Visit of NIC , WBSC Team to Bidhan Chandra Krishi Viswavidyalaya (BCKV), West Bengal to explore possibilities of application of AI/ML tools and techniques in Agriculture for e-Governance

AI Team, NIC WBSC led by Dr. Saibal Sarkar, DDG & SIO visited Bidhan Chandra Krishi Viswavidyalaya (BCKV), West Bengal, an eminent university in the field of agricultural education, research and extension, on 24.11.2022. The visit was part of the series of follow-up actions for the proliferation of Artificial Intelligence (AI) in key sectors like Healthcare, Agriculture, Education, 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 applications so that the boon of AI can be extended for the benefit of society.

The objective of the visit of NIC team was to discuss possibilities of addressing various challenges of Agriculture domain as faced by farmer community through the application of Artificial Intelligence and allied technologies. The delegation met Prof B S Mahapatra, Vice Chancellor and other senior professors and officials and discussed various techniques of AI which may be useful in this field.

The NIC team has discussed various possible application areas of AI in agriculture, like, **Precision Farming with Prediction**, **Soil and Crops Health Monitoring, Forecasting Weather data, AI Agriculture Bots etc.** Officials of NIC WBSC have also appraised the Vice Chancellor and other officials about various AI-driven Proofs of Concepts already developed by CoE-AI Lab, Kolkata, NIC WBSC. The team has also gave presentation as well as demonstrated AI enabled plant disease identification for **Rice, Wheat, Potato, Tomato and Tea** which have been developed under the aegis of CoE-AI Lab, Kolkata, NIC WB.

Illustrations of a few examples of AI enabled Plant Disease Identification System developed by AI Lab, Kolkata

The Vice Chancellor had a detailed discussion with NIC team about different priority areas of Agriculture domain where introduction of AI/ML tools may usher in enhancement in quality and quantity of Agricultural produces. He has also advised NIC to focus a few areas of Agriculture domain where AI and

allied technologies may lead to significant contributions to aid the farmers in detection of various diseases of plants which in turn will boost the production to a great extent.

The Vice Chancellor has appreciated the role of NIC in developing AI techniques and tools and thanked NIC for taking up these initiatives of infusing AI to boost Agricultural production as it is a very timely intervention of NIC in technology front. The Vice Chancellor, BCKV urged the DDG & SIO, NIC WBSC to urgently take up the work regarding development of AI-ML tools in the field of “Plant Disease Identification”, “Soil Health “AI enabled Tea Plant Disease Identification” and assured to provide domain expertise to NIC to make this initiative a successful one. The NIC WBSC team comprises of Dr Saibal Sarkar, DDG & SIO, Shri Atanu Das, Scientist F & ASIO (SHQ) & Group Head (AI), NIC WBSC & Dr Subrata Roy Gupta, Scientist E, NIC WBSC.

Vice Chancellor, BCKV discussing with DDG & SIO, NIC WB along with respective team members

Vice Chancellor, BCKV, DDG & SIO, NIC WB along with respective team members