

## AI Lab, Kol at NIC, WB : Visit to the Department of Women & Child Development and Social Welfare, GoWB on 14.12.2022 to propose and explore possibilities of introduction of Artificial Intelligence / Machine Learning based tools in the domain

A team of NIC WBSC led by Shri Chayan Kanti Dhar, DDG & SIO and Shri Atanu Das, Scientist F & ASIO (SHQ) & Group Head (AI) along with Sri Gautam Sengupta, Sc-'F' and Gr. Head / HoD for WCD&SW, Sri Ashis Mukherjee, Sc.-'F' & Gr. Head & HoD (P&RD), and Dr. Subrata Roy Gupta, Sc.-'E', AI-Lab, Kolkata of NIC WBSC visited the Department of WCD & SW, GoWB on 14.12.2022 to present and discuss the scope and possibility of introducing Artificial Intelligence / Machine Learning (AI/ML) tools in the field of Women & Child Development and Social Welfare. The visit is a part of the series of follow-up actions for the proliferation of Artificial Intelligence (AI) in key sectors like Healthcare, Agriculture, Education, Social Sector etc. through AI Lab, Kolkata. Ms. Sharmistha Dasgupta, DDG & HoG, AIRD, NIC HQs during her visit to Kolkata in November 2021, stressed the maximum use of AI in e-Governance applications so that the boon of AI can be extended for the benefit of society.

The meeting is chaired by Smt. Sanghamitra Ghosh, IAS , Principal Secretary to the GoWB, WCD&SW, and Smt Rachna Bhagat, IAS, Director, ICDS, Shri Debanjan Roy, Joint Secretary, Smt Priyanka Deb, State Project Manager, Kanyashree Prakalpa and other senior officials of the Dept of WCD & SW as well as from 3 associated directorates also participated in the discussion.

DDG & SIO briefed Principal Secretary & other officials about the need for the introduction of AI/ML tools and technologies in e-Governance sectors to ensure more efficient service delivery. He further stressed the need to develop and publish relevant APIs for ensuring a single source of truth in the e-Governance applications and interoperability among different applications. Officials of NIC WBSC have apprised officials of the Dept of WCD & SW about various AI-driven projects as well as Proofs of Concepts already developed by CoE-AI Lab, Kolkata, NIC WBSC. A presentation is made to demonstrate **Face Recognition based Attendance System (FRBAS), AI-enabled Person Counting System** etc which have been developed under the aegis of CoE-AI Lab, Kolkata, NIC WBSC in collaboration with CoE-AI, NIC Hqrs, for applications in Anganwadi services and activities. The possibility of AI/ML techniques applications in the early finding of inclinations and nurturing traits for effective childhood development is also discussed.

Officials of the Dept of WCD & SW participated in the deliberations in a detailed manner. The possibilities of applications of AI/ML tools in different social benefit schemes are also discussed. Issues regarding existing software applications, developed by NIC WB for WCD & SW are also discussed.

Smt Sanghamitra Ghosh, IAS, Principal Secretary appreciated the role of NIC in developing AI techniques and tools and thanked NIC for taking up these initiatives of infusing AI in e-Governance. She has also directed concerned officials to arrange to implement the following AI-powered software at the earliest:

1. De-duplication of beneficiaries using a photograph
2. Beneficiary Count in Anganwadi Centres
3. Attendance of Children of CCI's during lunch and dinner
4. Face Recognition based Attendance System (FRBAS) for Employees, Trainees, and Trainers
5. AI-powered Voice Assistant / Vernacular Chatbots

She assured that the officials of the Dept of WCD & SW shall render all assistance and provide domain expertise to NIC to make these initiatives successful.

Illustrations of a few examples of AI/ML Tools like Face Recognition based Attendance System (FRBAS), AI-enabled Person Count System, and Sign Language to Text Conversion developed by CoE-AI Lab, Kolkata:



FRBAS - Single Attendance Mode



FRBAS - Group Attendance Mode



Total Person Count - 8

AI enabled Person Count System



AI-enabled Sign Language to Text Conversion