

Bio-terrorism

Bioterrorism:

- “Intentional” release of virus, bacteria, etc. to harm humans, plants, animals.
- Some examples:
 - 2001 anthrax attacks in USA (letters with Anthrax sent to legislators, media, etc.)
 - Iraq’s bio-weapons program in 1980s. Loaded some missiles with anthrax and aflatoxin.
- Covid-19 pandemic has **exposed the vulnerability** of world powers to potential use of biological weapons. (Don’t say that corona is a Chinese conspiracy, until proven).

Challenges with bio-terrorism:

- Relatively **easy to create** without getting detected. (like a vaccine production facility).
- Wide **geographic reach** and **self-sustaining** spread.
- Difficult to control due to possible **mutations**.
- Difficult to find the **real attackers**.
- It may be **delivered** through air, water supply, agri inputs, humans, etc.
- India specific challenges:
 - Tropical **climate** generally more suitable for rapid spread of disease.
 - High **population** density, crowded public transport.
 - **Neighbors** who use proxy war as state policy. (Pak terror, China tech)

Is India prepared:

- **Epidemic Disease Act 1897** gives governments special powers to deal with dangerous epidemic disease.
- **NDMA** is equipped to deal with effects of weapons of mass destruction (chemical, biological, nuclear)
- **Integrated Disease Surveillance Program** of MoHFW to detect outbreaks in early phase.
- **Research infra** e.g. ICMR labs like NIV Pune, academic labs, etc.

What can be done?

- International cooperation on **intelligence** sharing.
- Infra for rapid **detection**, continuous monitoring of critical infra.
- Strengthening **disaster management** forces.
- Installing **biodefense** mechanisms on lines of USSR during cold war.
- **Public awareness** about dos and don'ts in cases of suspected bioterrorism.

Biological and Toxic Weapons Convention 1972.

- It was the 1st multilateral disarmament treaty to **ban Biological Weapons**.
- It prohibits countries from producing, stockpiling, acquiring, or retaining biological agents that can be used as weapons.
- India ratified this treaty in **2015**.

Lone Wolf Attack

(aka lone actor attacks)

What is a Lone Wolf Attack?

- A terrorist attack in which a **radicalized individual** translates his beliefs into violent actions. Example: **Christchurch** attack of March 2019
- It is different from **other terror attacks** which are planned, prepared, and executed by a **group** of people under some organization (e.g. Al-Qaeda).

What leads to a lone wolf attack?

- A **group of people** regularly generate media content against any particular group.
- People made to feel they are **under threat** by a particular group.
- Social media gets flooded by **hate content**.
- **Continuous exposure** to hate content leads to **self-radicalization**.
- Common people become terrorist **without even realizing** it.
- **Internet** provides information on **weapon** preparation from common items.

What are the reasons for their recent increase?

- Growing **inequality** fuels feeling of relative deprivation.
- Severe violation of rights, and **indifference of public**.
- Ease of radicalization through **technology**.
- Increase in **ideological movements** across the globe.

What can be done to control lone wolf attacks?

- Control the spread of **hate** on social media.
- Find **source** of hate generating social media posts.
- Using anti-terror **laws** against groups creating hate content.
- Strengthen **social unity** to prevent radicalization in society.
- Promote responsible **media** reporting. While reporting terror incidents, media should avoid amplifying extremist content.
- **Christchurch** call to Action (New Zealand's initiative after March 2019 Christchurch attack)
- Involve **tech companies** in controlling online content (Global Internet Forum to Counter Terrorism)
- Limiting access to **info** and material that can be used as **weapons**.



Additional comments:

- Intelligence agencies** prevent hundreds of terrorist attacks by using:
 - Human** intelligence (informers, spies)
 - Technical** surveillance (e.g. NTRO)
 - Coordination** with friendly countries
- Terror attacks** need lot of coordination, communication and movement:
 - Involvement of large **number of people**.
 - Communication happens over existing telecom networks or **internet**.
 - Travel of potential recruits across **borders**.
- An **individual acting independently** lacks these features.

Lone Wolf Attacks are ticking time bombs and could emerge as biggest internal security threat to India in near future. Elucidate. (150 words)



Terrorism:

14 October 2021

Taliban:

- Return of Taliban in Afghanistan is a **warning for neighbourhood**.
- Small **local** terror groups will feel **energised**.
- **Kashmir** is beginning to see a **new wave** of terror attacks.

'New era' terror:

- **Remote controlled terror** or Internet-enabled terrorism: recruited, trained and controlled through Internet.
- Terror groups with state backing can launch **cyber-attacks**.
- Limited only by **human imagination**.

Was global war on Terrorism successful?

- Not entirely. Terrorists using small arms, **IEDs**, **lone wolf attacks** does not mean that terrorism has weakened.
- Terrorism, stemming from a mixture of **religious fervour** and **fundamentalist aims**, remains **vibrant**.

Note:

- **IED:** Improvised Explosive Device
- **Lone wolf attack:** planned and committed by an individual on his own
- **Religious fervour:** passionate about religion
- **Fundamentalist aims:** spreading strict belief in some ideology विचारधारा
- **Vibrant:** full of energy

Aid for Afghanistan:

- At G20, PM Modi asked international community to provide Afghanistan with "immediate and unhindered access to **humanitarian assistance**".
- India can send aid **directly**, or through international organisations.

Reasons:

- India concerned about welfare of ordinary Afghans.
- Humanitarian crisis can have international ramifications.

Indo-Pacific

- ❑ It is a **geopolitical construct**, for area between Africa and Pacific Island States.
- ❑ It signifies interconnectedness of Indian and Pacific Oceans, and their importance to security and commerce.

**Evidence of growing focus on Indo-Pacific:**

- **Quad** restarted in response to China's growing influence in Indo-Pacific (2017)
- **USA** renamed its Pacific Command to **Indo-Pacific Command** (2018)
- **MEA** set up a separate **division** on Indo-pacific (2019)
- **EU** announced its 'strategy for cooperation in the Indo-Pacific' (April 2021)
- **AUKUS** announced by USA, UK, Australia (Sept. 2021)

Focus of global politics is shifting from Euro-Atlantic to Indo-Pacific because:

- Rise of major **economic powers** e.g. China and India.
- Formation of important **trade blocs** e.g. RCEP (world's largest)
- Presence of **natural resources** e.g. rare earth metals, methane hydrates
- Important **SLOCs** and **choke points** e.g. Bab-el-Mandeb in west and Malacca Strait in East
- Fear of **Chinese domination**:
 - Militarization of South China sea islands
 - Refusal to follow PCA ruling on South China Sea
 - Leasing of islands (Maldives) and ports (Sri Lanka)

India's vision of Indo-Pacific:

- **Rules based order**, respect for sovereignty and territorial integrity
 - Nine dash line violates territorial integrity of SE Asian nations
- **Freedom of navigation**
 - FONOPS in South China Sea by US, UK, Australia, etc.
- **Creating partnerships** to respond to China's power projections
 - Quad in response to China's domination

India's policy in Indo-Pacific?

- Reduce **Chinese** presence (ports, islands, submarines)
- Enhance own **presence** (Assumption island in Seychelles; Duqm port of Oman)
- More **partnerships** like Quad, BIMSTEC, Forum for India-Pacific Islands Cooperation.
- Increase **maritime awareness** through coastal radars, Information Fusion Centre, etc.
- Be a **net security provider** for small nations and international shipping routes.
- Provide weather forecasting, early warning and be **first responder to disasters** in IOR.
- Use of **Soft power** with help of diaspora and govt initiatives like Project Mausam.

Challenges India face:

- Economically not big enough to match Chinese **investments** in small countries.
- Slow execution of India-funded infra projects in neighboring countries.
- Low **economic integration**. India not part of RCEP.
- Limited **Naval capacity**, e.g. India has just 20 submarines, China has 70
- Aggressive maritime strategy can create problems on **land border**.

Way forward: (make points from India's existing policy)

- Join **Blue Dot network** to counter Chinese BRI
- Strategic use of **A&N islands**; more pacts like **Comcasa, Lemoa, Beca**
- More collaboration with likeminded countries, e.g. **Quad**



How Delhi came to see Europe as a valuable strategic partner

C Raja Mohan writes: With its economic weight, technological strength and normative power, the EU promises to enhance India's quest for a multipolar world, rebalanced Indo-Pacific.

2021 April: EU released '**Strategy for Cooperation in the Indo-Pacific**'

2021 Sept.: EU launched '**Global Gateway**' scheme to counter China's BRI

EU's Indo-Pacific Strategy:

- Build sustainable global supply chains.
- Develop partnership with like-minded countries
- Work with Quad to counter China's expansionist tendencies

Significance of EU For India as well as Indo-Pacific:

- ❑ EU is a critical element in construction of a **multi-polar** world.
- ❑ As US-China rivalry squeeze SE Asia, Europe is seen as a reliable **strategic option** for the region.
- ❑ Most Asian countries see Europe as a **valuable partner**, instead of suspicion.
- ❑ **Strategic cooperation** with the EU in defence, infra, ocean governance, digital partnerships, etc.
- ❑ EU's Indo-Pacific strategy looks to **work with Quad** and **increase security cooperation** with number of Asian countries.
- ❑ A stronger Europe with greater **geopolitical agency** is very welcome in the region.
- ❑ Europe can't match America's military weight, but it **can bring military balance** in the region.
- ❑ **Europe can** significantly boost India's capacity to **influence** future outcomes in the **Indo-Pacific**.
- ❑ EU outlined a strategy for India in 2018 to focus on four themes:
 - ❑ sustainable **economic** modernisation
 - ❑ promotion of a **rules-based order**
 - ❑ **foreign policy** coordination
 - ❑ **security** cooperation
- ❑ At the summit in Portugal in May this year, EU and India agreed to resume **free trade** talks and develop a new **connectivity** partnership.
- ❑ **Small European countries** have much to offer to India's economic, technological, and social transformation.
 - **Luxembourg** brings great financial clout, **Norway** offers impressive maritime technologies, **Estonia** is a cyber power, **Czech** has deep strengths in optoelectronics, **Portugal** is a window to the Lusophone world, and **Slovenia** offers commercial access to the heart of Europe through its Adriatic sea port at Koper.

AUKUS

Trilateral security pact between US, UK, Australia (focused to counter China). Implications:

- ❑ **Australia:**
 - Australia will get advanced nuclear powered submarine technology from US & UK
 - Stronger defence capabilities will help it counter security challenge in Indo-Pacific
- ❑ **China:**
 - Stronger Australia will help counter China's expansionist tendency in the Indo-pacific.
- ❑ **France:**
 - France was kept in dark about Aukus, lost \$66 billion submarine deal with Australia.
- ❑ **S-E Asia:**
 - Indonesia & Malaysia have expressed concern over the growing arms race in the region.

Significance for India:

- ❑ **Counter China:** Any development that counter's China's influence is welcome for India.
- ❑ **Powerful ally empowers India:** Australia will be able to share more maritime responsibility and can share info on movement of Chinese subs in the region.
- ❑ **Strengthen QUAD:** Aukus can cooperate with Quad in areas like cybersecurity and AI.
- ❑ **Cooperation with France:** France may offer nuclear powered subs to India, to compensate for loss in Australia deal.

Concerns for India:

- ❑ **India's absence** in security partnership centered on Indo-pacific is a cause of concern.
- ❑ **USA's unreliability** as India's ally. To counter China, it chose to strengthen Australia, not India.
- ❑ **New country with nuclear subs** in the region will reduce India's clout.
- ❑ Aukus may **reduce significance of Quad**, of which India is a part.

Way forward:

- Strengthen Indian Navy, commission more indigenous nuclear subs.
- Use the opportunity to increase defence cooperation with France.

AUKUS could rock China's boat in the Indo-pacific (08-11-2021)

Australia, UK, USA:

They already have close **defence** cooperation for **decades**, e.g.

- US sharing **nuclear weapons** tech with UK since **1943**
- UK did its first **nuclear test** in Australia in **1952**
- Australia still regards British Monarch as **Head of State**

AUKUS:

- **security pact** for **Indo-Pacific** region (announced on 15 September 2021)
- It will **strengthen** defence **cooperation** (also cyber, AI, Quantum, undersea capabilities)
- Elements of broader agenda gives opportunity to engage **regional countries** like NZ.
- It will also help other initiatives to **counter China's BRI**, like Blue Dot Network, Build Back Better World, Clean Network.

Benefits of AUKUS for the region:

- AUKUS can strengthen security of **Japan, Taiwan and ASEAN**.
- It counters threat of increasing number of **Chinese nuclear subs** in Indian Ocean.

Benefits of AUKUS for USA:

- Through its strong navy, **China is challenging US** dominance of Pacific.
- Through AUKUS, **US is using proxy** submarine forces to counter China.

Quad vs AUKUS:

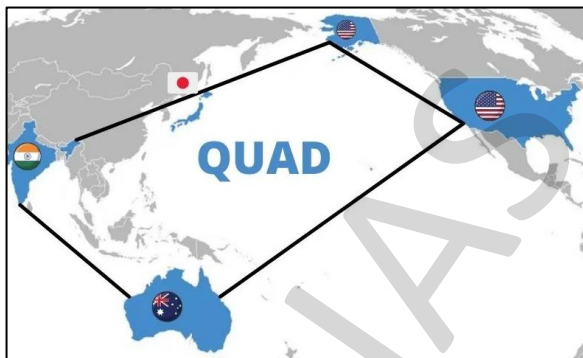
- **Quad** does not have mandate or **capability** to militarily counter China.
- Focus of Quad is both Indian and Pacific oceans, but AUKUS has **pacific-centric** approach.

Quad

First in-person meeting of Quad was hosted by USA in September 2021.

Quad:

- ❑ strategic security dialogue between India, USA, Japan, Australia.
- ❑ Maintained by semi-regular summits, information exchanges and military drills.
- ❑ Started in **2007** on initiative of Japanese PM Shinzo Abe, to establish an "**Asian Arc of Democracy**".
- ❑ Inactive for 10 years; **revived in 2017**, to counter China's growing influence in Indo-Pacific



Significance of Quad for India?

- Presents a **united front** against aggressive activities of China.
- **Counters China's influence** in Indian Ocean; supplements India's limited naval capabilities through joint patrols, info exchange, etc.
- **Deepen ties** with US, Japan, Australia; help India secure a place in the new world order.

Challenges:

- Quad lacks institutional framework; meetings are **ad-hoc**; no joint statements.
- **Priorities differ**, as India's priority lies in Indian Ocean, while Japan and Australia are concerned about the Pacific.
- China has called Quad 'mini-NATO', it can create problems on India-China **land border**.
- Creation of **AUKUS** reduces significance of Quad as a grouping to counter China.

Way forward:

- Set up mechanism for **regular** consultation.
- Expand **scope** beyond Indo-Pacific (Cybersecurity, 5G, etc.)
- Include other likeminded **countries**, like UK & France (but not too many)

Quad should not be seen as a military grouping, rather it presents opportunity to cooperate on lot of common areas like new technologies, climate change, infra projects to counter BRI, and a free and open rule-based order in Indo-Pacific.

Multilateralism



Jun 05, 2020, 1:59PM

New Orientation for a Reformed Multilateral System to be India's approach at UNSC: EAM Dr S Jaishankar

India's approach at the United Nations Security Council will be guided by the tenets of Samman, Samvad, Sahyog, Shanti and Samriddhi. External Affairs Minister Dr S. Jaishankar asserted that India's overall objective during the fresh tenure in the UN Security Council will be the achievement of N.O.R.M.S., New Orientation for a Reformed Multilateral System. He said this today at the launch event of a brochure outlining India's priorities for its forthcoming campaign to secure an elected seat in the UN Security Council. The election for the UN Security Council is slated to be held on 17th of this month.

Unilateralism → one-sided action by a party.

Vaccine nationalism,
USA withdrawal from UNESCO, WHO

Bilateralism → two parties coming together.

Indo-Nepal Treaty of Peace and Friendship 1950
China making bilateral deals under BRI

Multilateralism → multiple parties coming together

Post WW-II institutions like UN, WB, IMF
NPT, BRICS

What is N.O.R.M.S.?

- N**ew **O**rientation for a **R**eformed **M**ultilateral **S**ystem
- India has become UNSC member for 8th time.
- India's overall objective will be to push for a reformed multilateral system.
- N.O.R.M.S. is the framework to achieve it.
- Its components are:
 - a) Samman: Respect
 - b) Samvad: Dialogue
 - c) Sahyog: Cooperation
 - d) Shanti: Peace
 - e) Samriddhi: Prosperity

What is multilateralism?

Coming together of three or more states to discuss (& act on) issues of mutual interest.



a) **Global challenges cannot be tackled by unilateral or bilateral approach**

- Global threats need global response.
- Problem is so vast, no single country/group can tackle them alone.
- e.g. Climate change, Nuclear proliferation

b) **Power is diffused across states and non-state actors**

- Many groupings and private companies are quite powerful
- Their involvement is essential in any major decision
- e.g. Google, Facebook, WEF Davos summit, Blockchain Bill of Rights

c) **Deficiencies in statehood system across the world**

- Governments are incapable of meeting people's needs and aspirations.
- e.g. corruption, poverty, access foreign markets.

Challenges in multilateralism:

a) Vague goals:

- It is difficult to set clear priorities when so many nations come together.
- To accommodate every one, agenda expands, and become vague.

b) Time taking process:

- Negotiations take long time as everyone's concerns need to be addressed
- By the time negotiations finalize, situation would have changed.
- So, it's not suitable for issues that require quick action.

c) Trust deficit:

- Bigger groups have more chances of rivals being included.
- Rivalries between members make negotiations difficult.
- US-China, US-Russia, India-China

d) Illusion of progress:

- Signing of agreements creates illusion that progress is being made.
- NPT is not working on nuclear disarmament.

e) Free-rider problem:

- Some countries hope to enjoy benefits without making efforts
- USA withdrew from Paris agreement, but will enjoy clean environment

Multilateralism: Need of the hour (Institutions → countries → people)

The present global multilateral order is in crisis:

- UN is dominated by P5, no reforms, could not prevent many wars.
- WTO's appeal mechanism is practically stalled.
- WHO's failures in initial handling of coronavirus, and alleged protection to China.
- Nationalism and protectionism is increasing: America First, Brexit
- Bilateral deals under China's BRI is leading countries to debt trap.
- Pandemic needs global response, but countries are adopting vaccine nationalism.
- Covid induced lockdowns increased hunger. WFP got Nobel prize but lacks funds.

Way forward:

- Reform existing multilateral institutions to reflect new world order.
- Find common goals to get cooperation from all members.
- Explore use of sanctions or non-cooperation with non-cooperating countries.
- Use minilateralism wherever suitable:
 - Term coined by Moises Naim of Venezuela in 2009
 - It is a type of multilateralism
 - Less number of participants, dealing with specific issue
 - Generally, it is less formal and without institutions.
 - Benefits? (see problems with multilateralism)

Soft Power

India's rank in Global Soft power index fell from 27 to 36.

What is Soft Power?

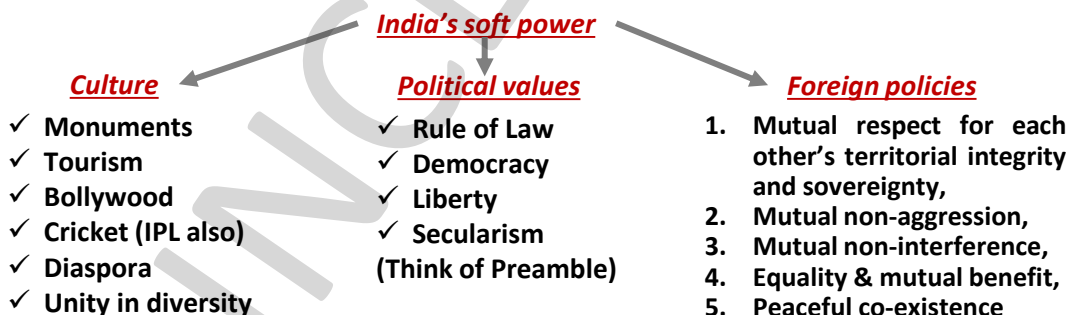
- ✓ ability to attract and co-opt, rather than coerce (contrast hard power).
- ✓ shaping the preferences of others through appeal and attraction.

Concept by **Prof. Joseph Nye** of Harvard University; three sources of soft power:

- 1) **Culture**: when it is attractive to others.
- 2) **Political values**: when a country lives up to them, at home and abroad
- 3) **Foreign policies**: when they are legitimate and have moral authority

India's soft power:

- a) Presence of all the major **religions** of the world: Four homegrown- Hinduism, Buddhism, Jainism and Sikhism and four came from outside- Zoroastrianism, Judaism, Christianity and Islam.
- b) **Architecture**: Ancient rock paintings; medieval temples; temples of South-East Asia; Taj Mahal; Indo-Islamic, Indo-Saracenic/Gothic styles.
- c) Popularity of **Bollywood** across the globe: West, Middle east, China, etc.
- d) **Yoga** and meditation: popularity of yoga classes in west, International yoga day.
- e) Variety of Indian **cuisines** and presence of Indian restaurants across the globe.
- f) Indian **diaspora** abroad spreads our culture and also promotes foreign policy goals.



Some government initiatives:

- a) Indian Council for Cultural Relations (**ICCR**) under MEA works to spread our culture abroad under its mandate of **cultural diplomacy**.
- b) MEA uses a **soft power matrix** to measure India's soft power abroad.
- c) **Project Mausam** to increase cultural connect with Indian Ocean countries.
- d) Push for **International yoga day** at UNGA to further popularize and spread Yoga.
- e) **Incredible India** campaign to promote tourism.
- f) **Swadesh Darshan** scheme of Ministry of Tourism has circuits on Jainism, Buddhism, etc.

What challenges does India face in spreading its soft power?

- 1) **Negative image** of India due to poverty, caste and communal violence, etc.
- 2) **Competition** from other countries:
 - a) China: **Chinese food** more popular than Indian food; **Feng-shui** more popular than Vaastu; **Kung-fu** (especially in Hollywood)
 - b) West: their **peaceful society** and **universities** are way more appealing than those of India.



Way forward?

- [Address the challenges]
- Strengthen the functioning of **ICCR**
- Set up a dedicated cadre of **Indian Cultural Service**
- To make Soft power effective, combine it with **Hard power**
- Soft power + Hard power = **Smart power**

Additional comments:

- ❖ India needs soft power because it cannot succeed simply as a hard power.
- ❖ India has shone in the world because of its soft power defined by its **history**, cultural and religious **diversity**, and **Gandhian legacy**.
- ❖ Losing these values at home today, will tomorrow result in **loss of respect** that India commands in the world. (Students can here contrast China's 'image' in the world, vs that of India).

Sport Diplomacy

- Sports play important role in international relations and diplomacy.
- Sports is a **global culture**. It surpasses linguistic and religious barriers.
- Sportsperson** have **fans** across countries, can be used to advance agendas.
- Sports have the **power to bring people**, nations, and communities **closer**.
 - **1999 Chennai India vs Pak**: Pak won and Indian crowd gave them a standing ovation.
- Sports can be used to **send political message**.
 - **1974 Davis Cup**: To oppose Apartheid, India refused to play against South Africa in the final match.
 - **1980 Moscow Olympics**: 60 nations, including USA, boycotted the games against Soviet invasion of Afghanistan.

Some other examples:

- 10,000 Pakistanis came to **Mohali** in **1999** to watch cricket.
- 20,000 Indians visited **Pakistan** for a cricket series in **2004**.
- After Pak PM Yousaf Raza Gilani attended a World Cup game in **Mohali in 2011**, Pakistan allowed the visit of an Indian team to probe 26/11 terror attack.

20. आतंकवादी गतिविधियों और परस्पर अविश्वास ने भारत-पाकिस्तान संबंधों को धूमिल बना दिया है। खेलों और सांस्कृतिक आदान-प्रदानों जैसी मृदु शक्ति किस सीमा तक दोनों देशों के बीच सद्भाव उत्पन्न करने में सहायक हो सकती है? उपयुक्त उदाहरणों के साथ चर्चा कीजिए।

Mains 2015

Terrorist activities and mutual distrust have clouded India-Pakistan relations. To what extent the use of soft power like sports and cultural exchanges could help generate goodwill between the two countries? Discuss with suitable examples.

12½

NAM



India should revive the non-aligned movement'

SPECIAL CORRESPONDENT

CHENNAI, DECEMBER 01, 2021 01:22 IST
UPDATED: DECEMBER 01, 2021 02:42 IST

M.K. Narayanan, former National Security Advisor, suggested that India must regain its moral leadership and revive the non-aligned movement. "India should not flinch in biting the bullet in dealing with China and Pakistan," he said. The country must reopen communications with Pakistan and revitalise its relations with Russia. Pointing out that the United States is a key factor in India's foreign policy, he said the U.S. could now undermine India's strategic autonomy.

NAM is no longer relevant:

- Cold war and colonialism have ended.
- There are more powerful new groupings like G20, SCO, etc.
- Failed to bring substantial reforms at UN, nuclear disarmament, etc.
- NAM summits are nothing but a place for blaming big powers.

NAM is still relevant:

- 120 members is a good number to effect changes at UN.
- Strategic competition between USA & China is driving world towards bipolarity.
- Smaller countries need to resist domination by China (e.g. BRI, South China Sea)
- Its members still face common internal (poverty) as well as external problems (UN, WTO).

Why should India continue to be part of NAM?

- India can assume leadership position at NAM.
- NAM can be helpful in securing a permanent place in UNSC.
- NAM can help India strengthen multipolar world.
- NAM can act as a group for reforms at UN, WTO, etc.
- NAM can be seen as a foreign policy tool rather than an organization.
- NAM should not be seen as anti-west gathering, rather as a critical diplomatic forum in pursuit of India's interests.
- In the recent address at NAM, Indian PM stated NAM as world's moral voice; share experiences & best practices; called for cooperative global response, pointed out limitations of existing international order.

Evolution of NAM:

- Idea emerged during cold war, when world was divided into two power centres:
 - USSR (representing socialist ideas)
 - USA (representing capitalist world)
- Newly independent countries had two choices, join either one or remain neutral.
- India & few other countries (Indonesia, Yugoslavia, Egypt etc.) chose autonomy over allegiance.
- Origin in Asia-Africa conference in Bandung, Indonesia 1955, "Ten guiding principles" of Bandung conference = guiding principles of NAM.
- 1st conference at Belgrade, Yugoslavia 1961.
- Its key principles are largely based on the principles of Panchsheel.
- 2nd largest platform after UN with more than 120 members.

Purpose of NAM in the past:

- Resist pressure** against joining any military pact.
- Stop colonialism & imperialism; **fasten decolonization**.
- For gaining **diplomatic prestige** for smaller nations.
- To maintain **strategic autonomy** (ability to have independent foreign policy)
- Help newly independent countries focus on **common problems**.

Achievements of NAM:

- Political:** anti-racism, anti-colonialism led to birth of new nations.
 - e.g. Mozambique in 1975, Zimbabwe in 1980, Namibia in 1990
- Economic:** enhancing trade within global south.
- Nuclear disarmament:** India presented action plan at UNGA for universal nuclear disarmament.
- Persuaded **IMF** to set up mechanisms to help developing countries during BoP crisis.

Additional comments:

- Global issues need global **cooperation**.
- To remain relevant, NAM must **adapt** to new world.
- It must **reshape** its goals & structure, to suit to the new age requirements.
- S. Jaishankar in 2016: “blocks & **alliances are less relevant today** as the world is moving towards a loosely arranged order”.

BIMSTEC

News:

- ❑ BIMSTEC **charter** has been finalized; may be signed at 5th Summit in Sri Lanka in 2022.
 - It will give BIMSTEC a long term vision and clearly outlines the roles and responsibilities of different institutional structures.
- ❑ BIMSTEC Master Plan for Transport **Connectivity** likely to be adopted at 5th Summit
 - NE India is a key part of the plan.
- ❑ BIMSTEC Centre for Weather and Climate, being hosted in India, is fully functional, to provide **Disaster Early Warnings**.

BIMSTEC:

- Founded in **1997** through **Bangkok declaration**
- Secretariat in **Dhaka** established in **2014**
- 1997 June : BIST-EC; Bangladesh, India, Sri Lanka, Thailand - Economic Cooperation
- 1997 December : Myanmar joined
- 2004 : Nepal and Bhutan also joined

Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation

Significance for India:

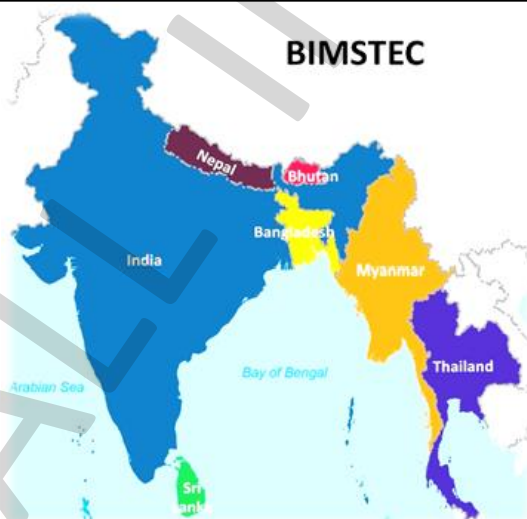
- No **Pakistan**, so a better alternative to SAARC.
- Restrict **Chinese** influence by stronger economic cooperation.
- Bridge between South Asia and **South-East Asia**. Supports India's neighborhood first and Act East policies.
- Bring more development opportunities to India's **NE region** due to geographical location
- The region has huge untapped reserves of **natural gas**.

Challenges:

- **Limited interaction**: Only four summits in last 20 years. Delay in setting up Secretariat.
- **Lacks unity**: Nepal & Thailand did not participate in Milex-18, the first military exercise by BIMSTEC.
- **Connectivity**: Poor road and rail connectivity

Way forward: (see challenges)

- Conclude **FTA** for greater economic cooperation
- Consider expanding **membership** to Indonesia, Malaysia, Singapore



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Epaper 

India reaches out, leaders of Bimstec could attend Republic Day 2022

Besides India, the seven-nation subregional grouping includes Bangladesh, Myanmar, Sri Lanka, Thailand, Nepal, and Bhutan. Leaders of Bimstec attended Prime Minister Narendra Modi's swearing-in at the beginning of his second term in May 2019.

SAARC

- ❑ Last summit in **2014**. 2016 summit cancelled due to Pathankot and Uri attacks

Issues with SAARC:

- ❑ **Colonial legacy**: Still entrapped in colonial legacy of communalism, unclear boundaries, etc.
- ❑ **Mutual mistrust**: it does not allow regional integration and cooperation (contrast Europe).
- ❑ **Trade**: low regional trade leads to low integration.
- ❑ **Domination**: fear of India's hegemonic role in the region.
- ❑ **Bilateral issues**: India-Pak rivalry remains biggest obstacle for SAARC
- ❑ **Charter**: SAARC charter does not allow discussion on contentious and bilateral issues

Need to revive SAARC:

- ❑ **Common issues**: poverty, development, climate change and Himalayas
- ❑ **Interdependence**: cross-border rivers; landlocked members; lack of resource self-sufficiency
- ❑ **EU and ASEAN**: living examples of regional cooperation bringing economic growth
- ❑ **Significance for India**:
 - ❑ Check **China's influence** by engaging neighbors in economic cooperation
 - ❑ It offers India a platform to showcase its **leadership** abilities.

Way forward:

- Create mechanism for **informal** discussions.
- Form Conflict conciliation groups for resolving **disputes**.
- Expedite **sub-regional** initiatives like BBIN motor vehicle agreement.

Batting for 'One South Asia' makes more sense *The Hindu 04-11-2021*

India:

- At international forums, India mentions **international** solar grid, small **island nations**, etc.
- But does not speak for its own **region** South Asia
- India **warns of Chinese debt trap**, but offers **no alternative** even with international cooperation.
- **Void left by India** filled by others: Bhutan & Nepal took **vaccines** from other countries, Sri Lanka took **currency swap** help from Bangladesh.

There is no South Asian initiative on climate change because:

- **India-Pakistan** tensions → no SAARC summit since 2014
- **Afghanistan** instability → takeover of Taliban
- **BBIN** Motor Vehicle Agreement → opposition from Bhutan

But these challenges are **not unsurmountable**, e.g. special SAARC conference in March 2020 due to **common challenge** of Corona.

Why South Asia needs to work together:

- It is a single **geographical unit** (Himalayas, rivers, monsoon)
- It has common **climate risks** (sea level rise, more cyclones, 6.3 crore climate migrants by 2050)
- It has **lowest per capita emissions**, but faces risk, so must demand global assistance.
- There is no South Asian **bank** for concessional financing of projects (WB, ADB, AIIB, NDB)
- Climate change and covid are bringing other regional blocks closer, but not the SA block.

Way forward:

- **India must lead** South Asia, to find solutions for funds, technology and market.
- At international forums, India's **voice** will be strengthened if it speaks **for South Asia as a whole**.
- India's announcements (e.g. solar grid) will have more weightage if they are **backed by a clear roadmap** for the region.

Neighborhood First

India's Neighborhood First Policy:

- ❑ Launched in 2014 to actively focus on improving ties with neighbors
- ❑ For India, neighbourhood is the first circle of priority.
- ❑ India wants cordial relations with its neighbors.

Need/Importance of the policy:

- ❑ We can **change** our **friends**, but **not neighbors** (Former PM A.B. Vajpayee)
- ❑ India's voice will have more weight at **international forums** if it speaks for South Asia.
- ❑ **To counter China's string of pearls** cooperation with Sri Lanka and Maldives is important.
- ❑ Economic cooperation necessary to prevent neighbors from falling into **debt trap** of China.
- ❑ Myanmar's cooperation needed to improve connectivity with NE, and tackle **separatist groups** operating out of Myanmar.

Challenges:

- ❑ **China's economic power** overshadows India's initiatives
- ❑ **Boundary issues** with Pak & Nepal. **Fishing disputes** with Sri Lanka.
- ❑ **India-Pak tension** impacts functioning of regional initiatives.
 - ❑ No SAARC summit since 2014
- ❑ **Internal issues of other countries** impact bilateral relations
 - ❑ Rohingya genocide in Myanmar. Return of Taliban in Afghanistan.
- ❑ **Domestic politics in India** affect international relations.
 - ❑ Anti-Bangladeshi narrative in Indian elections
- ❑ **India's involvement** in politics of other countries
 - ❑ 2015 Nepal blockade by India increased Nepal's closeness with China



April 2015 Nepal earthquake:

Indian media acted as PR agent of Indian government.

2015 Nepal Blockade (September-December):

- Nepal is a land-locked country.
- India stopped supplies. Nepal moved to China.
- Many projects announced, to **end Nepal's dependence on India.**

Trans-Himalayan Multi-dimensional Connectivity Network:

- economic corridor between Nepal and China
- part of China's Belt and Road Initiative
- announced in 2018
- includes railways, highways, road tunnels.

Gujral Doctrine: (by former PM I.K. Gujaral)

- ❑ A **peaceful neighborhood** is necessary for India to become a **global power**.
- ❑ Since we have **two hostile neighbours** (Pak & China), we have to be at **'total peace' with all other neighbours**, in order to contain Pakistan's and China's influence in the region.
- ❑ Hence, **set of five principles** to guide India's relations with neighbours were given:
 - 1) Countries should **not interfere** in internal affairs of one another.
 - 2) Countries should **respect** each other's territorial integrity and **sovereignty**.
 - 3) Countries should **not allow their territory** to be used against another country.
 - 4) should settle all their **disputes** via peaceful **bilateral** negotiations.
 - 5) India should have **non-reciprocal policy** with neighbours other than Pak & China.

The essence of Gujral Doctrine is that being the largest country in South Asia, India can extend **unilateral concessions to neighbours**.

Gujral Doctrine is a process and not an objective. A country can give today to gain tomorrow.

Significance of Gujral Doctrine:

- ❑ It recognized importance of friendly relations with neighbors.
- ❑ **Bangladesh:** water disputes resolved in just three months in 1996-97
- ❑ **Sri Lanka:** agreements signed for expanding development cooperation.
- ❑ **Pakistan:** cooperation in some areas (trade, travel, culture etc.) even as certain disputes remained unresolved (Kashmir, terrorism).

Criticism of Gujral Doctrine:

It weakened RAW's ability to conduct operations inside Pakistan.
(Pak special ops desk of RAW was shut down).

Challenges to Gujral Doctrine:

- Goodwill may not work with openly hostile neighbors
 - e.g. Kargil
- Connectivity projects increase security concerns
 - trafficking through Nepal, Bangladesh, Myanmar
- China's increasing footprint in India's neighbors (Chinese infra in Pak, Bangladesh, Sri Lanka)
 - CPEC in Pakistan, Hambantota in Sri Lanka

Mains 2013:

What is meant by Gujral doctrine? Does it have any relevance today? Discuss.

Afghanistan

Brief history of Afghanistan

1973: Republic of Afghanistan

- ❑ **Coup** led by **Dawood Khan** ended two centuries of royal rule; established **REPUBLIC of Afghanistan**

1978: Saur Revolution

- ❑ established **DEMOCRATIC REPUBLIC** of Afghanistan (a communist state); allied with **Soviet Union**

1979-89: Soviet-Afghan war

- ❑ **Soviet** army supported ruling **govt** against rebel factions (Afghan mujahideen)
- ❑ **Rebels** were backed by **USA**, UK, Pakistan, etc.
- ❑ War ended with **Soviet withdrawal**

1989-1992: Afghan Civil war

- ❑ war continued between Afghan govt and mujahideen, but without Soviet army
- ❑ Govt got financial support from Soviet; Mujahideen factions got support from USA & Pak
- ❑ In 1992, Democratic Republic of Afghan fell, Mujahideen established **ISLAMIC STATE** of Afghan

1992-1996: Afghan Civil war

- ❑ various mujahideen groups withdrew support to govt and began fighting against it
- ❑ One such group, **Taliban** (supported by Pakistan) captured Kabul, established **ISLAMIC EMIRATE** of Afghanistan

1996-2001: Afghan Civil war

- ❑ war continued between different factions supporting Islamic **State** and Islamic **Emirate**
- ❑ Al-Qaeda began terrorist attacks on USA, including 9/11
- ❑ Taliban refused to extradite Osama bin Laden

2001-2021: Afghan war

- ❑ NATO invaded Afghanistan on 7 October 2001;
- ❑ Removed Taliban; established **ISLAMIC REPUBLIC** of Afghanistan
- ❑ NATO and Afghan army continued fighting Taliban, al Qaeda, etc.
- ❑ After withdrawal of NATO, Islamic Republic fell, **ISLAMIC EMIRATES** re-established.

In short:

- **USSR** occupied Afghanistan in 1979
- **US and Pak** provided funds and arms to Mujahideen
- Early 1990s, USSR withdrew, rise of **Taliban**

US-Taliban Peace Deal: (Feb 2020)

- **US** will gradually withdraw all troops from Afghanistan.
- **UN** sanctions on Taliban will be withdrawn.
- Taliban will not allow any **anti-US** (and its allies) activity.
- Both sides will release each other's **prisoners**.

Current context

- ❑ After Taliban's takeover, India is concerned about **terrorism spreading from Afghanistan**.
- ❑ In November 2021, India hosted **Regional Security Dialogue** on Afghanistan:
 - ❑ Meeting chaired by Indian NSA
 - ❑ Pakistan and China were invited, but both stayed away.
 - ❑ There was no representation from erstwhile Afghan government or the Taliban.

Highlights of Delhi Declaration:

- Afghanistan should not become a safe haven for global **terrorism**
- Collective cooperation against terrorism and **drug trafficking** in the region
- Ensure that **fundamental rights** of women, children and minorities are not violated.
- **UN** presence in the country must be preserved

Some other Afghan peace process frameworks:

- **Troika plus** meeting of US, Russia, China, Pakistan
- **Moscow Format** established in 2017 (includes India also)

Challenges to peace:

- Constant **infighting** among different factions in Afghanistan.
- **Pakistan** trying to use Afghanistan for proxy war against India.
- **Russia, China** and others interfering to further their own interests.

Way Forward:

- **Humanitarian aid**, and gainful employment, to **ensure youth are not radicalised** and recruited into terrorist organisations.
- **UN** should have bigger role in ensuring peace in the region.
- **Pakistan** needs to be stopped from promoting violence and terror in the Afghan society
- **China** needs to understand that promoting terror groups can be counter-productive, as it may effect Uyghur issue in Xinjiang.
- **Taliban** should first seek internal legitimacy within Afghanistan before international recognition.
- **India** continues to 'wait & watch' Afghan developments. India must start talks, to ensure that Afghan territory is not used for anti-India activities.
- **Russia** has cultivated links with the Taliban in recent years. India can take Russia's support in engaging with Taliban. Taliban has expressed desire to engage with India.

Importance of Afghanistan for India :

- Important for access to **Central Asia**; TAPI pipeline; part of golden crescent;
- Used by **Pakistan** for proxy war against India. Pak deep state has direct links with Taliban.
- Increasing **Chinese** influence, and possible debt trap of Afghanistan.
- India's over \$3 billion **investments** will go in vain.

What can India do?

- **Engage with Taliban**, provide humanitarian aid, get safety assurance in return.
- **Work with other countries**, like USA and Russia, to secure India's interests.
- Actively participate in international forums on Afghan peace process.

Indian initiatives in Afghanistan:

- Zaranj Delaram road; Salma dam; Parliament building; Cricket stadium in Kandahar
- Technical advisers in institutions; Scholarships to students, Training for public servants

Extra info:

- Afghanistan is called as **graveyard of empires** (Alexander, USSR, US hegemony)
- Alexander once said "may god keep you away from the venom of cobra , teeth of tiger & revenge of Afghan" .

Bangladesh

News:

- 5 years ago, India's per capita GDP was 40% higher than Bangladesh.
- In 2021, Bangladesh surpassed India by \$280.

Rise of Bangladesh:

- Lenient labour laws and cheap **labour**.
- Greater participation of **woman** in labour force.
- Flourishing garments and **apparel** industry.
- Export of garments account for 84% of its total **exports**
- Deep **micro-finance** penetration helped in financial inclusion
- Improved in **health**, sanitation and education

Implications for India:

- Can help India develop its **North East** region.
- **Investment** possibilities for Indians in Bangladesh.
- Give **competition** to India in labour intensive sectors.
- Use Bangladesh's rise to promote **regional integration**, e.g. BBIN

NEWS 18

India Falls Behind Bangladesh in Per Capita Income by \$280

IANS

Updated: May 23, 2021, 17:21 IST

Once described as a "bottomless basket" by US Secretary of State Henry Kissinger, Bangladesh is fast emerging as a bull economy, outpacing giant neighbour India in many indices of economic or human development.

Importance of Bangladesh for India:

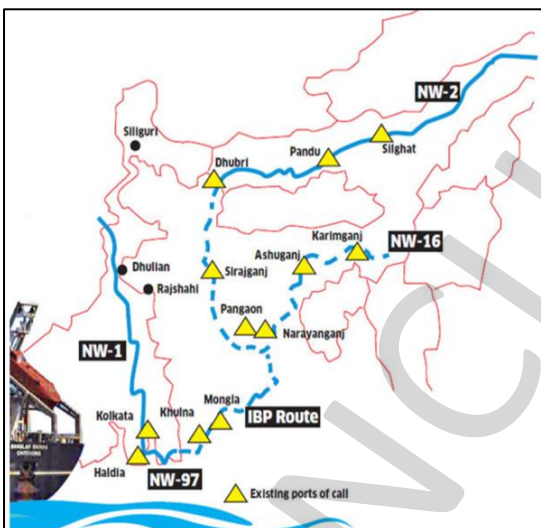
- **Long border:**
 - India's longest border is with Bangladesh, **4096 km**
- **Connectivity:**
 - alternative to **Siliguri** corridor;
 - gives landlocked NE access to **sea**
- **Security:**
 - to prevent anti-India activity in NE e.g. many leaders of NE insurgent groups are arrested by Bangladesh and handed over to India
- **Economy:**
 - Bangladesh is India's biggest trade partner in south Asia;
 - Trade surplus \$9 billion exports, \$1 billion imports.
 - A strong and rising economy with 8% annual GDP growth rate.
- **International forums:**
 - both are members of SAARC, BIMSTEC, BBIN, etc.

Challenges:

- **Security:**
 - **porous** border is used for **smuggling** of arms and drugs.
- **Economy:**
 - **Delays** in project execution; Just **10%** of the \$ 7.4 billion credit lines has been used.
- **Water:**
 - 54 common **rivers**, scope of dispute, e.g. Teesta river water sharing issue
- **NRC:**
 - issue of expelling **Bangladeshi Muslims**
- **China:**
 - growing **Chinese** influence in Bangladesh.
 - China has given **duty-free** access to 97% of Bangladeshi exports.
 - **25%** of Bangladesh's total **imports** are from China.
 - China building \$10 billion **infra** projects in Bangladesh.
 - In 2017, Bangladesh purchased **two submarines** from China.
 - **74%** of Bangladesh's **arms imports** are from China.

Steps taken:

- 2015 **Land boundary agreement** solved long outstanding border issue.
- Feni bridge, aka **Maitree Setu** connects Tripura with Chittagong port.
- **Maitree express** between Kolkata and Dhaka.
- Indo-Bangladesh Protocol **IBP route** that connects NW-1 (Ganga) with NW2 (Brahmaputra) via Bangladesh.
- India sells 660 MW of **electricity** to Bangladesh;
- India helping Bangladesh build **Rooppur nuclear power plant**



The Indian EXPRESS

Bengal: First cargo set sail for NE via inland waterways

The 12-15-day voyage will be an integrated movement via National Waterway (NW)-1 (river Ganga), NW-97 (Sunderbans), IBP route and NW-2 (river Brahmaputra), said IWAI in a statement.

Indo-Bangladesh Protocol (IBP) route:

- IBP was signed in **1972**.
- IBP connects NW-1 (Ganga) with NW-2 (Brahmaputra) and NW-16 (Barak) via Bangladesh.
- In Bangladesh, it passes through Padma (Ganga), Jamuna (Brahmaputra), Kushiara (Barak) and Meghna.



The Indian EXPRESS

Explained: The significance of the Feni river MoU between India, Bangladesh

The Feni river, which forms part of the India-Bangladesh border, originates in the South Tripura district, passes through Sabroom town on the Indian side, and meets the Bay of Bengal after it flows into Bangladesh.

- Feni river:**
- It originates in **Tripura** and flows into **Bangladesh**.
 - In November 2019, India and Bangladesh signed an MoU that allows Sabroom town in Tripura to withdraw 1.82 cusec water from Feni.
 - **Feni bridge** aka Maitree Setu will connect Tripura with Chittagong port.

Myanmar

Importance:

- **India's gateway to S-E Asia:**
 - It is the only **ASEAN** country to share land border with India.
- **Strategic location:**
 - Close to **A&N** islands; shares long border with **China**
- **North-East India:**
 - Cooperation necessary to act against **separatist groups** operating from Myanmar
 - **Kaladan** multi-nodal project and **IMT** trilateral highway
- **1643 km long porous border:**
 - Area prone to **smuggling** of drugs and arms.
- **Regional bodies:**
 - Member of **BIMSTEC** and **MGC** (Mekong Ganga Cooperation).

Initiatives:

- **People-to-people connect:** Free Movement Regime and Land Border Crossing Agreement 2018
- **Connectivity:** Kaladan Multi-Modal corridor; IMT trilateral highway
- **Defence:** Joint ops against insurgents; 2019 defence cooperation agreement
- **Aid:** 250 houses built by India in Rakhine state for Rohingyas
- **Cultural:** India restored Ananda temple in Bagan
- **October 2020:** India gave INS Sindhuvir to Myanmar (its only submarine)
- **January 2021:** India sent 15 lakh doses of Covishield to Myanmar

Concerns:

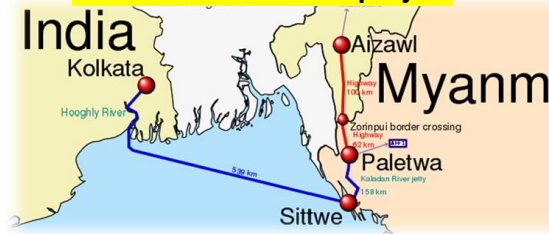
- China Myanmar Economic Corridor (CMEC) gives **China** direct access to Bay of Bengal
- Indian **projects** in Myanmar running behind schedule
- Porous border used for **smuggling** of arms and drugs (golden triangle)
- 40,000 **Rohingyas** from Myanmar in India



News:

- ❑ **2020 November:** Aung San Suu Kyi's party won; Military (Tatmadaw) alleged irregularities
- ❑ **2021 February:** military staged coup, arrested political leaders, imposed one-year emergency
- ❑ **USA** imposed sanctions. **China** blocked UNSC statement condemning the coup.
- ❑ **India's response:**
 - ❑ India **did not condemn** the military coup.
 - ❑ India was one of the 8 countries to participate in **military parade** in March 2021. (along with Russia, China, Pak, etc)
- ❑ Myanmar fall completely under **influence of China** will be a major **security concern** for India.
- ❑ Any armed revolt in Myanmar can create large scale **refugee problem** for India.
- ❑ In **1980s** India aligned with **pro-democracy** groups, even gave asylum to student activists.
- ❑ In **1992**, India signed **UN resolution** condemning human rights violation in Myanmar.
- ❑ In **late 1990s**, approach changed to align with '**whoever worked in India's interests**'
- ❑ Whether Myanmar fell under military or civilian rule, India showed willingness to work with **whichever faction was in power** at the time.

Kaladan multi-modal project



IMT trilateral highway



Kra Canal / Thai Canal:

Proposed canal that would connect Gulf of Thailand with Andaman Sea through Thailand.

Impact:

- China:** alternative to Malacca Strait, reducing oil shipments to China by 1,200 km.
- Thailand:** Revenue from ship traffic; divide country physically, increasing secessionist movements.
- India:** Increase China's naval presence in IOR, strengthen String of Pearls
- Cost and environmental concerns.



BRICS

Prime Minister chairs 13th BRICS Summit

Posted On: 09 SEP 2021 9:37PM by PIB Delhi

Prime Minister Shri Narendra Modi chaired the 13th BRICS Summit virtually today.

The theme of the Summit, chosen by India, was, BRICS@15: Intra-BRICS Cooperation for Continuity, Consolidation and Consensus.

FINANCIAL TIMES myFT

Twenty years on, the Brics have disappointed

The challenge of how these countries achieve higher prosperity across society remains unsolved

Jim O'Neill NOVEMBER 29 2021

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Formation of BRICS:

- 2001:** 'BRIC' term used in an article by Jim O' Neill of Goldman Sachs
- 2009:** First BRIC summit in Russia
- 2010:** South Africa joined; BRIC became BRICS

- All five are **economically significant** economies.
- All five are members of **G20**
- BRICS has:
 - 42% of global population
 - 30% of global territory
 - 23% of global GDP



What have been some notable achievements of BRICS so far?

- a) **New Development Bank** (HQ: Shanghai): Mainly for infra loans to developing countries. Seen as a competitor to **World Bank**.
- b) **Contingent Reserve Arrangement** (CRA): To deal with short-term balance of payment pressures in member countries. Seen as competitor to **IMF**.

What are some challenges faced by BRICS?

- a) **Geographical separation:** members are fragmented across continents. (Contrast this with SAARC/ASEAN/EU).
- b) **Lack of political homogeneity:** China and Russia have authoritative governments, and rest have democracy. (Contrast this with EU).
- c) **India vs China:** rivalry in manufacturing and territory
- d) **Dominance by China:** Chinese economy is twice the size of all others combined. (China 14; India 2.8; Brazil 1.8; Russia 1.7; South Africa 0.35) (in \$ trillion)
- e) **BRICS innovation base:** China is pushing it in the garb of increased technological cooperation. However, the real motive is to make it easier for Huawei to establish 5G networks in these countries.
- f) **UNSC reforms:** no unanimous views on UNSC reforms

BRICS is important:

- a) **G7** represents **developed** economies. **BRICS** represents **emerging** economies.
- b) BRICS can act as a **bridge** between the developed and developing world.
- c) A **Local Currency Bond Fund** may be launched soon. (Low trust in US dollar).
- d) **Partnership on New Industrial Revolution** launched in December 2020.
- e) BRICS **Business Council** is working to increase business cooperation.
- f) BRICS **Counter-Terrorism Action Plan** has been adopted.

Way forward: :

- a) **NDB** needs to extend more loans for projects in non-BRICS countries to create a solid constituency of supporters.
- b) BRICS should focus on fulfilling **existing commitments** instead of taking on new ones.
- c) All BRICS countries may not become economic superpowers by 2050, but they will definitely be **economically relevant**.

BRICS is often described as a talk shop of incompatible powers and a meaningless investment-banking acronym long past its sell-by date. Do you think India should continue its association with BRICS?

11. With reference to a grouping of countries known as BRICS, consider the following statements :

- 1. The First Summit of BRICS was held in Rio de Janeiro in 2009.
- 2. South Africa was the last to join the BRICS grouping.

Which of the statements given above is/are correct?

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

Prelims 2014

BRICS:

- ✓ Formed in 2006
- ✓ First summit in 2009 in Russia
- ✓ South Africa joined in 2010

IBSA:

- ✓ India, Brazil, South Africa
- ✓ IBSA = (BRICS) - (Russia and China)
- ✓ South-south cooperation
- ✓ Helps India overcome influence of China and Russia
- ✓ Formed in 2003 at Brasilia (capital of Brazil)

ADB – Asian Development Bank	Philippines
SCO – Shanghai Cooperation Organization	Beijing
NDB – New Development Bank	Shanghai
AIIB – Asian Infra Investment Bank	Beijing

UNSC

India has become UNSC member for the **8th time**.

India's overall **objective** during the two-year tenure will be **achievement of NORMS**.

New Orientation for a Reformed Multilateral system:

- 1) **New opportunities for progress**
 - innovative solutions for inclusive development
- 2) **Effective response to terrorism**
 - greater coordination to check terror financing & use of ICT
- 3) **Reforming multilateral system**
 - UNSC should reflect contemporary realities;
 - inadequate existing mechanisms e.g. weak Covid response
- 4) **International peace and security**
 - commitment to international law;
 - reforms in UN peacekeeping operations
- 5) **Technology with a human touch**
 - use of tech to reduce human suffering

In achieving NORMS, India's efforts will be guided by the **5S approach**: **Samman** (Respect); **Samvad** (Dialogue); **Sahyog** (Cooperation); **Shanti** (Peace); **Samridhi** (Prosperity)

What should be India's approach with different countries?

- **With P5 members**, avoid the temptation of taking sides.
- **With non-permanent members**, aspire for their leadership.
- **With non-UNSC members**, be the voice of the weaker nations.

Our success will depend on effectiveness in raising issues that go beyond the interest of big five.

Why UNSC need reforms?

- UN members increased from **113 to 193**, but UNSC composition remained same.
- While Europe is **over-represented**, Asia is **under-represented**. Africa and South America have **no representation** at all.
- Does not reflect contemporary realities (India, Japan, Germany)
- Use of veto power ends up blocking key decisions.

What constitutes UNSC reform agenda?

Five sets of issues have been identified by the General Assembly. These are

- 1) Regional representation
- 2) Categories of membership
- 3) The question of the veto
- 4) Size of an enlarged Council and its working methods
- 5) UNSC-UNGA relationship

Credentials for India's bid for permanent seat:

- **Founding** member of UN.
- World's largest **democracy**; one of the fastest growing large **economies**.
- India is a responsible **nuclear weapons state**.
- One of the largest contributors to UN **peace keeping** missions.
- India is seen as a responsible power, which adheres to global **rules and norms**. (Italian marine case; South China sea case)

Issues: poor socio-economic indicators; military projection limited to IOR; NPT; China

UNHRC

What are Human Rights?

- They are **inherent rights** that all humans have; need not be granted by any state.
- They are **universal**, and **same** for everyone.
- Universal **Declaration** of Human Rights was adopted by UNGA in **1948**.

UNHRC:

- Established by UNGA in **2006** to protect human rights around the globe.
- It has **47 members**, elected for **3-year term**, by UNGA, by simple majority.
- It **investigates violation** of HRs; reports to UNGA; recommendations not binding.
- Through **Universal Periodic Review**, it reviews human rights record of each UN member state.

Issues:

- Many UNHRC **members are** themselves systematic **offenders**. (Pakistan, China)
 - Many countries get **elected unopposed** due to **geographical quota** system.
 - **Secret ballot** allows rights violators get elected (China); countries not publically accountable for their votes.
- It has **failed to prevent violation** of human rights in most countries.
- It has disproportionately high **focus on Israel**; US quit from UNHRC in 2018.
- Largely **ignores** rights violation against weaker sections like **elderly, children, PwDs**.

Way forward:

- Focus **general issues**, like children & elderly, instead of country specific violations.
- Focus on **thematic issues**, like biotech & AI, which have significant human rights implications.
- To ensure effectiveness, connect HRC's work with **other UN organs**.

UN Peacekeeping

UN Peacekeeping:

- Formed in **1945**; it aims to help countries torn by conflict to create **conditions for lasting peace**.
- It is **not "UN Army"**. Peacekeepers remain members of their respective armed force.
- Financing it is **collective responsibility** of UN members
- **Major successes**: Sierra Leone (1999 to 2005), Burundi (2006)
- **Major failures**: Rwanda genocide 1994; Srebrenica massacre 1995

India:

- More than **2 lakh Indians** have served in 49 of the 71 UN peacekeeping missions established around the world since 1948.
- In **2007**, India became the first country to deploy an **all-women contingent** to a UN peacekeeping mission.
- Recently, Indian peacekeepers serving in **South Sudan** were awarded **UN medal** for their contribution to building peace in the country.

Additional comments:

- In practice, a nation's **voice** is in proportion to its contributions.
- **Chinese funds** gives it a role in formulating peacekeeping mandates.
- Troop contributions alone does not give much say in power politics.
- US 28%, China 15%, **India 1%**

75 years of UN

❑ Objectives:

- Maintain global peace
- Develop friendly relations among countries
- Help countries improve living condition of people

❑ Six organs:

- GA, UNSC, Secretariat, ECOSOC, ICJ, Trusteeship council

Achievements:

❑ Global peace:

- ❑ Use of peacekeeping forces to bring stability to conflict areas.
- ❑ UN facilitated negotiation of several arms control treaties.

❑ Socio-economic development:

- ❑ Helping countries with financial and technical assistance
- ❑ Setting common goals by use of MDG and SDGs.

❑ Humanitarian assistance:

- ❑ World Food Program assists governments in fighting hunger

❑ Health:

- ❑ WHO helped eliminate small pox; working to end TB, AIDS, Covid, etc.

❑ Environment:

- ❑ UNFCCC is the foundation for international cooperation on climate change.

Failures:

❑ Peace and security:

- ❑ UN could not prevent major wars like Vietnam, Iraq, or genocides like that in Rwanda.
- ❑ Peacekeeping forces failed to prevent massacre of 8000 people in Bosnian war.

❑ Nuclear weapons:

- ❑ Could not stop proliferation of nuclear weapons from China to Pakistan, North Korea.

❑ Reforms:

- ❑ UN failed to reform itself; it does not represent the contemporary world order. It is still dominated by the west.

❑ International law:

- ❑ UN fails to enforce compliance to international law. For example, China's unilateral actions in South China Sea and subsequent refusal to follow UNCLOS ruling.

Way forward:

- ❑ UNSC reforms to end the monopoly of select countries on world affairs.
- ❑ Increased accountability of Peacekeeping operations, especially w.r.t. allegations of abuse.

Six principle organs of the United Nations

UN Secretariat

— Administrative organ of the UN —



- Supports the other **UN bodies** administratively (for example, in the organization of conferences, the writing of reports and studies and the preparation of the budget);
- Its chairperson – the **UN Secretary General** – is elected by the General Assembly for a five-year mandate and is the UN's foremost representative.

UN General Assembly

— Deliberative assembly of all UN member states —



- May resolve non-compulsory recommendations to states or suggestions to the Security Council (UNSC);
- Decides on the admission of new members, following proposal by the UNSC;
- Adopts the budget;
- Elects the non-permanent members of the UNSC; all members of ECOSOC; the **UN Secretary General** (following his/her proposal by the UNSC); and the fifteen judges of the International Court of Justice (ICJ). Each country has one vote.

- ❖ **ICJ is in Netherlands**
- ❖ **Only one not in New York**

International Court of Justice

— Universal court for international law —



- Decides disputes between states that recognize its jurisdiction;
- Issues legal opinions;
- Renders judgment by **relative majority**. Its fifteen judges are elected by the UN General Assembly for nine-year terms.

UN Security Council

— For international security issues —



- Responsible for the maintenance of **international peace and security**;
- May adopt **compulsory resolutions**;
- Has fifteen members: **five permanent members with veto power** and ten **elected members**.

UNSC:

- ✓ **P5 (USA, UK, France, Russia, China)**
- ✓ **10 (2-year term, so 5 elected by UNGA each year)**
- ✓ **Need 2/3rd votes to win.**
- ✓ **No Consecutive re-election**
- ✓ **This is India's 8th term (1950..2011)**

UN Economic and Social Council

— For global economic and social affairs —



- Responsible for co-operation between states as regards economic and social matters;
- Co-ordinates co-operation between the UN's numerous **specialized agencies**;
- Has 54 members, elected by the General Assembly to serve staggered three-year mandates.

UN Trusteeship Council

— For administering trust territories (currently inactive) —



- Was originally designed to manage colonial possessions that were former **League of Nations mandates**;
- Has been inactive since 1994, when **Palau**, the last trust territory, attained independence.

Arctic Policy

Govt has released draft Arctic policy:

(Many other non-Arctic countries also have an Arctic policy, like China, Japan, South Korea, etc.)
Goa based National Centre for Polar and Ocean Research will be nodal body for Arctic research.

- 1) National CAPACITY building:
 - develop capabilities for exploration, research, etc.
- 2) Governance and international COOPERATION:
 - actively participate in international groupings/treaties on Arctic
- 3) Transportation and CONNECTIVITY:
 - surveying and mapping Arctic routes
- 4) ECONOMIC and human development:
 - explore mineral resources and identify opportunities for investment
- 5) SCIENCE and Research activities:
 - partnership with global institutes, and dedicated funding

India's interest in Arctic:

impact on monsoon, Himalayas, sea level, coastal erosion, benefits to Chinese economy, etc.

Importance (and challenges) of Arctic region:

Environment:

- ❑ Arctic influences global climate and ocean currents (THC & AMOC)
- ❑ It is home to more than **21,000 species** of plants and animals.
- ❑ More economic activity will accelerate global warming
 - ❑ Emissions from ships, carbon on ice will reduce albedo, danger of oil spills
- ❑ Thawing of permafrost will release methane, accelerate global warming.
- ❑ Melting of land ice will increase sea level.
- ❑ Arctic research increases our understanding of climate change, melting of Himalayan glaciers...

Resources:

- ❑ It is rich in oil, gas and minerals of economic significance.
- ❑ **22%** of undiscovered oil & gas are estimated to be in Arctic.
- ❑ Greenland has world's biggest undeveloped deposits of rare earth metals (US Geological Survey)

Geopolitics:

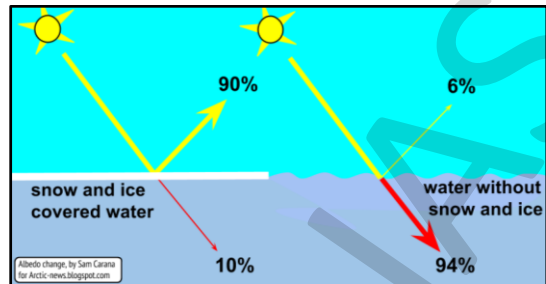
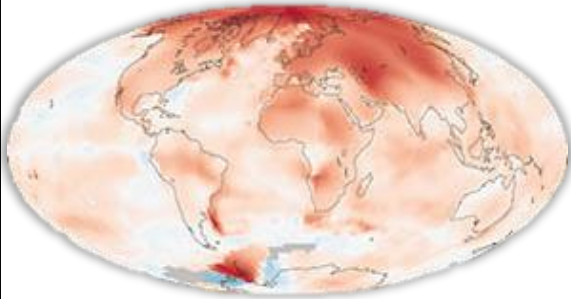
- ❑ Unlike Antarctica, Arctic is not a global common; there is no treaty that governs it.
- ❑ Scramble for resources, and new trade routes, will have geopolitical implications.
- ❑ Russia, Canada, Norway and Denmark have put in overlapping claims to sea-bed resources.
- ❑ Russia is the dominant power, with the longest Arctic coastline.
- ❑ China is projecting Polar Silk road as part of BRI, investing heavily in infra projects in the area.

Connectivity:

- ❑ Melting of Arctic ice is opening up new shipping routes (and for longer duration).
- ❑ Northern Sea Route is **40% shorter** than the route through Suez Canal.



Arctic Amplification



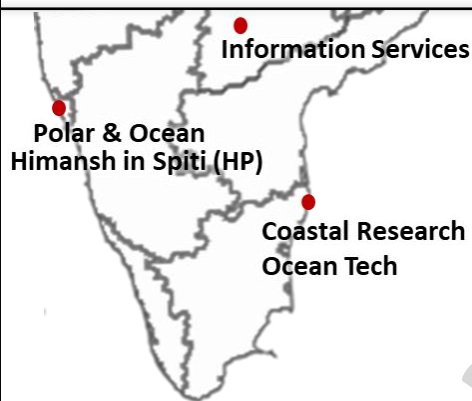
What?

Global temp rise → 1°C
Arctic temp rise → 2°C

Why?

(Less Albedo due to less ice)
ice melts → darker ocean exposed → more heat absorbed

Implications? (mark all correct) Polar bear, Weather, Climate, Coastal erosion, more rain, etc.



N.C. for Ocean **Info Services**
N.C. for **Polar & Ocean** Research
N.C. for **Coastal** research
N.I. for **Ocean Technology**

2008 – Himadri (Norway)
2014 – IndARC (Norway)



India's research stations

1983 – Dakshin Gangotri
1989 – Maitri
2012 – Bharti

Oceans by size:

- (PAISA)
- Pacific
- V
- Atlantic
- V
- Indian
- V
- Southern
- V
- Arctic

Arctic Council:

- for cooperation on common arctic issues
- **1996** by **Ottawa declaration**; HQ: **Norway**
- **8 members**: USA, Canada, Denmark, Iceland, Norway, Sweden, Finland, Russia
- **India**, China, etc. are **observers**

Prelims 2014:

Consider the following countries:

1. Denmark
2. Japan
3. Russian Federation
4. United Kingdom
5. United States of America

Which of these are member of 'Arctic Council'?

- (a) 1, 2 and 3 (b) 2, 3 and 4
(c) 1, 4 and 5 (d) 1, 3 and 5



I read I forget, I see I remember

See explanation of this PDF on **YouTube** www.youtube.com/c/allinclusiveias



Arctic Council:

- India has observer status since 2013

Arctic Science Ministerial:

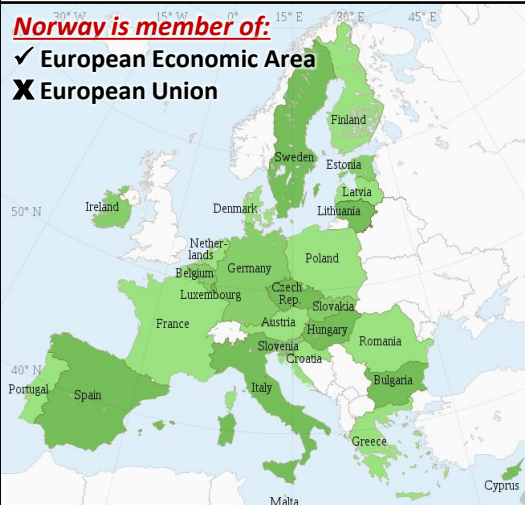
- 2016 → 2018 → 2021 (Iceland/Japan)
- For research & cooperation in Arctic

Svalbard Treaty 1920: (✓ India)

- recognized Norwegian sovereignty

Norway is member of:

- ✓ European Economic Area
- ✗ European Union

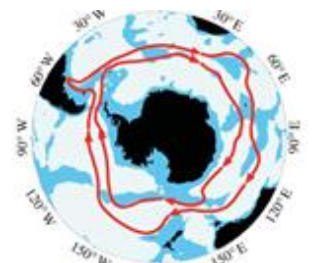
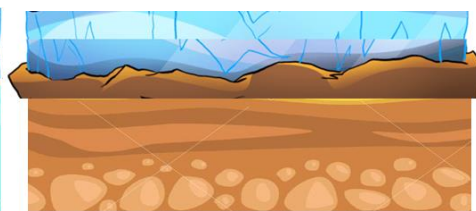


Svalbard Global Seed Vault: (by Norway)

- (largest) backup facility for world's crop diversity
- 2nd largest? National Gene Bank, Delhi (1996)

Why is Antarctica colder than Arctic? (20–30 °C)

- ❑ **Elevation:**
 - ❑ Average elevation of Antarctica is 2.3 km.
- ❑ **Thicker ice sheet:**
 - ❑ Arctic ice is floating so can't attain much height.
- ❑ **No water underneath:**
 - ❑ sea under Arctic ice is cold, but warmer than ice. There is land below Antarctic ice.
- ❑ **No surrounding land:**
 - ❑ Arctic is ocean surrounded by land. Antarctic is land surrounded by ocean.
- ❑ **Antarctic circumpolar current:**
 - ❑ it keeps warm ocean waters away from Antarctica



Strategic Autonomy

ability to take foreign policy decisions in national interest, without pressure from other country.

Need for strategic autonomy:

- ❑ **To maintain geostrategic balance:**
 - India's diplomatic ties with Iran, as well as USA; with Palestine as well as Israel.
- ❑ **For national security:**
 - India purchased S-400 missile defence system despite strong defence relations with USA.
- ❑ **Challenges:**
 - India stopped importing oil from Iran in mid-2019 following US sanctions on Iran.
 - North-South Transport Corridor stalled due to threat of US sanctions.

Way forward:

- Increase **GDP** growth rate.
- Increase economic **self-dependence** (but not import substitution)
- Strengthen **military** on land borders, and on sea, use Quad.
- Build regional ties, use **Neighbourhood** first policy, SAARC, etc.
- Create **partnerships** with USA/Europe/Japan in economic sphere, as alternative to China.
- Play leadership role in **multilateral institutions**.

In a multi-polar world, strategic autonomy cannot be absolute.

It is maintained in some core issues (Kashmir, nukes) more than non-core ones (oil import from Iran).

Past vs present:

- ❑ In the unipolar world of 1990s, India's strategic autonomy was about seeking US cooperation in capital & technology, and simultaneously prevent USA from 'internationalising' the Kashmir issue.
- ❑ Today India is economically dependent on Chinese imports, and China repeatedly tries to raise Kashmir issue at UNSC.
- ❑ For strategic autonomy from China, India is exploring collaborations with various nations that have common interest.

Non-alignment	Strategic autonomy
relevant in bi-polar world	relevant in multi polar world
India acted as leader of Global South	India acts as leader in various groups
India evaluates issues based on merit, not on dictates of other powers	



(from Foreign Secretary Shri Harsh Vardhan Shringla's speech)

Indian diplomacy is based on five pillars that help in sustaining strategic autonomy.

- 1) **Indian diplomacy is Indian in thought:**
 - Following Middle path of Buddhism, India keeps away from excessive strategic and political behaviour.
- 2) **India's multipolar focus:**
 - We place our Neighbourhood First, we Act East and we Think West. e.g. infra projects at Sittwe, Chabahar, etc.
- 3) **Diplomacy as force multiplier for govt:**
 - India helped many countries in initial days of pandemic, who in return helped us during second wave.
- 4) **India as force for global good:**
 - India supplying vaccines through vaccine maitri initiative
- 5) **Looking to the future:**
 - India participates in search for solution to common problems like climate change.

Foreign Policy in a changing world

Different phases of Indian diplomacy (or evolution of strategic autonomy):

1947-62: Optimistic Non-Alignment

- India's objectives in this phase were to resist dilution of its sovereignty; NAM
- Independent stand taken in Korean war & Suez canal crisis 1956

1962-71: Decade of Realism and Recovery

- Concluded defence agreement with the US in 1964.
- From 1965 Tashkent agreement India started tilting towards USSR.
- Signed Indo-Soviet treaty 1971.

1971-91: Greater Indian Regional Assertion

- Remarkable use of hard power in 1971; but faced many challenges
- US sanctions after 1974 Pokhran-I
- US-China-Pakistan axis seriously threatened India's prospects as a regional power.

1991-99: Safeguarding Strategic Autonomy

- Emergence of unipolar world encouraged India to change its approach.
- Increased engagement with Israel, USA, ASEAN.

1999-2013: India, a Balancing Power

- Indo-US nuclear deal; strengthened ties with Russia; coordinated with China on climate change and trade; made BRICS into a major global forum

2013-until now: Energetic Engagement

- India's policy of Non-Alignment has turned into Multi Alignment.

Way forward:

Need for greater realism in policy:

- India needs to change the image of a reluctant power.
- Discomfort with hard power is reflected by lack of consultation with military.
- Soft power diplomacy is not sufficient to protect the country.

Need for Strong economy:

- An expansionary foreign policy needs a strong economy.
- China's assertiveness in foreign policy is derived from its economic power.

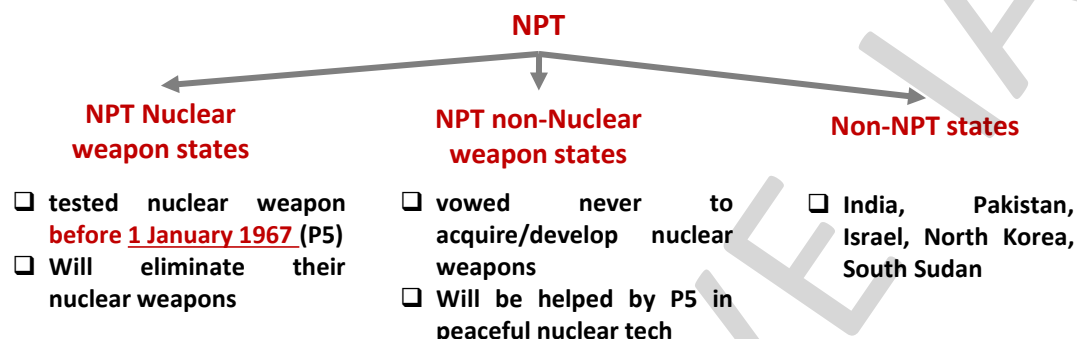
Need for Multi alignment:

- Today's world is characterized by complex interdependence.
- Indian foreign policy requires strategic hedging like Quad and SCO; Israel and Palestine

NPT

Non-Proliferation Treaty:

- ❖ **Proliferation** → increase in number.
- ❖ **Nuclear proliferation** → spread of nuclear weapons to non-nuclear weapon states.
- ❖ **NPT**: signed in 1968 to prevent spread of nuclear weapons; in force since 1970



Successes:

- Number of nuclear weapons reduced. 70k in 1986, 14k now.
- Controlled number of countries with nuclear weapons.

Issues:

- No time limit for P5 to eliminate their nuclear weapons.
- Could not prevent China from helping Pakistan and North Korea build nuclear weapons.

Why is India not signing NPT?

- **Discriminatory:**
 - NPT is **discriminatory**; divides world into **nuclear 'haves' and 'have-nots'**
- **Neighbours:**
 - Signing NPT would require India to **destroy its nuclear weapons**.
 - But India has two nuclear neighbours; Pak's is **India specific**
- **2008 deal:**
 - India no longer needs to sign NPT as **Indo-US Nuclear deal** and subsequent **NSG waiver** has given it access to international nuclear **cooperation**.

Comprehensive Nuclear-Test-Ban Treaty (CTBT)

It bans all nuclear tests, for all purpose, in all environments.

- **After WW-2**: hundreds of nuclear tests were polluting **environment** / destroying life
- **1954**: Castle Bravo tests by USA. Nehru called for standstill agreement.
- **1955**: Nikita Khrushchev proposed CTBT. Negotiations began.
- **Problem?** can't verify other's underground tests.
- **Result?** PTBT 1963 banned nuclear tests in **underwater, atmosphere, outer space**.
- **Problem?** underground tests continued.
- **1980s**: USSR and USA agreed on comprehensive ban.
- **1996**: UNGA adopts **CTBT**.
- CTBT is still not in force, why? Because 8 countries have not ratified it.
 - Signed but not ratified: USA, China, Israel, Iran, Egypt
 - Not signed: India, Pakistan, North Korea

India's Nuclear Doctrine

India's nuclear doctrine:

(Guides the use of nuclear weapons by a country)

- Aim is to present **credible minimum deterrence** (peace, not war).
- **No First Use**. Nuclear weapons will be used only in response to nuclear attack.
- **Retaliation** will be massive and cause unacceptable damage to aggressor.
- **Control** lies in hands of civilian political leadership (not military).
- No use of nuclear weapon against **non-nuclear weapon state**.
- Can use nuclear weapon in case of major **chemical or biological attack**.

Case for review?

- ❑ **Modernization of nukes by other countries:**
 - Tactical nuclear weapons developed by Pakistan.
- ❑ **To be in line with evolving global order:**
 - USA and Russia review their nuclear doctrines periodically.
- ❑ **New threats are emerging with advancement in technology:**
 - Massive cyber-attack and space wars can cripple a nation's economy.
- ❑ **Use of nukes by non-state actors:**
 - The current doctrine is silent on threat of '**nuclear terrorism**'.
- ❑ **Political posture:**
 - Ruling party's 2014 election manifesto promised review.
 - Defence Minister in 2019: No first use policy will not be continued indefinitely

India's nuclear triad: (launch platform)

- **Air:** Jaguar, Mirage-2000, Su-30
- **Land:** Agni and Prithvi
- **Underwater:** INS Arihant

Following is from Prelims

Prelims 2018:

In the Indian context, what is the implication of ratifying the 'Additional Protocol' with the 'International Atomic Energy Agency (IAEA)'?

- The civilian nuclear reactors come under IAEA safeguards.
- The military nuclear installations come under the inspection of IAEA.
- The country will have the privilege to buy uranium from the Nuclear Suppliers Group (NSG).
- The country automatically becomes a member of the NSG.

Prelims 2020:

In India, why are some nuclear reactors kept under "IAEA Safeguards" while others are not?

- Some use uranium and others use thorium
- Some use imported uranium and others use domestic supplies.
- Some are operated by foreign enterprises and others are operated by domestic enterprises
- Some are State-owned and others are privately-owned

Indian Nuclear tests:

- ✓ 1974: Smiling Buddha / Pokhran-1
- ✓ 1998: Operation Shakti-98 / Pokhran-II

Nuclear Suppliers Group:

- ✓ A group that controls supply of nuclear tech, fuel, etc.
- ✓ Formed in 1974 in response to India's nuclear test.
- ✓ 48 members: P5, Canada, Australia, etc. (No Pakistan)

➤ 2005: India-US agree on civil nuclear deal

➤ 2005-2008:

- US amended its Atomic Energy Act 1954
- India separated civil and military nuclear facilities
- US convinced NSG to make exception for India.

➤ 2008: finally deal was signed (aka 123 agreement) (UPA govt. was about to fall, still we signed)

➤ Significance? India became the **only** non-NPT nuclear state that can do nuclear commerce.

➤ Later, in next few years, India signed deals for fuel, reactors, etc. with **multiple countries**.

Treaty on the Prohibition of Nuclear Weapons:

- aka Nuclear Weapon Ban Treaty; entered into force in January 2021
- UN treaty to comprehensively eliminate nuclear weapons
- signed by 86 countries; No nuclear-armed nation supported it.
- The treaty is not binding on non-signatories.
- Reason by US/UK/France:
 - nuclear deterrence is essential to maintain global peace
- India position:
 - The treaty does not set any new standards or law.
 - India is committed to universal, non-discriminatory and verifiable nuclear disarmament.

How is it different from NPT?

- It prohibits nukes outright **for all countries**.
- NPT does not set any time limit for nuclear weapon states to eliminate nukes.

Significance:

- Builds global opinion against nuclear weapons

The Hindu 19-10-2021

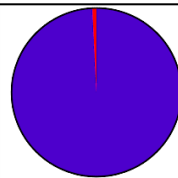
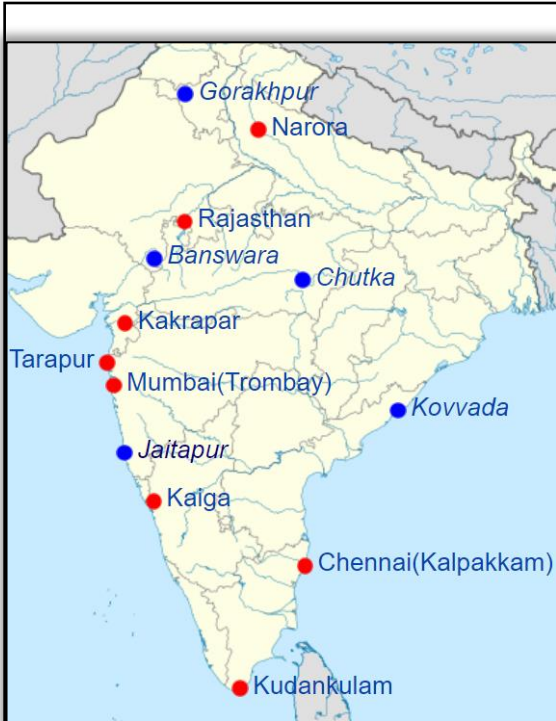


To reduce devastation by monsoon rains:

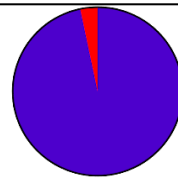
- strengthen natural defences
- keep **rivers** free of **encroachments**
- protect **mountain** slopes from mining, **deforestation**, construction

Abdul Qadeer Khan:

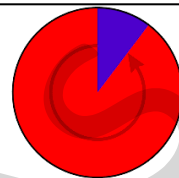
- Father of Pakistan's nuclear weapons program
- 1970s:**
 - stole nuclear tech from Netherlands
- 1980s:**
 - Netherlands tried to arrest; CIA protected
- 1998:**
 - Pak became supplier; helped NK, Iran, Libya
 - It is only then that USA became cautious
 - New York times pointed out the following
 - Two essential ingredients in Pak's nuclear program:
(a) China's help (b) USA's protection
- Why USA protected Khan/Pak?
 - CIA was smuggling weapons to **Afghan** via Pak to counter USSR.
 - USA wanted to balance **India** by Pak (India close to USSR; India had nukes)



Natural uranium
> 99.2% U-238
0.72% U-235



Low-enriched uranium
(reactor grade)
3-4% U-235



Highly enriched uranium
(weapons grade)
90% U-235

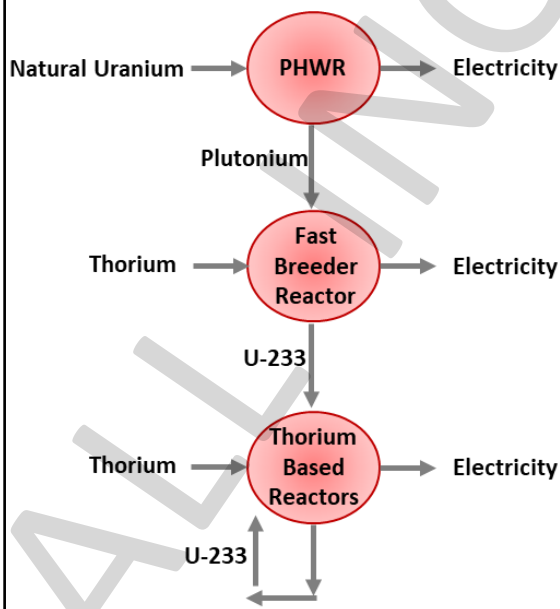
- Haryana:** Gorakhpur
- UP:** Narora
- Rajasthan:** Rawatbhata, Banswara
- MP:** Chutka
- Gujarat:** Kakrapar
- Maharashtra:** Tarapur (1st), Mumbai, Jaitapur
- Karnataka:** Kaiga
- TN:** Kudankulam, Kalpakkam
- Andhra:** Kovvada

1969 Tarapur Atomic Power Station was first commercial nuclear power station built in India.

India's three-stage nuclear power programme:

- Formulated by Homi Jehangir **Bhabha** in 1950s.
- Need? India has just **1-2%** of global **uranium** reserves, but **25%** of **thorium** reserves (Monazite sands, most in Andhra)
- But reactor with Thorium alone is not possible.
- It has to be converted into U-233; so 3-stages.

- Breeder reactor:** generates more fissile material than it consumes
- Fast Breeder Reactor:** Breeder reactor that uses fast neutrons (no moderator)
- India:** 500 MW prototype under construction at Kalpakkam (TN); uses Sodium as coolant. (Earlier 13 MW Test reactor made in 1985)



Prelims 2012:

To meet its rapidly growing energy demand, some opine that India should pursue R&D on Thorium as the future fuel of nuclear energy. In this context, what **advantage does Thorium hold over uranium?**

1. Thorium is far more **abundant** in nature than Uranium
2. On the basis of per unit mass of mined mineral, Thorium can generate **more energy** compared to natural Uranium.
3. Thorium produces **less harmful waste** in comparison to Uranium.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 & 3 only
- (c) 1 & 3 only
- (d) 1, 2 & 3**

Militarization of A&N islands

Also see:
 Class-11 Bio-terrorism
 Class-13 Lone Wolf Attack
 Class-17 Drones
 Class-27 Police reforms

About ANI:

- Group of **572 islands**, of which **37** are inhabited.
- 5 (out of 75) of India's **PVTGs** live here.
- It has **96 wildlife sanctuaries**, 9 national parks and one biosphere reserve.

Strategic importance of ANI:

- Proximity to other countries. ANI is 40 km from **Myanmar** and 160 km from **Indonesia**.
- ANI has just 0.2% of India's land but provide 30% of **Exclusive Economic Zone**.
- It dominates the **ten degree channel** through which thousands of commercial ships pass.
- It has potential to be developed as a **transshipment hub** (intermediate stop for cargo on its way to another destination)
- It is close to **Malacca strait**, which is a major **choke point**.
- As a counter to **China's** presence in IOR
- ANI is often called as India's **unsinkable aircraft carrier**

**Challenges in developing ANI:**

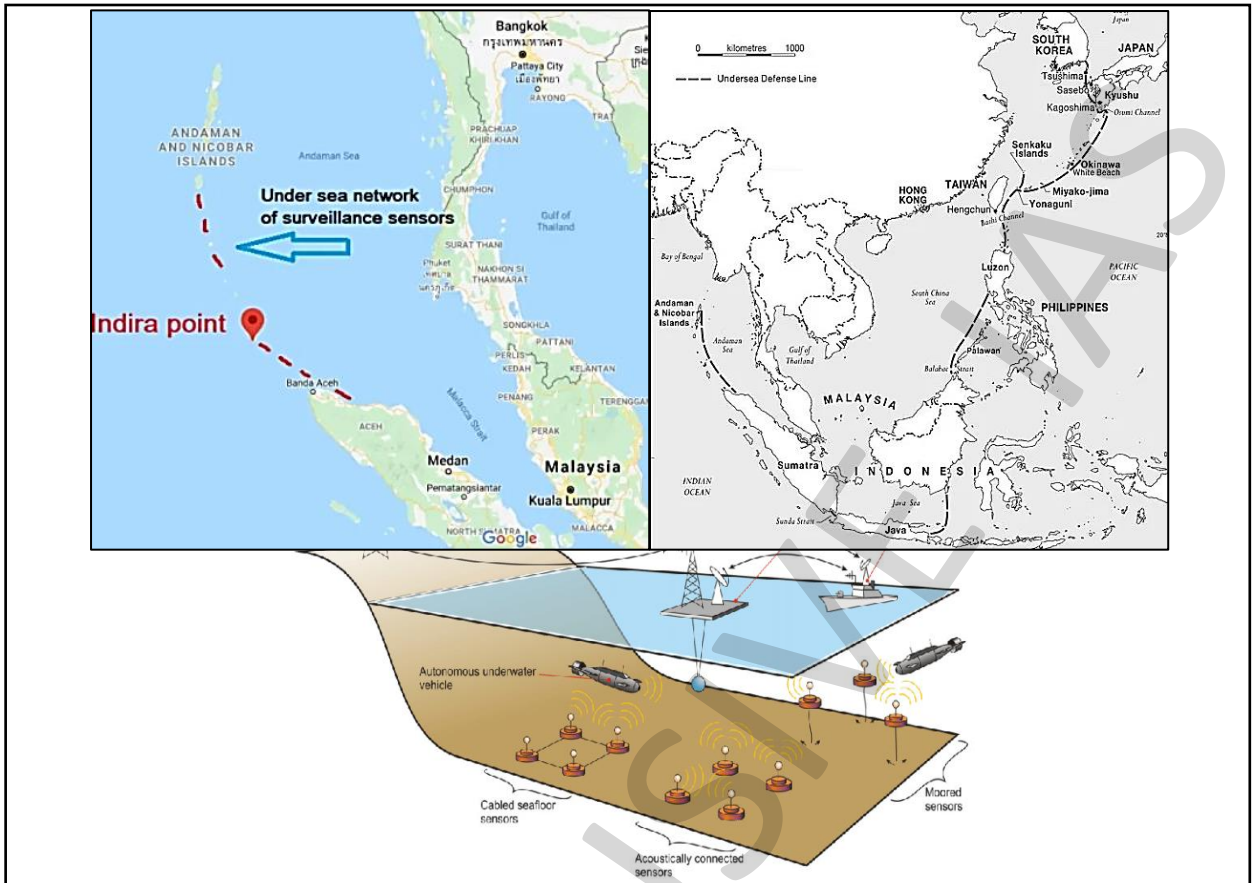
- Damage to **environment**
- Threat to local **tribes**
- Heavy **rainfall** reduces construction activity to just 6 months a year
- High **cost** of transporting goods from mainland
- Poor **telecom** connectivity
- Neighbouring** countries may become suspicious of India's intentions

Steps India has taken:

- Set up **tri-service theatre command** (assets and manpower of Army, Navy, Air Force and Coast guard are under one operational commander)
- Additional deployment of **warships and aircrafts**.
- Increasing **runway length** of INS Kohassa and INS Baaz to enable operations by larger aircraft
- 10 year **infra development** plan of Rs 5000 crore finalized.
- Undersea **optical fibre** laid between Chennai and ANI

Options before India for better use ANI:

- Develop ANI into a military garrison**
 - Problems: Nearby countries may feel threatened (South China sea!)
 - In 1980s, when India began developing ANI, Malaysia and Indonesia feared that India intends to dominate SE Asia
- Allow friendly countries, like USA, to build strategic capabilities in ANI**
 - Threatens our sovereignty
 - India is not in a military alliance with USA, not a part of NATO
- Provide military logistics support to friendly navies**
 - India has military logistics agreements with USA, Australia, Japan, etc.
- Cooperate with other navies on surveillance**
 - Undersea network of sea-bed sensors can monitor submarine activity.
 - US-Japan 'Fish Hook' SOSUS network already monitors China's submarine activity.
 - Recent reports suggest that it has been extended to ANI.



Way forward:

- Strengthen surveillance by long range patrol **aircraft** like Poseidon-81.
- Strengthen **undersea surveillance** by cooperation with friendly nations.
- Fast track **infra development** (both civil and military)
- Take into confidence **nearby countries**.
- As India tries to militarize ANI, China will try to increase military access to its **BRI ports**. Indian diplomacy should be prepared to counter this.



Maritime Piracy

Sept 2020: India joined Djibouti Code of Conduct as an Observer.

Djibouti Code of Conduct (DCoC):

- ❑ Established in **2009** by **IMO**
- ❑ Members cooperate **against maritime piracy** in Western IOR.
- ❑ India will get clearer picture of maritime scenario in the region.
- ❑ **Jeddah Amendment 2017:** added **human trafficking, illegal fishing.**

What is maritime piracy?

- ❑ Piracy in high seas outside the jurisdiction of any country.
- ❑ Ships are hijacked, crew kidnapped, and ransom demanded.

Why does it happen?

- ❑ Most international **trade** happens through sea
- ❑ **No security** on high seas
- ❑ **Poverty** in coastal areas
- ❑ **Weak governments** unable to control local pirates

Maritime piracy is a serious problem because:

(men, company, economy, country)

- ❑ Threat to **life** of crew.
- ❑ Loss of goods, **money** and business of the company.
- ❑ Disrupts international **trade** and thus causes loss to economy.
- ❑ Disrupts to **oil and gas** supplies of countries.
- ❑ e.g. petro-piracy of tankers leaving Nigeria's oil and gas fields.

Steps taken by India:

- ❑ Anti-piracy **patrols** by Indian Navy since **2008**
- ❑ **Merchant ships** can request to be **escorted** by navy ships.
- ❑ **Coordination** with other countries in conducting patrols.
- ❑ Joined **DCoC** as observer.

Steps by International community:

- ❑ **Maritime Security Programme (MASE)** program funded by European Union
- ❑ **Maritime Crime Programme (MCP)** of United Nation Office on Drugs and Crime (UNODC)



NEWS SERVICES DIVISION
ALL INDIA RADIO

Sep 16, 2020, 6:14PM

India joins Djibouti Code of Conduct/ Jeddah Amendment as Observer

India has joined the Djibouti Code of Conduct/ Jeddah Amendment, DCOC/JA, as Observer. The move came following the high level meeting of the Djibouti Code of Conduct/ Jeddah Amendment held virtually on 26th of August. DCOC/JA is a grouping on maritime matters comprising 18 member states adjoining the Red Sea, Gulf of Aden, the East Coast of Africa and Island countries in the Indian Ocean Region. India has joined Japan, Norway, the UK and the US as Observers to the DCOC/JA.

The DCOC, established in January 2009, is aimed at repression of piracy and armed robbery against ships in the Western Indian Ocean Region, the Gulf of Aden and the Red Sea. As an observer at the DCOC/JA, India is looking forward to working together with DCOC/JA member states towards coordinating and contributing to enhanced maritime security in the Indian Ocean Region.



19. 2012 में समुद्री डकैती के उच्च-जोखिम क्षेत्रों के लिए देशांतरी (लॉन्जिट्यूडिनल) अंकन अन्तर्राष्ट्रीय समुद्री संगठन द्वारा अरब सागर में 65 डिग्री पूर्व से 78 डिग्री पूर्व तक खिसका दिया गया था। भारत के समुद्री सुरक्षा सरोकारों पर इसका क्या परिणाम है?

In 2012, the longitudinal marking for high-risk areas for piracy was moved from 65 degrees east to 78 degrees east in the Arabian Sea by the International Maritime Organization. What impact does this have on India's maritime security concerns?

Mains 2014

High Risk Area:

- ❑ Area with high risk of **piracy** exist
- ❑ **2012:** moved **65° to 78°** East, except Indian territorial waters.
- ❑ To avoid High Risk area, ships travelled **close to Indian coast.**
- ❑ They came in conflict with local fishermen.
- ❑ This increased incidents like **Enrica Lexie 2012**
- ❑ **2019:** High risk areas shifted westward.

Way forward:

- ❑ Address the root cause, i.e. **poverty** in coastal Somalia.
- ❑ Capacity building of **Somalia's navy** in anti-piracy.
- ❑ Continue **coordination** with other nations for maritime patrols
- ❑ **Puntland state** in Somalia raised a strong **maritime police**, this should be replicated by other coastal states as well.

Defence Modernization

- ❑ India is world's **second-largest arms importer** (after Saudi Arabia)
- ❑ India spends **30%** of its defence budget on capital acquisitions (half of it are imports)
- ❑ **Russia's** share declined from 72% to **56%** in last five years.

- ❑ **Defence industry:**
 - ❑ 80,000 crore : size of India's defence industry
 - ❑ 63,000 crore : public sector
 - ❑ 17,000 crore : private sector (8,000 MSMEs)
- ❑ **Defence exports:**
 - ❑ About Rs 11,000 crore
 - ❑ Increased 7 times in last 4 years.

Challenges facing defence industry:

- Monopoly of **public sector** and limited experience of **private sector**.
- Lack of industry-**academia**-defence linkage.
- Limited capability to develop or absorb new **technology**. (labs & HR)
- **Imports** don't include transfer of technology.

Defence Acquisition Procedure, 2020:

- No **off-set** clause in G2G deals. Now no need to spend 30% of contract value in India
- **Import ban** on certain weapons (Caution: import substitution!!!)
- '**Leasing**' as a new category, for transport, simulators, etc.
- New Category of Buy (**Global-Manufacture in India**) for foreign OEMs to set-up factories in India.

Private sector in defence production:

- ❑ **Benefits:**
 - Tech, HR, Capital (think of land, labour, capital)
- ❑ **Challenges:**
 - Not for everyone; highly capital and technology intensive
 - Irregular flow of orders; lack of economies of scale (export restrictions)
 - Govt. prefers PSUs (security concerns)

Draft Defence Production and Export Policy 2020:

- Creation of a Defence **Investor Cell**
- **Corporatization** of ordnance factories
- Reforming DPSUs as **System Integrators**
- Creation of Export Promotion Cell and **Open General Export License** (OGEL) regime

Other steps taken:

- **Defence Testing Infrastructure Scheme**: most beneficial for startups and MSMEs
- **Srijan portal**: to promote domestic production of imported defence items
- **FDI** in defence under **automatic** route increased from 49% to **74%**.

Defence Modernisation:

- ❑ 15th FC has recommended a non-lapsable Modernisation Fund for Defence & Internal Security
- ❑ Source of funds: monetize surplus defence land, disinvest defence PSUs, CFI
- ❑ Fund to be used for: modernisation of defence forces, CAPFs, state police forces.

Need for defence modernization:

- ❑ Border security: e.g. use of smart devices for border surveillance
 - ❑ Procurement and manufacture: e.g. Indian navy has 140 warships, China has 350
 - ❑ Changing warfare: e.g. new frontiers opening up like space warfare, cyber warfare
- To project India as a potent global power.

Steps taken:

- ❑ Post of **CDS** and new **Dept of Military Affairs** to better manage military resources.
- ❑ **Integrated Battle Groups** are being created.
- ❑ Armed forces may be reorganized into **Theatre commands**.

Integrated Battle Groups

- ❑ **Divisions** (with 10-20k) are **too slow** to respond. Also, probability of full scale wars are very low.
- ❑ Future wars will be limited in time and space. The **first mover** will have a major **advantage**.
- ❑ Hence, IBGs are being formed as tailor-made formations as per threat, terrain and mission.
- ❑ IBGs will be **self-sufficient** combat formations.
- ❑ They will have a mix of **every arm and service** like Infantry, Artillery, Engineers, Signals, Air Defence, and others.
- ❑ **Troop strength** ~5,000 (bigger than Brigade (3000-3,500) but smaller than Division (10-12k)

Theatre commands

India may **restructure its military** to create theatre commands.

Possible theatre commands:

Northern C. , Western C. , Air Defence C. , Maritime C. , Peninsular C.

Theatre command:

- Putting personnel from **three services**, under a common **commander**, in a specific **geography**.
- The 5 theatre commands may replace **19 existing single-service** commands.

Advantages:

- Better **coordination** between three forces.
- **Non-duplication** and optimum use of resources. (All three defend airspace!)
- Integrated approach in **procurement** can significantly cut down costs.
- Integrating human resource in a theatre command can reduce **salary and pension** expenditure.

Challenges:

- **Experience:**
 - India has **limited experience** in operating theatre command e.g. **A&N island** tri-service command
 - Use of integrated command by Indian Peace-keeping Forces in **Sri Lanka** was not very successful.
- **Inter-service competition:**
 - **Commanders** preferring own service's assets over others cannot be ruled out.
 - Fear of **domination by Army** over Navy and AF as Army is generally overrepresented in joint military institutions.

Chief of Defence Staff:

- A four-star General with salary and perquisites equivalent to a Service Chief.
- Permanent **Chairman** of Chiefs of Staff Committee
- Principal military **adviser** to the defence minister
- Does **not** exercise any **military command**

Need:

- Recommended by various **committees** (Kargil, Naresh Chandra, Shekatkar)
- To better **coordination** and lesser **duplication of assets** between three forces.
- Rational utilization of **resources** of three services.
- Previous arrangement, senior-most service chief becoming Chairman of CoSC, was a mere **figurehead**.

Space Warfare

- ❑ **Combat that takes place in outer space.** It includes:
 - attacking satellites from the Earth
 - satellites attacking satellites
 - satellites attacking Earth-based targets
- ❑ **Types of space weapons:**
 - **Kinetic** weapons, e.g. missiles
 - **Non-Kinetic** weapons, e.g. laser, electromagnetic pulse
 - Other methods like cyber-attack, signal interference.
- ❑ **Reasons** for use of space as battle ground:
 - Rapid development of space **technology**
 - Increase in number of space **assets**
 - Increased **dependence** of economy on space based assets
- ❑ **Consequences:**
 - Space **debris**
 - Difficult to find **real perpetrators**, especially true for Electromagnetic pulse
 - Can lead to **full-scale war** on ground
- ❑ **Steps taken:**
 - ASAT missile test March 2019
 - Defence Space Agency in 2018 (along with cyber and special ops)

Outer Space treaty, 1967:

- 110 members; India ratified it in 1982
- **Weapons:**
 - bans WMDs in space
 - does not ban space weaponization
- **Exploration:**
 - all nations are free to explore space
 - no nation can claim sovereignty of any celestial body
- Insufficient on newer space activities like lunar mining, asteroid mining, etc.

Hybrid Warfare

- Recently, a data leak at **Zhenhua** exposed China's new hybrid warfare.
- Zhenhua is monitoring over **10,000 Indians** (millions globally).
- It sources data from all **digital footprints** of individuals, and uses big data and AI, to enable China to engage in 'hybrid warfare'.

Hybrid warfare:

- Use of **non-military tools** to achieve dominance or damage to enemy.
- It shifts violence from military to **political, economic and technological**.
- It uses weapons like cyber-attacks, disinformation, perception management, propaganda, economic manipulation, etc.
- **Impacts:**
 - Damage critical infra like power grids.
 - Influence electoral process
 - Create social tensions

Way forward:

- Strengthen **cyber-security** architecture
- Monitor **social media** advertisements and their source.
- Ban use of suspicious mobile **apps** (more than 100 apps banned in 2020)
- Scrutinize source of **FDI**, e.g. Chinese companies own 30% of Paytm

 **The Indian EXPRESS** SUBSCRIBE Epaper 

China watching: President, PM, key Opposition leaders, Cabinet, CMs, Chief Justice of India...the list goes on

Written by P Vaidyanathan Iyer, Jay Mazoomdaar, Kaunain Sheriff M | New Delhi |
Updated: September 15, 2020 5:41:05 pm

Calling itself a pioneer in using big data for "hybrid warfare" and the "great rejuvenation of the Chinese nation," a Shenzhen-based technology company with links to the Chinese government, and the Chinese Communist Party, is **monitoring**

Fake news

- False information deliberately **created and promoted** among general public.
- A Microsoft study has found that over **64% Indians** encountered fake news online, highest among the 22 countries surveyed.

Causes for culture of fake news:

- Large number of active social media **users** (300 million FB, 200 million WA)
- **Algorithms** recommend posts using likeability, and not accuracy. (Echo chamber)
- No specific **law**; action against fake news is either absent, or biased.

Concerns:

- ❑ **Rights:** Fake news violates people's right to unbiased and truthful information.
- ❑ **Health:** People develop false sense of security by fake news of scientists discovering homemade remedy as cure of corona/cancer etc.
- ❑ **Education:** it reduces formal education to mere literacy, as people believe real knowledge comes through social media.
- ❑ **Society:** most fake news in India is on political and religious matters, thus creating permanent divisions in society. [*Why? Divided society is easy to rule*]
- ❑ **Crime:** Many communal riots and mob lynching are product of regular feeding of fake news to common man.
- ❑ **Democracy:** it weakens democracy as it allows state to interfere in the election process. e.g. 2016 US Presidential elections
- ❑ **Infodemic:** abundance of info makes it difficult to separate truth from misleading/fake info.

Way forward: (Crime, criminal, people)

- Create a separate **law** to deal with fake news. [actionable wrong needs clear definition].
- Act against **creators** of fake news, as well as those who forward them.
- Create **awareness** among people not to forward sensational messages.
- Teach **students** to methods to check authenticity of news (Govt. schools in Kerala)
- Popularize fact-check **websites** and tools.

The Hindu 12-10-2021

EDITORIAL

The 'yes or a no' the Court must ask about Pegasus

A review of the Supreme Court's decision on the Pegasus spyware case, which will likely be a landmark judgment on the right to privacy and the limits of state surveillance.

Dangerous deadlock

The Supreme Court's decision on the Pegasus case is a landmark judgment on the right to privacy and the limits of state surveillance. The Court has held that the use of Pegasus spyware by the government is unconstitutional, as it violates the fundamental right to privacy. This decision is a significant step towards protecting citizens from state surveillance and ensuring that the government's actions are subject to judicial scrutiny.

The next step is a constitutional right to health

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Limits to accommodation

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LETTERS TO THE EDITOR

NSO Group	Project Pegasus	Opposition parties	Indian Government
<p>Israel based company; owns Pegasus spyware</p> <ul style="list-style-type: none"> ❑ We give Pegasus only to Govt or its agencies. ❑ To fight serious crimes and terrorism 	<p>International investigative journalism initiative</p> <ul style="list-style-type: none"> ❑ Leaked list of 50,000 mobile numbers ❑ Many governments (including India) used it to spy on Opposition members, journalists, judges, etc. to suppress dissent ❑ Countries like France ordered investigation; India didn't 	<p>Demanded independent investigation</p> <ul style="list-style-type: none"> ❑ Attempts in Parliament to hold the Executive accountable failed. ❑ Petition in Judiciary ❑ Key question: did govt use Pegasus against citizens not accused of any wrongdoing? 	<ul style="list-style-type: none"> ❑ In SC, govt affidavit cited "national security" to evade questions. ❑ Note: earlier, Defence Ministry clarified that it did not deal with NSO group.

Comments:

- **National security** has become a cloak for impunity to evade questions.
- **Rule of law** (PT 2021 Polity pg-51) applies to Executive as well.
- Constitution does not allow **unchecked surveillance**.
- In India, we have a long experience of "**death by Committee**": issues that require urgent attention linger for many months in a Committee, and once public memory has dulled, are given a quiet burial. (Context: SC said a committee will be formed)

Laws that provide for Communication surveillance:

- Telegraph Act, 1885 → mainly for calls
- Information Technology Act, 2000 → for all electronic

"Right to Healthcare" as a Fundamental Right?

- (Just like Right to Education) (Kailash Satyarthi 2014 Nobel Peace Prize)
- Poor: healthcare expenses throw them into debt and bondage labour.
- Children: put into child labour to pay for medical expenses; suffer consequences for lifetime.
- Women: social and economic challenges prevent them from accessing healthcare.
- Society: better social security
- Economy: savings, investment, job creation

The Hindu 13-10-2021

EDITORIAL

Taking the lid off illicit financial flows

The Financial Action Task Force (FATF) has highlighted the need for concerted steps to alter the global financial architecture to curb illicit financial flows.

Abbing children

The Financial Action Task Force (FATF) has highlighted the need for concerted steps to alter the global financial architecture to curb illicit financial flows. This is a significant step towards addressing the global financial architecture and ensuring that it is not used to facilitate illicit financial flows.

Do not breathe easy on the silicosis prevention policy

The government must make haste to prevent a killer disease that claims thousands of workers each year. This is a significant step towards addressing the global financial architecture and ensuring that it is not used to facilitate illicit financial flows.

IS vs Taliban

The government must make haste to prevent a killer disease that claims thousands of workers each year. This is a significant step towards addressing the global financial architecture and ensuring that it is not used to facilitate illicit financial flows.

LETTERS TO THE EDITOR

International Consortium of Investigative Journalists

- 1997; an **independent** network
- 2016 **Panama** Papers leak
- 2017 **Paradise** Papers leak
- 2021 **Pandora** Papers leak
- exposed hidden wealth, tax avoidance and money laundering by **rich and powerful**.

Illicit financial flows in the global financial architecture:

- **Tax havens** attract capital due to low tax rates
- This forces countries to **lower tax rates**.
- This has led to '**race to the bottom**', in turn adversely impacting the poor.
- Global **Minimum tax** of 15% for corporates (recently agreed) can help.
- Suggestions: ending **banking secrecy** and a **Tobin tax** on transactions

Tobin tax:

- aka Robin Hood tax or **Financial Transactions Tax**
- mainly to disincentivizing short-term currency speculation

Race to the bottom:

- governments deregulating business environment, or reducing taxes, to attract/retain economic activity.

The Hindu 14-10-2021



Terrorism:

Taliban:

- Return of Taliban in Afghanistan is a **warning for neighbourhood**.
- Small **local** terror groups will feel **energised**.
- **Kashmir** is beginning to see a **new wave** of terror attacks.

'New era' terror:

- **Remote controlled terror** or Internet-enabled terrorism: recruited, trained and controlled through Internet.
- Terror groups with state backing can launch **cyber-attacks**.
- Limited only by **human imagination**.

Was global war on Terrorism successful?

- Not entirely. Terrorists using small arms, **IEDs**, **lone wolf attacks** does not mean that terrorism has weakened.
- Terrorism, stemming from a mixture of **religious fervour** and **fundamentalist aims**, remains **vibrant**.

Note:

- **IED:** Improvised Explosive Device
- **Lone wolf attack:** planned and committed by an individual on his own
- **Religious fervour:** passionate about religion
- **Fundamentalist aims:** spreading strict belief in some ideology विचारधारा
- **Vibrant:** full of energy

Aid for Afghanistan:

- At G20, PM Modi asked international community to provide Afghanistan with "immediate and unhindered access to **humanitarian assistance**".
- India can send aid **directly**, or through international organisations.

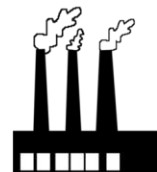
Reasons:

- India concerned about welfare of ordinary Afghans.
- Humanitarian crisis can have international ramifications.

The Hindu 21-10-2021



UNFCCC CoP 26 → November 2021, in Glasgow UK
Carbon market → Article 6 of Paris agreement



Kyoto:

- Developed countries had mitigation targets.
- Mitigating in their own country was expensive.
- So they purchased carbon credits from developing countries.

Paris agreement:

- Developing countries also have mitigation targets.
- Now, these carbon credits can be:
 - either sold to developed countries like earlier
 - or be used to achieve own mitigation targets.

Cyber security:

- To attack another country:
 - Past: **big army**, weapons, GDP, etc needed.
 - Now: **even small nations** same as big (cyberwarfare)
- A new National **cyber security policy** is needed. Components:
 - Identify critical **infra** to be protected
 - Develop capability to identify **attackers**
 - Develop capability for pre-emptive **strike**
 - Set up new departments for emerging **technologies**
 - Compulsory science & maths **education**.

The Hindu 02-11-2021

Kashmir's fragility has more complex reasons (written by former NSA M.K. Narayan)

- **Terror** attacks creating **fear**. There is exodus of **Hindus**. Situation is being compared to **1990s**.
- **Impression** is being created of increasing **support** to militancy, but ground **reality** is **different**.
- '**Disciplined Democracy**' is being practised since the dilution of Article 370.
(Fundamental freedoms and rights of people is under control)
- When article 370 was diluted, we knew that as always **Pak** will push **terrorists** and **propaganda**.
- But in **euphoria** of victory, we **ignored** lessons of **past**, on what should be done.
- When violence escalated, **Taliban** was said to be the **reason**, but situation is more **complex**.
- **China-Pakistan** relations are becoming stronger. China is trying to increase its influence.
- There is also a need for better intelligence gathering.
- **Poor intelligence** can create **misperception** & worsen the situation. e.g. **failure** to prevent **9/11**.
- Focus of **intelligence** agencies is on **past**, **not** on **future** possibilities.
- Focusing just on Taliban, and **ignoring** other factors **can be dangerous**.

The Hindu 04-11-2021

A court order for the ages

How far can govt invade into citizen's privacy?

- No limit if its about national security.

Pegasus:

- Spyware by Israel, sold only to govts **to fight terrorism**
- I.C.I.J.: India and other countries used it **to fight dissent**
- Israel, France and many other countries have **launched investigation**.
- But Indian govt **refused investigation**, saying its about national security.
- People approached SC: spying done even when national security not involved.

Supreme Court:

- Constituted committee. Simply saying 'national security' is not a pass to spy.

The Hindu 08-11-2021

A new jurisprudence for political prisoners

Thwaha Fasal case 2021:

- ❑ **Prosecution** → accused had **literature** related to caste, dissent, maoism
- ❑ **Accused** → attempt to label us as terrorist, based on our **ideology**
- ❑ **SC** → material does **not** promote **terrorism**, upheld bail given by trial court

Section 43(D) of UAPA: Unlawful Activities (Prevention) Act

- Can keep in jail up to **180 days** even without filing chargesheet
- **No bail** if allegations are prima facie (प्रथम दृष्टया) true

Under other laws:	Under UAPA:
presumption of innocence	presumption of guilt
innocent until proven guilty	guilty until proven innocent
burden is on prosecution to prove guilt	burden is on accused to prove innocence

Zahoor Shah Ahmed Atali case 2019 (and many other cases):

- Court should **just see allegations**, and **not consider evidence**
- So **bails rejected**, despite strong indications that evidence was fabricated

Thwaha Fasal case 2021

- Court should **also see evidence**, and **not just allegations**
- This will **prevent misuse** of UAPA, will help in bail of other **political prisoners**

Related news (page-10)

- **Tripura** police has booked **102** people under **UAPA**.
- Some of them have been booked just for tweeting "**Tripura is burning**"

Border security**Why not build a wall?**

- **Land** lying across the wall will be practically ceded to Pakistan.
- Cross-border **operations** by India will have to be stopped.
- It will make BSF totally **blind** to activities across the wall.
- Difficult **terrain**, landslides, presence of rivers, etc.

Challenges in border security

- **Undemarcated borders** with overlapping claims cause constant friction.
- Unilateral actions by some nations to **change status quo** in their favour.
- Misuse of **open and porous borders** for smuggling, illegal migration, etc.
- Active support to **terrorist infiltration** by Pakistan.
- Lack of **inter-agency coordination** among multiple agencies (Army, BSF, ITBP, SSB)
- Dense **jungles, rivers**, difficult **terrain** and extreme weather.
- Lack of **infra** in border areas. Slow troop mobilization. Low population. Poverty.
- Approx. 15,100 km **long border**, and 7,500 km long coastline.

Steps taken:

- All weather day night **satellite** surveillance e.g. RISAT satellites.
- Use of technology to detect underground **tunnels** e.g. Ground Penetrating **Radar**
- Increase in border **infra** like roads, (Dhola-Sadiya) bridges, (Atal) tunnels.
- **Confidence building measures** and communication linkages to avoid escalation.
- CIBMS

What more can be done?

- **No diversion of border forces**, e.g. ITBP often used for naxal areas.
- **One force one border** principle to reduce coordination issues.
- **Army for LoC and LAC**, BSF for settled borders.
- **Private sector** participation, continuous upgradation of technology, etc.

India-China border:

- Clashes due to border dispute, e.g. Ladakh, Doklam, AP
- Poor infra due to difficult terrain, so slow mobilisation of forces
- Coordination issues due to multiple forces, e.g. Army, ITBP, Assam rifles

Steps taken:

- Infra created e.g. advanced landing ground and road at Daulat Beg Oldi, bridge at Dhola-Sadiya
- Army infra projects within 100km of LAC exempted from forest clearance
- Increasing BRO's powers to speed up road construction

India-Pak border:

- Border dispute
- Cross border terrorism
- River water sharing issues

Steps taken:

- CIBMS being implemented to secure border
- NSG commandos deployed for counter terror ops

Border infrastructure

Recently, Govt. accepted Shekatkar Committee's recommendations on border road construction:

- ❑ **Mandatory** Engineering Procurement Construction (**EPC**) for projects more than Rs 100 crore.
- ❑ Increase BRO's **procurement powers** from Rs 7.5 crore to Rs 100 crore.
- ❑ Award contracts only after getting **90% statutory clearances** like environmental clearance.

Other steps taken:

- ❑ **Border Area Development Programme** for overall development of border areas (health, education, roads, drinking water, etc.)
- ❑ **General approval** under Forest (Conservation) Act, 1980 **for forest clearances**.
- ❑ Transfer of some **BRO projects to NHIDCL** (National Highways and Infrastructure Development Corporation Limited)

Use of Technology

Comprehensive Integrated Border Management System (CIBMS):

Seamless integration of humans, weapons, and high-tech surveillance equipment.

The aim is to eventually replace manual surveillance on borders.

Advantages:

- 24X7 **surveillance** using cameras, sensors, lasers, etc. helps in checking infiltration
- **All weather monitoring** through Risat satellites.
- Ground-penetrating radar helps detect **underground tunnels**
- **Secure communication** using fiber optics and satellite links
- Command and Control Centre to get **comprehensive picture**.
- Reduces human pressure and chances of **error**.

Challenges:

- High **cost** of procurement, maintenance, repair.
- Power supply, and other technical **limitations**.
- Fixed **location**, easy to detect, defenceless.
- Technical expertise to **operate** them not uniformly available among personnel.

Conclusion:

- Technology can complement, not replace, traditional methods of border security.
- Judicious mix of the two can yield better result.

Importance of border states

- ❑ **Internal security:**
 - Border states are first line of defence against smuggling of arms, drugs, and infiltration.
- ❑ **Foreign policy:**
 - They play important role in cross border cooperation and people-to-people contacts, e.g. border haats with Bangladesh
- ❑ **Regional integration:**
 - Due to geographical proximity to other countries e.g. NE with Myanmar/ASEAN

Maritime security

Need to focus on maritime security?

- Long coastline ~7500 km
- 90% of international trade is through sea
- To tackle organised crime, e.g. 20,000 crore of drugs seized at Mundra port
- To ensure national security, e.g. 2008 Mumbai attacks; Chinese String of Pearls
- To use maritime resources (see class-11 Blue Economy)

Mausam (cultural relations), Sagar (maritime cooperation), Quad

Challenges:

- Laws are **not accepted** by all countries, e.g. USA has not ratified UNCLOS
- Laws **lack enforcement** measures, e.g. China refused to follow PCA ruling on SCS
- High seas are global **commons**, so countries exploit them, and refrain to conserve

Way forward:

- ❑ Create maritime security board in UNSC.
- ❑ 5-point agenda on maritime security, proposed by India, adopted at UNSC:
 - 1) Boost maritime **trade**
 - 2) Maritime **connectivity** should be increased
 - 3) Resolve maritime **disputes** as per international law only e.g. South China Sea ruling
 - 4) Countries must jointly tackle maritime **threats** from non-state actors e.g. piracy
 - 5) Preserve maritime **environment** and resources, e.g. plastic waste, oil spills

United Nations Convention on Law of Sea (UNCLOS):

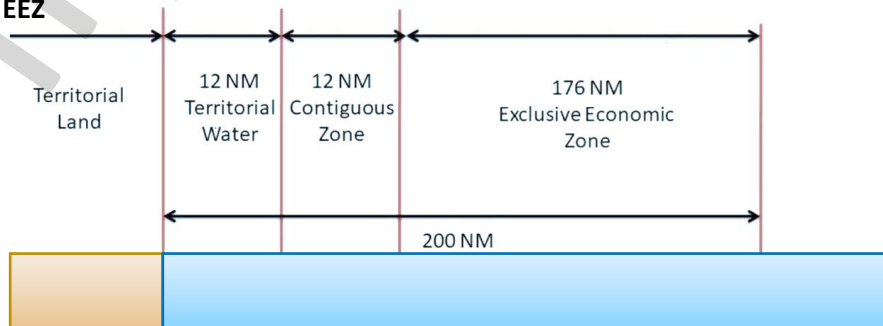
- a) It resulted from 3rd UN conference on Law of Sea (1973-1982)
- b) Signed in **1982**; effective from 1994.
- c) **Members**: 168 including India and China. USA has not ratified it.
- d) It defines the **rights and duties of nations** in maritime environments.
- e) To resolve **disputes**, states can approach either of:
 - a) International Tribunal for Law of the Sea
 - b) International Court of Justice
 - c) Arbitral tribunal

Enrica Lexie case ruling 2020:

- India will get compensation
- Marines will be tried in Italy

UNCLOS divides marine areas into following zones:

- a) **Internal water**: full sovereignty
- b) **Territorial water**: Set laws; use resources. Others are allowed innocent passage.
- c) **Contiguous zone**: Set laws on customs, smuggling, etc.
- d) **Exclusive Economic zone**: Use all economic resources. Others can lay pipes, cables, submarines.
- e) **Continental shelf**: possible extension of EEZ.
- f) **High sea**: area beyond EEZ



Global commons:

- ❑ areas outside national jurisdictions to which all nations have access.
- ❑ International law identifies four global commons:
 - High Seas, Antarctica, Atmosphere, Outer Space

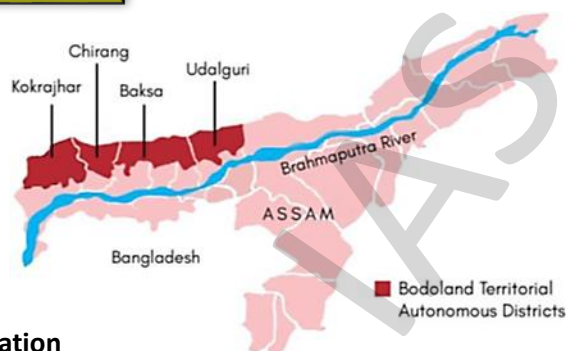
Bodoland

Bodos:

single largest community among STs in Assam;
5-6% of Assam's population.

Bodoland:

autonomous region in Assam; comprising four districts (Kokrajhar, Chirang, Baksa, Udalgiri)



Background:

- Till the 20th century, witnessed large-scale in-migration
- To reclaim ethnic and linguistic identities of Bodos, demand for a Bodo state arose in the 1960s.
- **1993:** 1st Bodo Accord; Bodoland Autonomous Council
- **2003:** 2nd Bodo Accord; Bodoland Territorial Council
- **2020:** 3rd Bodo Accord; Bodoland Territorial Region

Bodo Peace Accord:

- Over 1600 armed cadres **surrendered arms**.
- Bodo Territorial Area District **reorganized**: Bodo dominated villages included, others excluded
- Bodo Territorial Area District renamed as **Bodoland Territorial Region**
- BTR to have **more** executive, administrative, legislative and financial **powers**.
- Bodos living in hills would be conferred Scheduled **Hill Tribe status**.
- Bodo with Devanagari script will be associate official **language** of Assam.
- Special development package of **Rs 1500 crores**.

Bru Refugee crisis

1995-1997:

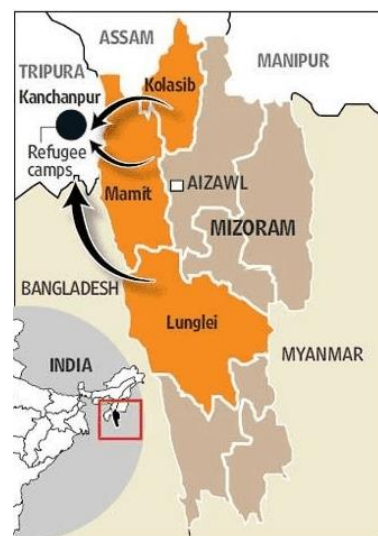
- Mizo and Bru, **both lived** in Mizoram
- Mizo said Bru are **outsiders**, not indigenous
- Mizo demanded that **voting rights** of Bru be taken away
- To fight back, Bru formed political body and **armed organization**
- Violent **clashes**
- 30,000 Bru people **fled** to Tripura
- Many times Government tried to send them back; even gave monetary incentives.
- But lack of security forces Bru to remain in Tripura itself.

Latest efforts:

- Agreement between Centre, Mizoram govt, Tripura govt, and leaders of Bru community.
- Brus in Tripura will be settled in Tripura itself.
- They will get tribal status, voting rights, welfare schemes, etc. i.e. **all rights** that other residents get.
- Rs 600 crore package for rehabilitation and development.

Challenges that remain:

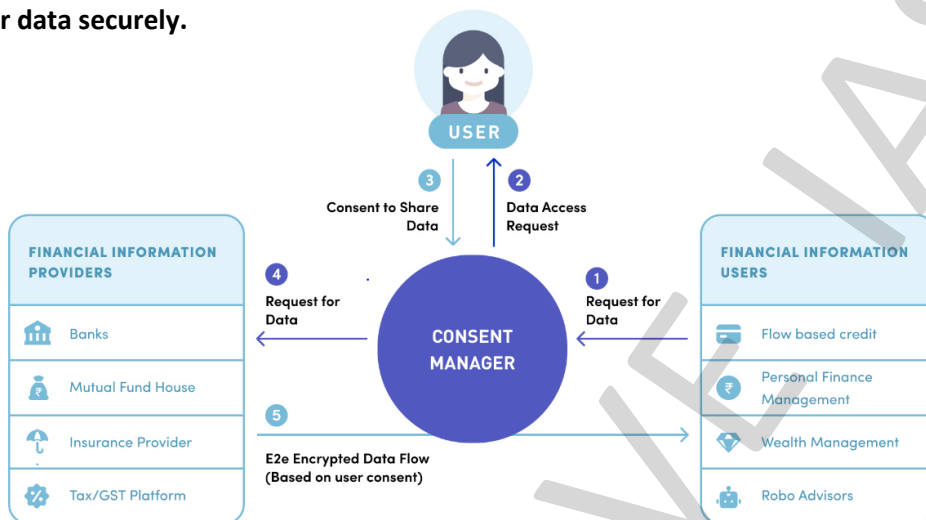
- Protest from local Tripura tribes
- Bru in Mizoram are still vulnerable to violence



- ❑ **NITI Aayog** has released draft Data Empowerment and Protection Architecture.
- ❑ It helps users **control and share** their data securely.

Data Protection

DEPA Institutional Architecture



Draft Data Empowerment and Protection Architecture (DEPA):

- Personal data is an **economic good**.
- Create a digital **framework for** secure data **sharing**.
- Create '**consent managers**' as intermediary between stakeholders.
- Individuals are best judge of '**right use**' of their personal data.

Data Empowerment:

- ability to control use of own data.
- It includes right to **privacy**, right to know how their data is used, **demand disclosure** from institutions using data, etc.

Data protection:

- ❑ preventing unauthorized use or misuse of data.
- ❑ **Need** for data protection? get points from **cybersecurity topic** (class-47)
- ❑ **Constraints** in data protection?
 - Difficult to apply **Indian laws** as most of data storage companies have **servers in foreign jurisdictions**.
 - Difficult to know about data breaches as **companies try to hide** cyber-attacks / data leakages.
 - Companies have **financial interest** in using data for non-intended purpose / selling it to third parties.
 - Govt. manages huge amount of data, still **govt. officials are not trained** enough to manage it. e.g. In 2017, a Jharkhand govt. website published Aadhaar details of 16 lakh pensioners.

Data colonisation:

- Most apps, web services, etc. have data stored on servers outside India (FB, Google, Microsoft)
- Concentration of data in the hands of a few companies. e.g. FB holds personal data of crores of Indians.
- India's data must be owned and controlled by Indians, and not by foreign corporations.
- Data is the new oil/economy, and we need to be careful not to fall behind.

Data Protection Bill

Personal data: data that can identify an individual

Non-Personal data: data that does not contain personally identifiable information

Personal Data Protection Bill, 2019

Dec 2019 → introduced in LS, sent to JCP
Dec 2021 → JCP tabled its report

- Categorises **personal data** into:
 - **Critical:** can be processed only in India.
 - **Sensitive:** can be processed abroad, but must continue to be stored in India.
 - **General:** no such localisation requirement.
- Data principal:**
 - Can withdraw consent to use data
 - Has right to be forgotten
- Data fiduciary:**
 - Can process data only for **specific and lawful purpose**.
 - Must implement safeguards like **data encryption**
 - Must provide **grievance redressal** mechanism.
- Government:**
 - Can direct data fiduciaries to share non-personal data and anonymized personal data for better targeting of services
- Sets up a Data Protection **Authority** to ensure compliance.
- Applies to** Government, Indian companies, foreign companies.

Issues:

Significant departure from draft bill prepared by Justice **B.N. Srikrishna** Committee

- DP Authority's composition is **dominated by government**; not independent
- Blanket exemption** of all provisions for national security, public order, etc.

Key recommendations of JCP:

- Non-personal data too** must be covered by the Bill.
 - Reason: it is not possible to distinguish between personal and non-personal data, when mass data is collected or transported
- Social media companies** that do not act as intermediaries are to be treated as content publishers.
- Data breach** must be notified by company to Data Protection Authority (DPA) within 72 hours of becoming aware of it.
- Fine of Rs 15 crore** or 4% of global turnover for data breaches.
- Jail term of up to 3 years** if de-identified data is re-identified.

How it compares to EU's GDPR?

- Similar in many aspects like consent of user, informing about data breach within 72 hours, etc.
- GDPR imposes fine, but no jail term.
- GDPR does not apply to non-personal data.

Naxal violence

Naxalism:

- Started as peasant revolt in **1967** in Naxalbari, West Bengal
- Spread as **armed struggle** against atrocities, land deprivation, etc.
- Govt responded with use of **force**
 - e.g. 1971 Operation **Steeplechase**, Army used against Naxals
- But it spread to many states
 - Today it affects **90 districts in 11 states**
 - 70% of Naxal incidents are in Chhattisgarh and Jharkhand

Causes:

- Denial of rights:**
 - Forced eviction from **land**, Forced labour, **Exploitation** by moneylenders.
 - Denial of basic rights like **share** in produce, fair **wages**, security of tenure, etc.
- Displacement:**
 - Due to **mining** and power projects without rehabilitation
- Governance issues:**
 - Governance **deficit** in remote areas
 - Misuse of powers by **police** (recently Draupadi by Mahasweta Devi was in news)
 - Political deprivation** leading to hopelessness / sense of powerlessness.

Steps taken: (Development and Security)

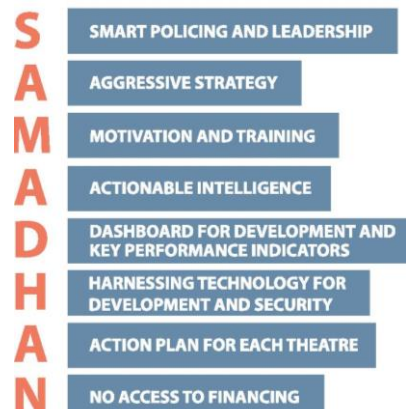
- Infra development:**
 - Improve roads connectivity, Telecom towers in remote areas
- Livelihood schemes:**
 - Roshni for training and placement of youth
 - More ITIs and skill development centres
 - Livelihood colleges set up in LWE districts
- Modernization of police forces scheme 2017-21:**
 - Increase police capabilities, fortified police stations, more interaction between police and locals, use of media to counter maoist propaganda
- Security:**
 - Black Panther** force in Chhattisgarh on lines of Andhra's **Greyhounds**
 - Bastariya Battalion** of CRPF with tribal youth from affected areas
 - UAVs** used by NTRO to assist security forces
 - Multi-disciplinary group to check **funding** of Naxalites (CBI, ED, NIA, IB)
 - State Governments have **surrender** and rehabilitation policy

Challenges:

- SOPs not followed** in troop movement, hence cases of ambush.
- Disconnect** between forces and IPS officers heading them leads to command issues.
- Low capacity in **police** forces
- Use of IEDs and **local support** to Naxals

Way forward:

Make points from steps taken



Insurgency in North-East

Violent rebellion against the authority, when ethnic communities feel that their interests are being neglected.

Reasons for insurgency in North-East:

- Historically **neglected** for development.
 - Insurgent groups take advantage of resentment of people and get support base.
- Hilly **terrain** and dense forest:
 - Difficulty in creating infra
 - More competition for limited resources
- **Porous borders** create ideal conditions for **foreign support** to insurgent groups,
 - e.g. supply of arms & funds from China.
- More than a hundred **ethnic groups**
 - Threat to local identity due to large scale migration
 - Society is divided due to **inter-tribal rivalry** and clashes. e.g. Meiteis vs Kukis
- **Feeling of alienation**
 - Weak connectivity with Mainland
 - Overwhelming presence of security forces and human rights issues

Steps taken:

- **Sixth Schedule** gives sufficient autonomy to the tribes to administer themselves with minimum outside interference.
- Dedicated **ministry** for development of the region.
- 10% of budget of Central Ministries must be spent on NER.
- Number of **connectivity** projects in North-East:
 - **Kaladan** Multimodal project, **IMT** trilateral highway, **Maitri setu** on Feni river to connect Sabroom in Tripura to Ramgarh in Bangladesh
- **Dialogue** with various groups for peaceful settlement of disputes.
 - Bodo peace accord, Bru refugee rehabilitation agreement

Way forward:

- Increase awareness of NE culture in mainland.
 - Promote industries like food processing, sericulture, etc.
- (make more points from challenges)

The twin approach of **development** and **counter insurgency** operations coupled with **political dialogue** provides the best answer to the problem of insurgency in NE.

Naga peace talks

- ❑ **Nagas** are not a single tribe, but an ethnic community, comprising several tribes who live in Nagaland & its neighborhood.
- ❑ **Key demands:** Greater Nagalim; Naga Yezabo (Constitution); Naga national flag.

Background:

- ❑ **Colonial times:** Tribal areas remained virtually contactless. The assertion of Naga nationalism that began during British rule, continued after Independence and even after Nagaland became a state.
- ❑ **1946:** A. Z. Phizo formed the Naga National Council (NNC); declared Naga independence on August 14, 1947; took up arms.
- ❑ **1958:** AFSPA enacted; govt. sent army to crush insurgency
- ❑ **1975:** Shillong Accord. Some NNC leaders gave up arms.
- ❑ **1980:** National Socialist Council of Nagaland (NSCN) formed under Muivah
- ❑ **1988:** the NSCN split into NSCN (Isak-Muivah)/(IM) and NSCN (Khaplang)/(K).
- ❑ **1997:** Ceasefire agreement of govt. with NSCN(IM).
- ❑ **2015:** NSCN(IM) agreed for settlement within Indian federation
- ❑ **2017 & 2018:** some other Naga armed outfits also joined talks.

Issues:

- Demands for separate **Constitution** and **flag** are against national integrity.
- Demand for **Greater Nagalim** would require neighboring states to cede territory.
- **Other states** too may make similar demands.

Cyber security

Cyber-space: Electronic world of interconnected networks of IT infrastructure.

Cyber-attack: Deliberate attempt to breach IT systems

Cyber-security: protecting IT systems from cyber attacks

Name some types of cyber-attacks?

- DDoS attack:** using multiple systems to flood target with traffic to crash it
- Man-in-the-middle:** attacker inserts himself into a two-party transaction
- Spyware:** secretly spies on activities of target. e.g. Pegasus
- Ransomware:** blocks system until ransom is paid (usually in cryptocurrencies)

Some recent cyber-attacks?

- Banking:** \$170 million stolen (later got back) from Union Bank of India
- Trade:** 2017 Petya ransomware affected operations at JL Nehru port
- Business:** 2017 data theft at Zomato, 17 million user records stolen
- Strategic:** 2019 cyber-attack at Kudankulam nuclear power plant

How is cyber-security everyone's need?

- Government:** protect critical infra; defence; citizens info, etc.
- Business:** protect trade secrets, strategies, customer data, etc.
- Individuals:** protect personal information, prevent frauds, etc.

Why India needs a robust cyber-security framework?

- More than **50 crore** active internet users (2nd largest after China)
- Ranks **third** among nations facing most cyber **threats** (Symantec report)
- Recent cyber-attack on **critical infra** e.g Chinese attack on Mumbai power grid.
- Most of the hardware is **globally procured**, hence more prone to backdoors.
- Negligible base of cyber security **experts**, despite large IT manpower
- Growing number of **online transactions**.
- Internet of things** gives rise to botnets which can be used for **DDoS attacks**.
- Techno-legal cases** will increase with more use of AI and cloud computing.

What has been India's approach to cybersecurity? (Learn any 2-3 points)

- IT Act, 2000** (amended in 2008): primary law dealing with cybercrimes; regulates use of computers, networks, etc.; lists down offences.
- National cyber security policy 2013:** create a secure cyber ecosystem; develop indigenous technologies; strengthen regulatory framework
- 2004: Computer Emergency Response Team **Cert-In**
- 2014: National **Critical Information Infrastructure** Protection Centre **NCIIPC**
- 2017: National Cyber-security **Coordination** Centre **NCCC**
- 2017: Cyber **Swachhta Kendra** for botnet and malware cleaning
- 2019: **Defence Cyber Agency** activated (others are space and special ops)
- 2020: Indian Cyber Crime Coordination Centre **I4C** to combat all types of cybercrime in a coordinated manner
- 2020: National Cybercrime **Reporting** Portal **NCRP** to enable citizens to report cybercrimes online. Action to be taken by state law enforcement agencies.
- Government Instant **Messaging** Service (**GIMS**) is being developed by MeitY
- State initiatives like **Cyberdome** project of Kerala police

How has covid affected cybersecurity scenario in India?

- ❑ Functioning of various security teams got affected temporarily.
- ❑ Increased number of govt. meetings held online. (UK has online cabinet meetings).
- ❑ Greater use of apps like zoom which share user data with third parties.
- ❑ Relaxed geo-fencing restrictions (for work-from-home) increased security risks.
- ❑ Job losses compelling people into online frauds.
- ❑ Govt. had to warn people against fake scheme Corona Sahayata Yojana scheme.
- ❑ More people are trying online shopping, susceptible to frauds.

Way forward:

Government:

- ❑ For greater international cooperation, India can consider signing Paris Call 2018 and Budapest Convention 2004.
- ❑ Cyber Warrior police force should be established on lines of CAPF.
- ❑ Strengthen the Public Key infra for better digital security (Prelims 2020)
- ❑ Implement Gulshan Rai committee recommendations.
- ❑ Air gapping of critical infra.

Companies:

- ❑ Report all cyber-attacks (mandated under law)
- ❑ All companies should have a cyber-security policy (RBI instructed banks)

Experts:

- ❑ More Universities should launch courses on cybersecurity.
- ❑ Create a National Cyber Registry as a repository of IT professionals.

People:

- ❑ Awareness about phishing, OTP scams, etc.
- ❑ Encourage use of antivirus, anti-malware, etc. (Cyber Swachhta Kendra)

Gulshan Rai Committee (2014) recommendations on Cybersecurity:

- ❑ Set up cyber forensic laboratories in states.
- ❑ Reduce Government's dependence on foreign servers
- ❑ Amend the Indian Evidence Act, 1872 to suit the current requirements and prosecute the cybercrimes.






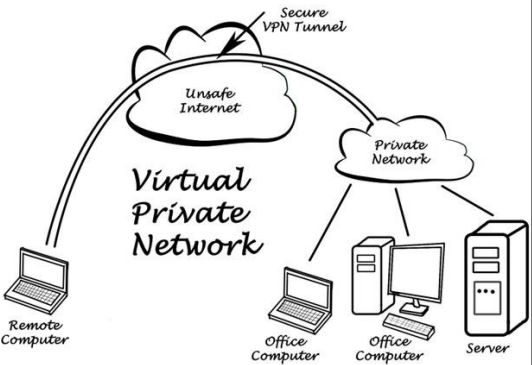

Conclusion:

Cyber-security is much more than a matter of IT. It is integral part of national security. Digital India should be India that is secure from cyber-attacks.

Q.23. कुछ रक्षा विश्लेषक इलेक्ट्रॉनिकी संचार माध्यम द्वारा युद्ध को अलकायदा और आतंकवाद से भी बड़ा खतरा मानते हैं। आप 'इलेक्ट्रॉनिकी संचार माध्यम युद्ध' (Cyber warfare) से क्या समझते हैं ? भारत ऐसे जिन खतरों के प्रति संवेदनशील है उनकी रूप-रेखा खींचिए और देश की उनसे निपटने की तैयारी को भी स्पष्ट कीजिए। [200 शब्द]

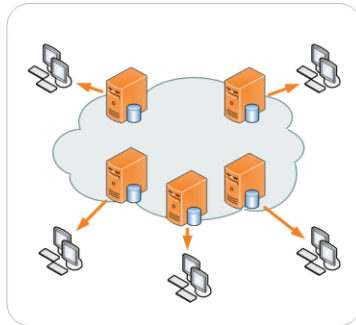
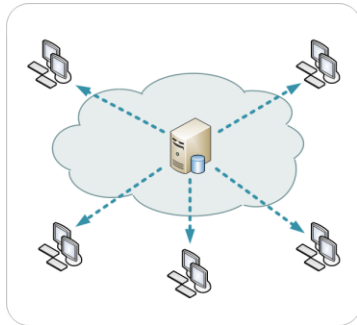
Cyber warfare is considered by some defense analysts to be a larger threat than even Al Qaeda or terrorism. What do you understand by Cyber warfare ? Outline the cyber threats which India is vulnerable to and bring out the state of the country's preparedness to deal with the same. [200 words]

Mains 2013 10

<p>Cyber Security</p>	<p>Malware: malicious software,</p> <ul style="list-style-type: none"> <input type="checkbox"/> Software made to harm devices <input type="checkbox"/> spyware, trojans, virus, etc. <input type="checkbox"/> Virus needs host file, worms don't. 	 <p>Trojan horse</p> <ul style="list-style-type: none"> <input type="checkbox"/> misleads you of its true intent <input type="checkbox"/> Greeks used it to enter Troy
 <p>RANSOMware:</p> <ul style="list-style-type: none"> <input type="checkbox"/> It will lock your files; ask for money <input type="checkbox"/> Payment by cryptocurrencies <input type="checkbox"/> e.g. DearCry, WannaCry, etc. 		 <p>Phishing: Attacker will trick you to reveal sensitive info</p>
 <p>SPYware: you won't know its there, it will spy on you e.g. Pegasus</p>		<p>Prelims 2018: The terms 'Wanna Cry, Petya and Eternal Blue' sometimes mentioned in the news recently are related to</p> <ul style="list-style-type: none"> (a) Exo-planets (b) Crypto-currency <input checked="" type="checkbox"/> (c) Cyber attacks (d) Mini satellites
<p>Prelims 2017: In India, it is legally mandatory for which of the following to report on cyber security incidents?</p> <ol style="list-style-type: none"> 1. Service providers 2. Data centres 3. Body corporate <p>Select the correct answer using the code given below: (a) 1 only (b) 1 & 2 only (c) 3 only <input checked="" type="checkbox"/> (d) 1, 2 and 3</p>		
<p>Prelims 2020: In India, under cyber insurance for individuals, which of the following benefits are generally covered, in addition to payment for the loss of funds and other benefits?</p> <ol style="list-style-type: none"> 1. Cost of restoration of computer system in case of malware disrupting access to one's computer 2. Cost of a new computer if some miscreant wilfully damages it, if proved so 3. Cost of hiring a specialized consultant to minimize the loss in case of cyber extortion 4. Cost of defence in court of law if any third party files a suit <p>Select the correct answer using the code given below: (a) 1, 2 and 4 only <input checked="" type="checkbox"/> (b) 1, 3 and 4 only (c) 2 and 3 only (d) 1, 2, 3 and 4</p>	<p>Prelims 2011: What is "Virtual Private Network"?</p> <ul style="list-style-type: none"> (a) It is a private computer network of an organization where the remote users can transmit encrypted information through the server of the organization. <input checked="" type="checkbox"/> (b) It is a computer network across a public internet that provides users access to their organization's network while maintaining the security of the information transmitted. (c) It is a computer network in which users can access a shared pool of computing resources through a service provider (d) None of the statements (a), (b) and (c) given above is a correct description of Virtual Private Network 	
<p>I read I forget, I see I remember See explanation of this PDF on  www.youtube.com/c/allinclusiveias</p>		
<p>Prelims 2021</p>	<p>Current Affairs</p>	<p>Science & Tech</p>
<p>Page-54</p>		<p>© All Inclusive IAS</p>

Organization	Ministry
Indian Computer Emergency Response Team (CERT-IN)	Meity
National Cyber Coordination Centre	MHA
Indian Cyber crime Coordination Centre (I4C)	MHA
National Critical Information Infrastructure Protection Centre	NTRO* < NSA < PMO

*National Technical Research Organization



Content Delivery Network (CDN):

Geographically distributed servers to speed up delivery of web content by bringing it closer to users.

Clean Network:

- **US** initiative for safe web (against China)
- Global Initiative on Data Security:**
- **Chinese** initiative for safe web (against US)

Sandes:

- G**overnment **I**nstant **M**essaging **S**ystem
- owned by GoI (NIC under Meity made it)
- earlier it was only for govt employees

Supercomputers:

- World's fastest SC? **Fugaku** of Japan
- Country with most SCs? **China** 188 (USA 122)

Frontier technologies:

- N**ew technologies with big **i**mpact
- Like AI, 3D printing, robotics, IoT, etc.

Digiboxx:

- Made by **NHTI Aayog** a private Indian company
- Just like google drive

Global Cybersecurity Index:

- 1 - USA; 10 - India
- by **International Telecommunication Union:**
- specialized agency of UN; 1865; Geneva

Bandicoot:

- sewer cleaning machine
- By a private Indian company



- BlackRock, Xeres, LokiBot, EventBot?** Android malwares
- Super app:** multiple services in one app. Example: Paytm for recharge, bills, movie, bus, train, flight, shopping, etc.

El Salvador:

- first country to adopt **Bitcoin** as **legal tender**
- Note: Bitcoins in Japan are legal property, not legal tender

Indo-US Science & Tech Forum:

- Formed in 2000
- To promote S&T through govt, academia, industry interactions.
- Recently launched **US India Artificial Intelligence Initiative**

UN Conference on Trade & Development:

- 1964; Geneva; Important reports:
 - World **I**nvestment Report
 - **T**rade & Development Report
 - **L**east **D**eveloped Countries Report

I read I forget, I see I remember

See explanation of this PDF on **YouTube** www.youtube.com/c/allinclusiveias

All-Inclusive GS-2 & GS-3 MAINS 2021

Class-48

AFSPA

Arguments against AFSPA:

- Failed** to control insurgency in North-East despite being in force since 1958.
- Misuse** of powers increases violence, **new insurgent groups** are formed.
- Merely on suspicion, use of **excessive force** is permitted.
- It gives armed forces power to maintain **public order**, which is in state list.

Arguments in support of AFSPA:

- Article 355:**
 - Duty of Union to protect States against external aggression & internal disturbance.
- These powers are necessary to conduct **counter-insurgency operations**.
 - Can't go for warrant when terrorists are hiding in a house
- Guidelines** against misuse have been issued by Army HQ:
 - Arrested people must be handed over to civil authorities within **24 hours**
 - Fire** must be opened only when source of militant fire can be **clearly identified**.
- Protects personnel from harassment by **frivolous legal cases**.

Armed Forces Special Powers Act (AFSPA)

- Gives special powers to Armed Forces, to maintain public order in disturbed areas.
- Search** without warrant
- Destroy** any structure from which armed attacks could be made.
- Arrest** suspicious people without warrant.
- Fire** upon any person acting in contravention of any law.
- Personnel have **legal immunity** for their actions. (Prosecution needs Centre's sanction)

Disturbed area: notified u/s 3 by Centre govt, Governor, Administrator of UT

1942: AFSPA Ordinance promulgated on 15 August 1942 to suppress the Quit India Movement.

1947: for Bengal, Assam, etc.

1958: AFSPA (Assam and Manipur) Act, 1958 (for many regions of North-East)

1983: AFSPA (Punjab and Chandigarh) Act, 1983; withdrawn in 1997

1990: AFSPA (Jammu and Kashmir) Act, 1990

AFSPA in North-East:

- Whole of Assam and Nagaland
- Whole of Manipur, except Imphal municipal area
- Three districts in Arunachal Pradesh
- Tripura: removed in 2015
- Meghalaya: removed in 2018

Jeevan Reddy Committee 2004:

- Repeal AFSPA, its essential provisions should be inserted into UAPA 1967.
- Grievance cells should be set up where armed forces are deployed.

2nd ARC:

- Repeal AFSPA, its essential provisions should be inserted into UAPA 1967.
- It will remove sentiments of discrimination and alienation among people of North-East

Justice J.S. Verma Committee 2013 (formed after 2012 Delhi gangrape)

- There is an urgent need to review AFSPA
- Sexual violence by armed forces must be brought under purview of ordinary criminal law.

Supreme Court in a 2016 case:

- Every death caused by the armed forces in a disturbed area should be thoroughly enquired.

Women in Armed Forces

Women in armed forces:

- Army: 4%
- Navy: 6.7%
- AF: 13.3%

SC has allowed permanent commission and command position to women in armed forces.

Women in armed forces:

- 1927: Military Nursing Service
- 1943: Medical Officers Cadre
- 1992: many more branches opened for women
 - Initially inducted for 5 years under Women Special Entry Scheme
 - Later upgraded to 14 years under SSC in 2006.
- 2010: Delhi HC judgement; Navy and AF allowed PC; Army did not.
- 2019: MoD allows PC in 8 branches of Army.
 - Problem? its only for staff appointments, not command position
- 2020: Supreme Court
 - All women serving as SSC are now entitled to opt for PC
- 2021 November:
 - For the first time, women appeared in NDA exam.

Implications:

- Women can rise to colonel level (earlier only for medical, judge, education)
- They can now become Commanding Officers in units (headed by Colonel)
- This does not give right to take command position. Command positions are based on vacancy, qualifications, etc.
- Discretion to give command position to women lies with Army/Government.

Women in combat role in Army?

Arguments in support:

- 30% women officers are deputed in conflict zones. (Govt informed SC)
- In Navy and AF, some combat roles are open to women.
- Other countries allow it. e.g. USA, Germany, Israel, etc.
- Widens the talent pool; will help fill vacancies.
- Modern warfare is more about cyberspace, intelligence, sophisticated weapons. Use of physical force is less necessary today.

Arguments against:

- Situations like pregnancy can affect deployability of a unit.
- Low acceptability among colleagues as most soldiers come from rural India.
- Field situations in Army require more physical strength than in Navy or AF.

Army has two parts:

- Combat Arms:
 - Fully combat role like infantry
 - Combat support role like engineers
- Services:
 - medical, transport, ration, etc.

OGW

Over-Ground Workers:

- People who **help militants** in their activities
- They provide safe house, arrange **funds** and weapons, act as **messenger**, radicalise others, hinders security operations, etc.
- They are often described as **militants without weapons**.
- They have the potential to become **militants in future**.

Issues in tackling OGWs:

- Identification**, as they live in the general population.
- Prosecution**, as collecting evidence is difficult.
- Feeling of **alienation** can increase if extreme steps against them are taken.

Steps taken / way forward:

- Mission **Pehal** by Army, where officers interact with youth to understand their grievances.
- Operation **Sadbhavana** by Army on people centric activities like infra, health, education, etc.
- Himayat** program for placement linked skill training programme for the youth.
- Stopping flow of **funds** to terrorist organisations
- Countering anti-India narrative on **social media** platforms
- Strengthening **intelligence** capabilities

Intelligence agencies

India's intelligence framework:

- National Security Council **Secretariat** headed by NSA
- Intelligence Bureau** is domestic intelligence, internal security and counter-intelligence agency.
- Research & Analysis Wing** is foreign intelligence agency, works in counter-terrorism, advises policymakers.
- National Technical Research Organisation** is technical intelligence Agency, it comes under NSA.
- They are governed by **Intelligence Organisations** (Restrictions of Rights) Act, **1985**.

Challenges:

- Lack of **coordination** between different agencies.
- Dependent on **imported** equipment for technical surveillance.
- Shortage of quality **personnel** (joined for job).
- Intelligence inputs are not taken seriously by **state police forces**.

Security issues with 5G

Why is 5G a security threat? (devices, network, speed)

- ❑ **Number of devices** will increase exponentially (IoT)
 - ❑ More opportunities to **spy**;
 - ❑ More **DDoS attacks**
- ❑ Network will use **thousands of Edge clouds**, rather than a few mega clouds
 - ❑ Most **IoT applications** will run on Edge clouds, not on central cloud.
 - ❑ Thousands of clouds need to be **monitored and secured**.
- ❑ **Higher bandwidth** and speed makes monitoring difficult
 - ❑ Limited speed helps monitor traffic; fast speed makes it difficult.
- ❑ **Network switching**
 - ❑ 5G will have limited coverage initially.
 - ❑ Switching to 3G/4G exposes 5G devices increases vulnerability.
- ❑ **Import dependence**
 - ❑ In 5G, all data is encrypted with keys stored in the 'core' of the network.
 - ❑ A backdoor in equipment can allow Chinese govt. to snoop on India.

AI in defence

Concerns:

- **Surveillance**: AI makes it easy to monitor all types of communication (text, voice, graphic) in real time.
- **Intelligence**: big data fed into AI can generate significant actionable intelligence.
- **Border security**: autonomous robots can be deployed for securing hostile border areas.
- **Accessibility**: AI tools have become more accessible, can be used to design nuclear weapons (by both state and non-state actors).

Steps taken:

- **Task force** for use of AI in national security under Tata Sons chairman N. Chandrasekharan.
- **Defence AI Council (DAIC)** created under Defence Minister.
- Centre for AI and Robotics (CAIR) under DRDO.

Right to internet

In Faheema Shirin case 2019, Kerala HC declared that Right to access internet is part of Right to Education and Right to privacy .

How is right to internet linked to fundamental rights?

- ❑ 19(1)(a): right to **speech** and expression
 - Internet is a medium of expression, e.g. use of social media
- ❑ 19(1)(b): right to **assemble** peaceably and without arms;
 - Medium of digital assembly and organize protests e.g. Arab spring
- ❑ 19(1)(g): right to practice any **profession**
 - Most businesses uses internet for info exchange, e.g. e-commerce
- ❑ 21A: Right to **education**
 - Internet is tool to access education, especially during lockdown

Problem in declaring right to internet as a right in itself:

- There are **competing needs** for more basic things like food, water, shelter.
- Providing digital **infra** everywhere is financially not feasible.
- Poverty, **illiteracy** and lack of local language content makes availability immaterial.
- **Technology** is enabler of rights, not a right in itself.

What should be state's role?

- **Positive obligation**: create **infra** for all citizens to access internet
- **Negative obligation**: discontinue actions that **obstruct** access to internet

Supreme Court in various judgements:

- ❑ Restrictions on internet must follow **principle of proportionality** under Article 19(2).
- ❑ Suspension of internet for **indefinite period** not permissible.

UNHRC Resolution 2016:

- Internet is a basic **human right**.
- People's **offline** rights must also be protected **online**.
- State should not **intentionally** prevent access to internet.

Importance of internet: Think PESTEL, or:

- Main source of information, communication
- Basis of IT sector, Gig economy, e-commerce
- Tool to access health and education

Right to be forgotten

What is Right to be Forgotten?

- Right of individuals to get their personal information deleted from internet.
- It differs from Right to privacy as:
 - RTP is about **preventing** private info from becoming public.
 - RTF is about **removing** personal info that is already in public domain.

Arguments in support of RTF:

- It helps **victim** to live life without reference to her past.
- It helps in easier social integration of erstwhile **offenders**.
- It gives people **control** over public use of their personal info.

Arguments against RTF:

- It is against **freedom of press**.
- Public has right to know about **criminal past** of people they are dealing with.
- Public should have access to past statements/conduct of **election candidates**.
- It is difficult to **implement** as info on internet exists at multiple places.

All-Inclusive GS-2 & GS-3 MAINS 2022

Class-67

Agnipath

Agnipath?

Tour of duty scheme to recruit soldiers below the rank of commissioned officers, into the 3 armed forces.

Features:

- Recruit **17.5 - 21** age people (23 years upper limit only for 2022 batch)
- Creates a **new rank** in armed forces (different from existing ranks)
- Compulsory exit after **4 years of service**

Benefits:

- Benefits for govt:** Low salary expense; Low pension bill
- Benefits for Armed forces:** Tech savvy armed forces; Younger armed forces
- Benefit for youth:** 4-year employment for youth; Skill India certificate will help get livelihood after exit (But no gratuity, no pension, no ex-Servicemen status)

Concerns:

- Might not attract best candidates**
 - as youth will prefer more permanent avenues like police and paramilitary
 - e.g. youth prefers civil service over contractual govt jobs
- Less training time:**
 - 6 months training is no replacement for current system of 2-3 years training.
 - Russian soldiers with short training period performed disastrously in Ukraine.
- Militarization of society:**
 - Unemployed youth are easy prey of crime syndicates and radical political outfits

Way forward:

- Learn** from the working of the new scheme, and **incorporate** necessary **changes**.
- Use innovative methods to inculcate **loyalty** and **camaraderie** in quick time.
- Steps must be taken to provide **assured placement** to all Agniveers after four years (placing 20-30k talented Agniveers should not be difficult as govt is creating lakhs/crores of new jobs every year)

<https://indianairforce.nic.in/wp-content/uploads/2022/06/AgneepathFAQs.pdf>

Benefits to Nation:

- National integration** based on **equal opportunity**, irrespective of gender & region
- Nation building** through youth with **military ethos in society**

Benefits to Armed forces:

- Improved battle preparedness** through more **energetic and trainable youth**.
- Youthful profile** by balancing of **youth and experience**
- Benefit from **Skill India** by recruiting from **Tech institutes**

Benefits to Individuals:

- Opportunity to **fulfil dream** of joining the Armed forces
- Imbibe **military discipline**, motivation, skill, fitness.
- Smooth integration into society with **skill certification**.
- Good financial package** making him more stable than civilian counterparts

<https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1833747>

- Average age** profile of Armed forces would come **down by 4-5 years**.
- Availability of trained personnel in times of external/internal threats and **natural disasters**.
- Attractive monthly package** with Risk and Hardship allowances.
- Life insurance** of Rs 48 lakh during service.
- '**Seva Nidhi**' will help pursue dreams without financial pressure (normally the case for financially deprived strata of society)

https://joinindianarmy.nic.in/writereaddata/Portal/Notification/861_1_Terms_and_Conditions_for_Agnipath_Scheme.pdf

- All Agniveers will be discharged** after 4 years of service
- 25%** will be given opportunity to apply for **regular cadre** (another 15 years)
- Soldiers in regular cadre will be enrolled **only after 4 years as Agniveer**.

Tour of Duty (Agnipath entry scheme)

- Army to recruit jawans (Agniveers)
- Details not yet finalized, like:
Train for 4 years, remove all, call back some with new joining date

Some benefits:

- 4 year employment for youth
- No pension burden for govt

Some problems:

- Doesn't fill combatant shortage
- Trains masses in weaponry
- Skill gap for industry

Following info is more relevant for interview, instead of Mains.

Year	Customised Package (Monthly)	In Hand (70%)	Contribution to Agniveer Corpus Fund (30%)	Contribution to corpus fund by Gol
1st year	30,000	21,000	9,000	9,000
2nd year	33,000	23,100	9,900	9,900
3rd year	36,500	25,580	10,950	10,950
4th year	40,000	28,000	12,000	12,000
Total contribution in Agniveer Corpus Fund after four years			Rs 5.02 Lakh	Rs 5.02 Lakh
Exit After 4 year	Rs 11.71 Lakh as SevaNidhi Package (Including, interest accumulated on the above amount as per the applicable interest rates would also be paid)			

<https://www.joinindiannavy.gov.in/en/page/agniveer-mr.html>

Agniveer (MR) – Chef:

- Prepare food, account for ration
- Get training in fire arms, etc.

Agniveer (MR) – Steward:

- Serve food in mess as waiter, do housekeeping
- Get training in fire arms, etc.

Agniveer (MR) – Hygienist:

- Maintain hygiene in wash-rooms,
- Get training in fire arms, etc.

<https://indianexpress.com/article/explained/agnipath-scheme-why-age-relaxation-can-also-become-a-problem-7976158/>

Army recruitment:

2015	72k
2016	52k
2017	50k
2018	53k
2019	80k
2020	Nil
2021	Nil

The above numbers are only for Army. 46k Agniveers in 2022 are for all 3 services.

	entry	entry	
Soldiers in service for 1 year	60k	60k	
Soldiers in service for 2 years	60k	60k	
Soldiers in service for 3 years	60k	60k	
Soldiers in service for 4 years	60k	60k	
Soldiers in service for 5 years	60k	15k	→ 45k
Soldiers in service for 6 years	60k	15k	
Soldiers in service for 7 years	60k	15k	
Soldiers in service for 8 years	60k	15k	
Soldiers in service for 9 years	60k	15k	
Soldiers in service for 10 years	60k	15k	
Soldiers in service for 11 years	60k	15k	
Soldiers in service for 12 years	60k	15k	
Soldiers in service for 13 years	60k	15k	
Soldiers in service for 14 years	60k	15k	
Soldiers in service for 15 years	60k	15k	
Soldiers in service for 16 years	60k	15k	
Soldiers in service for 17 years	60k	15k	
Soldiers in service for 18 years		15k	
Soldiers in service for 19 years		15k	
	exit	exit	
Number of soldiers serving Army at any given time	10 lakh	5 lakh	

Agnipath recruitment scheme: Why it can help cut the rising salary, pension bill

<https://indianexpress.com/article/explained/agnipath-recruitment-scheme-why-it-can-help-cut-the-rising-salary-pension-bill-7970128/>

Calculations done by Army in 2020 considered a three-year model. The comparison of cost incurred by the Government for a Sepoy with 17 years Terms of Engagement as compared to (Tour of Duty) Sepoy with 3 years service, shows that the prospective **lifetime savings for just one Sepoy is Rs 11.5 crore**. Thus savings for only 1000 jawans could be Rs 11,000 cr which could then be utilised for the much needed modernisation of Indian Armed Forces.”

Argument	Counter-argument
<input type="checkbox"/> It's a new entry scheme for soldiers.	<input type="checkbox"/> It's an exit scheme with fancy name. Soldiers were recruited earlier as well. <input type="checkbox"/> The only changes are early exit and no gratuity/pension/ex-Servicemen status
<input type="checkbox"/> Improves battle preparedness of Army	<input type="checkbox"/> Size of army will reduce by half, impacting border security <input type="checkbox"/> Hence, it will not be able to fill combatant shortage
<input type="checkbox"/> It will make army more tech savvy	<input type="checkbox"/> Skill to use technologically advanced equipment increases with experience . <input type="checkbox"/> Recruitment is of 10th /12th pass , not specialists from universities.
<input type="checkbox"/> It will reduce unemployment	<input type="checkbox"/> Soldiers were recruited earlier as well . <input type="checkbox"/> 46k vacancies this year is lowest since 2015.
<input type="checkbox"/> On exit, youth may get preference in paramilitary & police forces	<input type="checkbox"/> Paramilitary and police forces will reduce direct recruitment , i.e. lateral recruitment, if any, will be at cost of direct recruitment.
<input type="checkbox"/> Society will benefit from military discipline & skills	<input type="checkbox"/> Unemployed combatant youth could fall prey to lure of crime syndicates and radical political outfits
<input type="checkbox"/> Private sector will get disciplined youth	<input type="checkbox"/> Problem faced by private sector is lack of skills , not lack of discipline
<input type="checkbox"/> ₹ 11 lakh on exit is a good amount to start business	<input type="checkbox"/> ₹ 11 lakh is not a reward . It is salary that was not paid for 4 years. <input type="checkbox"/> Skills given do not include managerial/administrative/ business skills .
<input type="checkbox"/> Insurance for death and disability	<input type="checkbox"/> Previous system had better financial assistance (one time + monthly)
<input type="checkbox"/> Salary and Pension bill will reduce	<input type="checkbox"/> MPs/MLAs get lifetime pension for each term

ALL INCLUSIVE IAS

CAPFs

Suicide and Fratricide cases in CAPFs are on the rise.

Reason for suicide/fratricide in CAPFs:

- Strenuous environment impacts mental health**
 - Long exposure to counter-insurgency & counter-terror environment
- Lack of sleep due to extended hours of duty**
 - 85,000 vacancies in CAPFs are unfilled (2022 data)
- Commandants are burdened with administrative work**
 - This leaves little time to know the troops
- Abuse by superiors**
 - Perceived humiliation/harassment by superiors serves as final trigger for suicide/fratricide
- Delay in promotion and lack of career progression**
 - Top posts are occupied by IPS officers, not force's own officers
- Lack of grievance redressal**
 - Senior officers hesitate to address grievances due to lack of insight about the issues.
- Family issues**
 - Inability to take care of family in times of need

Impact:

- Low morale** of personnel
- Incidents of **indiscipline, fratricide, suicide**
- Inadequate maintenance** of arms and equipment

Steps taken to improve mental health of personnel:

- Defence Institute of Psychological Research**
 - is conducting studies to help in stress management
- CRPF conducts weekly "Chaupals"**
 - informal meeting where personnel can informally share personal problems
- Stress management workshops**
 - regular workshops and lectures are conducted to reduce mental stress

Suggestions:

- Early identification** and counselling of stressed soldiers
- Use technology** to reduce burden on manpower (use of cameras and sensors)
- Stress management sessions** and mental health programs by qualified psychiatrists

Central Armed Police Forces:

Border Guarding Forces

(AR) Assam Rifles - Myanmar border; insurgency in NE
 (BSF) Border Security Force - Pak & Bangla borders
 (ITBP) Indo-Tibetan Border Police - China border
 (SSB) Sashastra Seema Bal - Nepal & Bhutan borders

Forces for Internal Security

(CISF) Central Industrial Security Force
 (CRPF) Central Reserve Police Force

Special Task Force

(NSG) National Security Guard

CAPFs:

Border guarding: BSF, ITBP, SSB, AR

Internal security: CISF, CRPF

Special Task: NSG

Data:

- 47,000 resigned** or took voluntary retirement during 2016-2020
- 345 suicides** during 2017-2019
- 25 fratricides** during 2019-2021

BSF

- ❑ Centre has extended BSF's jurisdiction in some border areas.
- ❑ It will enable BSF to search, seize and make arrest in more areas.
- ❑ It does not give BSF power to investigate crimes.

Why was this step taken?

- ❑ **Unconventional threats** are rising in border areas
 - Drones dropping weapons, drugs, etc.
- ❑ **Limitation of State police**
 - Preoccupied with regular policing functions

Problem with such step:

- ❑ **Coordination issues**
 - due to overlapping jurisdiction of state police and BSF
- ❑ **Lack of sensitivity to local needs**
 - Police has better understanding of local culture, which central forces lack
- ❑ **Lack of accountability**
 - Locals can easily complain against abuse of power by police, but not by BSF
- ❑ **Challenges Federalism**
 - Law & Order is state subject
 - Centre's involvement in policing infringes upon power of states

Assam Rifles

- ❑ It is the **oldest** paramilitary force of India
- ❑ It was formed in **1835** as **Cachar Levy** to protect British tea estates against tribal raids
- ❑ It played important role in 1962 China war, 1988-90 peacekeeping in Sri Lanka, etc.
- ❑ Today it plays important role in:
 - Securing **Myanmar** and **China** borders
 - Conducting **counter-insurgency** ops in NE

Some issues:

- ❑ **Dual control** with MHA and MoD
- ❑ **Retirement age** is 60 years, while its 35 years in Army
- ❑ Demand for **One Rank One Pension** on lines of Army
- ❑ Lack of avenues for **promotion** as top posts are filled from Army

Issue of Dual control:

- ❑ It is the only paramilitary force with a dual control structure.
 - ❑ **Administrative** control is with **MHA**
 - MHA controls salaries, infra, etc.
 - ❑ **Operational** control is with **MoD** (Army)
 - MoD controls deployment, posting, transfer
 - The force is commanded by Lieutenant General from Army.
 - All its senior ranks, from DG to IG and sector headquarters, are held by Army officers.
- ❑ Both ministries have been pushing to get full control of AR.

Martyr / Shaheed

<https://indianexpress.com/article/explained/indian-army-martyr-term-objection-7842487/>

Explained: Why Indian Armed Forces don't use the term 'martyr' for personnel who die in the line of duty

- ❑ The word **'martyr'** has religious connotations
 - It referred to sacrifice made by people for their religious beliefs, particularly in **Christianity**.
- ❑ The word **'shaheed'**, is used as a Hindustani alternative to the word 'martyr'
 - It is linked to the concept of Shahadat in **Islam**.
- ❑ Hence, use of such words for Indian armed forces is found **wrong** as:
 - Armed forces of India are **not associated with any one religion**
 - Armed forces personnel **do not lay down their lives for religious principles**
- ❑ In February 2022, Army issued a letter to all its commands asking them to desist from using such words.
 - They have been asked to use phrases such as 'laid down their lives', 'killed in action', 'supreme sacrifice for the nation', 'fallen heroes', 'Indian Army braves and fallen soldiers', 'battle casualty', 'bravehearts', 'braves whom we lost', and veergati/veergati prapt/veer.

Emerging Technology:

- ❑ Technologies **under active development**, which can have **significant impact** on existing processes.
- ❑ Technology whose development and applications, are **still largely unrealized**.
- ❑ AI, Blockchain, Robotics, 3D printing, Nanotechnology, Gene editing, etc.

How is technology impacting national security?

- ❑ **Newer threats are emerging**
 - **Use of Drones** for cross-border smuggling of arms/drugs, breaching VVIP security, etc.
- ❑ **Difficulty in regulating private sector**
 - **Innovations in private sector** can have defence application, which is difficult to regulate.
- ❑ **Use by non-state actors**
 - **ISIS and Al-Qaeda** use social media to recruit terrorists.
- ❑ **Threat to public order**
 - **Deepfake videos** can be used to spread misinformation and instigate the masses
- ❑ **WMDs Weapons of mass destruction**
 - **Bio-chemical weapons** can be used to indirectly wage war against nations

Some more examples

- ❑ **Drones:** (class-17)
 - Cross-border smuggling of weapons, drugs, fake notes, etc.
 - Recce/attack on sensitive installations (VVIP, military)
- ❑ **Robots and Autonomous systems:**
 - Can guard in extreme climatic conditions and difficult terrain (Desert, mountains)
- ❑ **Quantum communication:**
 - Chinese satellite Micius provides secure communication that cannot be intercepted.
- ❑ **Quantum computer:**
 - Can break highly encrypted messages
- ❑ **All weather satellite surveillance**
 - RISAT satellites use microwaves to give live data even during night and cloudy conditions
- ❑ **Satellite internet:**
 - Starlink is providing high-speed secure internet to Ukraine forces

Steps taken by DRDO

- ❑ **Development-cum-Production Partner (DcPP) policy**
 - Involves private sector from beginning itself, to reduce development-to-induction time.
- ❑ **No fee for Transfer of Technology (ToT)** by DRDO to its industry partners
 - This will enhance capabilities and competitiveness of Indian industries in global market.
- ❑ **Technology Development Fund**
 - Provides financial support to private sector, to develop innovative defence products

Way forward:

- ❑ **PPP model** for R&D with private sector.
- ❑ Joint projects with **universities** and **start-ups**.
- ❑ **International** collaboration with like-minded countries.
- ❖ Technology is a **double-edged sword**.
- ❖ It is a crucial **asset**, as well as **threat**, to national security.
- ❖ Leadership in technology is an important asset for **major global powers**.
- ❖ Hence, India should **invest its resources** to gain upper hand in cutting edge technologies.

Technology in Law Enforcement

Awareness generation

- Use **Social media** to increase awareness about laws (Mumbai police is quite popular on Twitter)
- Aware citizens can **report traffic rules violation** on FB page of Delhi Traffic Police

Make police more accessible

- **Online filing** of lost report, facility to download FIR, etc.
- e.g. Saanjh portal of Punjab police provides many citizen-centric services

Emergency assistance

- **Mobile app** for sharing location in real-time and police assistance
- e.g. **Himmat** app of Delhi Police

Preventing crime

- Identify crime **patterns** and crime hot spots using **data analytics** and AI
- e.g. Punjab found that snatching incidents peak at 8 pm in rural areas and 10 pm in cities

Preventing riots

- **Social media chatter** can alert about potential riots
- **Countering rumours** and fake news can help maintain law & order

Evidence collection / Scientific investigation

- **Forensic** evidence collection helps in faster identification of suspects
- **Body-worn** cameras for better evidence collection and reduce chances of bribe

Suspect tracking

- **Facial recognition** technology e.g. NAFRS
- AI can be used to match **finger prints**, voice samples, etc.
- **Mobile monitoring** to track suspects using IMEI number, Call Detail Records, etc.

Cyber-crimes

- **Separate cell in police** to tackle cyber-crime complaints
- Strengthen cybersecurity like **Cyberdome** initiative of Kerala police

Traffic management

- **License plate reader** for traffic rules violation (red light jumping, over speeding, etc)
- **Smart traffic signals** that adjust timing as per traffic load
- **Drones** to monitor traffic movement and crowd management

Challenges:

- Funds** for deploying new technology, and its maintenance
 - Training** of police personnel for efficient use of technology
 - Preventing data **misuse** and ensure **privacy** of citizens
 - Mass surveillance** through mobile tracking and facial recognition
 - Controlling dissent** by confiscating & analysing mobile/laptop devices.
- ❖ **Technology can act as a force multiplier for police forces in India.**
 - ❖ Police to population ratio in India is less than **150** per lakh people (UN recommends **222**)
 - ❖ **Technology in itself is not a panacea for better policing**
 - ❖ Technology adoption must be accompanied by **reforms** to free police from political control.
 - ❖ **Technology is a double-edged sword in law enforcement**
 - ❖ It can be used to improve **law & order**, or be misused establish a **police state**.
(Police state: Govt that controls activities of citizens using law enforcement agencies)

From Prelims class		NAFRS
<div style="text-align: center;"> <p>Biometrics</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: left;"> <p>Physiological</p> <ul style="list-style-type: none"> face fingerprint hand iris DNA </div> <div style="text-align: left;"> <p>Behavioral</p> <ul style="list-style-type: none"> keystroke signature voice </div> </div> </div>	<p><u>National Automated Facial Recognition System:</u></p> <ul style="list-style-type: none"> ➤ initiative of NCRB ➤ use database to identify people on CCTV videos, etc ➤ example of use of AI for surveillance, dead bodies, etc. <p><u>National Crime Records Bureau:</u></p> <ul style="list-style-type: none"> ➤ 1986; MHA; initiatives like CCTNS 2009, ICJS 2019, etc <p><u>Crimes and criminal Tracking Network System:</u></p> <ul style="list-style-type: none"> ➤ national database of crimes and criminals ➤ connects databases, police stations, etc. <p><u>Inter-operable Criminal Justice System (ICJS)</u></p> <ul style="list-style-type: none"> ➤ integrating CCTNS with e-Courts, e-prisons, etc. 	

Money Laundering**Black money:**

- Income **not reported** to government
- Source of Black money:
 - Hiding income from **legal activities** (eg under-reporting factory production, selling of property)
 - Hiding income from **illegal activities** (eg bribe, trafficking drugs/arms/humans)

What is Money laundering? (ML is aka Jama Kharchi)

- Converting** black money to white money

Why is it done?

- To **reduce tax outgo**, by under-reporting income
- To keep **illegal activities** hidden from govt (bribe, trafficking)
- To enjoy benefits of illicit money **without fear**

How is Money laundering done?

Placement

Layering

Integration

- 1) **Placement** → Placing money **into financial system**
 - Black money is introduced into the financial system
 - eg through Shell companies, through cryptocurrency, etc.
- 2) **Layering** → Transferring money **to hide origin** of funds
 - Multiple transactions are done to hide origin of funds
 - Money goes out of India, flows between various companies, comes back to India as foreign income / FDI / political donations by Indian subsidiary of foreign company, etc.
- 3) **Integration** → Returning money for the launderer **to spend**
 - Purchase of luxury assets, industrial investments, etc.

Tech and ML:

- Encrypted **messaging apps** helps in exchange of info about ML.
- Purchasing **Cryptocurrency** to place money into the financial system.
- Large volume of **small digital transactions** are done to break big amount. (Smurfing)

Globalisation and ML

- International **organised crime** networks use ML to conceal proceeds of crime.
- Tax havens** like Cayman Island, Panama etc. provides assistance in ML and tax evasion.
- Distribution** of assets **across countries** prevents punitive action by authorities due to coordination issues.

Measures at national level:

- PMLA 2002** criminalises money laundering as a cognisable, non-bailable offence.
- Financial Intelligence Unit** coordinates efforts of national and international agencies against ML.

Measures at international level:

- 1988 Vienna Convention:**
 - It was the first major initiative against money laundering.
- 1989 FATF:**
 - Inter-governmental body to prevent money laundering and terrorist financing.
- 1997 ICIJ:** (International Consortium of Investigative Journalists)
 - Investigates matters of cross-border crime & corruption
 - Exposed tax evasion and ML through **Panama** Papers, **Paradise** Papers, **Pandora** Papers

PMLA 2002

Prevention of Money Laundering Act, 2002

- Defines money laundering:
 - **Anyone connected** with proceeds of crime shall be guilty of money laundering
- Objectives:
 - To **prevent** money laundering
 - To **seize** property obtained from laundered money
- It was enacted to fulfil India's **international commitment** to combat money laundering.
 - **1998 UNGA** special session asked members to enact laws against money laundering

Issues with amendments in PMLA?

- Burden of proof is on accused, not ED:**
 - But in criminal laws, accused is innocent until proven guilty.
- Violates Article 20 - accused is forced to be witness against himself:**
 - Section 63: **info must be given** by accused. False or no info will constitute another offence.
 - Article 20: No person accused of any offence shall be compelled to be a witness against himself.
 - Compelling the accused to be witness against himself violates **right against self-incrimination**.
- Enforcement Case Information Report (ECIR):**
 - ECIR (equivalent of FIR), is considered an "internal document" and **not given to the accused**.
 - Hence, accused does not even know allegations against him.
- Low conviction rate:**
 - 2014-2022 data: **3000** raids conducted, **888** chargesheets filed, only **23** people convicted.
- Process itself is punishment:**
 - PMLA can be misused against **political rivals** or **dissenters**, as process itself is the punishment.

News:

- Since 2015, PMLA has been **amended, through Money Bills**. For Money bill, refer class-5 pg-03.
- In July 2022, **SC upheld** constitutional validity of **PMLA amendments** and **ED's power** under the act.
- SC is **yet to decide** if it was correct to amend PMLA through Money Bill.

July 2022 SC ruling:

- Burden of proof:**
 - **Presumption of innocence** is a human right, but it can be **interdicted by law**.
 - Centre had told SC that presumption of innocence is not a **constitutional guarantee**.
- Enforcement Case Information Report**
 - ECIR cannot be equated with an **FIR**
 - Providing ECIR to accused is **not mandatory**
 - It is enough to **just disclose grounds** for arrest
- Upheld ED's powers**
 - to arrest, seize property, etc.

Note for students:

- Money laundering is not just about having vaults of cash, its about converting illicit money into assets.
- Similarly, corruption is not just about bribe, its about Quid pro quo, crony capitalism, favouritism, etc.

Myth	Fact
Black money is held in cash	<ul style="list-style-type: none"> <input type="checkbox"/> Most black money is held in assets like gold, property, etc. <input type="checkbox"/> That's why demonetisation did not wipe out black money
Ending cash , or becoming digital, will end corruption	<ul style="list-style-type: none"> <input type="checkbox"/> Corruption happens through Quid pro quo, crony capitalism, favouritism. <input type="checkbox"/> Petty bribes are paid in cash, but big-ticket scams are not based on cash.
All corruption involves transfer of cash	<ul style="list-style-type: none"> <input type="checkbox"/> Quid pro quo, crony capitalism, favouritism involves no cash <input type="checkbox"/> In 2014, Baba Ramdev said ban Rs 500/1000 notes as people can't take Rs 100 crore bribe in Rs 20 notes.
Mains 2022	GS-2 & GS-3
Class-68	Page-02
© All Inclusive IAS	

CBI

Works under:

- CVC (in corruption cases)
- DoPT (for all other matters)

Director:

- Appointed as per **Lokpal Act 2013**
- Selection Committee: PM, LoP, CJ

CBI:

- 1941:** Special Police Establishment against corruption in War & Supply department during WW-II
- 1946:** Delhi Special Police Establishment **Act** 1946
 - CBI derives powers from this act
 - But CBI is **"not"** statutory body
- 1963:** named as CBI by a Home Ministry resolution

Consent:

- CBI needs state govt consent, for new cases, from that state.
- General consent:
 - no need to take consent each time
 - Many states have withdrawn it, alleging misuse for political purpose.
- Consent not needed:
 - if directed by SC/HC
 - for UTs

ED

Enforcement Directorate: (1956)

- under Dept of Revenue, **FinMin**
- to investigate money laundering and foreign exchange violations
- It enforces laws:
 - Prevention of Money Laundering Act, 2002
 - Foreign Exchange Management Act, 1999
 - Fugitive Economic Offenders Act, 2018

Term of Directors of CBI & ED:

- Both have term of **2 years**
- Since 2021, they can be given **three extensions** of one year each.
- So, they can now remain as Director for 5 years max.

Civil Service Board

- In 2013, SC asked all states to create CSB
 - All states have not formed CSB
 - In 2020, Punjab was 20th
- Headed by:
 - Centre: **Cabinet Secretary**
 - States: **Chief Secretary**
- Decides on postings, transfers, etc.

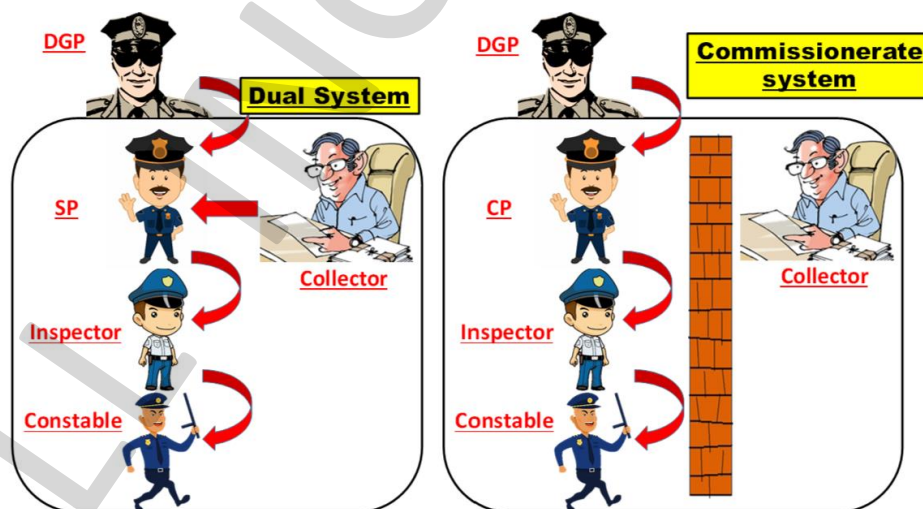
Prelims 2016:

Consider the following statements

1. The Chief Secretary in a State is appointed by the Governor of that State.
 2. The Chief Secretary in a State has a fixed tenure
- Which of the statements given above is/are correct?

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

Commissionerate system



First introduced in **Kolkata** during colonial times.
Today, more than 70 cities in 15 states have this system.

Submarines

Importance of submarines

- Surprise attack:**
 - They can **remain submerged** for many days, and attack with **low chances of detection**
- Intelligence gathering:**
 - They can **monitor naval activity** of other countries (Chinese subs are doing this in IOR)
- Sea port security:**
 - They can lay mines around enemy ports and in **shipping channels**.
- Escort Aircraft carriers:**
 - They conduct reconnaissance missions **before surface force enters** an area.
- Nuclear triad:**
 - They reduce possibility of enemy destroying all nuclear assets.
 - Hence, they present **credible nuclear deterrence** (second strike capability).

Project 75 / Kalvari-class submarines

- Six diesel-electric** submarines, based on **Scorpène-class**, for Indian Navy.
- Being constructed at **Mazagon** Dock in Mumbai, under **Transfer of Technology** from DCNS **France**.
- Timeline:
 - 2005: Transfer of Tech agreement signed
 - 2015: 1st sub launched
 - 2022: 6th sub launched (5th & 6th are yet to be commissioned)
- There are plans to fit them with Air-Independent propulsion (imported or those made by DRDO)
- Navy recently invited bids for **Project 75-I**
 - But condition is to have **sea-proven fuel cell based AIP system**
 - Hence, many potential **bidders have withdrawn** from the process

Air Independent Propulsion Technology

- Diesel-electric sub:**
 - Must surface every **2-3 days**, to get oxygen from air, so that diesel engine can recharge batteries.
 - This make them prone to detection by enemy, and hence **expose their location**.
- Diesel-electric sub with AIP system:**
 - sub can remain submerged for much longer time (**2-3 weeks**).
 - This increases their lethality by better **under-water endurance** and **stealth**.

Types of submarines

SSK: diesel-electric submarine

SSN: powered by nuclear reactor, can remain submerged for weeks, can launch conventional missiles

SSBN: powered by nuclear reactor, can remain submerged for weeks, can launch nuclear missiles

Nuclear submarines:

- (Russian) INS Chakra-I : 1987-1990
- (Russian) INS Chakra-II : 2012-2021
- (Russian) INS Chakra-III : 2025 (expected)
- (Indian) INS Arihant :**
 - 2009 launched, 2016 commissioned
- (Indian) INS Arighat :**
 - under trials
- Advanced Technology Vessel Project:** launched in 1984; to build nuclear submarines

Number of submarines:

- China 70: SSK (50) + SSN (12) + SSBN (7)
- India 16: SSK (15) + SSN (0) + SSBN (1)

Nuclear triad:

- ability to launch nuclear missile by land, air, submarine.
- India has nuclear triad?
Yes (2016 Arihant commissioned)

Aircraft carrier

India's first indigenous Aircraft Carrier, INS Vikrant, has been commissioned.

Aircraft Carriers:

- A large ship that allows fighter jets to operate.
- As floating airbase, it allows countries to project airpower worldwide, without depending on local air bases.

Notable role:

1971 Indo-Pak war:

- INS Vikrant enforced naval blockade of East Pakistan

1941 Pearl Harbour attack:

- Japan used six ACs to carry 400 planes to attack US base

Significance of Aircraft Carriers (for India):

- To **counter China's** increasing presence in IOR
- China** plans to have **5 carriers by 2030**
- Helps **secure India's interests** in the maritime domain
- Gives ability to **project air power** over long distances
- Necessary for **regional power** to become **global superpower**

Does India need three ACs / IAC-2 / INS Vishal ?

- Yes:
 - India has a long coastline of **7517 km**
 - Peninsular** India needs protection from **two sides**
 - With two carriers guarding IOR, **third carrier** can be under **maintenance** or be sent to project power globally.
- No:
 - They are very **expensive** to build and maintain
 - In the East, India already has an unsinkable AC in the form of **A&N islands**. (class-45)

Challenges with Aircraft Carriers:

- Huge cost**
 - More than \$2 billion for INS Vikramaditya
 - More than \$3 billion for INS Vikrant
- Technologically challenging**
 - Only few countries have been able to manufacture ACs
- Need compatible jets**
 - AC is useless if the jets it hosts are not capable enough
 - Jets take-off with less missiles due to limitations on aircraft weight.
- Sitting duck**
 - Needs to be escorted by destroyers, frigates and submarines.
 - AC are often considered as sitting ducks for anti-ship missiles.



Aircraft carriers:

- 1961-1997: INS Vikrant (from UK)
- 1987-2017: INS Viraat (from UK)
- 2013- : INS Vikramaditya (from Russia)
- 2022- : INS Vikrant (IAC-1)

Name	INS Vikrant
Namesake	INS Vikrant (R11)
Operator	Indian Navy
Ordered	2004
Builder	Cochin Shipyard Limited
Cost	\$0.5 billion (planned), \$3.13 billion as of Jan 2020 ^[5]
Laid down	28 February 2009
Launched	12 August 2013
Acquired	28 July 2022 ^[1]
Commissioned	2 September 2022 ^[2]
Motto	Sanskrit जयेम सं युधिष्ठिः (transl. I defeat those who fight against me)
Status	End of sea trials ^{[3][4]}

2004 Ordered
2009 Construction began
2013 Launched
2022 Commissioned

Indigenous Aircraft Carrier 'Vikrant' proceeds for maiden sea trial

Shri Sonowal says, this is a true reflection of Make in India and Atma Nirbhar Bharat initiatives of the Prime Minister

Posted On: 04 AUG 2021 2:07PM by PIB Delhi

In-service ACs:

11 - USA
02 - UK, India, China, Italy
01 - Russia, France, Spain, Brazil, Thailand

Currently, only USA & France have nuclear-powered ACs.

Carrier Battle Group:

AC and its escorts ships/subs

CATOBAR:

Catapult Assisted Take Off, Barrier Arrested Recovery

- Jets launch using **catapult** (steam or electric powered)
- Jets land using **arrestor wires**.
- More **expensive** to install and maintain due to catapult.
- **Heavy jets** can be launched, can carry more weapons.
- Used by **USA, France**.

STOBAR:

Short Take Off, Barrier Arrested Recovery

- Jets launch by their **own power** using **ski-jump**
- Jets land using **arrestor wires**.
- **Less expensive** due to absence of catapult.
- Needs **lighter jets**, can carry limited weapons.
- Used by **India, China, Russia**

Fifth Generation Fighter Aircraft

Fifth-generation fighter (FGFA)

- ❑ They are the **most advanced** fighters in operation
- ❑ Most of their **technologies** were developed in **21st century**
- ❑ **Some features:** stealth, super-cruise, advanced avionics, highly integrated computer for situation awareness.
- ❑ **FGFAs in operation:**
 - 1) USA **F-22** Raptor
 - 2) USA **F-35** Lightning-II
 - 3) China Chengdu **J-20**
 - 4) Russia Sukhoi **Su-57**

Sukhoi/HAL FGFA (India-Russia)
based on improved Sukhoi **Su-57**
2007: Joint study started
2010: Contract signed
2018: India pulled out

HAL AMCA (Advanced Medium Combat Aircraft)
2010: Feasibility studies started
2013: Design phase began
2016: Design accepted by IAF
2025: First flight of prototype expected

India needs FGFA because:

- **China** already has FGFA
- **Pak** is in talks with China to buy FGFA
- **Su-30** & **Rafale** are **4.5** generation fighters

Since FGFA will take time, focus should be on:

- **Expand fleet:** faster induction of Tejas & Rafale
- **Upgrade fleet:** better avionics and missiles on Su-30
- **More air bases:** especially along China border

And some usual points:

- Cost, Technology, training, etc.
- Involve academia, private companies, other countries

Weapons of Mass Destruction

Also see:
Class-44 pg-08 NPT
Class-11 pg-05 Bio-terror

Weapons of Mass Destruction:

Nuclear, Biological, or Chemical (NBC) weapons intended to **harm large** number of people and infra.

UNSC Resolution 1540 (2004):

Countries should **take steps to prevent proliferation** of WMDs to non-state actors.

WMDs and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Act, 2022

- 2005 Act prohibits** unlawful activities related to WMDs (and their delivery systems)
 - It has provisions to prevent **export**, or transfer to non-state actors/**terrorists**, any **material/tech** related to WMDs
- Recently, **UNSC & FATF** have recommended steps to prevent **financing of proliferation of WMDs**
 - Hence, to fulfil our **international obligation**, 2022 amendment has been brought.
- Objectives of 2022 amendment:**
 - 1) **prohibit financing** of any activity related to WMD
 - 2) **empower Centre to seize** any assets related to such financing

Chemical weapons:

- intentional release of chemicals to **inflict death or harm** on humans.
- Choking agents**, like **phosgene**, attacks respiratory system
- Blister agents**, like **mustard gas**, burns skin and blinds people
- Nerve agents**, like **Novichok**, interferes with brain's messages to muscles
- Chemical Weapons Convention 1993**
 - Countries must **destroy and prohibit**, all chemical weapons.
 - 193 members, including India.

Biological weapons:

- Intentional release of **disease causing organisms** or toxins
- They are made of two parts: a **weaponized agent** and a **delivery mechanism**.
- Biological Weapons Convention 1972**
 - Countries must **destroy and prohibit**, all biological weapons.
 - 184 members, including India.

Cluster bomb & Vacuum bomb

Russia has been accused for using cluster bombs and vacuum bombs in the ongoing Ukraine war.

Cluster munitions:

- Weapon that **scatters small bombs** over a large area
- It is a **non-precision** weapon, to kill humans or damage infra, over a **large area**.
- Issues:
 - It **indiscriminately kills** large number of civilians
 - **Unexploded** sub-munitions pose **threat** to people long after war is over
- Convention on Cluster Munitions 2008**
 - Prohibits countries from making/using cluster bombs
 - 110 members (Russia, Ukraine, India are not members)

Thermobaric bomb (vacuum bomb) (aerosol bomb or fuel air explosive)

- They use **oxygen from air** for a large, high-temperature **blast**.
- They work through two explosions:
 - 1st explosion**: releases **cloud of fuel** & metal over large area
 - 2nd explosion**: **ignites** the aerosol into a giant fire ball
- Blast waves** can **destroy buildings** and **vaporise humans**
- There is **no specific convention** to ban them.

Defence

Integrated Guided Missile Development Plan (1982-2008)

Prelims 2014:

	Purpose	Range	Fuel	Nuclear	
Prithvi	Surface-to-surface	100, 350	1,2 Liquid 3 solid	✓	3 is Dhanush (Navy)
Akash	Surface-to-Air	30, 70	Solid	X	
Trishul	Surface-to-Air	9	Solid	X	
Nag	Anti-Tank	20	Solid	X	Namika, Helina, Sant, Dhruvastra
Agni	Surface-to-surface	700-5000	Solid	✓	

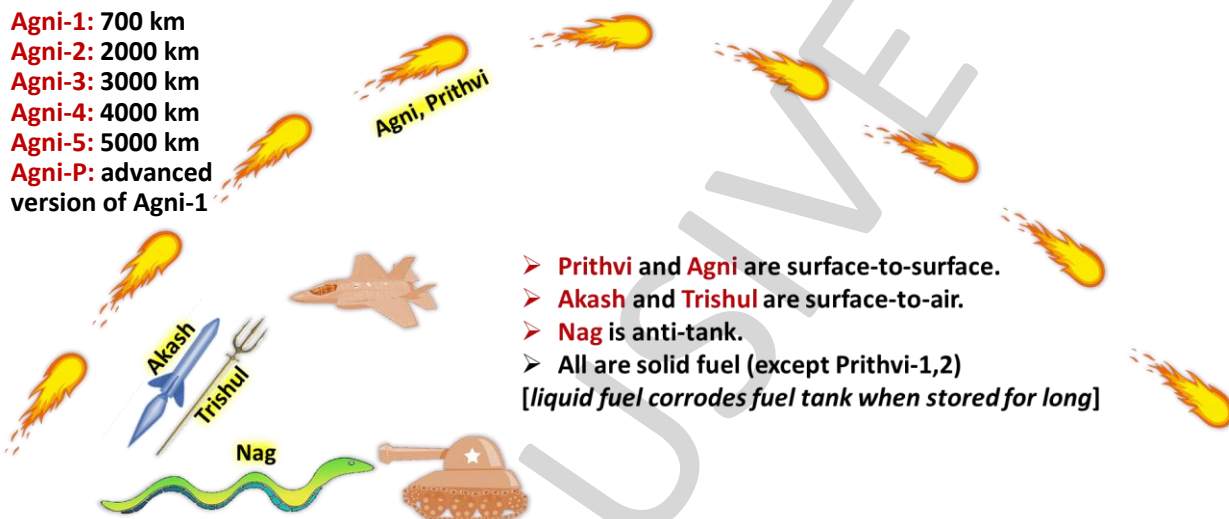
With reference to Agni-IV missile, which of the following statements are correct?

1. It is surface to surface missile.
2. It is fuelled by liquid propellant only
3. It can deliver one-tonne nuclear warheads about 7500 km away.

Select the correct answer

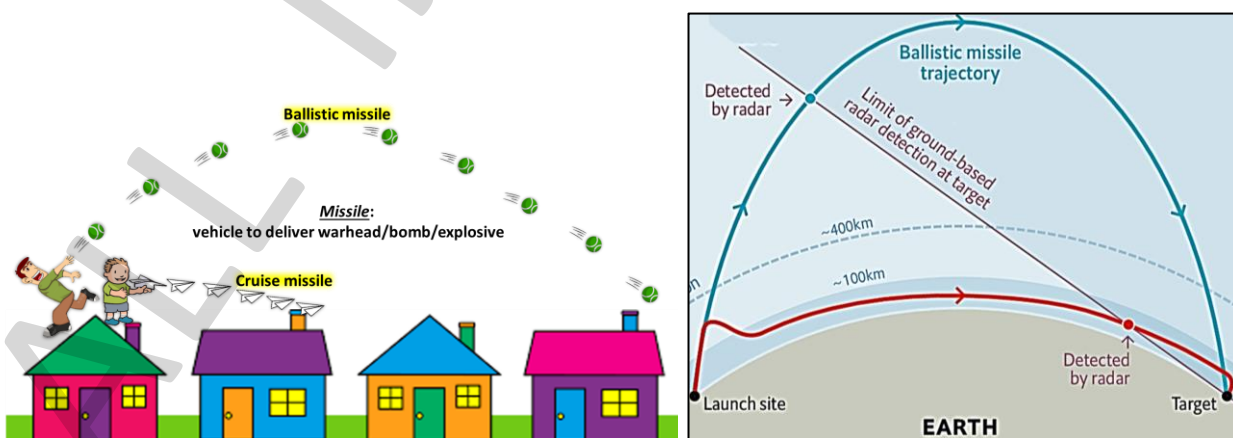
- (a) 1 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3

- Agni-1:** 700 km
- Agni-2:** 2000 km
- Agni-3:** 3000 km
- Agni-4:** 4000 km
- Agni-5:** 5000 km
- Agni-P:** advanced version of Agni-1

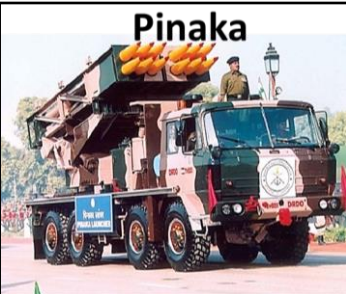


Indian Ballistic Missile Defence Programme:

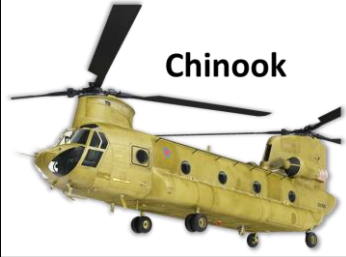
- Two tiered defence.
- For endo-atmospheric defence- **Ashwin** (Advanced Air defence)
- For exo-atmospheric defence- **Pradyumna** (Prithvi Air Defence)
- They were first tested in 2007 and improved continuously.
- Latest version can shoot down targets moving at 10 km/s in orbits as high as 1200 km.
- Used in 27 March, 2019 Mission Shakti.



I read I forget, I see I remember | See explanation of this PDF on **YouTube** www.youtube.com/c/allinclusiveias



Pinaka



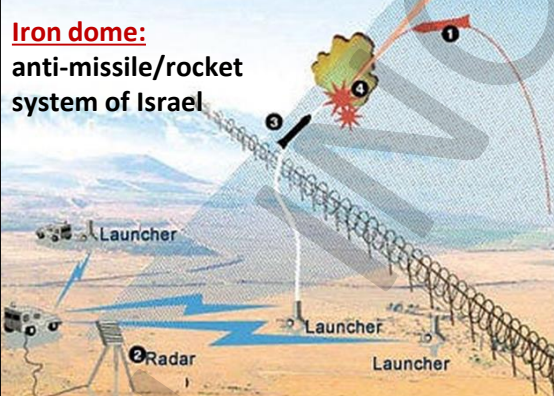
Chinook



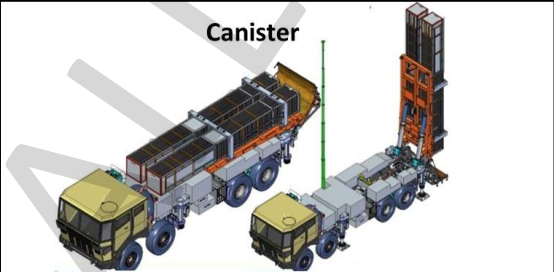
Arjun



Dhanush



Iron dome:
anti-missile/rocket
system of Israel



Canister

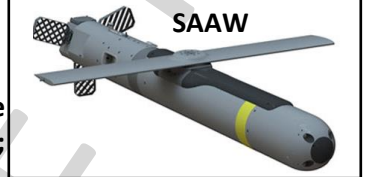
- ❖ **Pinaka:** Indigenous multi barrel rocket launch system; range 40 km
- ❖ **Ulka, Fluffy, Abhyas:** aerial targets for practicing anti-missile systems
- ❖ **Saras:** indigenous passenger aircraft
- ❖ **Apache:** fighter helicopter of USA, purchased by India
- ❖ **Chinook:** helicopter of USA; has two horizontal rotors; purchased by India
- ❖ **C-17, C-130, C-295:** military transport aircrafts
- ❖ **Derby and Python-5:** Air-to-Air Missiles
- ❖ **Netra:** Airborne Early Warning And Control made by ISRO. Radar on airplane
- ❖ **Smart Anti-Airfield Weapon:** glide bomb; for ground targets; range 100 km
- ❖ **Arjun:** Main Battle Tank
- ❖ **Dhanush:** artillery gun
- ❖ **Supersonic Missile Assisted Release of Torpedo:** for anti-submarine ops; range 600 km



Saras

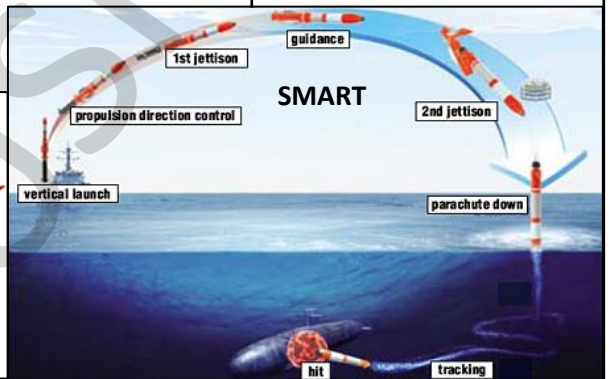


Netra




SAAW

Fighter jets:
France: Rafale, Mirage 2000
Russia : Sukhoi-30, MiG-29
India : Tejas
None is 5th generation



Aircraft carriers:

- ❑ 1961-1997: INS Vikrant (from UK)
- ❑ 1987-2017: INS Viraat (from UK)
- ❑ 2013- : INS Vikramaditya (from Russia)
- ❑ 2022- : INS Vikrant (IAC-1)

<p><u>Rudram:</u> (Range 200 km)</p> <ul style="list-style-type: none"> <input type="checkbox"/> 1st indigenous anti-radiation missile <input type="checkbox"/> against electronic surveillance <input type="checkbox"/> Can be launched from fighter jets <input type="checkbox"/> DRDO; started in 2012; 2016 first flight <input type="checkbox"/> Many tests; induction in IAF by 2022 		<p><u>BrahMos:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> by India and Russia <input type="checkbox"/> 300-500 km; Mach 3 <input type="checkbox"/> world's fastest cruise missile <input type="checkbox"/> Fuel: 1st stage Solid, 2nd stage Liquid <input type="checkbox"/> can be launched from any platform <input type="checkbox"/> Hypersonic version being developed 		<ul style="list-style-type: none"> <input type="checkbox"/> Supersonic: > Mach 1 <input type="checkbox"/> Hypersonic: > Mach 5
<p><u>QRSAM:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> by DRDO <input type="checkbox"/> 30 km; Mach 4 <input type="checkbox"/> For moving army 	<p><u>Barak 8:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> LRSAM, MRSAM <input type="checkbox"/> by India and Israel <input type="checkbox"/> SAM; 150 km; Mach 3 	<p><u>S-400:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Russian SAM <input type="checkbox"/> 400 km; Mach 6 <input type="checkbox"/> China, India, etc. 	<p><u>Shaurya missile:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> by DRDO <input type="checkbox"/> Surface-to-Surface <input type="checkbox"/> 2000 km; Mach 7 <input type="checkbox"/> Nuclear capable 	
<p><u>Prelims 2016:</u></p> <p>Which one of the following is the best description of 'INS Astradharini', that was in the news recently?</p> <p>(a) Amphibious warfare ship (b) Nuclear-powered submarine <input checked="" type="checkbox"/> (c) Torpedo launch and recovery vessel (d) Nuclear-powered aircraft carrier</p>		<p><u>Prelims 2018:</u></p> <p>What is "Terminal High Altitude Area Defence" (THAAD), sometimes seen in the news?</p> <p>(a) An Israeli radar system (b) India's indigenous anti-missile Programme <input checked="" type="checkbox"/> (c) An American anti missile system (d) A defence collaboration between Japan and South Korea</p>		
<p><u>Nuclear submarines:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Russian) INS Chakra-I : 1987-1990 <input type="checkbox"/> (Russian) INS Chakra-II : 2012-2021 <input type="checkbox"/> (Russian) INS Chakra-III : 2025 (expected) <input type="checkbox"/> (Indian) INS Arihant : 2009 <input type="checkbox"/> (Indian) INS Arighat : under trials <input checked="" type="checkbox"/> Advanced Technology Vessel Project: launched in 1984; to build nuclear submarines 		<p><u>Varunastra:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> indigenous anti-submarine torpedo like underwater cruise missile; 40 km <p><u>Nuclear triad:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> ability to launch nuclear missile by land, air, submarine. <input type="checkbox"/> India has nuclear triad? Yes (2016 Arihant commissioned) 		
<p><u>Nanosniffer:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Indigenous; by IITs (not DRDO) <input type="checkbox"/> Gives result in seconds. <input type="checkbox"/> Can detect nano-gram quantity of explosives <input type="checkbox"/> world's first Explosive Trace Detector using microsensor technology 		<p><u>Coastal Radar Stations:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Sri Lanka, Mauritius, Seychelles; plan for more <p><u>Navy's centres to monitor traffic in IOR:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Info Management & Analysis Centre (after 26/11) <input type="checkbox"/> Info Fusion Centre for Indian Ocean Region <input type="checkbox"/> Both in Gurugram 		
<p><u>Project-75:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Six scorpene submarines built in India with French help. <input type="checkbox"/> Kalvari (2015), Khanderi (2017), Karanj (2018), Vela (2019), Vagir (2020), Vagsheer. <input checked="" type="checkbox"/> Diesel powered, not nuclear. Air Independent Propulsion enables 21 days underwater stay. 				
<p><u>Project-75i:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> similar to Project-75 <input type="checkbox"/> Subs may be bigger 	<p><u>Project-17A, 18, 28:</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> frigates 	<p><u>Innovations For Defence Excellence (iDEX)</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Promote innovation, involve private <input type="checkbox"/> initiative launched in 2018 		
I read I forget, I see I remember		See explanation of this PDF on  www.youtube.com/c/allinclusiveias		
Prelims 2021	Current Affairs	Science & Tech	Page-48	© All Inclusive IAS

Techno Diplomacy

New, Emerging and Strategic Technologies (NEST)

MEA has created a **new division** called NEST to:

- engage in **technology diplomacy**
- deal with foreign **policy aspect of** new and emerging **technologies**

It will enable more active participation of India in **global forums**, in the area of **technology governance** and promoting our **national interests** in that context.

Techno-diplomacy

Art of negotiating technology questions as a **tool of diplomacy**. For example:

- conducting negotiations between countries with conflicting technological interests
- ability to cooperate on S&T when political relations are extremely difficult

Learn like this: (1) Agree on politics but disagree on Tech (ii) Disagree on politics but agree on Tech

What India needs to do?

Reduce dependence on China:

- Indian companies like Paytm have significant Chinese control
- This raises concerns like data misuse, cyber-espionage, etc.

Data governance:

- USA's Cloud Act and Europe's GDPR restrict use of certain data
- India should also frame a competent data protection law

Setting Standards:

- New technologies like 5G, IoT will need adoption of some standards
- India should be more proactive in organisations like IEEE and ITU

Diaspora

Diaspora: People of Indian ancestry living outside India, e.g. NRIs and OCI

Data:

- **1.8 crore:** As per UN estimates, India has largest diaspora in the world
- **\$90 billion:** Remittances sent to India every year

Significance of Diaspora:

- ❑ **Diplomacy:**
 - They help shape policy of other countries wrt India
 - e.g. Indian diaspora played critical role in finalizing Indo-US nuclear deal in 2005
- ❑ **Soft power:**
 - Google & Microsoft being headed by Indian origin people boosts India's image
 - Spread of Indian cuisine, yoga, etc are primarily through diaspora
- ❑ **Employment:**
 - Migration of semi-skilled labour to west Asia eases job crises in India
 - Around 90 lakh Indians live in West Asia
- ❑ **Remittances:**
 - \$90 billion annual remittances help in maintaining forex reserves
- ❑ **Start-ups in India:**
 - They support start-ups as investor and mentor

Steps taken:

- ❑ **Pravasi Bharatiya Divas**
 - Celebrated on 9th January to mark contribution of diaspora to India's development.
 - (Gandhiji returned from South Africa to Mumbai on 9 January 1915)
- ❑ **Overseas Citizenship of India:**
 - OCI cardholders get many of the rights available to resident citizens.
- ❑ **Ministry of Overseas Indian Affairs** (2004-2016)
 - For all matters relating to Indian diaspora around the world.

Challenges:

- ❑ **West Asia:** Kafala system in GCC is comparable to slavery
- ❑ **USA/Europe/Australia:** Racist attacks on Indian diaspora

What more can be done?

- Cooperate with host countries to protect rights of overseas Indian workers
- Compulsory insurance for risks faced by our overseas workers.

Indentured Labour

Indentured Labour Migration from India in 19th century

- ❑ **Indentured labour**
 - Bonded labourer under contract to work for an employer for a specific amount of time
 - Thousands of Indians were taken abroad to work on plantations, mines, rail construction, etc.
 - Poor economic conditions in UP, Bihar and Tamil Nadu increased people's debt, and forced them to migrate as indentured labour.
- ❑ **Destination:**
 - Mauritius, Caribbean islands, Ceylon and Malaya.
 - Working conditions were harsh, and there were few legal rights.
- ❑ **Cultural fusion in Caribbean:**
 - They blended in the local culture
 - Chutney music in Trinidad and Guyana reflects Indian influence
 - Muharram in Trinidad was transformed into a carnival called 'Hosay' in which workers of all races and religions participated.
 - Protest religion of Rastafarianism reflects cultural links with Indian migrants to the Caribbean.
- ❑ **Their descendants:**
 - Most indentured workers stayed there even after their contracts ended.
 - Consequently, there are large communities of people of Indian descent in these countries.
 - Nobel prize winner VS Naipaul, some West Indies cricketers are some of the descendants

Shanghai Cooperation Organization

SCO Summits:

- **2022** Summit is being held in at Samarkand (**Uzbekistan**)
- **2023** Summit is expected to be hosted in New Delhi (**India**)

SCO:

- It is a **Eurasian** political, economic and security organization
- It is the successor to the **Shanghai Five** 1996
- **India** and Pakistan joined SCO in **2017**

Relevance:

- ❑ **Political cooperation:**
 - Platform for India to advance **cooperation** with Central Asian countries
 - India gets opportunity to renew **bilateral ties** with regional countries
- ❑ **Economic cooperation:**
 - **Mineral resource** rich central Asian region can help in development of SCO countries
 - **Connectivity** to Central Asia and beyond can be boosted by cooperation in SCO
- ❑ **Security Cooperation:**
 - **RATS** mechanism aims to reduce terrorism, separatism, extremism in the region

Challenges:

- ❑ **Dominated by China:**
 - All SCO members, except India, have joined China's **BRI**
- ❑ **Presence of Pakistan:**
 - Major action against **Terrorism** may not be possible due to Pakistan's membership of SCO
- ❑ **Russia-China-Pakistan axis:**
 - Growing closeness between them reduces chances of **India's concerns** being taken up seriously
- ❑ **Seen as anti-NATO**
 - Projecting SCO anti-NATO block is against **India's interest**

Way forward:

- ❑ **Connect Central Asia policy:**
 - Improve bilateral relations with Central Asian countries through Trade & Tourism
- ❑ **Get support within SCO:**
 - Coordinate with smaller countries in SCO to lend support to India's concerns
- ❑ **Maintain strategic autonomy:**
 - India should refrain taking any sides: pro-west or anti-west
- ❑ **Remain engaged:**
 - If you are not on the table, you are on the menu
 - If one wishes to influence a decision, then one must be present at the negotiation table

Shanghai Cooperation Organisation:

- ✓ Formed in 2001
- ✓ HQ in Beijing (not Shanghai)

RATS - Regional Anti-Terrorist Structure:

- ✓ It is a permanent organ of SCO.
- ✓ It is headquartered in **Tashkent**, Uzbekistan.
- ✓ It promotes cooperation in member states against terrorism, separatism and extremism.

- ✓ **1996** - Shanghai Five - China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan
- ✓ **2001** - named SCO - **Uzbekistan** added at a meeting in Shanghai
- ✓ **2017** - India and Pakistan join at SCO summit in Astana (Nursultan) (capital of Kazakhstan)

Indo-Pacific Economic Framework

IPEF:

- ❑ Economic initiative launched by USA in May 2022
- ❑ It has 14 founding members, including India
- ❑ 4 themes of IPEF:
 - Fair and resilient **trade**
 - **Supply chain** resilience
 - Infrastructure, **clean energy**, and decarbonization
 - **Tax** and anti-corruption

Significance of IPEF for India:

- ❑ **Alternative to RCEP:**
 - **India did not join RCEP**. IPEF can be a good alternative to RCEP.
- ❑ **Counter China:**
 - IPEF can help counter China's growing **influence in Indo-Pacific**
- ❑ **Global Supply chain**
 - IPEF may help India become part of global supply chain, giving **boost to exports**.

Issues:

- ❑ **No clear objective:**
 - IPEF will not create FTA, nor discuss tariff reductions.
 - Hence, how it will boost trade is not clear.
- ❑ **Similar to BDN & B3W:**
 - Blue Dot Network and Build Back Better World initiatives have not given any tangible results.
 - Similarly, IPEF too could fail to challenge China's influence.
- ❑ **Conflict with WTO:**
 - Any preferential within IPEF, without signing FTA, may violate WTO provisions

Comparison with RCEP:

- IPEF **outweighs** RCEP in terms of population and GDP
- IPEF has most major members of RCEP, **except China**
- IPEF also **includes USA and India**, which are not part of RCEP

Criticised by China:

- IPEF is seen as a **political grouping**, created with intention **to isolate China**

Indian Position:

- ❑ **India has agreed to three pillars relating to:**
 - supply chains
 - clean energy
 - tax & anti-corruption
- ❑ India is still evaluating the pillar on **Trade**, which includes:
 - Environment, labour, digital trade and public procurement
 - Data protection and privacy is one area where India may differ with IPEF
 - India is in the process of framing laws for data privacy.
- ❖ India is engaging with the **Trade** track in IPEF, but will wait for the final framework to emerge.
- ❖ Indian officials are participating in discussions with an open mind.

World Health Organization

- ❑ WHO is a **specialized agency** of UN, responsible for international **public health**.
- ❑ Established in **1948**, it is headquartered in **Geneva**, with six semi-autonomous regional offices.
- ❑ **Functions:**
 - ❑ It sets international health **standards**
 - ❑ provides technical **assistance** to countries
 - ❑ **Coordinate** response to health emergencies
- ❑ **Structure:**
 - ❑ **World Health Assembly:** member states; supreme decision making body
 - ❑ **Executive Board:** technical experts; oversee implementation of programs
 - ❑ **Secretariat:** headed by Director General; implements the programs
- ❑ **Source of funds:**
 - ❑ **Assessed contributions:** paid by member states based on GNP and population.
 - ❑ **Voluntary contributions:** paid by members states, organizations, individuals, etc.
- ❑ **Achievements:**
 - ❑ eradication of smallpox, near-eradication of polio.
- ❑ **Issues:** (*funds, functions, functionaries*)
 - ❑ No stable source of funds; dependent on voluntary contribution (20% assessed, **80% voluntary**)
 - ❑ No single document to outline its **responsibilities**.
 - ❑ Unlike WTO, it has no powers to bind or sanction members, **can only advice**.
 - ❑ Lacks **administrative strength** for effective coordination; relies on bureaucracy.
- ❑ **Criticism in handling Covid:**
 - ❑ **Delay** in acknowledging human-to-human transmission. Taiwan informed WHO of it in December 2019, but WHO waited till mid-January for Chinese confirmation.
 - ❑ WHO urged countries not to spread fear by imposing **travel restrictions**.
 - ❑ Relied on Chinese data, instead of verifying the same. WHO team went to Wuhan only in mid-February. **Praised China** for transparency and effective covid control.
- Way forward:** (In December 2020, India submitted 9 point reform plan)
 - ❑ Empower WHO Director-General
 - to declare **Public Health Emergency of International Concern** (PHEIC) even without consensus in IHR Emergency Committee.
 - ❑ For funding of WHO programs
 - **un-earmark voluntary contributions**, so that money can be used where it is needed the most.
 - ❑ Monitor expenditure
 - at **micro level** for greater transparency and accountability in use of funds.
 - ❑ **Standing Committee of Executive Board**
 - Should be set up to supervise member's implementation of WHO's recommendations.
 - ❑ Vaccines:
 - Set up mechanism for fair and equitable **access to vaccines** and diagnostic tools (prevent vaccine nationalism).

Multilateral Banks

Multilateral Development Bank:

- International financial institution, formed by a group of countries.
- India is a member of major MDBs like WB, ADB, NDB, AIIB, etc.
- ❑ They help in **economic development** and poverty reduction.
 - By giving financial and technical support to developing countries
- ❑ **World Bank** is funding more than **700 projects** in India
 - Projects like Sarva Shiksha Abhiyan, PM Gram Sadak Yojana
- ❑ India is **ADB's** 4th largest shareholder and its top borrower since 2010.
 - Projects like: Delhi-Meerut RRTS

Challenges:

- ❑ **Dominated by developed countries**
 - USA is largest shareholder of World Bank with 17.25% of its capital shares.
 - Every World Bank president since its inception has been a U.S. citizen.
- ❑ **Conditions attached with funds**
 - Project execution to be through specific companies only
 - Sourcing of equipment from certain suppliers only

What can be done:

- **Use new banks**, like NDB, to challenge dominance of WB, ADB
- **Push for governance reforms** to increase representation of developing countries
- **Form issue based coalition** with like minded countries to counter dominance of west.

11. With reference to a grouping of countries known as BRICS, consider the following statements :

- ✗ 1. The First Summit of BRICS was held in Rio de Janeiro in 2009.
- ✓ 2. South Africa was the last to join the BRICS grouping.

Which of the statements given above is/are correct?

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

Prelims 2014

BRICS:

- ✓ Formed in 2006
- ✓ First summit in 2009 in Russia
- ✓ South Africa joined in 2010

IBSA:

- ✓ India, Brazil, South Africa
- ✓ IBSA = (BRICS) - (Russia and China)
- ✓ South-south cooperation
- ✓ Helps India overcome influence of China and Russia
- ✓ Formed in 2003 at Brasilia (capital of Brazil)

ADB – Asian Development Bank	Philippines
SCO – Shanghai Cooperation Organization	Beijing
NDB – New Development Bank	Shanghai
AIIB – Asian Infra Investment Bank	Beijing

[April 2022] India got elected to four ECOSOC bodies

ECOSOC:

- **One of the six principal organs of UN**
 - Responsible for **coordination** on economic and social issues
- **Sustainable development:**
 - Its focus is on 3 dimensions of sustainable development – economic, social and environmental.
 - Every year it convenes High-Level Political Forum to review implementation of 2030 **SDGs**.
- **Finance & trade:**
 - It engages with multilateral financial & trade institutions like WTO to support developmental goals.
- **Humanitarian relief:**
 - Its Humanitarian Affairs Segment strengthens coordination of UN humanitarian efforts
- **Women rights:**
 - Its Commission on Status of Women has drawn attention to women's rights.
- **Voice for the Youth:**
 - Its Youth Forum brings youth voices into discussions in global policy-making.