

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

RAJYA SABHA
UNSTARRED QUESTION NO. 1960
TO BE ANSWERED ON THE 17/03/2023

DIGITAL AGRICULTURE

1960. SMT. KANTA KARDAM

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

the State-wise details of the schemes launched by Government to promote digital agriculture in the country, including the State of Uttar Pradesh?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

Digital technologies are finding increasing use in the agricultural value system, and farmers are increasingly becoming more informed, as various measures are taken to provide them ready access to technology and information, which are given below:

- i. Under plan scheme viz. National e-Governance Plan in Agriculture (NeGP-A) wherein, funds are released to the State(s)/UT(s) for project involving use of modern technologies viz. Artificial Intelligence (AI), Machine Learning (ML), Robotics, Drones, Data Analytics, Block Chain etc. Details of the project sanctioned in last 03 Years including Uttar Pradesh is given at Annexure.
- ii. Government has proposed to build Digital Public Infrastructure (DPI) for agriculture as an open source, open standard and inter-operable public good to enable inclusive farmer centric solutions and support for growth of agri-tech industry and start-ups. In this regard, following initiatives have been proposed:
 - a. Development of Central Core of the DPI
 - Registries (Farmers, Crop Sown registry and Geo Referencing of Village Maps and Crop Sown Registry)
 - Unified Farmers Service Interface
 - Agri Data Exchange
 - Consent Manager
 - b. Development of Krishi Decision Support System (KDSS)

- iii. Sub Mission on Agricultural Mechanization (SMAM) is being implemented w.e.f April,2014.The scheme aims at 'reaching the unreached' by bringing to the small and marginal farmers in the core and giving the benefits of farm mechanization, by Promoting 'Custom Hiring Centers' , creating hubs for hi-tech & high value farm equipments, distribution of various agricultural equipments, creating awareness among stakeholders through demonstration and capacity building activities, and ensuring performance- testing and certification at designated testing centers located all over the country.
- iv. National Agriculture Market (e-NAM) is a pan-India electronic trading portal which networks the existing Agricultural Produce Market Committee (APMC) mandis to create a unified national market for agricultural commodities. Digital services are provided to traders, farmers, Farmers Producer Organizations (FPO), Mandis through various modules of e-NAM platform such as FPO trading module, warehouse based trading module.
- v. Under PM KISAN Scheme, fund is directly transferred into the bank accounts of the eligible farmers under Direct Benefit Transfer mode. Farmers can do their self-registration through the Farmers Corner in the portal. PM-KISAN Mobile App was launched to broaden the reach of the scheme where farmers can view the status of their application, update or carry out corrections of name based on their Aadhaar card and also check history of credits to their bank accounts.
- vi. Integrated Scheme for Agricultural Marketing schemes (AGMARKNET) to promote creation of agricultural marketing infrastructure by providing backend subsidy support to State, cooperative and private sector investments Services are provided through (AGMARKNET) portal which is a G2C e-governance portal that caters to the needs of various stakeholders such as farmers, industry, policy makers and academic institutions by providing agricultural marketing related information from a single window. It facilitates web- based information flow, of the daily arrivals and prices of commodities in the agricultural produce markets spread across the country.
- vii. Agriculture Infrastructure Fund (AIF): To mobilize a medium - long term debt finances facility for investment in viable projects for post-harvest management Infrastructure and community farming assets through incentives and financial support in order to improve agriculture infrastructure in the country. Financial assistance is provided digitally in the form of Interest Subvention and Credit Guarantee for setting up post- harvest management Infrastructure to beneficiaries such as Farmers, Primary Agricultural Credit Societies (PACS), Farmer Producers Organisations (FPOs), Self Help Groups (SHG), State Agencies/APMCs.
- viii. National Mission on Horticulture: It Promotes holistic development of Horticulture sector (including bamboo & coconut) HORTNET project is a web enabled work flow-

based system for providing financial assistance under MIDH. It is a unique intervention to accomplish e-Governance in NHM where-in total transparency has been envisaged in all the processes of workflow i.e., online application filing, authentication, processing and online payment to the beneficiary's bank account through DBT.

- ix. National Project on Soil Health and Fertility: To issue soil health cards to farmers of the country, so as to provide a basis to address nutrient deficiencies in fertilization practices. Soil Health Card Portal is available where farmers can track soil samples.
- x. Development of Kisan Suvidha mobile application to facilitate dissemination of information to farmers on the critical parameters viz., Weather; Market Prices; Plant Protection; input Dealers (Seed, Pesticide, Fertilizer) Farm Machinery; Soil Health Card; Cold Storages & Godowns, Veterinary Centres and Diagnostic Labs. With market information, farmers are better informed about markets to sell produce, prevailing market prices and quantity demanded in the market. Thus, they can make informed decisions to sell produce at the right price and right time.
- xi. The Indian Council of Agriculture Research (ICAR) has also compiled more than 100 mobile apps developed by ICAR, State Agricultural Universities and Krishi Vigyan Kendras and uploaded on its website. These mobile apps developed in the areas of crops, horticulture, veterinary, dairy, poultry, fisheries, natural resources management and integrated subjects, offer valuable information to the farmers, including package of practices, market prices of various commodities, weather related information, advisory services, etc.

Projects approved to the States/UTs during 2020-21 under National e-Governance Plan in Agriculture (NeGPA)

S.No.	Name of State/UT	Technology
1.	Arunachal Pradesh	Resilient Supply Chain for identified Agricultural Crops Leveraging Digitization
2.	Bihar	Digital Package of Practices for Major Crops and Automation Technique in Irrigation in State Seed Multiplication Farms
3.	Meghalaya	Development of web and mobile based "Crop Pest Surveillance and Advisory Project (CROPSAP)
4.	Uttar Pradesh	(i)Unmanned Aerial Vehicle for Agriculture Applications, (ii) Hand Held Tool based Soil Health Monitoring Integrated system and (iii) Automated Fire Alert System for Crop Residue Burning in U.P.
5.	Telangana	(i)Crop Monitoring(ii)Automated irrigation Systems(iii) Fertilizer Calculation (iv)Automated Farm Operation (v)Traceability from seeds to produce and (vi) Produce Grading and Quality Assaying
6.	Odisha	Creation of Farmer Database
7.	Punjab	(i)Development of Crop and Soil Digital Algorithms for Crop Growth Monitoring, Crop Yield and Soil Quality at Farm Level using Remote Sensing, GIS and Machine Learning Technique sand(ii)Precision irrigation in major cropping systems of Punjab using artificial intelligence and sub-surface drip system
8.	Assam	e-project on ML based Crop Health Checkup for paddy crops.
9.	Andhra Pradesh	Gap Analysis & proposed solution to overcome the gaps in existing system in terms of integration digital transformation & seamless process flow
10.	Madhya Pradesh	(i)Precision Farming and(ii)Ground water Availability

Projects approved to the States/UTs during 2021-22 under National e-Governance Plan in Agriculture(NeGPA)

Sr. No.	Name of State/UT	Name of Project
1.	Sikkim	Sikkim Agriculture Resource and Management System (ARMS)
2.	Utrakhand	1.computerize reporting of Agricultural Statistics Land Use Statistics and Area under different crops right from village level to State level 2. A for designing, development, installation and commissioning of the smart agriculture platform using GIS, Remote Sensing, AI and IoT
3.	Nagaland	Soil & Water Resource Management, Meteorological Analysis & Forecasting System using Remote Sensing, GIS mapping, Drone and Emerging Technologies under NeGPA.
4	Meghalaya	Regarding farmer's database
5.	Tamil Nadu	creation of Unified Farmers Database and building layers or solutions over the Farmers Database
6.	Arunachal Pradesh	1.Developing a resilient Agriculture /Farm Produce Supply Chain System Leveraging Digitalization in Arunachal Pradesh 2. Development of Smart Pest Surveillance System cum Geo Spatial Aided Agricultural Information System
7.	Mizoram	Geospatial Analytics & Decision Support for agriculture Development in Mizoram
8.	Haryana	Implementation of Emerging Technologies in Agriculture Sector in Haryana
9.	Andhra Pradesh	Implementation of Phase-II "UDP app to operate RBKs"
10.	Punjab	Estimation of Groundwater Unit Draft and Water Budgeting in Different Agro-climatic Regions of Puniab Using Internet of Things and Satellite Remote Sensing
11.	Odisha	Phase II of Krushak database (Odisha's farmer's database)

Projects approved to the States/UTs during 2022-23 Under National e-Governance Plan in Agriculture (NeGPA)

Sr. No.	Name of State/UT	Name of Project
1.	Himachal Pradesh	Project proposal for setup of ICT Infrastructure Requirements in the Department of Agriculture
2.	Puducherry	Project proposal for setup of Intelligent Agriculture Advisory System(i-AAS), Robotic Control Tissue culture(RCTC) and real time irrigation management system(RIMS)
3.	Tripura	Centralized farmer database, Direct benefit transfer, Precision farming, Integrated Information Ecosystem, Use of AI/ ML and Blockchain technologies, Capacity Building of Employees, Digital Soil Health Card App, SSO Integrated Platform, Farmer Producer Organization (FPO) Portal etc.
