Illegal, unreported, and unregulated (IUU) fishing** activities pose economic challenges.
- **Maritime Border Disputes** with neighboring countries, such as Pakistan, Sri Lanka.
- **Maritime Infrastructure Development** require substantial investments: **Lackadaisical approach of state governments** resulting in slow pace of coastal infrastructure development.
- **Issues in Security Framework**-Fragmented approach and overlapping jurisdiction.
- **Rising Influence of USA and China** like Chinese dual-use facilities in Myanmar and Sri Lanka.

Steps Taken By India

- India has become a **Nuclear Triad country** by inducting **Nuclear (SSBN) INS Arihant and Aircraft carrier 'INS Vikrant'.**
- **Regional cooperation** through initiatives like Security and Growth for All in the Region **(SAGAR),** Indian Ocean Rim Association **(IORA), Indian Ocean Naval Symposium** etc.
- Establishment of an **International Fusion Centre (IFC)** for Maritime Domain Awareness on safety and security issues.
- **Coastal Security Scheme (CSS) by the MHA to strengthen the patrolling and surveillance.**
- **Utilizing soft power** like **Project Mausam to re-connect** with littoral countries.
- **Promoting Sustainability** such as 'Blue economy' initiative.
- **Infrastructure development** initiatives like **Sagarmala.**
- **Humanitarian Assistance and Disaster Relief (HADR)** initiatives like Vaccine Maitri.
- **International cooperation** like cooperation with Bahrain-based **Combined Maritime Forces (CMF)**

Way Forward

- **Five-point framework for maritime security** by India highlighting - Free maritime trade, Settlement of maritime disputes, Responsible maritime connectivity, Combat maritime threats, Preserve the maritime environment-**must be implemented** in letter and spirit.
- **Cooperation among countries** by implementing the international treaties like UNCLOS.
- Emphasising on leveraging technology for **modernisation on Navy.**
- **Confidence building measures** with island and littoral nations.

3.2.1. ANTI-MARITIME PIRACY ACT

Why in News?

Recently Anti-Maritime Piracy Bill, 2019 was given assent by the President.

Key Highlights of the Act

- **Definition of Piracy:** The Act defines piracy as "**any illegal act of violence or detention or any act of depredation committed for private ends by any person or by the crew or any passenger of a private ship and directed on the high seas against another ship or any person or property on board such ship**".
  - Inciting or intentionally facilitating such acts and voluntary participation in the operations of a pirate ship or aircraft also amounts to an act of Piracy.
- **Applicable regions:** The Act will apply to high seas which includes EEZ and all waters beyond the jurisdiction of any other state.
- **Piracy an Extraditable Offence:** The accused can be transferred to any country for prosecution with which India has signed an extradition treaty.
- **Designated Courts: Central Government, in consultation with the Chief Justice of the concerned High Court,** will specify certain courts as Designated Courts for speedy trial of offences of piracy.
- **Authorized Personnel:** Only authorized personnel are allowed to carry out arrest and seizure of the Pirate ships.
- **Disposing the seized property:** Ship or property seized will be disposed of only by a Court order.

Concerns associated with the Act

- **Death Penalty: The Provision of death penalty,** as a punishment for an act or attempt of piracy, is against the Supreme Court's directive of rarest of rare case, as it violates Article 14 and 21.
- **Lack of Clarity:** There is a lack of clarity over what acts would amount to helping in a piracy.
- **Extradition difficulties-** The Act provides for **presumption of guilt of accused in case certain conditions are satisfied.**
  - If accused has to be extradited from a third country, **that country will not**

PIRACY IN THE 21ST CENTURY

Horn of Africa 30% of Attacks
Gulf of Guinea 43% of Attacks
Strait of Malacca 19% of Attacks

Very Low | Low | Medium | High | Very High

"PIRATES ATTACK RISK AT SEA"
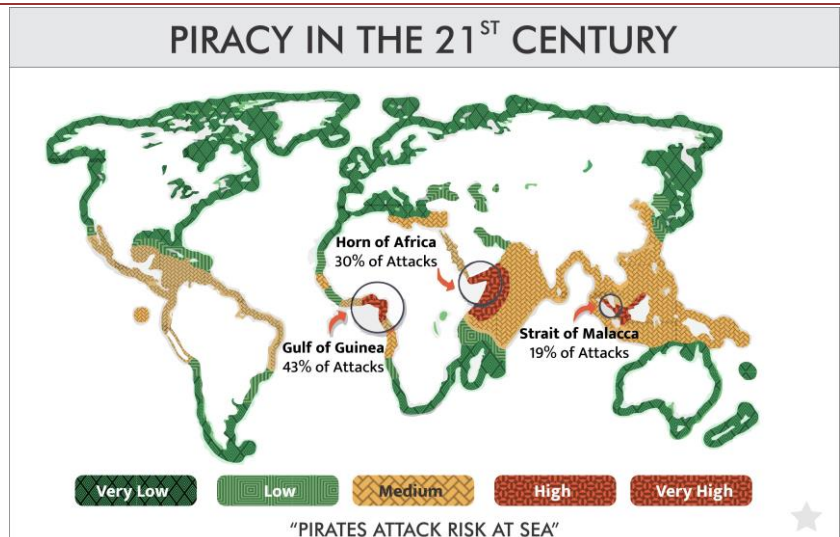
Measures taken to deal with Piracy at Sea

- Since **2008, naval escort is provided by Indian naval ships** to vessels of Indian origin and other countries in the Gulf of Aden.
- An **Inter-Ministerial Group (IMGO) has been set up by the Government** under the Ministry of Shipping to deal with **the hostage situation** arising out of hijacking at sea of merchant vessels with Indian crew.
- Government has constituted **a Committee of Secretaries on Anti-Piracy and Hijacking at sea (COSAPH)** under the Chairmanship of Cabinet Secretary
- Contingency Plan for **dealing with piracy and hijacking of merchant ships.**
- The Government has also **approved a "National Maritime Domain Awareness" (NMDA) project.**
- The Project will **subsume the existing naval Information Management and Analysis Centre (IMAC) at Gurugram,** which takes feeds from multiple sources ranging from coastal radars to satellites.
- It will function as **an integrated intelligence grid to detect and thwart threats emanating from sea in real-time** and is expected to provide 'actionable intelligence' on maritime threats.

Significance of Anti-piracy Act
- India being a **signatory to the United Nations Convention on Laws of Seas (UNCLOS),** is expected to cooperate in controlling the menace of Piracy all around the world.
- **Growing menace of Piracy along the Gulf of Aden,** which is the major gateway connecting Asia, Europe and East coast of Africa.
- **India does not have a specific law** or legal provision in Indian Penal Code or Criminal Procedure Code for piracy.
- **Need to provide maritime security** as more than 90 percent of India's trade is through sea routes and more than 80 percentage of our hydrocarbon requirement is ferried through sea route.

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extradite an accused who is already proven to be guilty till the time he doesn't prove himself to be innocent.

- **Cyber Attacks**- The Act is **silent on the potential cyber-attacks on the vessels/ships.**

Conclusion

Having a piracy free Indian Ocean region is essential for the growth of maritime trade in the region and this will also help India to establish its regional supremacy.

3.2.2. STRATEGIC DEVELOPMENT OF ANDAMAN AND NICOBAR ISLANDS (ANI)

Why in news?

In the last few years, the **Andaman and Nicobar Islands (ANI)** have gained an important position in **India's foreign policy.**

Strategic importance of ANI

- **Securing Sea Lines of Communications (SLOC)** by creating a series of chokepoints: **Preparis Channel** in the north, the **Ten Degree Channel** and the **Six Degree Channel** (used by vessels passing through Malacca Strait) to the south.
- **Countering increasing Chinese presence:** By gaining ground at critical chokepoints, China could use them to **its benefit** during any **future conflict or a standoff with India**.
  - o ANI's strategic location allows India to pursue **sea denial warfare** strategy to dictate terms in littoral space.
- **Net security provider:** India can also leverage the potential of these islands to protect its own interests and burnish its image as the 'net security provider' in the region.

STRATEGIC LOCATION OF ANDAMAN AND NICOBAR ISLANDS

BANGLADESH | MYANMAR | LAOS

INDIA

ANDAMAN & NICOBAR ISLAND

THAILAND

Bay of Bengal

VIETNAM

Challenges in ANI's strategic development

Wrong perception in region
> Turning ANI into a strategic-MILITARY hub **might not sit well with Southeast Asian countries,** who perceive India to be benevolent and benign power.

Slow Pace of Development
> **Internet connectivity, Road building,** airstrip construction, and even the building of jetties has been **slow or non-existent.**

Institutional Reluctance
> Towards allowing port visits to the ANI by **foreign navies in general and** the **US Navy in particular.**

Ecological Fragility
> Establishing a credible Aerial and Naval presence in this ecologically fragile and **ethnographically extremely sensitive region presents complex challenges.**

- **Connection with Southeast Asia:** Containing about 30 percent of India's Exclusive Economic Zone (EEZ), ANI connects South Asia with Southeast Asia.
- **Important fulcrum of Indo-pacific:** The ANI are at the **intersection of the Indian Ocean and the South China Sea,** and further to the Pacific Ocean.

Developmental initiatives taken in ANI

- **Maritime hub:** In 2015, the government announced a plan to develop the islands into the country's first maritime hub to develop facilities, such as telecommunications, electricity, and water etc.

- **Declining protectionism:** In 2019, a new Island Coastal Regulation Zone Notification was promulgated, allowing land reclamation for ports, harbors and jetties. Allowing such projects will help in **creating strategic infrastructure.**
- **Maritime exercises:** Indian Navy conducts **joint maritime exercises** such as the Singapore India Maritime Bilateral Exercise, MILAN and Coordinated Patrols with Myanmar, Thailand and Indonesia.
- **Expanding naval presence:** Following the Ladakh stand-off with China in May 2020, India is expediting plans for **stationing additional forces, warships, aircraft, and missile batteries** in the ANI.
- **Others:**
  - The **Chennai-Andaman and Nicobar** undersea internet cable was inaugurated to provide **high-speed internet connection** to seven remote islands of the ANI chain.
  - In 2018, India and Indonesia set up a special task force to **enhance connectivity between the ANI and the port of Sabang** in Aceh to promote **trade, tourism and people-to-people contacts.**

Road Ahead

- **Encouraging migration:** There is a need to consider encouraging migration from the mainland and open up some of the strategically located uninhabited islands to tourism.
- **Strategic infrastructure:** In a bid to emphasize its regional pre-eminence, the Indian Navy in recent times has raised the tempo of naval operations in the Bay of Bengal highlighting India's combat prowess.
- **Cooperation with strategic partners:** Port visits by US, Japan, Australia, France or the UK can lead to further graded cooperation in all the dimensions.
- **Engagement with ASEAN:** There lies an opportunity to make ANI an important element of "Act East Policy" of engaging with countries in the region east of India.

4. SECURITY FORCES

4.1. SECURITY FORCES IN INDIA

SECURITY FORCES AND AGENCIES IN INDIA AT A GLANCE

Structure of Security Forces in India

- **Under Defence Ministry:** Army, Air Force, Navy, Indian Coast Guard(ICG)
- **Under Home Ministry:**
  - o **Central Armed Police Forces (CAPFs)**
    - ➢ Border Security Force (BSF),
    - ➢ Central Industrial Security Force (CISF),
    - ➢ Central Reserve Police Force (CRPF),
    - ➢ Indo-Tibetan Border Police (ITBP),
    - ➢ Sashastra Seema Bal (SSB)
    - ➢ Assam Rifles (AR)
  - o **National Security Guard (NSG)**
  - o **National Investigation Agency(NIA)**
  - o **Special Protection Group (SPG)**

Challenges of Security Forces

- **Bureaucratisation** of Central Armed Police Forces.
- High **vacancies** and lack of promotional prospects.
- **Shortages of Arms and Ammunition**
- **Difficult terrain of operation** like Himalayan region in case of ITBP.
- **Poor Intelligence gathering and analysis** leads to smuggling, rise of insurgency at border.
- **Over the Ground supporter** like for Naxalite–Maoist sympathiser, Hybrid militants in J&K etc.

Role of various security forces

- **Army, Air Force and Navy:** Safeguard National Interests from External Aggression and Internal Subversion.
- **ICG:** Conducting round-the-year real-life operations at sea.
- **BSF:** It is also known as **'first line of defence of India'** responsible for
  - o Security of Border Lines of India, prevent trans-border crimes, smuggling.
- **CISF:** Security umbrella includes India's most critical infrastructure facilities and VIP Security.
- **CRPF:** To assist the Civil Administration under the State Governments / UT Administrations in matters relating to Maintenance of Public Order, internal security and counter insurgency.
- **ITBP:** Guarding India-China borders ranging from the Karakoram Pass in Ladakh to Jachep La in Arunachal Pradesh and operation against LWE.
- **SSB:** Guard the Indo-Nepal Border and Indo - Bhutan Border.
- **AR:** During peace and 'proxy war', ensure security of the Indo-china and Indo-Myanmar borders.
- **NSG:** Specialized strike force trained in the counter terrorism and anti-hijacking operations.
- **NIA:** Functioning as the Central Counter Terrorism Law Enforcement Agency in India.
- **SPG:** Provide security to the Prime Minister, and members of his immediate family residing with him at his official residence.

Steps taken by India to strengthen the security structure

- **Modernisation of Armed Forces** involves the acquisition of platforms, technologies, etc.
- **Use of wide range of emerging technologies** like Drones in LWE operation.
- A**rmed Forces Special Powers Act (AFSPA)** for disturbed areas of J&K and North Eastern States.
- **Smart Border Fencing like CIBMS** for India-Bangladesh border.
- **To bring the human face of Security through special programmes** like Civic Action Programme (CAP).
- **Legislative Changes** like NIA (Amendment) Act, 2019
- **National Intelligence Grid (NATGRID)** services available to 11 central agencies and police of all States and Union Territories.

Way Forward

- **Modernization** of the Central Armed Police Forces.
- Setting up Dedicated **R&D wing** in each force.
- Workshops on **stress management** through yoga and meditation should regularly be undertaken.
- **Construction of roads** of operational significance in border areas.

4.1.1. DEFENCE INDIGENISATION

SELF-RELIANCE IN DEFENCE MANUFACTURING AT A GLANCE

Need for self-reliance

- **Security concerns** (territorial disputes with China and Pakistan, insurgency in J&K, North-Eastern states, Left-wing extremism).
- **Regional Power** (To act as a net security provider in the region).
- **Economic Benefits** (reduce dependency on arms imports, reducing Current Account Deficit).
- **Advancement in technology** (to improve Armed Forces' war-fighting capabilities, development of new weapons etc).

India's defence industrialization can be divided into five different phases

- **From independence to the mid-1960s:** Ordnance factories of British India formed the core of the state-led defence industry.
- **From 1960's – 1980's:** Self-reliance replaced self-sufficiency, License production and direct purchase predominant course.
- **From mid-1980s till the early 2000s:** Focus towards co-development and co-production with foreign companies
- **From the mid-2000s to late 2014:** 100 per cent participation of the private sector allowed.
- **From 2014 to present:** Self-Reliance through Make in India Initiative, greater degree of political and bureaucratic will, greater participation of the private sector.
  - ➢ **India ranks 4th among 12 Indo-pacific nations** in self-reliant arms production capabilities as per SIPRI.
  - ➢ As per SIPRI, Five largest military spenders in 2022 were US, China, Russia, India and Saudi Arabia.

Issues in achieving self-reliance in defence manufacturing

- Huge **import dependency.** As per SIPRI, **India was the world's biggest importer of major arms in 2018-2022.**
- **Absence of an Overarching Policy Framework** and mechanisms to monitor Self-Reliance.
- **Lack of synergy** among stakeholders.
- **Lack of investment in R&D.**
- **Lack of Private sector Participation.**
- **Discrimination towards the defence manufacturing** sector vis-à-vis other sectors

Recent Initiatives taken to promote self-reliance

- **Draft Defence Production and Export Promotion Policy 2020**
- **Defence Acquisition Procedure 2020**
- **Positive Indigenisation list** for which there would be an embargo on the import.
- **Technology Development Fund (TDF)** to promote self-reliance in Defence Technology.
- **Defence Industrial Corridors (DICs)**
- **Strategic Partnership Model with global firms** to seek **technology transfers.**
- **Mission Defspace,** iDEX scheme,etc.
- **SRIJAN portal** to facilitate indigenisation by India industry

Way Forward

- **Adopt 5Is (Identify, Incubate, Innovate, Integrate and Indigenise)** to accelerate progress.
- **Create a data bank to estimate self-reliance** to enable monitoring of progress made
- **Conducive Financial Framework:** to nurture and develop the defence production sector.
- **Defence Modernisation Fund** exclusively for the procurement of key defence assets.
- **Dedicated defence-specific universities** to meet the skilled human resources requirement
- **Fostering innovation** through Board of Research for Advanced Defence Sciences (BRADS)

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4.1.2. THIRD POSITIVE INDIGENISATION LIST

Why in news?

Ministry of Defense (MoD) approves third Positive Indigenisation List (PIL) for Defence Public Sector Undertakings (DPSUs).

More on news

- To **promote self-reliance in defence manufacturing,** MoD approved **third PIL of 780 strategically important Line Replacement Units (LRUs)**. These are c urrently being imported from abroad.
  - o These components **will be procured from domestic industry after a ban on their import kicks** in under time-line from December 2023 to December 2028.
- Indigenisation of these items will be taken up **under 'Make' category of DAP 2020 (refer infographic for categories and indigenous content).**

Prioritised Category	Indigenous Content
Buy {Indian-IDDM (Indigenously Designed, Developed and Manufactured)}	Indigenous design and ≥ 50%
Buy (Indian)	> 50% if indigenous design; else ≥ 60%
Buy and Make (Indian)	> 50% of 'Make' portion and transfer of critical technologies from foreign vendors as per specified range, depth and scope
Buy (Global-Manufacture in India)	≥ 50%
Buy (Global)	Foreign Vendor-Nil Indian Vendors ≥ 30%

About Defence Acquisition Procedure (DAP) 2020

- It superseded **Defence Procurement Procedure (DPP) of 2016.**
  - o **Salient feature of DAP 2020**
    - ✓ Notification of **positive indigenisation lists** in respect of weapons/platforms.
    - ✓ **Increased Indigenous Content (IC)** in various categories of procurement.
    - ✓ **Highest priority** to procurement under Buy (Indian-IDDM) category.
    - ✓ **Reservation for MSMEs and small shipyards** for orders up to Rs 100 crore/year.
  - o **Significance**
    - ✓ **To make India a global defense manufacturing hub.**
    - ✓ **Reduce dependence on imports.**
    - ✓ **Boost overall economy.**
    - ✓ **Ensure timely acquisition of military equipments.**
    - ✓ **To modernise and improve capabilities of the Armed Forces.**
    - ✓ **Defined role for Private sector.**

4.1.3. INS VIKRANT

Why in news?

Prime Minister commissioned **India's first Indigenous Aircraft Carrier INS (Indian Naval Ship) Vikrant** in Kochi.

About INS Vikrant

- **INS Vikrant** was India's first aircraft carrier, **bought from UK and commissioned in 1961.**
  - o It played an important role in **several military operations** - including **1971 war with Pakistan** - before being **decommissioned in 1997.**
- Vikrant is the **largest warship ever been built in the maritime history of India.**
  - o It is also the **first indigenously designed and built aircraft carrier** for Indian Navy.
  - o It is **designed by Indian Navy's in-house Warship Design Bureau (WDB)** and **built by Cochin Shipyard Limited,** a Public Sector Shipyard under Ministry of Ports, Shipping & Waterways.

- o The only operational aircraft carrier with Indian Navy at present is **INS Vikramaditya**, which had **served in erstwhile Soviet** and, thereafter, **Russian navy as Admiral Gorshkov before being inducted by India in 2013.**

Significance of an aircraft carrier

- **Significant boost to self-reliance** campaign in defense manufacturing.
- **Enhance capability**: Such warships **enhance the Navy's capability to travel far and carry out domination operations** including Air Interdiction, Anti-Surface Warfare etc.
- **Increased strength:** The commissioning of INS Vikrant adds India's name to a small group of nations with the ability to manufacture elite naval asset and project India's power overseas.
- **Net Security provider:** It is important amid **India's bid to be a net security provider in the Indian Ocean region.**
- **Deterrence:** Aircraft carriers act as a deterrent and **will boost India's defence as well as attack in a conventional war against enemies**, especially in wake of rising China's presence in IOR.

4.1.4. SUBMARINES IN INDIA

Why in news?

Recently, Russia pulled out of the Project-75 India (P-75I) submarine project citing difficulties to fulfil project conditions.

Major Concerns with the Project

- **No Prototypes**: Requirements specified by Indian Navy include **Transfer of Technology; stealth technology; state-of-the-art submarines** equipped with powerful missiles.
  - o So far, there is **no prototype available** of such submarine in world.
- **Hefty Penalties:** Construction is to be done in India, and **high penalties have to be paid by original equipment manufacturers (OEM)** in case timelines are not met.
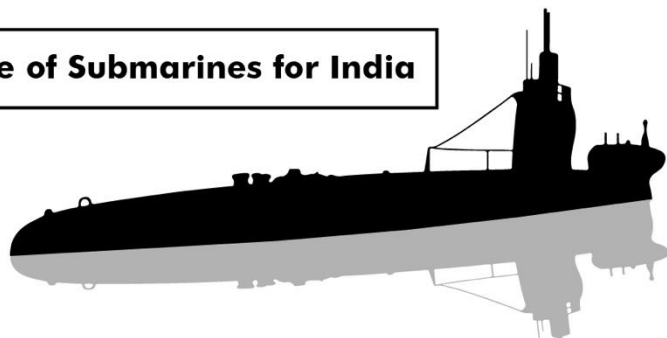
About Project-75I

- In 1999, **Cabinet Committee on Security** approved a plan for Indian Navy to **induct indigenously build and induct submarines by 2030** which was classified into two phases i.e. **P-75 and P-75I.**
  - o Under first phase of P-75, signed in 2005, **India and France signed contract for building six Scorpene class (**diesel-electric**) submarines.**
  - o These submarines have **capability of operating in a wide range of Naval combat** including anti-warship and anti-submarine operations, intelligence gathering and surveillance and naval mine laying.

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- o Fifth Scorpène-class submarine **Vagir** was delivered to Navy recently.
- **P-75I** phase envisages construction of **six conventional submarines with better sensors and weapons and Air Independent Propulsion System (AIP).**
  - o AIP allows **non-nuclear submarines to operate without access to atmospheric oxygen**.
  - o It allows submarines to **stay for longer hours in water and decreases the noise levels**.
- It provides **boost to indigenous design and construction capability of submarines** in India, in addition to **bringing in latest submarine design and technologies**.

Classification of Submarines

Submersible Ship Ballistic Nuclear (SSBNs)	Nuclear-Powered attack submarines (SSNs)	Diesel-electric attack submarines (SSKs)
• Often referred to as **"boomers,"** serve as an **undetectable launch platform for intercontinental missiles**. • They are **designed specifically for stealth** and **the precise delivery** of nuclear warheads. • India has **one nuclear ballistic submarine i.e. INS Arihant (S2)**.	• It is **armed with non-nuclear weapons**. • Provide Navy the **capacity to carry out intelligence, surveillance, and covert deployment** of Special Operations Forces. • Only **6 countries** currently have **nuclear-powered submarines**- UK, US, China, Russia, India and France.	• They have **two or more diesel engines**. • The battery capacity can **constrain the amount of time a diesel sub can stay underwater**, leading to frequent resurfacing and thus can be **easily detected**. • India has **15 conventional diesel-electric submarines**.

Issues with India's naval build-up

- **Delays and Aged Fleet**: After INS Kalvari, inducted recently, the next youngest conventional submarine with the Navy is 17 years old.
- **Contractual Obligations**: The Akula class submarine, INS Chakra, on lease from Russia, is only for training Indian sailors and is not permitted to carry nuclear missiles or be deployed on operational roles.
- **Limited endurance**: For instance, INS Arihant's nuclear reactor has a short refueling cycle and therefore a limited endurance capacity.
- **Lackadaisical Development**: Slow development of AIP system by DRDO has led to a significant delay for the Indian Navy's submarine plans.
- **Lack of Infrastructure**: Shortfalls in essentials capacities such as advanced towed array sonars (ATAS) to detect enemy submarines, heavyweight torpedoes to neutralize them etc.
- **Inadequate Funding:** India spends only around 15 percent of its total military expenditure on its navy, far lower than its peers in the Quad.

STEPS THAT CAN BE TAKEN

Boost Indigenous Development
Of submarines and bring in the latest submarine design and technologies.

Enhanced Surveillance
By Indian Navy and Coast Guard along the coast and in all offshore development areas.

Technology Upgradation
To enhance the nation's quest for self-reliance in modern conventional submarine construction.

Boost Communications and Intelligence Network
To boost maritime security connectivity among authorities involved in coastal security.

Enhance Bilateral Agreements
With naval powers such as Russia, USA for deeper cooperation including logistical support, technological transfer.

Conclusion

As most of India's submarines are over 25 years old, there is a need to fast track submarine building plan in India for our own maritime security and also to counter Chinese presence in the Indian Ocean in the coming years.

4.1.5. DEFENCE MODERNISATION

DEFENCE MODERNISATION AT A GLANCE

About Defence Modernisation

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- Defence Modernisation is defined as **upgrading and adopting new technologies** or platforms to counter emerging challenges.
  - ▷ **It reflects country's military capability and capacity to defend itself against the hostile countries.**
- It is continuous process **based on threat perception** and **operational challenges.**
- Focus is on **acquiring latest military technologies from international markets** as well as **manufacturing them indigenously.**

Need of Defence Modernisation

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- **Challenging strategic environment** like China's presence in Indian ocean.
- **Inadequate number of equipments** like aircraft, submarines etc.
- Achieving the **foreign policy goals** of being a regional power and a net security provider.
- **Rapidly changing landscape of warfare** like hybrid warfare.
- **Building R & D** capabilities for military technologies.
- **Altered nature of border threats** like rapid construction by china near India-China border.
- **Enhancing HADR capabilities**

Steps that have been taken by India

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- **For defence production and indigenisation, steps like** DAP 2020, Positive Indigenisation List (PIL), SRIJAN Portal etc.
- **Mobilising finance for defence:** allowing 74% FDI under automatic route and 100% through government approval.
- **Preparation for Space warfare:** Mission DefSpace, Mission Shakti, etc.
- **Restructuring/Integration of armed forces :**Creating integrated theatre command, Agniveer scheme , Chief of Defence staff etc.
- **Corporatization of** Ordinance Factory
- Indian Army is working on creating **battlefield surveillance system** for swift decision-making.

Challenges Faced in Defence Modernisation

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- **Slow decision making process** as production and acquisition contracts take close to 7 to 9 years for finalisation.
- **Limited Public Sector** manufacturing capacity and capability and lack of private sector participation.
- **Lack of investment in R& D.**
- Absence of a concrete **Defence industrial base.**
- Limited discourse on **nature of future warfare.**
  Limited technology transfer like recent cancellation of P-75I project with Russia.

Way Forward

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- **Fostering innovation** through Board of Research for Advance Defence sciences (BRADS) as suggested by Rama Rao Committee.
- **Providing handholding to private sector.**
- **Adopting the concept of 5Is** (identify, Incubate, Innovate, Integrate and Indigenous) to accelerate progress.
- Development of **industry-defence-academia linkages.**
- **Looking at defence modernisation in an integrated manner in conjunction** with infrastructural modernisation, etc.

4.1.5.1. TECHNOLOGY DEVELOPMENT FUND (TDF)

Why in news?

Recently, limit of funding of innovative defense projects under Technology Development Fund (TDF) has been raised to Rs 50 crore per project, from the present limit of Rs 10 crore.

About Technology Development Fund (TDF) scheme

- Executed by the Defence Research and Development Organisation (DRDO), TDF aims **to create an ecosystem for promoting self-reliance** by building indigenous state-of-the-art systems for defence application.

KEY FEATURES OF SCHEME

PROMOTING SELF-RELIANCE IN DEFENCE TECHNOLOGY	BOOST TO MSMES AND STARTUPS	BETTER FUNDING MECHANISM	RELAXED CRITERIA
Established to promote self-reliance in Defence Technology as a part of the Make in India initiative.	Encourages participation of public/private industries especially MSMEs and Startups so as to create an ecosystem for enhancing cutting-edge technology capabilities for defence application	Scheme facilitates up to 90 percent of the total project cost and allows industry to work in consortium with another industry/academia	Limited to the development of technologies or prototype of product having potential use for the Services with a typical development period of two years

EMERGING TECHNOLOGIES IN DEFENCE

BLOCKCHAIN
For protecting confidential military data, countering cyber threats. streamlining the procurement process, and supply chain security etc.

IMMERSIVE TECHNOLOGIES
(AR/VR) to build flexible experiences, such as for flight or combat training. mapping information, movement markers etc.

INTERNET OF MILITARY THINGS
Connecting ships, planes, tanks, drones, soldiers etc. for improving situational awareness and response time.

ADDITIVE MANUFACTURING (3D PRINTING)
Localized, on-demand production, novel material combinations for armors, self-heating military clothing, and ammunition.

CYBER WARFARE CAPABILITIES
Including cyber protection for major institutions and offensive capabilities ranging from malware and ransomware to phishing attacks.

ARTIFICIAL INTELLIGENCE (AI)
Enhances capability for intelligence, surveillance, and reconnaissance (ISR) missions, empowers autonomous weapon systems, thereby reducing soldier casualties etc.

ROBOTICS & AUTONOMOUS SYSTEMS
Increasing situational awareness, reducing soldiers' workload, facilitating movement in challenging terrains.

QUANTUM TECHNOLOGY
For secure communication systems

5G
Enhances training and battlefield capabilities due to its fast-speed, low latency, enhanced throughput etc.

4.1.6. TECHNOLOGY AND BORDER MANAGEMENT

Why in news?

Indian Army is working on converting the entire fence along **700 km stretch of Line of Control (LOC)** into **smart fence** to **improve surveillance and check infiltration.**

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Role of integrating technology in Border Management

- **Complementing existing system**: At present, border guarding is almost fully dependent on human surveillance. This makes border management a time-consuming and complex task.
- **Checking infiltration**: It can be of help to detect infiltration via land, underwater, air and tunnels by deploying close circuit television cameras, thermal imagers and night vision devices etc.
- **Facilitate Cross Border Trade**: For example: Blockchain technology can help process transactions quickly and securely and makes identification and tracking of illegitimate trade easier.
- **Improved Intelligence inputs and Surveillance** through Remote sensing satellites, radar satellites and satellites with synthetic aperture radar (SAR) sensors which are capable of providing day and night all-terrain and all-weather inputs.
- **Madhukar Gupta Committee on border protection** had recommended the Union Government to **strengthen border protection and address vulnerabilities in fencing** along the Indo-Pakistan border. This led to **implementation** of **Comprehensive Integrated Border Management System (CIBMS) in 2015**.

Challenges in deployment of technology in border areas

- **Infusion of large amount of fund** for acquiring the technology.
- **Under-utilization of existing infrastructure** such as detection, surveillance and communication technologies as well as physical structures.
- **Lack of technical expertise**: The effectiveness of the technological equipment is further curtailed by the lack of training, repair and maintenance facility and smart users.
- **Adverse terrain**: Water bodies across borders create certain difficulties like changing course of the river, difficulty in detecting intrusions etc.
  - 12.36 percent of the Indo-Pakistan border is riverine, while 37 percent of the Indo-Bangladesh border is riverine.
  - Also, **erratic power supply** in such terrains hinders smooth working of technology.

> **Related news**
> **Artificial Intelligence in Military**
> **World's first international summit** on Responsible use of Artificial Intelligence in Military (REAIM) 2023 **held in Hague, Netherlands**
> **Role of AI in military domain**
> - **Training and simulation** to provide battlefield experience to soldiers.
> - **Surveillance,** specifically in difficult to reach border regions, to provide situational awareness.
> - **Offensive capabilities,** such as autonomous armed drones, which can execute targets.
> - **Reconnaissance and tactical suppor**t in combat situations such as targeted strikes.
> **Concerns associated with use of AI in military**
> - **Ethical risks:** Principle of **distinction between civil and military assets and populations**, and principle of **proportionality of force deployment are compromised**.
> - **Data biases:** AI is characterised by a predisposition to certain kinds of data such as racial or gender bias which **impacts rational decision making**.
> **Steps taken by India to increase usage of AI in military**
> - **Dedicated labs in DRDO** for application orientated research in AI in different domains.
> - **Defence AI Project Agency (DAIPA)** enables AI based processes in defence Organisations.

Way forward

- **Sharing financial burden**: A possible solution is to follow the **US–Mexico model**, where both the countries have jointly developed border areas, making them more stable economically, socially and demographically.
- **Capacity building**: Manpower must be trained before-hand and prompt service backup of equipment should be in place.
- **Private sector participation**: Efforts should be made to utilize the knowledge available with private sector in the context of electronic and surveillance equipment and maintenance and updating of data such as biometric details.
- **Continuous upgradation**: It is important to upgrade the present inventory of equipment and accessories in conjunction with the new project so that they are also utilized optimally.
- **Knowledge exchange and experience sharing** with international border-guarding forces can also be taken into consideration.

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4.1.6.1 DRONES IN INDIA

DRONES IN INDIA AT A GLANCE

⊕ Drone is a layman terminology for Unmanned Aircraft (UA), an aircraft, **which is intended to operate with no pilot on board.**

Application Of Drones In Each Sector

Agriculture
- Crop health monitoting
- Soil health assessment
- Improved resource utilisation

Forest and wildlife
- Wildlife conservation
- Managing human wildlife conflict
- Forest protection

Urban Development
- City survey
- Improved urban planning
- Project monitoring
- Project quality assessment

Healthcare
- Epidemic control
- Cleanliness & hygiene
- Healthcare delivery

Traffic Management
- Road surface condition monitoring
- Improve traffic management
- Traffic feedback

Homeland Security
- Real time surveillance
- Security Planning
- Drugs/Narcotics Detection

Disaster Management
- Real time surveillance
- Search and rescue
- Delivery of essential goods

Mining
- Mineral scouting
- Managing encroachment
- Contract monitoring

Need for Drone Regulations

⊕ **Addressing policy gaps** to balance between security concerns and legitimate uses of drones in a variety of civilian sectors.
⊕ **Quality control and standardization** as a sizable percentage of India's drones continue to be imported.
⊕ **Rising use of drones for various sectors** such as agriculture, forest and wildlife, healthcare, mining, disaster management etc.
⊕ **Addressing Privacy Question** as Drones can collect data and images without drawing attention.
⊕ **Terrorist threat management** as there have been several instances of known terrorist organisations using them to carry out their activities.

Security Concerns with drones

⊕ Drones have been **regularly used to drop weapons and drugs** along the Punjab border.
⊕ **Conventional radar systems are not meant for detecting** low flying objects.
⊕ **Technology is easily accessible to terrorist groups** and it also provides them the capability of air strikes.
⊕ Drones are **relatively cheaper, compact and smaller in comparison to conventional weapons** and yet can achieve far more destructive results.
⊕ They **can be controlled from a remote distance** and does not endanger any member of the attacking side.

Steps taken to regulate and mitigate security risk of drones

⊕ **Draft Drone Rules, 2021** to increase ease of compliance for unmanned aviation industry, and ensure safety and security.
⊕ **Ministry of Civil Aviation had issued National Counter Rogue Drones Guidelines** to deal with rogue drones.
⊕ **Government set guidelines for anti-drone guns** to be deployed by security forces.
⊕ **Detect-and-Destroy technology** for drones developed by DRDO.
⊕ **Drone (Amendment) Rules, 2022** were notified abolishing the requirement of a drone pilot licence.
⊕ **Digital Sky platform** by DGCA for drone management.
⊕ **Regulations on drone market** as government banned the import of drones.
⊕ **Except for research and development, defence and security purposes.**

Way forward

⊕ **An international process to define the limits** of what is acceptable with respect to the possession and use of drones is urgently needed.
⊕ **Government should come up with laws that enable innovation,** but restrict infringements on privacy and misuses of airspace.
⊕ **Rectify classification of** Unmanned Aircraft System (UAS) under the UAS Rules which is weight-based classification rather than performance based.
⊕ **Incremental approach** in integrating drones in armed force.

4.1.6.2. MILITARY APPLICATIONS OF DRONES

Why in News?

Indian armed forces have floated the idea **for integrating Unmanned Aerial Vehicles (UAVs) or drones in its combat systems**.

Drone systems in Indian Military

- **Swarm Drones:** The Indian Army inducted **swarm drones,** which refer to several UAVs operating in coordination. These are **useful in combat operations** for surveillance inputs and undertaking close reconnaissance.
- **Switch VTOL (Vertical Take-Off and Landing) UAVs:** VTOL capabilities makes these useful in remote areas and difficult terrains. In 2021, Army signed a contract with Mumbai based ideaForge for these drones.
- **Few examples of Indigenous Drones is Lakshya, Nishant, TAPAS UAV (Rustom), etc.**
- **Imported drones in India:**
  - **Israel's Searcher and Heron UAVs**

Need for autonomous drones by Indian armed forces

- **Border surveillance:** India's border with neighbouring countries (Pakistan and China) requires continuous surveillance.
- **Regional Security:** To keep a close eye on the **movements of foreign vessels** as there has been a rise in their **deployment** around India's Andaman and Nicobar Islands.

> **Defence systems against drones**
> - **Naval Anti Drone System (NADS):** First indigenously developed comprehensive anti-drone system developed by DRDO.
>   - It has capabilities for both **hard kill** (attacking vital drone components) **and soft kill** (misguiding, signal jamming etc.).
> - **DRDO's D-4 Drone System:** Acquired by all three forces, it can detect, identify, and neutralize different types of drones within a 4 km radius.
> - **Indrajaal:** Indigenous **autonomous drone defence dome** developed by a private Indian firm Grene Robotics.
> - **Israel's SMASH 2000 Plus system:** Being used by Indian Navy, this system is installed mainly on assault rifles providing hard kill option.

- **Technological supremacy in warfare: Greater warfighting abilities** of autonomous platforms powered by artificial intelligence (AI) and use of disruptive technologies of fourth industrial revolution (4IR).
- **Reconnaissance and Tactical Support:** Drones provide **accurate and real-time intelligence** about enemy positions and movements, helping make informed decisions during complex operations such as surgical strikes.

Issues with deployment of autonomous drones in warfare

- **Dehumanizing warfare:** The **computer neither has access to all relevant data to make an informed decision nor it recognises the need for more information** to come up with an optimal solution.
- **Absence of accountability:** If autonomous drones **erroneously used force** in a theatre of conflict, there is **no one to be held accountable,** as blame can't be pinned on a machine.
- **Risk of shared liability:** It enhances the risk of **shared liability between networked drone systems** that enable combat solutions are not under the control of the user.
- **Doctrinal paradox:** There is **no easy way of incorporating AI-fuelled drones into military doctrine**, particularly when effectiveness of such technology in combat is not established.
- **Limitation in uses of current drone capabilities:** Technical issues such as limited flight time, limited range, payload capacity, weather conditions, cybersecurity risks pose a challenge in utilizing such capabilities.

Conclusion

Indian Armed forces are on their evolutionary curve and should follow an incremental approach **in integrating autonomous drones** in combat systems. While technology absorption in the armed forces has matured, there is a need to fill the **large gap that still exists in the development of critical technologies.**

4.1.7. MILITARY LOGISTICS AGREEMENTS

Why in News?

India and Vietnam have signed a **logistics support pact to allow militaries** of both sides to **use each other's bases for repair and replenishment of supplies.**

What are Military Logistics agreements?

- These are merely **administrative arrangements** that would facilitate replenishment of fuel, rations, and spare parts, as well as berthing and maintenance for each other's warships, military aircraft, and troops during port visits and joint exercises.
- This is **done on a reciprocal basis**, essentially simplifying the process of extending logistical support to one other.
- India has such agreements with Australia, Japan, US – the **Quad countries – as well as with France, Singapore and South Korea.**

Benefits of Military Logistics agreements

- **Expanding India's Military reach:** especially maritime outreach and influence in various regions that are strategically important to India. For example:
  - **Reciprocal Exchange of Logistics Agreement (RELOS)** with Russia gives India access to Russian facilities in the Arctic region.

CONCERNS RELATED TO MILITARY LOGISTIC AGREEMENTS

REORIENTATION OF FOREIGN POLICY
- To likes and dislikes of partner country. This can **strain traditional friendships** with other nations in the region.
- For example, signing of LEMOA might strain traditional friendships with Russia.

ISSUE OF JURISDICTION
- For instance, under **what jurisdiction will fall the illegal behaviour** of partner nations troops?

SOVEREIGNTY ISSUE
- LEMOA criticism stretched from **India joining the US camp** and establishment of a US base in the country to permitting the US to launch operations from Indian soil.

  - **Logistics Exchange Memorandum of Agreement (LEMOA)** provides India access to U.S. military facilities in Djibouti, Diego Garcia, Guam, and Subic Bay.
- **Saves time and cost** of the lengthy book-keeping exercises that the militaries have to otherwise do with each visit.
- **Enhanced cooperation and greater inter-operability between Nations** during activities such as peacekeeping operations, humanitarian assistance and disaster relief (HADR) etc.
- **Strategic importance:** It permits a country to project power away from its borders in international waters.
- **Edge to Indian Navy:** These agreements have enhanced operational turnaround and strengthened interoperability among Indian and partner navies on the high seas.

Conclusion

India shied away from concluding military logistic agreements for more than a decade. But changing geopolitical situation and an assertive China has facilitated India's embrace of like-minded partners across the Indo-Pacific, including through logistics agreements.

4.1.8. THEATERISATION OF ARMED FORCES

Why in News?

Recently, the Government introduced the '**Inter-Services Organisations (Command, Control and Discipline) Bill, 2023**' in Lok Sabha.

Key features of the bill

- **Inter-Services organisation:** It will be a body of troops including a **Joint Services Command** consisting of persons, subject to the **Air Force Act, 1950,** the **Army Act, 1950** and the **Navy Act, 1957** or any two of the said Acts.
- **Objective of the bill:** The bill seeks to empower the **Commander-in-Chief** or **Officer-in-Command** of **Inter-services Organisations** to **exercise disciplinary** or **administrative control** over the service personnel under their command, irrespective of their service.

About Theaterisation and its Purpose

- **Theaterisation:** It refers to the **Integrated** or **Joint Theatre Commands** (JTCs) where all the **manpower** and **assets** of the **Indian Army, Navy** and **Air Force** will be under **single operational control** in a **geographical region**.

- **Across the world: Globally**, over **32 nations**, including the **US** and **China**, have adopted jointness.
  - In comparison, Indian armed forces function with **17 single-service commands (Army 7, Air Force 7, and Navy 3)** despite JTCs like structural changes recommended since **Kargil Review Committee** of **1999**.
  - Few minor steps are taken towards the armed forces integration (refer **image**).

Significance of Theaterisation for India

In **2021**, the then **CDS** proposed 4 JTCs (**Air, Maritime, Western and Eastern**) for jointness in operations, planning, procurements, logistics, transport, training etc. in order to:

- **Create a unified approach:** For increased synergy against potential security threats from Pakistan and China.
  - Presently, **4** different **Army, 3 Air Force and 2 Navy commands** look after **Pakistan** with **little connection** in **planning** and **operations** as well as **command-and-control structures**.
- **Improved functioning of inter-services organisations:** For instance, overcoming time-consuming administrative deliberations among services.
- **Overcome Budgetary Constraints:** Towards Defence Modernisation by pooling of resources and saving resources for capital expenditure.
- **Prepare for Future Wars:** Having a non-linear and multi-dimensional battlefield (including economic, cyber and space etc.) in a **synergized** manner through better command-and-control structures.
- **Improve the efficiency of military operations:** Through prompt and one-point military advice with other benefits such as:
  - **Prioritizing defence procurements** based on the theatre specific requirements.
  - **Better acclimatization and training of troops** to the given battle space and operational requirements.

Challenges to Theaterisation

- **Declining military spending:** In **2023-24**, the **Defence Budget** was merely **1.97%** of the projected **Gross Domestic Product (GDP)** against **2.5%** of **GDP** in **2010-11**.

Steps taken for Armed Forces Integration

In 2001, India's **first tri-service command – Andaman and Nicobar Command** – was set up on **geographical basis**

In 2003, **Strategic Forces Command** was set up on functional basis, i.e., to handle **India's nuclear arsenal**

In 2019, the **Chief of Defence Staff (CDS)** post was created to take forward jointness

At the **bureaucratic level**, the **Integrated Defence Staff (IDS)** was created for jointness

- **Inter-services frictions:** Some experts believe that JTC is an attempt to subordinate IAF to theatre commanders and obliterate its individual identity as a service.
- **Dynamic nature of security threats** such as presence of three distinct theatres on the Chinese side due to the presence of Nepal and Bhutan.
- **Turbulence in existing structure** with concerns over the role of three service chiefs.
  - **Lack of self-reliance in defence production**, leaving all three forces with limited assets in the initial phase.
- **Absence of National Security Strategy** to provide effective direction and promote optimal utilization of military resources.

Way Forward

- **National Security Strategy (NSS):** In modern democracies, NSS would provide definite objectives as well as political direction on strategic challenges.
  - In addition to NSS, **creation of a Joint Services Doctrine** will lead to better alignment of motivation of armed forces along with their strategies.
- **Facilitate R&D:** Optimisation of resources also calls for **greater introduction and reliance on technological forces, assets, and capabilities** like use of next generation weaponry, AI and other disruptive technologies.

4.1.9. CHIEF OF DEFENCE STAFF (CDS)

Why in news?

Recently, Lt General Anil Chauhan appointed next Chief of Defence Staff (CDS) more than nine months after the post fell vacant.

About Chief of Defence Staff (CDS)

- CDS, approved in 2019, is the **head of Army, Navy and Air Force** and is a **four-star military officer**.
  - First proposal for CDS came from **Kargil Review Committee (2000).**
  - Later, **Naresh Chandra Committee on defence and security (2011)** and **Shekatkar Committee (2016)** mooted the idea of CDS.
- CDS was created **to increase efficiency & coordination among the Armed Forces** and reduce duplication.
- **Aimed to**
  - **Achieve better results at all levels** through effective coordination between the Armed Forces and the Civil Services.
  - **Help facilitate inter-service integration** and better civilian-military coordination in the Nation's Higher Defence Organisation.
  - **Strengthen the process of Joint Planning, Operations and Procurement,** thereby making Armed Forces more effective and efficient.
- CDS **does not exercise any military command,** including over the three Service Chiefs, so as to be able to provide impartial advice to the political leadership.

> **Duties and functions of CDS**
> - To **head the Department of Military Affairs (DMA)** in Ministry of Defence (MoD) and function as its secretary.
> - To **act as the Principal Military Advisor to Defence Minister** on all Tri-Service matters.
> - To **function as the Permanent Chairman of the Chiefs of Staff Committee** and to administer the Tri-Service organizations/agencies/commands.
> - To be a **member of Defence Acquisition Council** and function as the Military Advisor to the Nuclear Command Authority.
> - To ensure **optimal utilisation of infrastructure** and rationalise it through jointness among the Services.
> - To **implement Five-Year Defence Capital Acquisition Plan and Two-Year roll-on Annual Acquisition Plans,** as a follow up of Integrated Capability Development Plan.

Need of CDS

- **Better advice to political executive:** CDS rises above inter-services rivalry and provide holistic advice on critical issues such as joint strategy and planning, weapons procurement, manpower allocation and joint operations.
- **Integration of armed forces:** CDS is principally responsible for getting the armed forces better integrated rather than operating in silos.
- **Constantly changing security dynamic:** Requires India's military needs to be efficient in combat and in averting adversaries, which is achievable only if the military is integrated.
- **Prioritizing procurement:** CDS can help

CHALLENGES FOR CDS

Other Pending Reforms
Without other structural reforms, including creation of unified theatre commands, questions are bound to be raised about the wisdom of appointing a CDS

Domination of Army
It is argued that CDS will establish the Army's domination and other services may be reduced to a supporting role.

Balancing Procurement Requirements
For example, while the Air Force is embarking on a programme for 114 new fighters, the Navy is running a parallel procurement programme.

meet country's military requirements in a manner that operational capabilities of forces are not compromised, and at the same time, needs are met with the available monetary resources.

- **Global similarity:** Many major countries like Italy, France, China, UK, USA etc. have created the post of CDS to bring more jointness and integration in their Armed Forces.

Conclusion

With the creation of CDS, India embarked upon a much-delayed process of integration of the armed forces and the defence establishment. CDS therefore must be supplemented by other structural reforms such as

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indigenous R&D, production of equipment, fostering innovation etc to improve the future readiness of the forces.

4.1.10. AGNIPATH SCHEME

Why in News?

Union Cabinet approved Agnipath Scheme-a recruitment scheme for Indian youth to serve in the Armed Forces.

About Agnipath Scheme

- It is a major defence policy reform **to usher in a new era in the Human Resource policy** of the three Services.
  - o Idea of a **short-term recruitment model or 'Tour of Duty' (ToD) was first mooted around two years back** for the selection of officers and jawans, for a limited number of vacancies.
- **Youth (from 17.5 years to 23 age group) selected under this scheme will be known as Agniveers** who will be enrolled for a period of **four years**. They would form **a distinct rank in the Armed Forces**, different from any other existing ranks.
- **Upon the completion of four years of service,** Agniveers will be offered an **opportunity to apply for permanent enrolment** in the Armed Forces.
  - o **Up to 25% of each specific batch will be enrolled in regular cadre** based on objective criteria including performance during their four-year engagement period.

A Transformative Scheme

NATION

- **National integration based** on unity in diversity with equal opportunity to youth including women from all regions.
- **Nation building through empowered,** disciplined & skilled youth with military ethos in civil society.
- **Potential Social transformation** as any citizen can apply for Agniveers recruitment diluting the caste and regional composition overtime.

ARMED FORCES

- **Improved battle preparedness** through transformative evolution with energetic, fitter, diverse, more trainable & resilient youth, suited to the changing dynamics .
- **Youthful profile** by optimal balance of youth & experience.
- **Harness benefits of SKILL INDIA** by induction from tech Institutes.
- **Addressing manpower** cost of Ministry of Defence

INDIVIDUALS

- **Imbibe** military discipline, motivation, skill and physical fitness.
- **Smooth integration into society** with skill Screening Assesment sets, certification and diplomas/higher education/credits.
- **Confident & better citizens** by military training, team building, ethos & camaraderie forged over the years.

Global practices
- **Russia: Russian military is a hybrid format** combining a traditional cadre-and-reserve conscript system (includes one year of training and one year of service) and a contract-professional system.
- **Israel: Period of active-duty conscript is 32 months for men and 24 months for women,** followed by a decades-long period of compulsory reserve duty.
- **France: Soldiers have two types of enlistment:** 1 year contract or 3-5 years contract (both renewable).

Concerns related to scheme

- **Building cohesion:** Time period for Agnipath is too short to build cohesion as it is built over a long period of training.
- **Might not attract best candidates** as they are likely to apply for more permanent avenues like police or paramilitary forces first.
- **Unfair to the potential recruit** as the absence of a continued employment guarantee at the expiry of four years could be demoralizing.
- **Untested scheme:** There has been no independent study, pilot project and/or test run to ascertain the viability of the scheme.
- **Potentially militarize the society:** With their ambitions of serving in the military for a full 15 years, frustrated and unemployed, the demobilised Agniveers could fall prey to the lure of crime syndicates and radical political outfits.
- **Disturbing the regional balance:** With the scheme calling for recruitment on an all-India basis, rather than by state allotments, army's ranks could well become northern states dominated, disturbing regional balance within the military.

Way forward

- **Scheme needs to be linked to other manpower management related reforms** based on optimisation/ reduction of manpower and restructuring/ reorganisation.

- **Educational qualification can be raised** to 10+2 and a more stringent all-India merit-driven entrance examination with psychological tests must be introduced for a shift towards a more tech-savvy armed forces.

- Due care must be taken to ensure that the Agnipath scheme **does not upset the regimental ethos of the Indian Army.**

- Amendments such as the **extension of their initial service period and mandatory re-enlistment of at least 50%** of Agniveers as recommended by some veterans could be considered.

What will an Agniveer do after 4 years?

Many will get selected to the permanent cadre in the Armed Forces

For the rest

- **Get a financial package of about Rs 12 lakh** and a head start in life

  For those wishing to be entrepreneurs

- Priority under **bank loan schemes**

  For those wishing to study further

- Class 12 equivalent certificate and **Bridging Course (of choice) for further studies**

For those wishing to work

- **Given priority in CAPFs, Assam Rifles and police and allied forces** in several states
- **Tangible skills and work experience** in different facets including engineering, mechanics, law and order etc.
- Major companies and sectors (IT, Security, Engineering) have announced t**hey will prefer hiring a skilled & disciplined Agniveer** ☆

- Reduced training period will have to be offset by **focused training and employment of other innovative methods.**

- It is important to **ensure that Agniveers are absorbed gainfully in the society,** lest they become a potential threat to the society.

- **Incentivise this new scheme.** For instance, in the US the short-term duty soldiers undergo education at government expense.
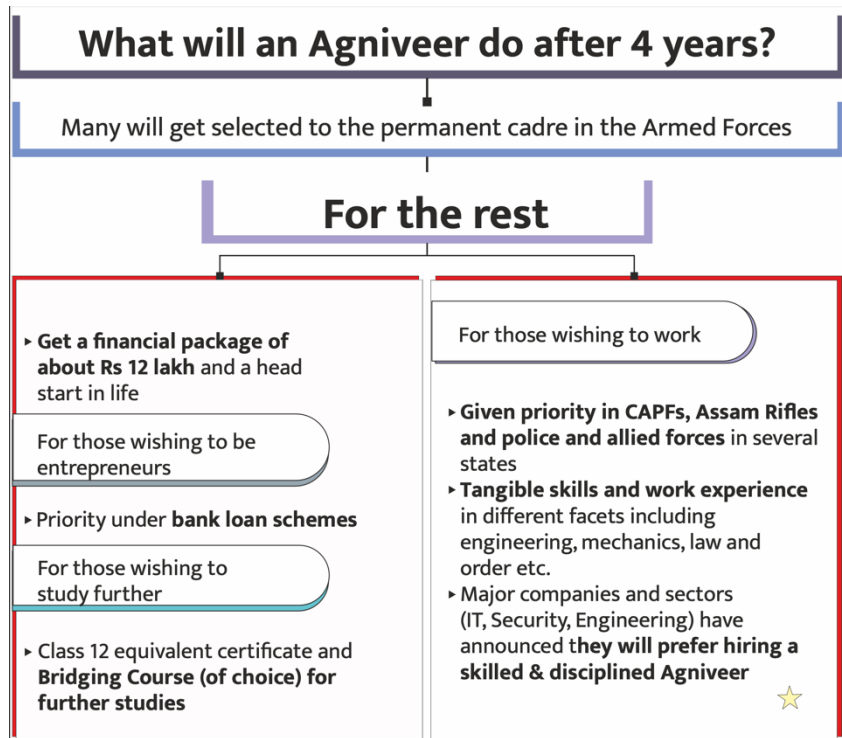
4.1.11. INTEGRATED BATTLE GROUPS (IBG)

Why in news?

As per Army Chief, IBG consultations are complete and are in the process of final compilation.

About Proposed Integrated Battle Groups

- IBGs are **brigade sized agile self-sufficient combat formations** which can swiftly launch strikes against adversary in case of hostilities.
  - Its objective is to **make the force more lethal and suitable to fight a modern war** with the support of technology.
  - Idea was tested in the plains and high altitudes in 2019.
- **Structure of IBG**
  - Each IBG would be tailor made **based on Threat, Terrain and Task** and resources will be allotted based on the **three Ts.** They **need to be light** so they will be low on logistics.
  - They will be able to **mobilise within 12-48 hours based on the location.**

SIGNIFICANCE OF IBG

Responsive
It will ensure faster punitive and defensive operations.

Boost Defence
IBG will help in effectively implementing the Cold Start doctrine which envisages swift deployment of troops on the western border within days if a situation of a full-blown war arises.

Faster Mobilisation
IBGs will be able to execute their operations swiftly and add to the options of the theatre commanders.

Efficient Utilisation of Resources
Based on three Ts, especially in an eventuality of a two front war scenario (Pakistan and China).

o Each IBG will likely be **headed by a Major General.**
o IBGs involve the **integration of infantry, armoured tank regiments**, artillery, Unmanned Aerial Vehicles (UAVs), combat engineers and signals into one fighting unit.
o IBGs will be **defensive and offensive**.

4.2. POLICE FORCES

Why in News?

57th All-India Conference of Director Generals/ Inspector Generals of Police (organized by the Intelligence Bureau (IB)) of all the states and union territories was held in Delhi.

Policing responsibilities in India

Need for Effective Policing Reforms

Increasing complexity of crimes with the increase in technology enabled crimes

The public has no corresponding obligation to help the police

Required to help in other departments such as income tax raids, demolitions by municipal authorities etc

Police is first responder in event of crime or any law-and-order situation

Holding police accountable

- **Basic framework:** The basic framework for policing in India was laid down in the pre-independence era through the **Police Act, 1861.**
  o In the federal structure of the country, **'Police' and 'Public Order' are state subjects** under the **Seventh Schedule** to the Constitution of India.
- **Responsibilities of State police forces**: Primarily in charge of issues such as crime prevention and investigation and maintaining law and order.
  o Also provide the **first response in case of more intense internal security challenges** (e.g., terrorist incident or insurgency-related violence).

Policing issues in India

- **Human resource problem:**
 o **Overburdened forces:** According to the Status of Policing in India Report 2019, police in India **work at 77% of their sanctioned strength** and for 14 hours a day on average.
  o **Absence of incentives to perform:** 86% of the state police comprises of **constabulary** and lack of promotion prospects weaken their incentive to perform.
  o **Gender inequality: Women are underrepresented** in the police force, constituting **only 10.3% of police force.**
- **Physical infrastructure:**
  o According to Bureau of Police Research and Development (BPRD) data (2020), several police stations have been found with **no wireless, no telephone** and **no vehicles.**
  o **CAG audits and BPRD** has found **shortages in weaponry** and **lack of modern weaponry** with state police forces.
- **Technology:**
  o Indian Police forces have **not kept pace with changes in technologies** like forensics, fingerprinting, facial recognition etc. For example, Crime and Criminal Tracking Network & Systems (CCTNS) is facing implementation issues like limited usage etc.
- **Insufficient financial allocation:**
  o Expenditure on police accounts for about **3% state government budgets**.
- **Police-Public Relations:**
  o Police requires the confidence, cooperation and support of the community to prevent crime

SMART

Strict and Sensitive

Modern and Mobile

Alert and Accountable

Reliable and Responsive

Techno savvy and Trained

and disorder. However, according to 2nd ARC Report, **police-public relations is in an unsatisfactory state.**

Mains 365 – Security
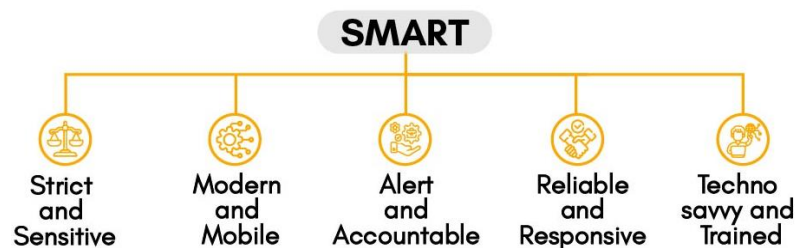
Policing reforms that can be implemented

- **SMART police:** The Prime Minister, at 49th DGP conference in 2014, enunciated the concept of SMART Police.
- **Community Policing:** Community policing models such as **Mohalla committee in Maharashtra, Janamaithri in Kerala, have produced good results.**
- **Optimization of police personnel with technology integration:** Increasing sensitivity of police officers and **training them in emerging technology.**
  - Initiatives like **National Data Governance Framework** can facilitate data flow among agencies.
- **Filling legal loopholes:** Repealing obsolete criminal laws & building standards for police organizations across states would optimize utilization of policing energies.
  - Also, prison reforms will have to be undertaken to ensure overall transformation of the Criminal Justice System.
- **Cooperative policing setup: Increased cooperation between state police and federal authorities** will facilitate optimal utilization of capabilities and sharing of best practices.

POLICE REFORMS DIRECTED BY THE SUPREME COURT IN PRAKASH SINGH VS. UoI, 2006

- **Establish State Security Commission** for eliminating Political or Governmetal interference from the Police.
- **Appointment** of Director General of Police (DGP) on merit-basis.
- Minimum **tenure of two years for DGP.**
- Minimum **term for police officers** including superintendents of Police should be two years.
- Establishing a **Police Establishment Board** to decide the transfers, postings, promotions, salaries of officers.
- Setting-up **National Security Commission (NSC)** for placement and selection of Chiefs of Central Police Organisations.
- Minimum **term for the NSC** would be two years.
- Constitution **Police Complaints Authority (PCA)** for looking into the cases of complaints against police officers.
- **Differentiating law and order with investigation** by constituting a separate Security Commission.

4.3. GLOBAL SECURITY AGENCIES

4.3.1. FINANCIAL ACTION TASK FORCE (FATF)

FINANCIAL ACTION TASK FORCE (FATF) AT A GLANCE

About Financial Action Task Force (FATF)

- FATF is the global **inter-governmental money laundering (ML) and terrorist financing (TF) watchdog.**
  - ▷ It sets **international standards(recommendations)** that aim to prevent these illegal activities.
- **Currently comprises 37 member jurisdictions and 2 regional organisations** (Gulf Co-operation Council and European Commission).
  - ▷ **India became a member of the FATF in 2010.**
  - ▷ FATF **suspended Russia's** membership over Ukraine war.
- **FATF's 'Black' and 'Grey' lists-** These terms **do not exist in official FATF terminology** but are colloquial phrases used to describe **two lists of countries maintained** by the body.
  - ▷ **Black List countries-** High risk and **subject to Call for Action** (Myanmar, North Korea, Iran)
  - ▷ **Grey List Countries-** Countries under **increased monitoring.** FATF recently removed Pakistan from the Grey List.

Key areas of FATF recommendation

- Measures to ensure transparency
- Arrangement to cooperate with other countries.
- Establishment of component authorities.
- Measures to be placed in criminal justice and regulatory systems.
- Preventive measures

Shortcomings of FATF

- **Structural weakness** because of **simplistic categorisation of different jurisdictions** into grey and black.
- **FATF relies on assurances** without actually considering the actual performance.
- **Seen as an instrument of power politics** as decisions are based on consensus.
- **Others issues**
  - ▷ Group's **informal method of selecting its President.**
  - ▷ No international agreements as to **what constitutes terrorism and terrorist financing.**
  - ▷ Countries fail to **enhance mutual legal assistance, information sharing and cooperation.**

Way forward for strengthening the organisation

- **Categorisation within grey list:**
  - ▷ After **categorising,** a **graded response may be designed** in consultation with different constituents like credit rating agencies, banks, IMF and WB, etc.
- **Making FATF more representative by formalizing the appointment** at various positions.
- **Inclusion of new risks** such as the **regulation of virtual assets.**
- **Policy advice and technical assistance to members.**
- **Close cooperation and coordination with other key international organizations,** including IMF, World Bank.

Mains 365 – Security

4.3.2. INTERNATIONAL CRIMINAL POLICE ORGANIZATION (INTERPOL)

INTERPOL AT A GLANCE

About Interpol

- ⊕ INTERPOL is an **inter-governmental organisation comprising 195 member countries.**
- ⊕ It enables member countries to **share and access data on crimes and criminals** and offers a range of technical and operational support.
- ⊕ It has a **National Central Bureau (NCB) in each member country** for coordinating with the police agencies of the other countries.
- ⊕ **INTERPOL Notices** (issued by General Secretariat) are international requests for cooperation or alerts allowing police in member countries to share critical crime-related information.
  - ▷ **Types of Notices**-Red Notice, Blue Notice, Green Notice, Yellow Notice, Black Notice, Orange Notice, Purple Notice, Interpol-UN Security Council Special Notice.

Achievements of Interpol

- ⊕ **ID-ART Mobile App:** To **identify stolen cultural property, reduce smuggling, and recover stolen works** and artefacts.
- ⊕ **Human Trafficking:** Operations highlighting the importance of carrying out targeted, coordinated enforcement actions against criminals.
- ⊕ **Securing Cyberspace:** Multi-sector partnerships to monitor emerging trends, police the web, etc.
- ⊕ **Training: Specialized Interpol training to** Police, immigration authorities **on forensic identification techniques and data sharing mechanisms.**

Challenges faced by INTERPOL

- ⊕ **No influence** over its member states as extradition is possible only through bilateral agreements.
- ⊕ **Politically Motivated Arrests** like arrest of Belarusian politician, Ukrainian politician etc.
- ⊕ **Member states are not in any way obliged to comply with the demands of General Secretariat**(Article 2 of Interpol's Constitution).
- ⊕ **Emergence of transnational, cyber and organised crime.**
- ⊕ **National Sovereignty** of member states hinders Interpol in carrying out its responsibilities.
- ⊕ **Corruption**-In 2015, Interpol was criticised for multimillion-dollar corruption deals with private sector organizations like Federation of International Football Association etc.

Way Forward for a strengthened INTERPOL

- ⊕ **Possess Powers** to make members obey and ensure smooth execution of the decisions.
- ⊕ **Amending its Constitution** to enable it to adopt an assertive position as a supra-national police force.
- ⊕ **Sensitize its member states on white collar crimes and Police reforms.**
- ⊕ Delete Red Notice for those who were granted refugee status as per **1951 Refugee Convention** and establish an independent body to review RNs regularly.
- ⊕ **Establish mechanism to protect rights of people with international refugee status.** ☆

4.3.2.1. POLICE METAVERSE

Why in news?

INTERPOL has launched the **first ever police metaverse specifically designed for law enforcement agencies** worldwide during its 90th General Assembly in New Delhi.

More on news

- INTERPOL metaverse **allows registered users to take virtual tour of its general secretariat headquarters in France's Lyon,** interact with other officers via their avatars, and take training courses in forensic investigation and other policing skills.

- o This metaverse, **provided through the Interpol Secure Cloud, assures neutrality**.
- o It can be **accessed by all 195 member countries** and offers benefits like remote work, networking, collecting and preserving evidence from crime scenes, and delivering training.

4.3.3. UNSC COUNTER TERRORISM COMMITTEE

Why in news?

UNSC CTC's **special meeting held in India** ended with the adoption of **Delhi declaration.**

About Delhi declaration

- It called for:
  - o Issuing new set of **non-binding guiding principles in countering digital terrorism threat**.
  - o **Counter terrorist exploitation of Information and Communications Technology** (like payment technologies and misuse of drones etc).
  - o **Countering use of technologies for terrorist purposes**, while **respecting human rights** and fundamental freedoms.
  - o **Deepen engagement with civil society**, including women's organizations, private-sector entities etc.
- **About CTC**
  - o It was **established by UNSC resolution 1373** (2001) in the wake of the 11 September terrorist attacks in the United States.
  - o It comprises **all 15** UNSC members.
  - o **Mandate**: Tasked with monitoring the implementation of **steps to enhance countries' legal and institutional counter-terrorism abilities,** at every level, locally and internationally.
  - o **Under resolution 1535 (2004), Counter-Terrorism Committee Executive Directorate** (CTED) to assist the work of the CTC was established.

4.3.4. INTERNATIONAL CRIMINAL COURT (ICC)

Why in news?

International Criminal Court (ICC) **issued arrest warrant for Vladimir Putin for war crimes** in Ukraine.

More on news

- ICC stated that **Putin bears individual criminal responsibility for the abduction and deportation of Ukrainian children** since Russia's full-scale invasion began last year.
  - o However, **ICC has no power to arrest sitting heads of state** or bring them to trial.

Comparison between ICC and ICJ		
	International Criminal Court (ICC)	**International Court of Justice (ICJ)**
Genesis	• **Established by Rome Statute,** it is **not part of the UN.**	• Established by United Nations Charter, **it is Principal judicial organ of UN.**
Subject Matter	• **Trial criminal offenses** i.e. genocide, crimes against humanity, war crimes, crimes of aggression	• **Settle legal dispute** i.e. sovereignty, boundary disputes, maritime disputes, trade, natural resource etc.
Parties	• Individuals either **ratified member of ICC** or accept the jurisdiction of ICC. • **India, Russia, US are not members.**	• Only states either member of UN or ICJ or both. • **India is a member.**
Jurisdiction	• Its international jurisdiction **applies only to individuals,** not the companies that employ them.	• **Two types of jurisdiction:** Legal disputes that are submitted to it by States, Advisory opinion. • **No jurisdiction to try individuals** accused of war crimes or crimes against humanity.
Composition of Court	• Composed of **eighteen judges** elected to **nine-year terms** and **not re-elected** for further terms.	• Composed of **fifteen judges elected to nine-year terms** and **may be re-elected** for up to two further terms.
Appeal	• Appeal is instituted by appeal chamber.	• **No appeal provision** for ICJ.

5. MISCELLANEOUS

5.1. NUCLEAR DISARMAMENT

NUCLEAR DISARMAMENT AT A GLANCE

About Nuclear disarmament

- It is the **process of reducing and eradicating nuclear weapons,** as well as ensuring that countries without nuclear weapons are not able to develop them.
- **As per ICAN, nine countries** possess nuclear weapons: **USA, Russia, France, China, U.K, Pakistan, India, Israel, and North Korea.**
  ▷ In total, the global nuclear stockpile is close to **13,000 weapons.**
  ▷ While that number is lower than it was during the **cold war (60,000 weapons worldwide).**

Factors driving the risk of nuclear weapons use

- **Evolving foreign policy doctrines** of nuclear armed states.
- **Modernization of technology** and development of nuclear weapons.
- **Space warfare and digital technologies** have increased risk of misinformation and nuclear war.
- **Conflict between nuclear armed** and nuclear allied states has increased risk of escalation.
- **Emerging nuclear arms race** and consequent strategic instability in South Asian Region.

Need of Complete Disarmament

- **Social Impact:** Long term exposure to radiation causes high infant mortality rates, cancer etc.
- **Economic Cost:** Infrastructure loss and high budgetary expenditure on nuclear weapons.
- **Nuclear Terrorism:** Easy access of terrorist organization will impact global peace.
- **Environment Impact:** Global warming, ocean acidification, food insecurity etc.

Global initiatives to achieve Nuclear Disarmament

USA-Russia: New START (Strategic Arms Reduction Treaty) for Nuclear Disarmament.
Diplomatic efforts by UN
▷ **Conference** on **Disarmament (CD),** a sole negotiating body for multilateral nuclear disarmament.
▷ **NPT** aims to limit spread of nuclear weapons.
▷ **CTBT** aims to eliminate nuclear weapons .
▷ **TPNW** prohibits developing, testing, producing, manufacturing, acquiring, possessing or stockpiling nuclear weapons.
▷ FMCT prohibits production of **Highly Enrichment**
▷ **Uranium (HEU)** and **Plutonium.**
▷ **Celebration of International Day** for Total Elimination of Nuclear Weapons.
Multilateral Export Control Regime (MECR) prevents proliferation of weapons of mass destruction.

India's stand in Global Nuclear Disarmament

- India remains committed to goal of a **nuclear weapons free world** through global, verifiable and non-discriminatory nuclear disarmament.
  ▷ India supports negotiations on **Comprehensive Nuclear Weapons Convention** in CD.
  ▷ **India** proposed **universal nuclear disarmament to UNGA,** known as Rajiv Gandhi Action Plan.
  ▷ **India** is in support of **universal FMCT.**
  ▷ **India opposed CTBT, NPT and TPNW.**

Challenges in achieving Nuclear Disarmament

- **Lack of consensus among NWSs.**
- **Imbalance in military spending.**
- **Unsettled international security environment** may force countries to adopt nuclear proliferation.
- **NPT unable to address issues of acquiring nuclear weapons** by non-state actors.
- **Verification challenges** as IAEA currently faces funding issues.

Way forward

- **Commitment of NWSs** towards nuclear disarmament.
- **Stable International environment** based on mutual trust.
- **Countries must abide by existing arms control treaties.**
- **Strengthening the verification system.**
- **Ensure the peaceful use of nuclear technology** and minimize the risk associated with it.

5.1.1. 25 YEARS TO POKHRAN NUCLEAR TESTS

Why in news?

On May 11, 2023, India celebrated 25 years of Pokhran-II nuclear tests.

Pokhran I and Pokhran II tests

- The operation was code-named **'Operation Shakti'**. It was second nuclear test by India.
- India conducted its **first nuclear tests on May 18, 1974, in Pokhran.**

- o Its code name- **Operation Smiling Buddha** came from the test's date being on the same day as Buddha Jayanti.
- India's **rationale and intentions regarding the development of nuclear weapon** were outlined in the Official nuclear doctrine.
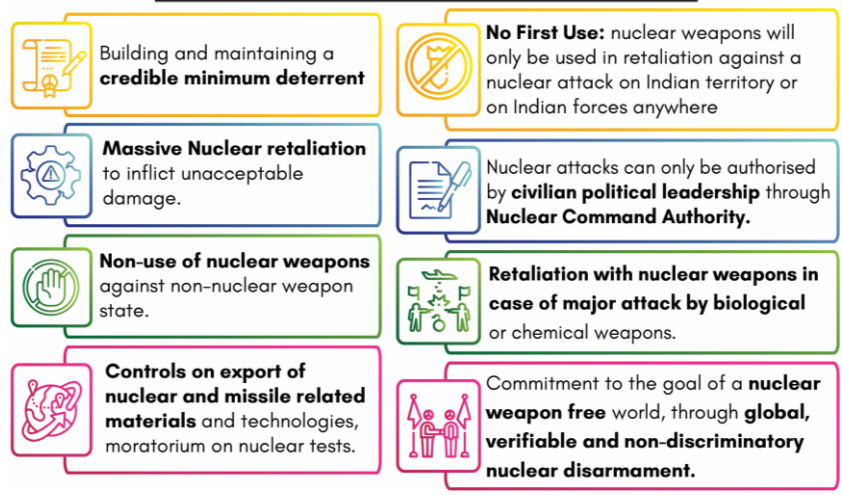
Why did India choose to exercise the nuclear option in 1998?
- **China as nuclear weapon state**: China had acquired its nuclear weapon in October 1964 which increased concerns of India.
- **Reports of Pakistan acquiring nuclear weapons**: China had also conducted a nuclear test for Pakistan, reportedly in May 1990.
- **Pressure to sign NPT and CTBT**: If India signed on to CTBT, India would have been closing nuclear option forever. If India refused to sign, it would have to explicitly state why it does not want to sign.
- **Existing discriminatory nuclear order**: Global nuclear governance set-up based on NPT had divided the world into the P-5 and others. India, though fully embedded to the peaceful uses of atomic energy, was not very happy with this discrimination.

Significance of India becoming nuclear weapon state

- **Improved international standing**: India is now a member of three out of four multilateral export control regimes — MTCR, Wassenaar Arrangement, Australia Group — and is in the reckoning for membership of the NSG.
- **Security situation along the border**: With respect to China and Pakistan, it has helped balance the military asymmetry by ensuring a credible deterrent.
- **India among foremost global military powers**: India is part of an elite group having an operational **nuclear triad** capability. That means India can launch nuclear weapons from land, air, and sea.
- **Energy security for the future**: India has installed generating capacity of 2,225 MW in 1998-99 which increased 205 per cent to 6,780 MW in FY23.
- **Transformation in relations with USA**: Post tests, India's relations with the US and the West had begun to crystallise into a substantive relationship. With Indo US civil nuclear deal in 2008, **India became a de facto nuclear power**.
- **Expression of technological capability**: The most important fall-out has been with regards to access to international technology.
  - o For example, with the United States, we now have a high-tech defence cooperation, the NSSP (Next Steps in Strategic Partnership).
- **Perception of India and national pride**: India has been recognised as responsible nuclear power.

India's Nuclear Doctrine

- Building and maintaining a **credible minimum deterrent**
- **No First Use:** nuclear weapons will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere
- **Massive Nuclear retaliation** to inflict unacceptable damage.
- Nuclear attacks can only be authorised by **civilian political leadership** through **Nuclear Command Authority.**
- **Non-use of nuclear weapons** against non-nuclear weapon state.
- **Retaliation with nuclear weapons in case of major attack by biological** or chemical weapons.
- **Controls on export of nuclear and missile related materials** and technologies, moratorium on nuclear tests.
- Commitment to the goal of a **nuclear weapon free** world, through **global, verifiable and non-discriminatory nuclear disarmament.**

Conclusion

At the first level India needs to address immediate security threats by intelligently building sufficient and resilient retaliatory capability to signal credible deterrence. And at the second level, India needs to make long-term innovative diplomatic investments towards the **creation of a global environment conducive to peace and universal nuclear disarmament.**

Challenges in Nuclear Domain for India
- Continuing Pakistan's use of sub-conventional warfare despite nuclear detterence
- Border skirmishes along India China border.
- Atomic energy sector has not benefitted as much as it should have
- No progress on goal of complete disarmament
- Fear that limited military engagement could eventually lead to a nuclear war.
- Pakistan developing tactical nuclear weapons

Do we need to revise No first use (NFU) policy?
- India's NFU policy has been **criticised on following grounds.**
  - o It **limits strategic space for Indian decision-makers** in crisis situations where they have limited room to execute escalation-related measures.

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- o **Continuation of attacks** like- Kargil in 1999, and the Mumbai attacks in 2008 is seen as **evidence of the failure of nuclear deterrence**.
- o Nuclear-armed states, including in India's neighbourhood, are undertaking arsenal expansion and an offensive and defensive capability build-up, like **developing tactical nuclear weapons.**
- **Arguments in favour of the NFU policy**
  - o It **obviates pre-emption,** which would otherwise place considerable pressure on Indian decision-makers to carry out a nuclear First Strike in the heat of a crisis.
  - o It helps India avoid the pitfalls of **building a technologically advanced nuclear capability deployed on hair-trigger alert,** which is a financially costly nuclear posture.
  - o It also **conveys nuclear restraint to the world and India's adversaries,** ensuring stability.
  - o **Conventional attacks and incursions can be tackled at the conventional level,** keeping nuclear weapons out of the equation. Surgical strikes by India in Pakistan Occupied Kashmir in 2016 are illustrative of this.

Nuclear Command Authority
comprises

Political Council
Chaired by the Prime Minister. Sole body which can authorize the use of nuclear weapons.

Executive Council
Chaired by National Security Advisor. Provides inputs for decision making by NCA and executes directives given by Political Council.
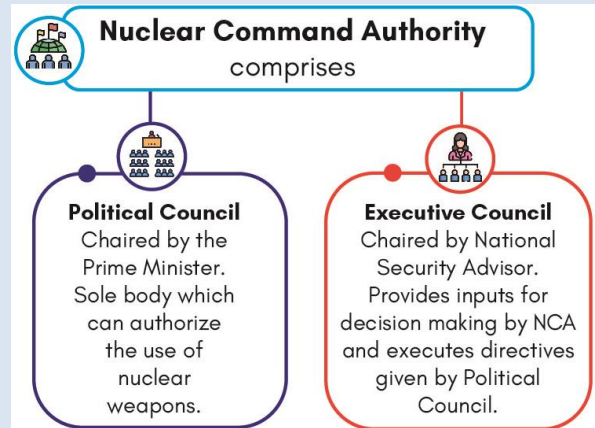
5.1.2. WEAPONS OF MASS DESTRUCTION (WMD)

Why in News?

Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Act, 2022 was passed by Parliament.

About Weapons of Mass Destruction (WMDs)

- As per United Nations Regional Centre for Peace and Disarmament in Asia and the Pacific (UNRCPD), **WMDs constitute a class of weaponry with the potential to:**

ABOUT WMD AND THEIR DELIVERY SYSTEMS (PROHIBITION OF UNLAWFUL ACTIVITIES) ACT, 2005

Primary objective was **to provide an integrated and overarching legislation** on prohibiting unlawful activities in relation **to all three types of WMD,** their delivery systems and related materials, equipment and technologies.

It instituted **penalties for contravention of these provisions.**

It was passed to meet an **international obligation enforced by the UN Security Council Resolution (UNSCR) 1540 of 2004 that puts** binding obligations on all UN member states **to take and enforce effective measures against proliferation of WMD,** their means of delivery and related materials to non-state actors

  - o **Produce in a single moment an enormous destructive effect** capable to kill millions of civilians, jeopardize the natural environment, and fundamentally alter the lives of future generations.
  - o Cause **death or serious injury of people through toxic or poisonous chemicals.**
  - o **Disseminate disease-causing organisms or toxins** to harm or kill humans, animals or plants.
  - o **Deliver nuclear explosive devices, chemical, biological or toxin agents** to use them for hostile purposes or in armed conflict.
- As per India's 2005 WMD Act, **WMDs are biological, chemical, or nuclear weapons.**

Key features of the 2022 Act

- It **amends the Weapons of Mass Destruction and their Delivery Systems** (Prohibition of Unlawful Activities) **Act, 2005**.
- It **prohibits financing of any activity in relation to WMD** and their delivery system.
- **It empowers the Central Government to:**
  - o **freeze, seize or attach funds or other financial assets** or economic resources for preventing such financing.
  - o **prohibit making available funds, financial assets or economic resources** for any prohibited activity in relation to weapons of mass destruction and their delivery systems.

Significance of the Amendment

- **To meet international obligations:** United Nations Security Council's targeted financial sanctions and the recommendations of the Financial Action Task Force (FATF) have mandated against financing of proliferation of weapons of mass destruction and their delivery systems.

- **Address shortcomings in the present act:** Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, passed in 2005, only banned manufacture of weapons of mass destruction.
    - o Current law only covers trading and does not cover financing of WMD.
- **Tackling evolving threats:** These notably include developments in the field of drones or unauthorised work in biomedical labs that could maliciously be used for terrorist activity.
- **To strengthen global enforcement** to ensure that non-state actors, including terrorist and black-market networks, do not gain access to such materials.
- **Enforcing global WMD controls:** Having now updated its own legislation, India can demand the same of others, especially from those in its neighbourhood.

What more should India do?

- Amendment will have to be **enforced through proper outreach measures to industry and other stakeholders** to make them realise their obligations under the new provisions.
- **India should keep WMD security in international focus.** Even countries which do not have WMD technology have to be sensitised to their role in the control framework to prevent weak links in the global control system.
- **India can offer help to other countries on developing national legislation,** institutions and regulatory framework through the IAEA (International Atomic Energy Agency) or on bilateral basis.

Global treaties to outlaw WMDs		
Treaties/Conventions/Codes	**About**	**Ratified/Signed by India**
Biological Weapons Convention, 1972	• **Prohibits the development, production, acquisition, transfer, stockpiling and use of biological and toxin weapons.**	**Yes**
Chemical Weapons Convention, 1992	• **Prohibits the development, production, acquisition, stockpiling, retention, transfer or use of chemical weapons.**	**Yes**
Treaty on the Non-Proliferation of Nuclear Weapons (NPT), 1970	• **To prevent the spread of nuclear weapons and weapons technology,** to promote cooperation in the peaceful uses of nuclear energy and to further the goal of achieving nuclear disarmament. • **Only binding commitment in a multilateral treaty.**	**No.** India opposes NPT's discriminatory nature and argues for the universal ban of nuclear weapons.
Treaty on the Prohibition of Nuclear Weapons (TPNW), 2017	• **Prohibits participating in any nuclear weapon activities.** • These include **undertakings not to develop, test, produce, acquire, possess, stockpile, use or threaten to use nuclear weapons** and also to provide assistance to any State in the conduct of prohibited activities.	**No.** India believes that this Treaty does not constitute or contribute to the development of customary international law; nor does it set any new standards or norms.
Comprehensive Nuclear-Test-Ban Treaty (CTBT), 1996	• It **bans all nuclear explosion tests on Earth.** It also establishes a CTBT Organization (CTBTO), located in Vienna, to ensure the implementation of its provisions. • It is **yet to enter into force**.	**No** India opposes CTBT's discriminatory nature and supports universal ban of nuclear weapons.
Hague Code of Conduct (HCOC) formerly known as "The International Code of Conduct" (ICOC), 2002	• **To regulate access to ballistic missiles** which can potentially deliver weapons of mass destruction.	**Yes**

Multilateral Export Control Regimes (MECR)	• **Voluntary and non-binding agreements created by the major supplier countries** to co-operate in their effort to prevent transfer of certain military and dual use technology that support proliferation of WMD.
	• **There are currently four such regimes under MECR:**
	  o **Nuclear Suppliers Group (NSG)** for the control of nuclear related technology.
	  o **Australia Group (AG)** for control of chemical and biological technology that could be weaponized.
		India is **member of three of the 4 MECRs**, except the Nuclear supplier Group.

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| | o **Missile Technology Control Regime (MTCR)** for the control of rockets and other aerial vehicles capable of delivering weapons of mass destruction. | |
| | o **Wassenaar Arrangement for Conventional Arms and Dual-Use Goods and Technologies.** | |

5.1.3. NUCLEAR NON-PROLIFERATION TREATY (NPT)

Why in news?

Recently, 10th NPT's review meeting took place.

About NPT

- The treaty was signed in 1968 and entered into force in 1970.
- The Treaty represents **the only binding commitment in a multilateral treaty to the goal of disarmament** by the nuclear-weapon States.
- The treaty **defines nuclear-weapon states (NWS)** as those that have built and tested a nuclear explosive device before 1 January 1967; these are the United States, Russia, the United Kingdom, France, and China.
  - Four other states are known or believed to possess nuclear weapons: India, Pakistan, Israel and North Korea.
- **All countries of the world except South Sudan and the above four are parties to the NPT.**
- **NPT Review Conference is held every five years** to review the operation of the treaty and consider means to strengthen it.
- The International Atomic Energy Agency (**IAEA) verifies Non-NWS (NNWS) compliance with commitments under the NPT** not to acquire nuclear weapons.
  - **Article III** requires NNWS to conclude agreements with the IAEA to safeguard all nuclear materials in all peaceful nuclear activities.

> **About IAEA**
> - It was **founded in 1957 to promote nuclear cooperation** and the safe, secure and peaceful use of nuclear technologies.
> - It is a **specialized agency integrated within the United Nations system** but through its own international treaty "The Statute of the IAEA".
> - It has **three main roles:**
>   - **furthering peaceful uses of nuclear energy** in science, especially for the critical needs of developing countries;
>   - **promoting nuclear safety and security** for nuclear and radioactive materials in civilian use;
>   - **verifying in more than 900 civilian facilities** that nuclear materials are not used in making nuclear weapons.

Achievements of NPT

- **Reduction in number of nuclear weapons**: From a peak of 70,300 warheads in 1986 to around 14,000 at present, with the US and Russia accounting for over 12,500.
- **Successfully prevented proliferation around the world:** Since 1970, only four countries have acquired nuclear weapons, bringing the total number of nuclear-weapon-states to nine.
- **Additional Protocol for detection:** The treaty facilitates cooperation on peaceful applications of nuclear technology under the watch of the IAEA.
  - It has helped make the nuclear inspections in the Iran nuclear deal much more effective and in years ahead with North Korea.
- **Creating nuclear weapon free zones:** Additionally, the states of many regions of the world have chosen to be part of nuclear-weapon-free zones in strong demonstration of their commitment to the objective of a world without nuclear weapons.

> **Stockholm International Peace Research Institute (SIPRI), 2022 report highlights on Nuclear weapons proliferation**
> - While absolute numbers of nuclear arsenal have reduced, they are **expected to grow over the next decade.**
> - **Russia and the USA together possess over 90%** of all nuclear weapons.
> - Nine nuclear-armed states—including India, Pakistan, Israel and China continue to modernize their nuclear arsenals.

Challenges to effective implementation on NPT

- **Non-compliance of each nuclear-weapon state with the Treaty:** These include-
  - **Increases in arsenal sizes** (Russia, China), or raising the cap on the maximum number of warhead (UK),
  - **Fuelling a new nuclear arms race** by spending billions on nuclear weapons each year, including building new and more dangerous weapons systems (United States, Russia, China, France, UK).

- o **Failing to pursue negotiations** in good faith to end the nuclear arms race and for nuclear disarmament (United States, Russia, China, France, UK).
- **Unsettled international security environment** may polarise nations to adopt the path of nuclear proliferation for e.g.
  - o Russia suspending its participation in the New START treaty;
  - o U.S. withdrawal from the Joint Comprehensive Plan of Action (JCPOA);
  - o U.S.-North Korea negotiations at a halt.
- **Loopholes in the treaty:** NPT does not forbid a non-weapon state from possessing nuclear weapons.
  - o The treaty has **no sanctions for violators or for withdrawal from the treaty.**
- **Emergence of new technologies** and types of weapons — including offensive cyber, counter-space, and hypersonic weapons — could further destabilize the security environment.
- **Breakdown in international diplomacy over the Ukraine invasion** is also enabling other states to move away from non-proliferation and disarmament.
- **Formation of Military groupings:** The proposal to allow Australia, a non-nuclear weapon state, to acquire nuclear submarines powered by highly enriched uranium (HEU) under the **AUKUS arrangement has a potentially negative impact on non-proliferation efforts and the control of fissile material.**

Way Ahead

- **More stakes on USA and Russia:** They could help themselves by agreeing to extend New START (Strategic Arms Reduction Treaty). It would be useful to engage China in strategic stability discussions as well.
- **Adhering to the TPNW:** It will make a strong contribution to the NPT's Article VI obligation for states-parties to pursue nuclear disarmament.
- **Encouraging peaceful uses of nuclear energy:** All NPT parties must work to ensure continued access to them in a safe and secure manner, and without increasing the risk of nuclear proliferation.
- More regions in the world (preferably comprising NWS) should enter into an arrangement of establishing **Nuclear-weapon-free zones.**

5.1.4. WASSENAAR ARRANGEMENT

Why in News?

At the 26th annual Plenary of the Wassenaar Arrangement (WA), India assumed the **chairmanship for one year.**

About Wassenaar Arrangement

- It is a **multilateral export control regime** which aims to promote regional and international security and stability by **controlling the export of conventional weapons and dual-use goods and technologies.**
  - o WA members agree to **exchange information on sensitive dual-use goods and technologies and report on such transfers and denials of controlled items** to non-participants.
- It was **formally established in 1996** and has 42 members.
  - o Except for China, all the other permanent members of the U.N. Security Council are signatories of the WA.
- The WA **operates on a voluntary basis and decisions are made by consensus.**
- The WA Plenary is the decision-making body of the Arrangement which operates based on consensus.

Significance of membership of WA for India

- o WA will **facilitate high technology tie-ups with the Indian industry** and ease access to high-tech items for India's defence and space programmes.
- o **India is recognized as a responsible exporter** of dual-use goods and technologies.
  - ✓ Recognition boost India's defense industry and contribute to its development as a strategic player in the region.

5.1.5 CLUSTER BOMBS AND THERMOBARIC WEAPON

Why in News?

Human rights groups accused Russia of using **cluster bombs and Thermobaric weapons in the ongoing war with Ukraine.**

About Cluster Bombs and Thermobaric weapon

Cluster bombs	Thermobaric weapon (also called aerosol bombs, fuel air explosives, or vacuum bombs)

• These are **non-precision weapons** that are designed to injure or **kill human beings indiscriminately over a large area**, and to destroy vehicles and infrastructure.
• They **can be dropped from an aircraft or launched in a projectile,** scattering many bomblets as it travels.
• Many of these bomblets **end up not exploding,** posing a threat to the civilian population for long after the fighting has ceased.
• Countries that have ratified **Convention on Cluster Munitions** are prohibited from using cluster bombs. As of date, **there are 110 state parties to the convention.**
    o **Russia, Ukraine, India are not signatories.**
• **India has capacity to have cluster munitions delivered by ground**-launched artillery projectiles, rockets, and missiles.
	• They **use oxygen from the air** for a large, high-temperature blast.
	• **Causes significantly greater devastation** than a conventional bomb of comparable size.
	• The weapon goes off in **2 separate stages:**
	    o As they hit their target, a **first explosion splits open the bomb's fuel container**, releasing a cloud of fuel and metal particles that spreads over a large area.
	    o A **second explosion then occurs,** igniting the aerosol cloud into a giant ball of fire and sending out intense blast waves that can destroy even reinforced buildings or equipment and vaporise human beings.
	• These are **not prohibited by any international law or agreement.**

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5.2. DEFENCE EXPORTS

DEFENCE EXPORTS AT A GLANCE

Defence exports are a pillar of the **government's drive to attain self-sufficiency in defence production.**

It is **important for both strategic and economic reasons** and has been an important guiding principle for the government.

India has a target of US $5 billion for defence export by 2024-25.

Defence Exports from India

- **India's defence export** reaches an all-time high of approx. **Rs.16000 crore in FY 2022-23.**
- In 2021-22, **private sector accounted for 70%** of the exports while public sector firms accounted for the rest.
- Presently, India is **exporting different equipment to more than 85 countries** around the globe.
- **Major arsenal exported:** Armoured protection vehicles, light-weight torpedo, weapons locating radar, fire control systems, offshore petrol vehicles etc

Challenges

- **Red tapism:** PSUs are hamstrung by red tape and a poor global impression of their ability to deliver on time and on cost.
- **IPR Issues:** Indian defence industry has been manufacturing some weapon platforms (Tank T-90, Su-30 fighter aircraft etc) with IPR held by foreign Original Equipment Manufacturer (OEMs).
- **Low productivity:** It leads to higher per unit cost making the end product costlier and thus, less attractive to buyer.
- **Identification of target countries:** Indian export is mainly focused on assemblies/sub-assemblies/components of military equipment, thus making it difficult to establish a pattern about target countries.
- **Other issues:** Absence of designing and development capabilities (especially in critical technologies), lack of industry-academia-defence linkages **less pro-active diplomatic efforts** etc.
- **High competition** as countries prefer the defence products of US, France, etc.

Steps taken up to boost Defence exports

- Formulation of a **Defence Export Strategy** and constitution of a **Defence Export Steering** Committee (DESC) and **Export Promotion Cell (EPC)**
- **Defence Acquisition Procedure (DAP) 2020** to promote Make In India and AtmaNirbharta in defence
- **Scheme for Promotion of Defence Exports:** It provides an opportunity to exporters to get their product certified by Government.
- **Indigenisation Support to MSMEs:** by issuing "positive indigenisation lists" of items that cannot be imported and can only be procured from domestic industry.
- **Simplified defence industrial licensing:** Dept. of Defence Production (DDP) notified as the Licensing Authority for export of various items.
- **Strategic Parthnership**
- **Specific role of MEA:** facilitated Lines of Credit for countries to import defence products, defence attaches in Indian missions empowered to promote defence exports.
- **Allowed FDI** under automatic route up to 74% and upto 100% through government route.
- **Corporatisation of Ordinance factory.**
- **Innovations for Defence Excellence** (iDEX) initiatives.

Way forward

- **Focusing on new markets,** especially developing nations, by enhancing role of Defence Attaches.
- **Exemption from duties and taxes** to Defence products to make them price competitive.
- **Regular military exercises** with several nations **to understand their defence requirements** .
- **Defence Export promotion/facilitation agency** should be set up to monitor actual progress of exports vis-à-vis planned targets.
- **A 'full package export'** consisting of a life cycle support.
- **Quality Assurance & testing** infrastructure development.
- Promotion of defence products like **DefExpo 2022.**

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5.3. FOREIGN MILITARY BASES

Why in News?

China is said to be building its second foreign military base(after one in Djibouti) in the Indo Pacific Region.

About Foreign military Bases

- By definition, a military base is **an installation created to serve as support for military operations and logistics.**
- Foreign military bases are **found in more than 100 countries and territories** within or near the land**.**
  - US currently maintains a world-wide network of some 1000 military bases and installations.
  - **Farkhor Air Base in Tajikistan is India's** foreign military base overseas.

Significance of Foreign military bases

Contingency Responsiveness	Deterrence and Assurance	Securing National Interest	Security Cooperation	Others Roles
➤In-place forces provide the immediate capabilities needed to counter major acts of aggression by countries that have been identified as posing a substantial military threat to base owning countries.	➤Military related mobility infrastructure allows the nations to project substantial combat power around the globe, contributing to deterring potential adversaries and assuring friends and allies.	➤For ex: Africa represents an important French supplier of oil and metals and is a significant market for France's exports. ➤Therefore, to secure its national interests, France maintains military bases in countries such as Chad, Djibouti, Gabon, Ivory Coast, and Senegal.	➤Forces based overseas benefit from the interoperability and adaptability skills and the greater cultural awareness gained from more frequent training with foreign partners.	➤Hosting states personnel during an operation, being a platform for military maneuvers, serving as stock or location of test-ranging for weaponry and as posts of intelligence operations.

Concerns regarding foreign military bases

- **Economic Cost:** The financial burden of maintaining a sizeable military force in foreign countries and the need to justify the level of military spending have been important considerations. For example, US' presence in Afghanistan.
- **Emerging geopolitics situations** have necessitated a comprehensive review of such bases, particularly in the light of the threats associated with failed states and regional conflicts.
- **Operational Risks:** Some adversaries will have capabilities (such as long-range precision-guided weapons) to inflict substantial damage on forward bases and forward-deployed forces.
- **Can bring political instability:** If agreements are negotiated with non-popular local governments, the foreign presence can be seen as an authoritarian policy by the population and by other states as well.
- **Environmental concerns:** The testing of new weaponry, including chemical and nuclear weapons, might represent a risk of contamination and of accidents.
- **Outdated Role:** Key threats are redefined amid growing religious extremism, terrorism and other asymmetric threats (e.g. unconventional warfare, threat of proliferation of weapons and technologies of mass destruction).

Conclusion

Forward military basing has changed in the light of the new global and regional challenges and strategies. Certain parts of Asia have emerged as new areas of concern, which has strengthened the motivation for establishing bases there.

China's Foreign Military bases
- It **opened its first foreign military base in Djibouti** in the Horn of Africa in 2017. It is said to be building its second foreign military base at Ream, Cambodia.
- **Impact on India**
  o It has fuelled worries in India that it's part of China's strategy to encircle the Indian subcontinent ("the string of pearls") with the help of military alliances and assets in Bangladesh, Myanmar, and Sri Lanka.
  o Prospect of Chinese warships being permanently positioned at Karachi or Gwadar **inhibits the Indian Navy's coercive options during a crisis.**
- **India's response**
  o **Cooperating with other nations:** India's military relations with France, which includes a Mutual Logistics Support Agreement, enables Indian naval warships to seek access to the French naval base in Djibouti.
  o **Strengthening ties in IOR:** In response to China's overseas military base in Djibouti, India has sought to access facilities in the Seychelles, Oman and Singapore.
  o **Improving capabilities:** To counter increasing Chinese surveillance activities close to the Andaman Islands, India has been investing in the development of an integrated surveillance network in the Bay of Bengal and Arabian Sea with radar stations in Sri Lanka, the Maldives, and other littorals.
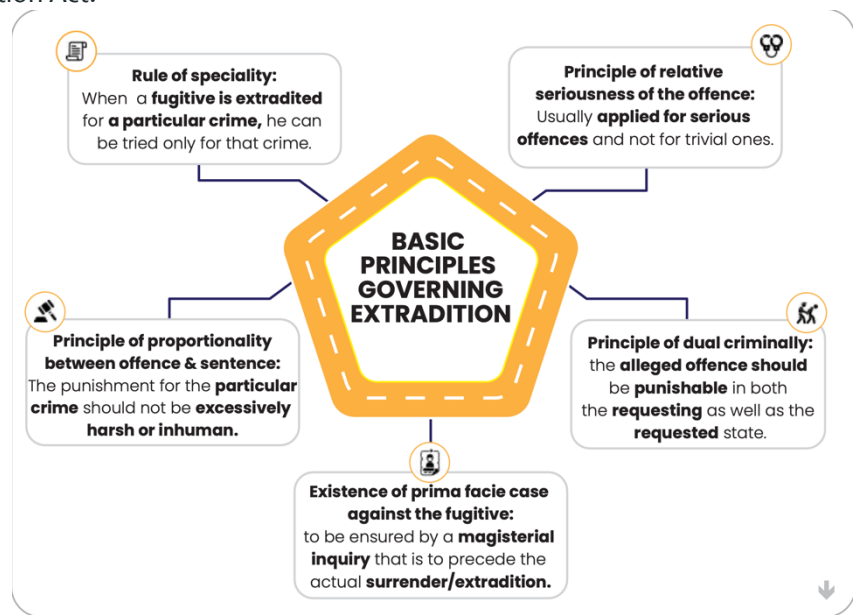
5.4. EXTRADITION

Why in News?

India has called upon the G20 countries to adopt multilateral action for faster extradition of fugitive economic offenders and recover the assets from both domestic as well as from abroad.

About Extradition

- **Meaning: Extradition is an act where one country delivers a person accused or convicted of committing a crime in another country, over to their law enforcement.**
- It **is a cooperative law enforcement process between the two countries** and depends on the arrangements made between them through an extradition treaty.
- **Process in India: In India, The Extradition Act, 1962 covers the extradition** of a fugitive from a foreign country to India or vice versa.
  o **So far, India has signed extradition treaty with 48 countries** including Australia, Canada, U.K, U.A.E, USA and **extradition arrangements are signed with 12 countries.**
  o **The Consular, Passport and Visa Division of the Ministry of External Affairs is the Central Authority** that administers the Extradition Act.
  o **The Fugitive Economic Offenders Act of 2018,** defines a fugitive economic offender as **one who has committed one or more scheduled crimes involving 100 crore rupees or more** and has either fled India or refuses to return in order to evade or face criminal punishment.

BASIC PRINCIPLES GOVERNING EXTRADITION

Rule of speciality: When a **fugitive is extradited** for **a particular crime,** he can be tried only for that crime.

Principle of relative seriousness of the offence: Usually **applied for serious offences** and not for trivial ones.

Principle of proportionality between offence & sentence: The punishment for the **particular crime** should not be **excessively harsh or inhuman.**

Principle of dual criminally: the **alleged offence should** be **punishable** in both the **requesting** as well as the **requested** state.

Existence of prima facie case against the fugitive: to be ensured by a **magisterial inquiry** that is to precede the actual **surrender/extradition.**

Need for Extradition of Fugitive offenders

- **To avoid Macro Economic implications:** The fugitives may default on loans, engage in fraudulent activities, and siphon off large amounts of money from banks and financial institutions.
- **To punish the guilty:** Geographical border should not become an obstruction for bringing the offenders before the Court of Law.
- **To deter future Crimes:** Moving to a foreign country should not be seen as an option for offenders to escape and by bringing the offenders to task, it deters such cases in future too.

- **To maintain cordial relationship:** By cooperating to extradite the offenders who have committed grave crimes in a foreign land and settled in India, the relationship with that country can be improved.
- **To maintain peace:** Extradition can be used as an effective way to bring the transnational crimes under check. It is also the only effective way to bring the master minds behind terrorist attacks to justice.

Challenges in Extradition:

- **Absence of Extradition treaties: India has signed Extradition treaty with only 48 countries** and the process becomes difficult, if the offender hides in a country with which no treaty is signed.
- **Clause of Double Jeopardy:** If the offender **has already faced legal action in the other country, then it debars to punish the person again** for the same crime.
- **Exclusion of political offences:** Political offences are generally not considered as a criteria for extradition in most countries.
- **State of Indian Prisons:** In many cases, **the overcrowded and unhygienic nature of Indian jails was sought as a reason to avoid transfer to India.**
- **Custodial violence:** Countries like the UK and many other European countries have often **denied extradition requests on the possibility that the requested person will be subject to custodial violence** in India's prisons.
- **Rule of Speciality:** The extradited offender **can be prosecuted only for the offence he was surrendered** and no additional/other cases can be included in the prosecution process.

Way Forward

- **Signing of more extradition treaties:** The Government should **focus on signing the treaty, with all possible allies** to avoid delays in future.
- **By Reciprocating the deeds:** By **efficiently handling an extradition request** from an another country, our requests to other countries will also be dealt at a faster pace.
- **By reforming the Prisons:** By **making the Prisons a better place for rehabilitation and acknowledging the rights of prisoners**, the extradition process can be made faster.
- **By signing international instruments:** India can sign international instruments, such as **the UN Convention Against Torture (1984)** to establish India's zero tolerance towards torture and custodial violence.
- **By improving the capacity and efficiencies of law enforcement agencies:** the increase in manpower can fasten the process in various departments and help to speed up the extradition procedures.

5.5. CLIMATE CHANGE AND SECURITY

Why in News?

In recent years, the linkages between climate change and security have gained significant attention.
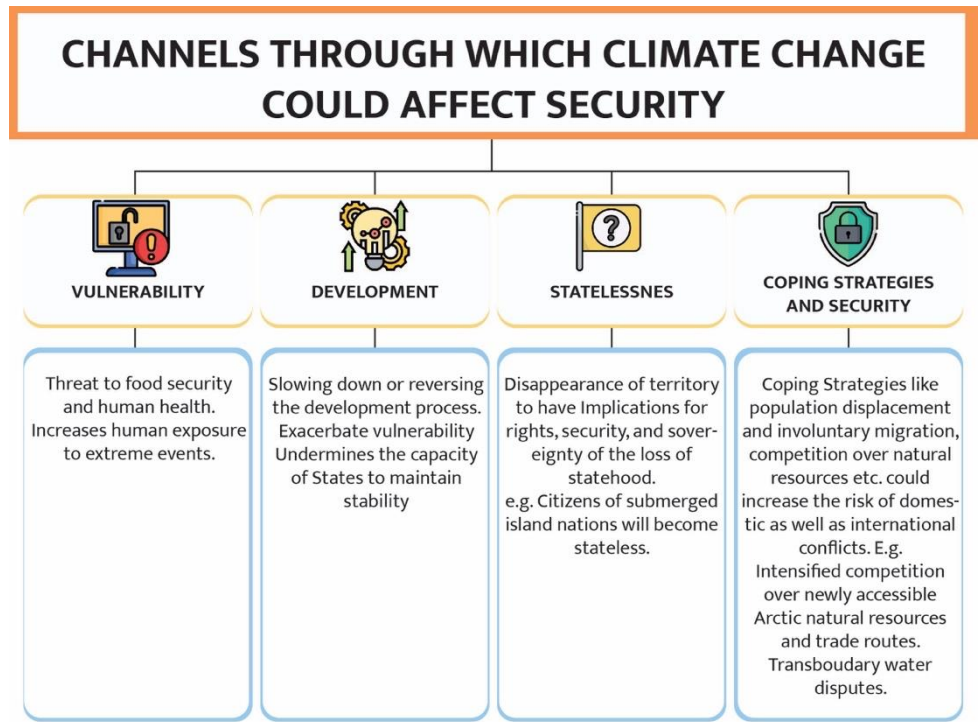
UNSC draft resolution on the subject

- Russia and India among other countries voted against the UNSC draft resolution aimed at **systematically integrating climate-related security risks into the UN's conflict prevention, conflict management and peacebuilding work.**
- **Concerns regarding resolution:**
  - While climate change has the potential to impact peace and security, the **nexus between the two is complex.**
    - ✓ For instance, other factors such as environmental degradation, food shortages and unfair distribution of resources are most likely to lead to tension and conflict.
  - **Climate change lies outside the ambit of UNSC:** UNSC's primary responsibility is "maintenance of international peace and security" and all matters related to climate change are being discussed in UNFCCC, a specialised agency.
  - **More powers to the world's industrialised countries,** which hold a veto power, to decide on future action on climate-related security issues, unlike UNFCCC, where decisions are made by consensus.

Way forward

- **UNFCCC can expand the scope of discussions** to include climate-related security issues.

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- **International community must provide stronger support to climate change adaptation** in developing countries, including through investments in capacity-building at all levels.
- **Enhance global efforts to ensure the sustainable and equitable development of all countries**, notably through developed countries' meeting their international commitments on development assistance.

CHANNELS THROUGH WHICH CLIMATE CHANGE COULD AFFECT SECURITY

VULNERABILITY

Threat to food security and human health. Increases human exposure to extreme events.

DEVELOPMENT

Slowing down or reversing the development process. Exacerbate vulnerability Undermines the capacity of States to maintain stability

STATELESSNES

Disappearance of territory to have Implications for rights, security, and sovereignty of the loss of statehood. e.g. Citizens of submerged island nations will become stateless.

COPING STRATEGIES AND SECURITY

Coping Strategies like population displacement and involuntary migration, competition over natural resources etc. could increase the risk of domestic as well as international conflicts. E.g. Intensified competition over newly accessible Arctic natural resources and trade routes. Transboudary water disputes.

- **Anticipate and prepare to address unprecedented challenges** like possibility of large numbers of persons displaced across borders by climate change, prospect of statelessness of citizens of submerged island nations, drastic reduction in water availability etc.
- **Improve the flow of information and sharing of assessments,** particularly on early warning, between different regional and international organizations.

APPENDIX

APPENDIX: KEY DATA AND FACTS

DEFENCE

Defence Modernisation

- ▶ **Initiatives for defence production and indigenization:** Defence Acquisition Procedure (DAP), 2020, iDEX (Innovation for Defence Excellence), SRIJAN Portal, Technology Development Fund (TDF) Scheme etc.
- ▶ **Initiatives for improving military organization:** Agnipath scheme, Chief of Defence Staff , Integrated Battle Groups, Department of Military Affairs etc.
- ▶ **Other efforts:** Defence Testing Infrastructure Scheme, DRDO's dedicated laboratories for application-oriented research in AI etc.

Defence Exports

- ▶ India's defence export reached an all-time high of approx. **Rs 16,000 crore in FY 2022-23**.
- ▶ India set a target of **$5 billion** in defence exports **by 2024-25.**
- ▶ Presently, India is exporting **defence equipment to more than 85 countries.**
- ▶ **Major arsenal exported:** Armoured protection vehicles, light-weight torpedo, weapons locating radar, fire control systems, offshore petrol vehicles etc.

Self-reliance in Defence Manufacturing

- ▶ Recent **Indigenous defence products** e.g Aircraft Carrier **INS VIKRANT, Pralaya Ballistic missile,** etc
- ▶ **Initiatives taken:** DAP 2020, TDF Scheme, Positive indigenization list, Defence Industrial Corridors, Conducive FDI policy (up to 74% through automatic route) etc.
- ▶ India's **defence expenditure has remained less than 1% of its GDP** in the last five years.
- ▶ As per SIPRI report, India's military spending of **$81.4 billion** ranked **4th highest** in the world.

Military Logistics Agreements

- ▶ Agreements with Australia, Japan, US – **Quad countries – as well as with France, Singapore and South Korea.**
- ▶ **India and Vietnam** have signed a logistic support pact for military.

TECHNOLOGY AND INTERNAL SECURITY

Data Protection

- ▶ India **does not have any dedicated legal framework** for data protection.
- ▶ **Some acts/judgments cover data protection in general** including Sec43 of IT Act, Right to Privacy Judgement (Justice Puttaswamy case), Consumer Protection Act, Copyrights Act etc.
- ▶ **MeitY** has released a **draft of Digital Personal Data Protection Bill,2022** for public consultation.

Cyber Security	▶ India is **ranked 10th (among 194 countries) in Global Cybersecurity Index 2020.** ▶ India has **digitally vulnerable targets** with a large pool of around **1.15 billion phones** and more than 816 million internet users. ▶ In 2021, **illicit transactions using cryptocurrencies** were estimated to be around **$20 billion.** ▶ Cost of cyber-attacks is **expected to reach $20 billion in next 10 years.** ▶ As per **Ransom-ware Report-2022,** Ransomware incidents have gone **up by 53% in 2022 over 2021.**

Critical Information Infrastructure	▶ Critical Information Infrastructure(CII) is **declared by government under Sec 70 of IT Act2000(Amended 2008).** ▶ **Initiatives for critical infrastructure protection:** National Cyber Security Policy, 2013, National Cyber Security Strategy 2020, CERT-In, National Cyber Coordination Centre (NCCC), National Critical Information Infrastructure Protection Centre (NCIIPC) etc. ▶ **Center declared Census, National Population Register database as CII.**

Role of Technology in Law Enforcement	▶ **Technologies used:** Body-worn cameras, automatic tag and license plate readers, Biometrics, Brain fingerprinting, google glass etc. ▶ **Best practices in India:** UP (AI enabled app to digitize records of criminals), Punjab (Saanjh-a citizen facing portal), Odisha (MO SAATHI to help women), Maharashta (AMBIS database of criminals) etc. ▶ Tamil Nadu Government decided to use '**Fingerprint Analysis Tracking System**' to create a **biometric database** record of criminals. ▶ **CBI, NIA** and Narcotics Control Bureau (**NCB**) provided access to **National Automated Fingerprint Identification System (NAFIS).**

SECURITY FORCES

Police Reforms	▶ ·Nearly **20% of the sanctioned strength is vacant** at various levels. ▶ ·Expenditure on police accounts for about **3% state government budgets.** ▶ ·**Women are underrepresented** in the police force, constituting **only 10.3% of police force.** ▶ ·**Some experts body for police reforms:** Padmanabhaiah Committee (2000), Malimath Committee (2002-03), SC directives in Prakash Singh Case (2006), Second ARC (2007), Police Act Drafting committee II (2015). ▶ **Government Initiatives:** SMART Policing, Crime and Criminal Tracking Network System (CCTNS), Model Police Act, 2006 etc.

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STATE AND NON- STATE ACTORS

Naxalism

▷ **Incidents** of LWE violence have **reduced by 76%** from 2010 to 2022.
▷ **Number of LWE affected districts** reduced from **35 to 25** from 2018 to 2021.
▷ **Deaths (civilians and security forces) have reduced by 90%** over the past 12 years.
▷ **Initiatives taken for LWE states:** National Policy and Action Plan (2015), Various Sub–Schemes under Scheme Modernization of Police Forces, SAMADHAN strategy.
▷ **Skill Development:** ROSHINI, ITIs and Skill Development Centres, livelihood college etc.
▷ **Institutional measures:** Black Panther combat force for Chattisgarh, Bastariya Batallion etc.

Insurgency in Northeast

Initiatives taken to restore peace

▷ **Fencing of borders** with regional cooperation.
▷ **Priority to northeast routes under UDAN 4.0**, development as **economic hub under Act East Policy** (National Bamboo Mission, Agri export Zones etc.).
▷ **3rd Bodo Peace Accord (2020)** was signed for peace in Bodo-dominated areas in Assam.
▷ Government **entered into ceasefire Agreement** with National Socialist Council of Nagaland (K) Niki Group.
▷ **Other initiatives:** Maitri Setu with Bangladesh, Aspirational District Programmes, etc.

Terrorism

▷ As per Global Terrorism Index (GTI) 2023- India remained at **13th** while Pakistan ranked at **6th**.
▷ There is **no internationally agreed definition** of the term "terrorism".
▷ **National Investigation Agency (NIA)** is functioning as Central **Counter Terrorism Law Enforcement Agency** in India.
▷ Creation **of two new divisions (Counterterrorism and Counter-Radicalisation Division and Cyber and Security division)** in Ministry of Home affairs.

Drug Trafficking

▷ Within India, the **worst affected regions are North East India** (especially Manipur) and **North West India** (especially Punjab).
▷ **NER is close to Myanmar which is 2nd largest producer of opium in the world after Afghanistan. World Drug Report**
▷ As per **2023 World Drug Report by UNODC,** The estimated number of users grew from 240 million in 2011 to **296 million** in 2021.
▷ **India has become a transit hub as well as a destination** for heroin and hashish produced in Golden Triangle and Golden Crescent.

Money Laundering

▷ Parliamentary act **Prevention of Money-laundering Act, 2002 (PMLA)** is dedicated to money laundering.
▷ Money laundering has been made a **standalone offense** through legislation.
▷ **Prosecution complaints** have been filed in only **19%** of the case.

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Counterfeit Currency Notes	▷ The value of the **counterfeit currency in the banking system has reduced by more than 80% between 2016 to 2021.** ▷ Fake currency n**otes seized by different law enforcement agencies have gone up** to 92 Cr from 28 Cr. ▷ Counterfeiting is punishable offence under **Sections 489A to 489E of the Indian Penal Code**. ▷ It has also been brought under the ambit of **Unlawful Activities (Prevention) Act (UAPA), 1967**
UAPA (Unlawful Activities [Prevention] Act)	▷ **SC stated that mere membership of a banned organization will be crime under the act.** ▷ Only **3.6% of cases registered UAPA cases resulted in conviction.** ▷ Centre empowered to **designate individuals as terrorist**. Earlier, only organization could be designated as terrorist organisations.

EMERGING DIMENSIONS OF SECURITY

Space Weaponisation	▷ India became the **27th nation** to sign the **Artemis Accords**. ▷ **Mission Def-Space:** Is an initiative by the Indian Government to develop innovative solutions for defence requirement in the space domain. ▷ **India in the race of space power:** Indian National Committee for Space Research (INCOSPAR) formed in 1962, ISRO in 1969, Defence Space Agency (DSA) in 2019, Anti-satellite (ASAT) missile test (Mission Shakti). ▷ **Global Framework to prevent Weaponization of Space:** Outer Space Treaty, Prevention of an Outer Space Arms Race, USA Artemis Accord. ▷ **IndSpaceEx:** Simulate space warfare exercise for Indian forces.
Maritime Security	▷ India recently chaired UNSC high level open debate on "**Enhancing Maritime Security: A case for International Cooperation**". ▷ India has become a **Nuclear Triad** country by inducting Nuclear (SSBN) INS Arihant and Aircraft carrier '**INS Vikrant**' ▷ **Challenges**-Terror attacks, Piracy, Organised crimes, rising influence of USA and China,etc ▷ The **Maritime Anti-Piracy Act, 2022** was passed to focus on piracy.
Hybrid Warfare	▷ Hybrid warfare entails an **interplay or fusion of conventional as well as unconventional instruments** of power and tools of subversion. ▷ It includes-**cyber attacks, Interference in electoral process,etc**
Bio-Terrorism	▷ India –USA Joint exercise TARKASH has for the first time included response to biological terror attacks. ▷ **Existing measures in India to deal with it:** Epidemic Diseases Act of 1897, NDMA proposed a model instrument for government to deal with it and private sector, Integrated Disease Surveillance Project. ▷ **Measures at International Level:** Biological Weapons Convention, INTERPOL Bioterrorism Prevention Unit, Cartagena Protocol on Biosafety.

WEEKLY FOCUS- SECURITY

S.No.	Topic	Learn More
1.	Artificial Intelligence and National Security	
2.	India's Nuclear Doctrine	
3.	Coastal Security: State of India's Preparedness	
4.	Indigenisation of Defence Industry: From Necessity to Opportunity	

S.No.	Topic	Learn More
5.	Hybrid Warfare: New age war warrants a new age response	
6.	Nuclear Disarmament: A step towards safe and better world	
7.	Geospatial Data: Driving the new age of defence	

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ESSAY
ENRICHMENT PROGRAMME 2023
18 JUNE | 5 PM

▸ Introducing different stages from developing an idea into completing an essay
▸ Practical and efficient approach to learn different parts of essay
▸ Regular practice and brainstorming sessions
▸ Inter disciplinary approaches
▸ **LIVE / ONLINE** Classes Available

Lakshya Mains Mentoring Program 2023

LAKSHYA
Mains Mentoring Programme 2023

Lakshya Mains Mentoring Program 2023 is a targeted revision, practice, and enrichment Program that aids students in achieving excellence in the UPSC Mains Examination 2023. The Program adopts a strategic approach by providing smart preparation strategies, developing critical thinking and analytical skills, and advanced answer-writing abilities.

Scan the QR code to Register

Features of the Program

Dedicated Senior Mentor

A Senior Mentor is assigned to each student to provide personalized guidance in each aspect of the Mains examination preparation and assist students in consolidating their strengths maximizing their performance by identifying and improving upon student weaknesses.

Emphasis on High-Scoring Potential Subjects

The Program lays special emphasis on subjects like Ethics and Essay and provides ample opportunity for students to inculcate the learnings and effect their implementation in the answer writing.

Regular Group Sessions

Aspirants engage in interactive sessions conducted by experienced mentors which provide subject-specific strategies, insights from toppers, advanced-level answer-writing skills, etc.

Answer Enrichment

Aspirants gain insights from institutional experience and the answer scripts of previous toppers to enhance the content and presentation of their answers, making them impactful and effective.

Live Practice Sessions

Through these practice sessions, aspirants can implement session learnings and receive immediate feedback from their mentors to refine their approach and boost their confidence.

Lakshya Mains Practice Test (LMPT)

Aspirants can undertake the scheduled LMPTs in online/Offline modes to put their knowledge and skills to the test and validate their preparation strategies.

Expert Evaluation

The LMPT is evaluated by the expert team at VisionIAS through an Innovative Assessment System to provide detailed feedback for further improvement.

Feedback Session with Assigned Mentor

In this session, students can discuss the feedback received on their LMPT performance and their Answer Scripts to address any doubts or concerns in a personalized setting with their Mentor.

Peer Interaction and Motivation

Aspirants participate in constructive discussions, share their experiences, insights, and motivation with fellow aspirants facilitating co-learning and development.

Multi-platform Support

Aspirants can benefit from a comprehensive support system in the form of online/offline Groups and One-to-One sessions, telephonic support, and a dedicated Telegram platform for immediate assistance whenever needed.

With its intelligent design, effective implementation, dedication from Senior Mentors, and active participation of Students, the Program has achieved tremendous success in a short period of time with **Waseem Ahmad Bhat** securing an impressive All India Rank (AIR) of 7, **Siddharth Shukla AIR 18,** and **Anoushka Sharma** securing AIR 20.

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Heartiest *Congratulations*
to all Successful Candidates

39 in Top 50 Selections in CSE 2022

AIR 1 ISHITA KISHORE

AIR 2 GARIMA LOHIA

AIR 3 UMA HARATHI N

हिंदी माध्यम में 40+ चयन CSE 2022 में

= हिंदी माध्यम टॉपर =

66 AIR KRITIKA MISHRA

85 AIR BHARAT JAI PRAKASH MEENA

105 AIR DIVYA

120 AIR GAGAN SINGH MEENA

173 AIR ANKIT KUMAR JAIN

---

8 in Top 10 Selections in CSE 2021

2 AIR ANKITA AGARWAL

3 AIR GAMINI SINGLA

4 AIR AISHWARYA VERMA

5 AIR UTKARSH DWIVEDI

6 AIR YAKSH CHAUDHARY

7 AIR SAMYAK S JAIN

8 AIR ISHITA RATHI

9 AIR PREETAM KUMAR

1 AIR SHUBHAM KUMAR
CIVIL SERVICES EXAMINATION 2020
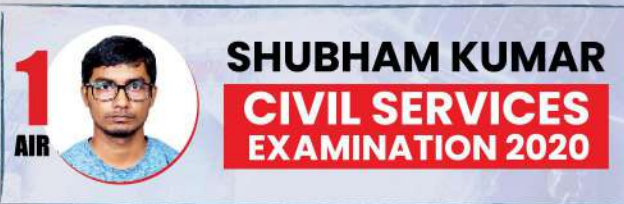
HEAD OFFICE
Apsara Arcade, 1/8-B, 1st Floor,
Near Gate 6, Karol Bagh
Metro Station

DELHI

Mukharjee Nagar
Plot No. 857, Ground Floor,
Mukherjee Nagar, Opposite
Punjab & Sindh Bank, Mukherjee
Nagar, New Delhi – 110009

For Detailed Enquiry,
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