YOJANA MAGAZINE ANALYSIS

(February 2024) (Part 1/3)

TOPICS TO BE COVERED

PART 1/3

- INDIA'S VISION FOR HARNESSING AI FOR GLOBAL GOOD
- AI IN INDIAN GOVERNANCE & PUBLIC SERVICES

PART 2/3

- POTENTIAL & CHALLENGES OF GENERATIVE AI.
- USE CASES OF GENERATIVE AI IN GOVERNANCE

PART 3/3

- ROLE & SCOPE OF AI FOR CITIZEN SERVICES
- CYBER SECURITY CHALLENGES IN THE ERA OF AI.

TOPICS (PART 1/3)

- INDIA'S VISION FOR HARNESSING AI FOR GLOBAL GOOD
- AI IN INDIAN GOVERNANCE & PUBLIC SERVICES

INDIA'S VISION FOR HARNESSING AI FOR GLOBAL GOOD

Artificial Intelligence (AI) has evolved from a theoretical concept to a tangible & life transforming tool presently. All is considered a double edged sword which has both **positive** & negative impacts.

The current debate revolves around How to harness Al's power while mitigating Al's negative impacts- ensuring Al is both safe & successful.

India is a keen observer of this debate and wants to make advances in this new domain. We also want to keep mitigating the negative impacts. **India AI** has been **launched by GoI** to promote AI.

WHAT IS INDIA AI?

At the forefront of Digital India, is the pivotal role played by AI. GoI is actively shaping it's AI Vision through a mission named **India AI.**

Vision of India Al:

Support for the Al Startup Ecosystem.



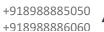
- Development of practical applications addressing real world challenges in healthcare, agriculture, language translation, governance and beyond.
- Dedicated focus on AI research: Developing infra & attracting youth to adopt such domains. (skill penetration in AI high in India).
- Analyse the largest dataset (of Indian population) to give beneficial outcomes.

GLOBAL PARTNERSHIP FOR ARTIFICIAL INTELLIGENCE (GPAI)

The Global Partnership on Artificial Intelligence (GPAI), an alliance of 29 members, has unanimously adopted the New Delhi declaration underscoring the need to mitigate risks arising from the development and deployment of artificial intelligence (AI) systems, and promoting equitable access to critical resources for AI innovation.

WHAT IS GPAI?

- It is an international initiative established to promote responsible development & use
 of AI.
- It deals with two aspects:
 - Promote the use of AI for benefiting humanity at large.
 - Mitigating risks associated with AI.







- Established in: 2020. (proposed by Canada and France at the 2018 44th G7 summit).
- Founding members: 15 member countries. (Australia, Canada, France, Germany, India, Italy, Japan, Mexico, New Zealand, the Republic of Korea, Singapore, Slovenia, the United Kingdom, the United States of America, and the European Union)
- Present membership: 29 member countries.

MEMBERS



THE NEW DELHI DECLARATION

The New Delhi Declaration on Artificial Intelligence (AI) was adopted on **December 14, 2023** by the **Global Partnership on AI (GPAI)**.

 The declaration recognizes the role of Al in generating economic growth and innovation, and its potential to create jobs.





- It also acknowledges the need for regulations, policies, and standards to address concerns such as:
 - Misinformation
 - Unemployment
 - Transparency
 - Fairness
 - Protection of intellectual property and personal data
 - Upholding human rights and democratic values
- The declaration also prioritizes safe, secure, and trustworthy AI, and addresses the risks of generative AI.
- The declaration said that a global framework for use of AI should be rooted in:
 - democratic values and human rights;
 - safeguarding dignity and well-being;
 - ensuring personal data protection;
 - o the protection of applicable intellectual property rights,
 - privacy, and security;
 - o fostering innovation; and
 - o promoting trustworthy, responsible, sustainable, and human-centred use of Al.

- GPAI members also promoted equitable access to critical resources for AI innovation including computing, high-quality diverse datasets, algorithms, software, testbeds, and other AI-relevant resources. It said that the GPAI will pursue a diverse membership, with a particular focus on low- and middle-income countries to ensure a broad range of expertise, national and regional views, and experiences based on shared values.
- The declaration also agreed to support Al innovation in the agriculture sector as a new "thematic priority".

BLETCHLEY DECLARATION V/S NEW DELHI DECLARATION

While the GPAI New Delhi declaration addresses the need to tackle Al-related risks, it largely supports innovation in the technology in various sectors, including agriculture and healthcare. The essence of the declaration can be summed up as follows: Al is inherently good and is a catalyst for economic growth, but some harms need to be mitigated along the way.

While the declaration that was signed at the UK Al Safety Summit last month put security and safety risks related to Al in the centre of the discussions. The declaration noted the "potential for serious, even catastrophic, harm, either deliberate or unintentional, stemming from the most significant capabilities of these Al models"

INDIA'S POSITION ON REGULATION OF AI

Even as India looks to unlock the **potential economic benefits of AI systems**, it's own thinking on AI regulation has **undergone a significant change** — **from not considering** any legal intervention on regulating AI in the country just a few months ago, to now moving in the direction of actively formulating regulations based on a "risk-based, user-harm" approach.

At the inaugural session of the GPAI Summit on Tuesday, Prime Minister Narendra Modi flagged the dual potential of AI — "while it can be 21st century's biggest development tool, it can also potentially play a very destructive role — and called for a global framework that will provide guardrails and ensure its responsible use.

AI IN INDIAN GOVERNANCE & PUBLIC SERVICES

In the past decade, India has adopted a different approach for digital transformation through the Digital India program. Our Digital Public Infrastructure (DPI) is considered to be one of the biggest enabler in our economic growth story.

Governance has been streamlined, service delivery has become efficient and ease of life has crept in our society.

All has been involved in our DPI but it entails a lot more potential in the times to come. That is why the govt. Is keen on more & more effective usage of All in governance.

NATIONAL PROGRAM ON AI (NPAI)

The Gol's flagship initiative, the NPAI, aims to nurture the building blocks of the domestic AI Ecosystem through four key interventions:

 National Data Management Office (NDMO): NDMO aims to enhance data quality, utilisation & accessibility.



- 2. National Center on AI: NCAI is envisaged as a sector-agnostic entity that identifies AI solutions for public sector problem statements and facilitates their nationwide deployment aiming to drive large scale socio economic transformation.
- Skilling for AI: This pillar aims to revamp technical education infra like ITIs, Polytechnics, etc by building labs.
- 4. **Responsible AI:** Emphasise the need to address potential biases & discrimination in AI adoption through the development of indigenous tools, guidelines, frameworks etc.

KEY GOVERNMENT INITIATIVES LEVERAGING AI

- Unified Mobile Application for New Age Governance (UMANG) APP: It gives all
 Indian citizens a singular point of access to Pan India e governance services. (central
 to local government)
- Digi Yatra App: This app enhance the air travel experience of travellers. It is a biometric based boarding system for travellers.
- **Bhashini Platform:** It is developed by MeiTY. It is a speech to speech translation platform for various Indian languages.



- Applications of Al in urban governance: Municipal corporations & police are using image recognition & Al for real time monitoring of traffic & infrastructure of the city.
- Application of AI in healthcare: ATMAN AI, an AI based software used to detect
 Covid by analysing the chest X ray. Usage of AI in cancer detection & treatment is also
 active.
- Al usage in agriculture:
 - Al based pest management system: CottonAce is an Al driven Early warning system which gives information to the farmers about application of pesticide.
 - Al based sensors deployed in the fields to assess soil moisture.
- Al based attendance monitoring system (Shiksha Setu): Government of Assam has developed a mobile application for recording digital attendance of both- the teachers & the students. (Based on facial recognition)