

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION No.2382
ANSWERED ON 16/03/2021

ARTIFICIAL INTELLIGENCE RELATING TO GOVERNMENT SERVICES

2382. Shri Manas Ranjan Bhunia:

Will the Minister of Science and Technology be pleased to state:

- (a) whether any research is being done by Government in the field of Artificial Intelligence, especially relating to provision of Government services; and
- (b) if so, the details thereof?

ANSWER

MINISTER OF HEALTH AND FAMILY WELFARE; MINISTER OF SCIENCE AND TECHNOLOGY; AND
MINISTER OF EARTH SCIENCES
(DR. HARSH VARDHAN)

(a) & (b) Yes Sir. Department of Science & Technology (DST) has created a Technology Innovation Hub (TIH) on Artificial Intelligence at Indian Institute of Technology, Kharagpur with a basic objective of carrying out research, translation and technology development especially relating to provision of Government services.

Ministry of Electronics & Information Technology (MeitY) initiated activities including core and applied research in AI related to Government services:

- i. Automated Speech Recognition in English, Hindi, Tamil and Text to Speech Synthesis for conversational speech in India languages
- ii. Indian Language to Indian Language Machine Translation
- iii. Development and deployment of English-Marathi-English Machine Translation System
- iv. Bilingual Optical Character Recognition (OCR)
- v. Sensor based prosthetic hands
- vi. Drone and AI based pesticide and fertilizer spray solution
- vii. AI based recommendation engine in Government e-Marketplace
- viii. Also, under the Visvesvaraya PhD Scheme of Ministry of Electronics & IT, more than 80 research scholars are doing research on AI and related fields.

NITI Aayog has initiated several pilot projects in the sphere of AI especially relating to provision of Government services. Some of these pilot projects are:

- i. Healthcare AI Catalyst Project: NITI Aayog is implementing a Declarative Artificial Intelligence based Clinical Decision Support System Project in the aspirational district of Bahraich with the mandate to enable Artificial Intelligence technologies to test the feasibility of the Clinical Decision Support System in Indian public healthcare settings. It would help in smoothening the issuance of advisories for pregnant mothers and children by digital means by front-line health workers by avoiding the use of physical registries which can be error prone and time consuming, and also empowering the front-line health workers to task-shift from mere agents of implementation into intermediate care-givers via the use of this technology and subsequent learning from it.
- ii. AI-enabled Diabetic Retinopathy Detection using retinal scans: The pilot study is being conducted in the aspirational district of Moga and in Mohali to test the use of Artificial Intelligence Platform for Screening of Diabetic Retinopathy in Public Health Facilities from retinal scans of eyes. This will reduce burden on health systems and ophthalmologists as it can be later used for mass screening in under-served areas.
- iii. AI-enabled Smartphone based Anthropometry to detect low birth weight in babies: The pilot project is being conducted in the aspirational districts of Baran in Rajasthan and Balrampur in Uttar Pradesh. The pilot project involves use of artificial intelligence in developing a smartphone-based anthropometry to identify low-birth-weight babies thereby improving their chance to get access to medical interventions and a consequent healthy life.
