GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 880
TO BE ANSWERED ON: 09.02.2024

PARTNERSHIPS AND INITIATIVES ON ARTIFICIAL INTELLIGENCE

880: SHRI S NIRANJAN REDDY:

Will the Minister of Electronics and Information Technology be pleased to state:

(a) the details of Government's international partnership and collaborations in the field of Artificial Intelligence (AI) for development, deployment and capacity building and cooperation;
(b) the steps taken by Government taken to foster state-level or inter-state collaborations in India for AI technological capacity building and knowledge exchange;
(c) Whether any initiatives have been taken to promote inter-state collaboration in India for enhancing AI applications and successful models in governance; and
(d) if so, details thereof and if not, the reasons thereof?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI RAJEEV CHANDRASEKHAR)

(a): The Government considers Artificial Intelligence is the most significant invention and innovation in our times. Artificial Intelligence has in recent times accelerated its growth and capabilities and we are experiencing an inflection point in the growth of AI. AI represents a kinetic enabler of our digital economy and will further catalyze our digital economy goal.

The Government considers the next decade as 'India Techade', a decade full of technology opportunities for young Indians. The Government recognizes the potential of emerging technologies such as Artificial Intelligence and is actively working with the international players to foster innovation and promote their utilization.

India over the last 9 years has become a pre-eminent nation in developing technologies for the benefit and transforming the lives of its citizens. The Government is committed to ensuring harnessing the power of AI for the good of our people and the rapid proliferation of the use of AI in sectors like healthcare, agriculture, education, Governance, DPI and others.

The Government remains committed to building a vibrant technology ecosystem through strategic international partnerships and collaborations with technology leaders. Some examples of such partnerships and collaborations are given below:

i. **GPAI** -The Global Partnership on Artificial intelligence (GPAI) is an international and multi-stakeholder initiative to guide the responsible development and use of AI, grounded in human rights, inclusion, diversity, innovation, and economic growth. In order to achieve this goal, GPAI aims to bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI- related priorities. India as a founding member and current council chair of the Global Partnership on Artificial Intelligence (GPAI) has recently held GPAI summit in New Delhi with participation of 28 countries. India has taken lead in ensuring that AI is available for all and committed to develop global framework for safety & trust of AI models and applications.

ii. **G-20**- Under the presidency of the Indian Government, the 18thG-20 summit was held in Delhi, where the G20 member nations reaffirmed their commitment to G20 AI Principles (2019) and endeavored to share information on approaches to using AI to support solutions in the digital economy. Further, the member nations agreed to pursue a pro-innovation regulatory/governance approach that maximises the benefits and considers the risks associated with the use of AI. Finally, it was agreed to ensure responsible use of AI that could promote attainment of the Sustainable Development Goals, commonly known as SDGs.

iii. **iCET** - The India- US Initiative on Critical and Emerging Technologies (iCET) was launched on January 31, 2023 to elevate and expand strategic technology partnership and defence industrial cooperation between the governments, businesses, and academic institutions of two countries. The initiative is led by Nationals Security Advisor's (NSA) of both the countries and has six priority sectors – defence, space, quantum, artificial intelligence, semiconductors and telecommunications.

iv. **India–Australia** - India and Australia signed a 'Framework Arrangement on Cyber and Cyber-Enabled Critical Technology Cooperation' in June 2020. Under this Framework Arrangement, both sides have agreed to cooperate on cyber and critical technologies, including Artificial Intelligence (AI).

v. **India-Japan**- India-Japan cooperation in Artificial Intelligence is being advanced through India-Japan Digital Partnership established in 2018, which covers collaboration in the areas of Artificial Intelligence and other emerging technologies.

vi. **India-Germany**- The framework for cooperation in the field of AI was laid out in the Joint Declaration of Intent signed between the Indian Ministry of Electronics and Information Technology and the Federal Ministry of Economics and Technology (now the Federal Ministry of Economic Affairs and Climate Action) on 30 May 2017. Cooperation on AI was anchored in the Work Plan 2022 of the Indo-German Working Group on Quality Infrastructure.

vii. **India-EU** - The India - EU Joint Task Force on Artificial Intelligence was launched in May 2021 to work on issues such as AI-induced risks, quality assessment of AI systems, best practices and common standards. Following the launch of the India – EU Trade and Technology Council (TTC), discussions on AI are held under the TTC mechanism wherein both sides committed to seek cooperation on trustworthy Artificial Intelligence.

viii. **India - UK** - The India- UK Roadmap 2030 was launched in 2021, will strengthen envisages to strengthen the existing India-UK Tech Partnership to tackle global challenges; realising the potential of Artificial Intelligence (AI), and emerging technologies. It also incorporates working together to share knowledge and expertise regarding artificial intelligence.

(b): India over the last 9 years has become a pre-eminent nation in developing technologies for the benefit and transforming the lives of its citizens. The Government is committed to ensuring harnessing the power of AI for the good of our people and the rapid proliferation of the use of AI in sectors like healthcare, agriculture, education, Governance, DPI and others.

The steps taken to foster state-level and inter-state collaborations in India for AI technological capacity building and knowledge exchange include:

- The government has initiated State Capacity Building Workshops being offered by the National e-Governance Division, Ministry of Electronics & Information Technology, under its Capacity Building Scheme. State Capacity Building Workshops have been started from 19.10.2023 in collaboration with knowledge partners to focus on specific problem statements, issues pertaining to certain regions, encourage more participation and so on. These workshops are focused on emerging technologies such as AI in digital

transformation, Blockchain technology, Data driven decision-making for Government, Cloud computing, Generative AI etc. One session of these workshops is dedicated to concept generating, using these technologies to carry out Proof of Concept. About 3 workshops per State are planned in the next 3 years. 5 workshops have been conducted across 3 States (Maharashtra, Kerala, and Haryana) and one is planned for February 2024 in Lakshadweep.

- Future readiness series on Digital-Governance are being conducted in collaboration with Government practitioners and industry partners. These webinars introduce Government leaders, policy practitioners and relevant stakeholders to build digital readiness amongst them for adoption of emerging technologies such as Artificial Intelligence, Cyber Security, IoT etc. in order to catalyze public service delivery more efficiently and effectively. These have attempted to be conducted monthly.
- **YUVAi- Youth for Unnati and Vikas with AI**:National e-Governance Division (NeGD), MeitY in collaboration with its partners, has launched 'YUVAi: Youth for Unnati and Vikas with AI'- A National Programme for School Students with the objective of enabling school students from classes $8^{th}$to $12^{th}$with AI tech and social skills in an inclusive manner. The programme will provide a platform for youth to learn and apply AI skills in 8 thematic areas- Krishi,Aarogya,Shiksha, Paryavaran,Parivahan,Grameen Vikas, Smart Cities and Vidhi aur Nyaay.
- **Future Skills PRIME:**Ministry of Electronics & IT (MeitY) & NASSCOM has jointly initiated a programme titled FutureSkills PRIME, a B2C framework for re-skilling/ up-skilling of IT professionals in 10 Emerging area including Cloud Computing and Artificial Intelligence. Under this programme so far, 16.52 Lakh+ candidates have signed-up on the FutureSkills PRIME Portal, out of which, 2,92,389 candidates have completed their course. In addition, 2,258 Trainers and 10,986 Government Officials have been trained on these technologies by NIELIT/C-DAC Resource Centres, and around 16,29,390 unique learners have collectively earned 91,81,874 'badges' in recognition of having completed bite-sized digital fluency content.
- **INSPIRE:** "Innovation in Science Pursuit for Inspired Research (INSPIRE)" is a flagship scheme of the Department of Science and Technology (DST) which aims to attract meritorious youth to study basic and natural sciences at the college and university level and to pursue research careers in both basic and applied science areas including engineering, medicine, agriculture and veterinary sciences. The ultimate aim is to expand the R&D base of the country.
- **Atal Innovation Mission:** NITI Aayog has initiated an AIM-State partnership for helping in strengthening the existing innovation ecosystem in the states/UTs. AIM is proposing joint efforts with states to create a strategy for infrastructure, processes, human resources, and policies in building a holistic innovation and entrepreneurship ecosystem in the state, and proposes to do so through the transfer of know-how, expertise, mentorship, and interconnections.
- **"Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)"** has been approved to usher in digital literacy in rural India by covering 6 crore rural households (one person per household) by 31.03.2024. To ensure equitable geographical reach, each of the 2,50,000 Gram Panchayats across the country are envisaged to register an average of 200-300 candidates. Digitally literate persons are able to operate computers/digital access devices (like tablets, smart phones, etc.), send and receive emails, browse internet, access Government Services, search for information, undertake cashless transactions, etc. and hence use IT to actively participate in the process of nation building. So far, a total of around 7.35 crore candidates have been enrolled and 6.34 crore have been trained, out of which 4.73 crore candidates have been certified under the PMGDISHA Scheme.

(c) and (d): Digital India has transformed the lives of citizens, expanded the digital economy, becoming a producer of technology from the consumer of technology, and India has emerged as one of the pre-eminent nations of the world using technology to improve the lives of its

citizens. The Government has initiated various measures to enhance the adoption of emerging technologies such as Artificial Intelligence throughout India, such as:

- MeitY has launched the **"National AI Portal"** (https://indiaai.gov.in/) which serves as a comprehensive repository of Artificial Intelligence (AI) initiatives in the country. The portal acts as a single point of reference for individuals, researchers, and industry professionals seeking information about AI initiatives in India, including academic research, startups, policy initiatives, and other related information.
- The Government has established several Centres of Excellence in various emerging technologies including Artificial Intelligence, Blockchain, Internet of Things (IoT), etc., to explore opportunities in these specialized fields. These centres provide start-ups with premium plug-and-play co-working spaces and access to the ecosystem.
- Department of Science & Technology is implementing the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) to promote R&D, Human Resource Development (HRD), Technology Development, Entrepreneurship Development, International Collaboration etc. As part of this Mission 25 Technology Innovation Hubs (TIHs) in advanced technologies have been established in reputed institutes across the country. The TIHs at IIT Kharagpur, IIIT Hyderabad and IIT BHU are working towards Artificial Intelligence and Data Science.
- MeitY has undertaken the implementation of the "National Program on Artificial Intelligence". The objective of the program is to establish a comprehensive program for leveraging transformative technologies to foster inclusion, innovation, and adoption for social impact.
- MeitY along with CDAC has also initiated a Proof-of-Concept (PoC) project on AIRAWAT (AI Research, Analytics and Knowledge Dissemination Platform) for providing a common compute platform for AI research and knowledge assimilation. This AI Computing infrastructure will be used by all Technology innovation hubs, Research Labs, Scientific Communities, Industry, and Start-Ups institutions with National Knowledge Network. The PoC for AIRAWAT is developed with 200 petaflops Mix Precision AI Machine which will be scalable to a peak compute of One AI Exaflop.
- BHASHNI, the National Language Technology Mission(NLTM), an initiative by the Ministry of Electronics and Information Technology was launched in July 2022 to provide language technology solutions as digital public goods with the aim to enhance internet accessibility and digital services in Indian languages, creating a multi stakeholder ecosystem for delivering a scalable solution for digitizing Indian languages. Bhashini provides a unifying architecture, underpinned by principles of open data and open source software, to enable contributions from research initiatives and the digital ecosystem to deliver citizen services by encouraging inclusivity and empowering citizens by transcending language barriers. Under Digital India Bhashini initiative, to provide Artificial Intelligence (AI) driven language technology solutions through Bhashini platform (https://bhashini.gov.in) for all 22 Scheduled Indian Languages including voice-based access, and help the creation of content in Indian languages.
- Unified Mobile Application for New-Age Governance (UMANG) has been developed as a single mobile platform to deliver major Government services ranging from Central to Local Government bodies to citizens. A Conversational AI platform for the delivery of UMANG/Government services has been initiated to provide AI ChatBot and Voice Assistant on UMANG platform. Through the Conversational AI platform, citizens will be able to avail selected UMANG services with an intuitive Voice User Interface. Currently, 35 Services of UMANG platform are integrated with the Conversational AI platform.

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