# 1<sup>th</sup> September, 2024 SIONIAS NS ∕⊳`

# 'Blueprint for Action' issued by 'Responsible AI in the Military Domain Summit'

REAIM (Responsible AI in the Military Domain) Summit 2024 held in Seoul (South Korea) announced a legally non-binding "Blueprint for Action" to govern responsible use of AI in the military.

> REAIM, with its inaugural summit held in 2023, is a platform for global discussion with all stakeholders on ways to ensure responsible military application of AI.

### Key highlights of the 'Blueprint for Action'

- Impact of AI on international peace and security: AI applications in military domain should be developed, deployed and used in a way that maintains and does not undermine international peace, security and stability.
  - Recognize that Al applications can present both foreseeable and unforeseeable risks including risks of an arms race, miscalculation, escalation, and lowering threshold of conflict.
  - Stresses the need to maintain human control and involvement for all actions critical to informing and executing sovereign decisions concerning nuclear weapons employment, without prejudice to ultimate goal of a world free of nuclear weapons.
- Implementing responsible AI in the military domain: AI applications should be ethical and human-centric, applied in accordance with applicable national and international law, promote dialogue on rigorous testing and evaluation (T&E) protocols. etc.
- Future governance of AI in military domain: Discussion on Governance should take place in an open and inclusive manner to fully reflect wide- ranging views, strengthen international cooperation on capacity-building to reduce knowledge gap on responsible development and deployment, etc.

### India, GCC adopt Action Plan for Joint Activities

Joint Action Plan 2024-2028 was adopted at the recently held 1st ever India-Gulf Cooperation Council (GCC) Joint Ministerial Meeting for Strategic Dialogue.

### **Key Outcomes of the Ministerial Meeting**

- Joint Action Plan 2024-2028: for undertaking various joint activities in diverse areas including health, trade, security, agriculture and food security, transportation, energy, culture, amongst About Gulf Cooperation Council (GCC) others.
  - Our Action Sector Action Sector Action Sector Action Plan, based on mutual consensus, later on.
- 3P Framework: India affirmed framework of 3Ps-People, Prosperity and Progress to enhance partnership between India & GCC.
- Humanitarian crisis in Gaza: External Affairs Minister states that India's position has been principled and consistent and any response must take into account the principles of humanitarian law.

### India-GCC Relations

- Political: 1st India-GCC Political Dialogue was held in 2003. Currently, India has strategic partnerships with Saudi Arabia, UAE, & Oman.
- Trade & Investment: Bilateral trade stood at USD 161.59 billion in FY 2023-24.
  - UAE is the 7th largest source of FDI in India.
- Diaspora: Approximately 8.9 million Indian expats (66% of NRIs) reside in GCC countries.
  - Share of inward remittances from the GCC region are about **30%** (2020-21).
- Energy: GCC countries contribute to 35% of India's oil imports and 70% of gas imports.

- Established in 1981.
- > Headquarter: Riyadh (Saudi Arabia).
  - Objective: To achieve unity among its members based on their common objectives and their similar political and cultural identities.



1/4





### Health Ministry Releases "Health Dynamics of India (Infrastructure and Human Resources) 2022-23"

Previously known as the Rural Health Statistics, the report provides comprehensive annual data on health infrastructure and human resources.

### Key finding

- There are 714 district hospitals, and 362 medical colleges in India.
- Rural
  - Rise in health facilities: Between 2005 to 2023, number of SCs, PHCs, and CHCs, has increased.
  - functioning around the country of which around 25000 PHCs are in rural areas.
  - Shortage of doctors: Between 2005 to 2023, availability
     (in position) of doctors and medical officers in PHCs has increased from around 20,000 to around 32,000.
    - However, vacancy has also almost doubled in the same period.
  - Infrastructure gap: Most of the Sub-Centres (SCs) in Andhra Pradesh, Bihar, Karnataka, Rajasthan, Uttar Pradesh among others are running in rented buildings.

### Urban

- Inter-State disparity in availability of services: There is a shortfall of around 36% of U-PHCs (Urban PHCs) as per the urban population norms.
  - However, U-PHCs exist above the required norms in Andhra Pradesh, Himachal Pradesh, Andaman & Nicobar Island, Chandigarh and Delhi.
- Infrastructure gap: Most of the U-PHCs in Andhra Pradesh,

Bihar, Karnatak, Uttar Pradesh, Madhya Praadesh, among others are functioning in rented buildings.

## Indo-Pacific Oceans Initiative (IPOI) Completes Five Years

### About IPOI

- Genesis: IPOI was launched by India in 2019 at the East Asia Summit (EAS) in Bangkok (Thailand) as an open, inclusive, nontreaty-based global initiative.
- Philosophy: Builds upon India's 'Security and Growth for All in the Region (SAGAR)' initiative of 2015.
  - IPOI seeks to build a sense of community by creating new partnerships with like-minded countries through practical cooperation.
- 7 pillars of collaboration: One or two countries could take the lead for a pillar with others joining in voluntarily.

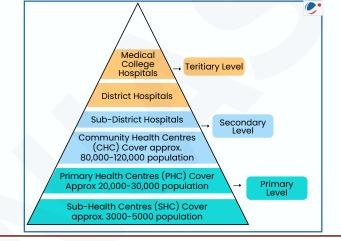


### Significance of IPOI

- The cooperation approach provides an alternative to geopolitical competition in the Indo-Pacific.
- Aligns with India's Maritime India Vision 2030 and Maritime Amrit Kaal Vision 2047.
- Convergences with other global initiatives like AIIPOIP (Australia-India Indo-Pacific Oceans Initiative Partnership), **AOIP** (ASEAN Outlook for the Indo-Pacific), **IPEF**, etc.

### About India's Public healthcare system

- > "Public Health and Hospitals" is a state subject and the primary responsibility of strengthening the public healthcare system lies with the respective State Governments.
- India's Public healthcare system encompasses a three-tiered system.
- Doctor-population ratio in country stands at 1:834 (includes both allopathy and AYUSH doctors).



Outline a brief plan and agenda for the next five years by

Make a truly global body by incorporating all island states,

Way ahead to enhance effectiveness of IPOI

East African and Gulf countries.

leaders of each pillar.

⋗



Annual summaries for each pillar by leading countries.



### Prime Minister Chaired First Meeting of The Governing Board Of Anusandhan National Research Foundation (ANRF)

#### Key initiatives announced:

- Partnerships for Accelerated Innovation and Research (PAIR): Pairing universities where research is at nascent stage with top tier established institutions for mentorship in hub and spoke mode.
- Mission for Advancement in High-impact Areas (MAHA): To support priority-driven, solution-focused research in priority areas like EV mobility, Advanced Materials, Solar Cells, Health & Medical Technology, etc.
- ANRF Centre of Excellence (ACE): To establish world-class research centers with substantial funding support.

#### About ANRF

- Genesis: Establishment under the ANRF Act 2023 and erstwhile Science and Engineering Research Board is subsumed into ANRF.
- Aim: To seed, grow and foster a culture of research and innovation throughout the country as per recommendations of National Education Policy.

ANRF strives to making India knowledge-driven society

Funding: Mobilisation of ₹50,000 crore for the period 2023-2028 (Rs 14,000 crore from Centre and Rs 36,000 crore from private sources).

#### Governance

- Administrative department: Department of Science and Technology (DST)
- Governing Board
  - Ex-officio President: PM
  - Ex-Officio Vice-Presidents: Union Minister of Science and Technology, and Minister of Education.

Issues in India's research ecosystem that would be resolved by ANRF

- Only a few of India's higher education institutions were engaged in research activities.
- Several ministries run separate R&D programmes, often leading to duplication and inefficiency.

### **Also in News**

### Sanchar Saathi

Recently, more than one crore fraudulent mobile connections disconnected with help of Sanchar Saathi

### Sanchar Saathi

- Launched by: Department of Telecommunication
- Objective: citizen centric platform to fight cyber fraud, enabling citizens to report suspicious calls & messages.
- It contains various modules such as:-
  - ⊖ Chakshu-Report Suspected Fraud Communication
  - CEIR-Block Your Lost/Stolen Mobile
  - TAFCOP-Know mobile connections taken in your name
  - KYM-Know Your Mobile / IMEI Verification
  - RICWIN-Report Incoming International Call With Indian Number
  - € KYI-Know Your Wireline Internet Service Provider

## Four major initiatives of 'I4C' launched

Recently, Union Home Minister launched 4 new initiatives under Indian Cyber Crime Coordination Centre (I4C) on its foundation day celebrations to make the fight against cybercrime more robust, effective and successful.

8468022022 (#) www.visionias.in

- While addressing the event, Minister also emphasized that cyber security is no longer limited to the digital world but has also become an important aspect of national security.
- I4C scheme was approved in 2018 and dedicated to the nation in 2020 to tackle cybercrimes and develop effective coordination among the Law Enforcement Agencies.

### New Initiatives launched

- Cyber Fraud Mitigation Centre (CFMC): For immediate action and seamless cooperation to tackle online financial crimes. CFMC will serve as an example of "Cooperative Federalism" in law enforcement.
- 'Cyber Commandos' Program: To establish Special wing of trained 'Cyber Commandos' in States/UTs and Central Police Organizations (CPOs) to counter threats of cyber security landscape in the country.
- Samanvay platform (Joint Cybercrime Investigation Facilitation System): Web-based module to act as a one stop portal for data repository of cybercrime, data sharing, crime mapping, data analytics, cooperation and coordination platform for Law Enforcement Agencies across the country.
- Cyber Suspect Registry: To be created based on National Cybercrime Reporting Portal (NCRP), in collaboration with banks and financial intermediaries for strengthening fraud risk management capabilities of financial ecosystem.

### How Cyber security is an important aspect of National security?

- Infrastructure protection: To safeguard critical national infrastructure like power grids, water systems, and transportation networks from digital attacks.
  - E.g., 2019 Malware attack on Kudankulam Nuclear Power Plant.
- Economic security: To protect businesses and financial institutions from cyber threats, helping maintain economic stability.
  - E.g., 2017 WannaCry Ransomware attack.
- National defence: For protecting military communications, weapons systems, and other strategic information.
  - ⊖ E.g., Stuxnet worm attack on Iranian nuclear facilities.

### Northern United-2024

Recently, China and Russia announced joint naval and air drills 'Northern United-2024' in the Sea of Japan and the Sea of Okhotsk. About Northern United 2024

It aims to improve strategic cooperation between the China and Russia and "strengthen their ability to jointly deal with

security threats." About Sea of Japan and Okhotsk

Sea of Japan is marginal sea of the western Pacific Ocean. It is bounded by Japan and Sakhalin Island to the east and by Russia and Korea to the west.



Sea of Okhotsk is bounded on by Kamchatka Peninsula and the Kuril Islands (East and Southeast), by northern coast of Japanese island of Hokkaido (South), and by Sakhalin Island (Southwest).

3/4

### •VISIONIAS Inspiring Innovation



### **Paraguay River**

The water level in the Paraguay River is facing the **lowest water level** in more than a century.

### About Paraguay River

- Fifth largest river in South America and principal tributary of the Paraná River.
- Originates south of Diamantino in the Brazilian state of Mato Grosso.
- Flows generally north-to-south, weaving its way through Brazil, Paraguay, and Argentina.
- A notable feature of the upper basin is the vast seasonal swamp called the Pantanal.
- The predominant climate in the drainage basin is hot and humid, characterized by dry winters and heavy rains in the summer



### **Digital Public Goods**

Ministry of Electronics and Information Technology launched Phase III of capacity-building initiatives under Digital India vision to enhance skills in Digital Public Goods Projects.

#### About Digital Public Goods (DPGs)

- DPGs are open-source technologies, including open data, open Al models, open standards and open content, used in a country to operationalize digital public infrastructure.
  E.g., Aadhaar, UPI, Digilocker, etc.
- DPGs can limit economic monopolies over digital solutions and knowledge.
- Reasons behind introducing DPGs: Inclusivity and accessibility, catalyst for innovation, enhanced transparency in public service delivery, etc.

# Proton Fusion Engine

Recently, a US-based startup firm RocketStar has conceptualized a **proton fusion propulsion engine**.

#### **About Proton Fusion Engine**

- It was initially conceptualized by Albert Einstein back in 1929 use nuclear fusion to propel spacecraft at near-light speeds.
- It aims to use hydrogen fusion to generate enormous amounts of energy, offering a cleaner and more efficient alternative to chemical fuels.
- Its design relies on a funnel-shaped magnetic field, where protons are compressed and heated to extreme temperatures. The resulting plasma jet provides the necessary thrust.
- > The potential to extend this technology to vehicles on Earth could revolutionize transportation.

## **Place in News**



Recently, Israel launches a strike on the Khan Younis safe zone in Gaza. **Political Features** 

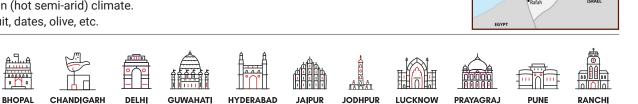
- > It is a territory occupying 140 square miles along Mediterranean Sea just northeast of the Sinai Peninsula.
- **Bordering countries:** Egypt (Southwest) and Israel (East and north).
- It is the smaller of the two Palestinian territories, the other being the West Bank, that make up the State of Palestine.
- In the 6-Day War of 1967, it was taken by Israel, which occupied the region for the next quarter century.
- In 1994, Israel began a phased transfer of governmental authority in the Gaza Strip to the Palestinian Authority under the terms of the Oslo Accords.

### **Geographical Features:**

AHMEDABAD

- It is a part of Levant region (region along the eastern shores of Mediterranean Shores).
- **Climate:** Mediterranean (hot semi-arid) climate.
- Major crops: Citrus fruit, dates, olive, etc.

BENGALURU



# Presbyopia

Drug Controller General of India has approved a new eye drop PresVu.

8468022022 ( www.visionias.in

It is developed to reduce dependency on reading glasses for individuals affected by presbyopia.

#### About Presbyopia

- It is a refractive error in which the eyes gradually lose the ability to focus on nearby objects.
- It happens as the lens stops focusing light correctly on the retina (a light-sensitive layer of tissue at the back of the eye).
   With the age, the lens in eye gets harder and less flexible.
- It is an age-related condition and people usually develop it at around the age of 40.

# Siddha Medical System

A recent study showcases that Siddha drugs can reduce Anaemia among Adolescent Girls.

The treatment used a combination Siddha drugs ABMN (Annapēticenturam, Bāvana kaţukkāy, Mātuļai manappāku, and Nellikkāy lēkiyam).

About Siddha System

- **Founder:** Sage Agasthiyar or Agasthya.
- 'Siddha' literature is in Tamil and it is practiced largely in Tamil speaking parts of India and by Indian Diaspora in South East Asia.
- It is one of the oldest medical systems in India and focuses on spiritual, mental and physical well-being.
- Its principles largely rely upon Panchabootham, taste, and three humours (doshas) Vali (vatham air+ space), azhal (pitham fire) and iyyam (kapham water + earth).



The statue of the Greatest ruler of the Cochin dynasty 'Sakthan Thampuran' in Kerala fell.

### About Sakthan Thampuran

- Raja Rama Varma Kunjipillai (or Rama Varma IX) is popularly known as Sakthan Thampuran.
- He ruled the Cochin kingdom from 1790 to 1805.
- Transferred the seat of the Cochin kingdom from Thrippunithura to modern-day Thrissur.
- He started the Thrissur Pooram (tribute to Lord Shiva), one of the Kerala's largest temple festivals.
- He put an end to the institution of the Yogiatirippads and entrusted temple management to the government.

4/4

Jabalia, Han

GAZA STRIP

Deir al-Balah

Khan Younis