# AI in Public Service Delivery

**Source: IE**

## Why in News?

India's **first Artificial intelligence (AI) powered Anganwadi** was launched in Waddhamna village, Nagpur district, Maharashtra.

- This pilot project is being hailed as a major leap in bridging the **rural-urban digital divide** in early childhood education, marking a significant advancement in **public service delivery.**

## How can AI Aid in Public Service Delivery?

- **Early Child Care:** Maharashtra's AI-enabled Anganwadi integrates with the **Poshan Tracker** to monitor children's nutrition and health in real time.
  - Anganwadi workers upload meal photos for **instant dietary analysis,** enabling predictive alerts on **malnutrition risks.**
  - AI integration facilitates targeted delivery of supplementary nutrition under **Integrated Child Development Scheme.**
  - Children now learn through **virtual reality (VR)** experiences, interactive stories, and drawing on smart boards.
- **Smarter and Inclusive Governance:** AI is helping the government move from a one-size-fits-all approach to tailored, real-time service delivery.
  - **BharatGen**, a **government-funded multimodal AI model,** aims to enhance public service delivery in language, speech, and computer vision, catering to India's diverse population.
  - At **Mahakumbh 2025,** AI tools were used to **manage railway passenger flow,** optimize **crowd dispersal,** and power multilingual chatbots, setting a global benchmark in tech-driven mass event management.
- **Efficient and Targeted Welfare Delivery:** AI models trained on high-quality anonymised datasets (via the **IndiaAI Dataset Platform**) can analyse patterns in poverty, health, education, etc.
  - This helps policymakers identify gaps, predict needs, and deliver targeted benefits.
- **Accessibility**: Tools like **Digital India BHASHINI**, **Sarvam-1** break language barriers, making services available in multiple Indian languages, and enhancing inclusivity for differently-abled individuals.
- **Law Enforcement:** AI enables predictive policing, real-time surveillance, and cyber threat detection.
  - Delhi Police uses an AI-driven Facial Recognition System (FRS) to solve crimes and find missing persons.
  - AI accelerates case research, aids in drafting judgments, and helps reduce backlogs, improving justice delivery and legal efficiency.
    - For example, **SUPACE (Supreme Court Portal for Assistance in Court's Efficiency)** helps judges with legal research.
- **Optimizing Agriculture and Ensuring Food Security:** **Project Farm Vibes,** developed by **Microsoft Research** and the Agricultural Development Trust, Baramati, is transforming

farming with data-driven insights.
    - It uses AI tools to analyze field conditions, optimize irrigation, and provide real-time, localized farming recommendations.
        - The project has led to a **40% increase in crop production, reduced water and fertilizer usage, and minimized post-harvest wastage.**
    - The AI in agriculture market is projected to grow from USD 1.7 billion in 2023 to USD 4.7 billion by 2028, boosting economic sustainability in farming.
- **Tackling Climate Change and Environmental Monitoring:** AI models support flood prediction, air quality tracking, and climate modelling.
    - Platforms like **Google DeepMind's GenCast** enable citizens to contribute localized weather data, improving real-time predictions.
    - **Mission Mausam**, which aims to make India ***"Weather Ready" and "Climate Smart,"*** uses AI and satellite data from the **Indian Meteorological Department** and flood monitoring systems to improve **disaster preparedness and flood forecasting.**
        - The **Mausam App** delivers weather updates and warnings in a user-friendly format.
- **Education and Personalized Learning:** AI-powered EdTech enables adaptive learning based on student needs. AI integration being explored in the government's **Digital Infrastructure for Knowledge Sharing (DIKSHA) platform.**
    - In **Tripura**, IAS officer Chandni Chandran launched an **AI-based initiative** to tackle a 70% school dropout rate. Students' career dreams were turned into AI-generated images and displayed on **"Aspirational Boards"** in classrooms.
        - The move has boosted motivation and emotional engagement, with plans to expand it to more schools.
- **Strengthening Urban Governance and Smart Cities:** AI improves traffic flow, waste management, and public service delivery.Bengaluru's **AI-driven Adaptive Traffic Control System (ATCS)** cuts congestion at junctions.
- **Improving Financial Governance and Taxation:** AI helps detect fraud, prevent subsidy leakages, and automate auditing.
    - ***MuleHunter.ai,*** developed by RBI, detects mule accounts used in financial scams.
- **Better Healthcare**: **Centres of Excellence (CoEs)** in AI for healthcare are developing solutions like disease prediction, which will holistically benefit the health of rural and urban populations across the country.

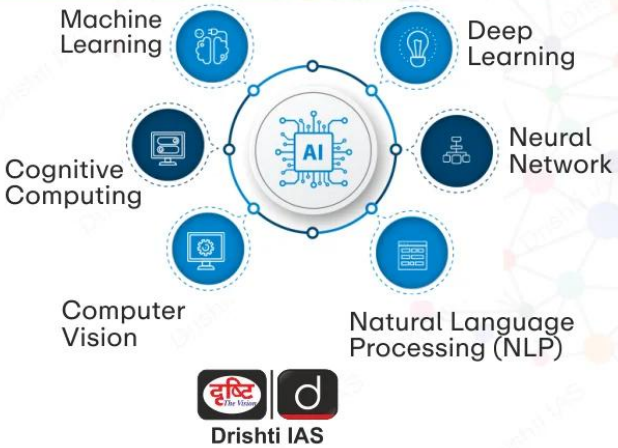
# Artificial Intelligence(AI)

***AI is the simulation of human intelligence in machines programmed to think and learn like humans, capable of problem-solving, reasoning, and adapting to new information.***

## AI Timeline - Major Milestones

- **1950s** – Turing Test Proposed; First AI Programs Developed
- **1956** – Dartmouth Conference Coins "Artificial Intelligence"
- **1960s** – Eliza Chatbot Created; Early Neural Networks Emerge
- **1996** – Deep Blue - a Chess-Playing Program
- **2012** – Deep Learning Breakthrough in Image Recognition
- **2014** – Generative Adversarial Networks (GANs) Introduced
- **2020** – GPT-3 Demonstrates Advanced Language Generation
- **2022** – Chatgpt Launches, Bringing Conversational AI to Masses
- **2023** – Generative AI Boom; Major Tech Companies Release AI Models

## KEY COMPONENTS OF AI




Drishti IAS

## Applications of AI

- **Healthcare:** Personalised medicine
- **Finance:** Algorithmic trading
- **Transportation:** Autonomous vehicles
- **Marketing & Customer Service:** Targeted advertising, chatbots
- **Education:** Adaptive learning systems, personalised tutoring
- **Agriculture:** Crop monitoring
- **Cybersecurity:** Threat detection
- **Energy:** Smart grid management, consumption forecasting

## Concerns

- Deepfakes & misinformation
- Privacy issues
- Algorithmic bias
- Data ownership & liability issue
- Automation & job displacement
- Ethical decision-making complexes

## Regulating AI

- **Global Partnership on AI (GPAI)** launched in 2020
- **Bletchley Declaration (2023):** Enhance Global Collaboration on AI
- **G20 New Delhi Leaders' Declaration (2023):** Harnessing AI responsibly for good and for all
- **Hiroshima AI Process (2023)** by G7

## India and AI

- **National Strategy For AI 2018**
- **AI For All:** Self-learning online program
- **GPAI Summit 2023** hosted by India
- **IndiaAI Mission 2024**
- **US India Artificial Intelligence (USIAI) Initiative:** AI cooperation in critical areas
- **AIRAWAT** (AI Research, Analytics and Knowledge Assimilation Platform): Supercomputer

## Conclusion

AI's integration into India's public service delivery enhances **efficiency, inclusivity, and accessibility, improving governance.** Through initiatives like the **IndiaAI Mission**, India is advancing towards a **more**

**transparent, citizen-centric system**, positioning itself as a global leader in AI-powered governance.

***Drishti Mains Question:***

How is Artificial Intelligence reshaping public service delivery in India? Illustrate with examples.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### *Mains*

**Q.** e-governance, as a critical tool of governance, has ushered in effectiveness, transparency and accountability in governments. What inadequacies hamper the enhancement of these features? **(2023)**

**Q.** E-Governance is not only about utilization of the power of new technology, but also much about critical importance of the 'use value' of information Explain. **(2018)**