## GOVERNMENT OF INDIA MINISTRY OF AGRICULTURE AND FARMERS WELFARE DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

# RAJYA SABHA UNSTARRED QUESTION NO-1940

ANSWERED ON- 23/12/2022

### RESEARCH AND DEVELOPMENT IN AGRICULTURAL SECTOR

1940. SHRI SUJEET KUMAR:

Will the MINISTER OF AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) the steps taken by the Ministry to encourage research and development in agriculture sector in order to align with the National Strategy for Artificial Intelligence which is aimed at maximising AI technology's potential for economic and social benefits and which has identified agriculture sector as a priority sector for the implementation of AI driven solution as per NITI Aayog in 2019; and
- (b) the amount of funds sanctioned and spent for undertaking Research and Development in the agriculture sector?

### **ANSWER**

#### THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

### (SHRI NARENDRA SINGH TOMAR)

- (a): (i) A Network Project on Precision Agriculture (NePPA) has been initiated in 2021 in which 16 Indian Council of Agricultural Research (ICAR) Institutes are conducting research in different field of agriculture in which Artificial Intelligence(AI) is used for development of agricultural technologies, products and processes for economic and social benefits. Apart from this, other ICAR institutes have also initiated work on AI in their respective domains of agriculture.
- ii. Department of Agriculture & Farmers' Welfare provides funds under the National e-Governance Plan in Agriculture (NeGPA) program to State Governments for Digital Agriculture projects using emerging technologies like Artificial Intelligence and Machine Learning (AI/ML), Internet of Things (IOT), Block chain etc.
- iii. A progamme called "Innovation and Agri-Entrepreneurship Development" has been in operation under Rashtriya Krishi Vikas Yojana (RKVY) since 2018-19 with the objective to promote innovation and agripreneurship by providing financial support and nurturing the incubation ecosystem. Start-ups under this programme are taking up projects in various fields of agriculture and allied sectors including Artificial Intelligence (AI), Internet of Things (IoT), Information & Communication Technology (ICT), Block Chain Technology (BCT), Precision Farming and Digital Agriculture etc.
- iv. Mahalanobis National Crop Forecast Centre (MNCFC) has conducted few pilot studies under Pradhan Mantri Fasal Bima Yojana using innovative technologies for crop yield estimation through various Government and Private Agencies using various technologies viz., Satellite, Unmanned Aerial Vehicles (UAVs), Simulation models, IoT devices and AI/ML techniques to derive the yield estimates at Gram Panchayat level.
- **(b):** The budget allocation of Indian Council of Agricultural Research (ICAR) for 2022-23 and expenditure up to 30.11.2022 is as given below:

Allocation: Rs. 7872.89 Crore Expenditure: Rs. 5314.91 Crore