



कृषि एवं किसान कल्याण विभाग

DEPARTMENT OF

**AGRICULTURE & FARMERS WELFARE**

# Emerging Hi-Tech & Digital Agriculture Ecosystem

# Budget Highlights

कृषि एवं किसान कल्याण विभाग  
DEPARTMENT OF  
**AGRICULTURE & FARMERS WELFARE**



## **Delivery of Digital and Hi-Tech services to farmers**

A scheme in *PPP mode* will be launched with the involvement of public sector research & extension institutions, private agri-tech players and stakeholders of agri-value chain,



## **Use of Kisan Drones**

Use of 'Kisan Drones' will be promoted for crop assessment, digitization of land records, spraying of insecticides, and nutrients.

# Suggestions & Feedback

## Implementation

- **Nodal officers** at the central and state ministries to coordinate with all stakeholders in implementation of scheme and create an enabling environment.
- Transparent IT Portal & Monitoring of schemes
- Continuous review of policy to make them business/user friendly
- Investment required in indigenous equipment and miniaturizing system for small holder farmers

## Guidelines & Regulations

- Fast tracking approvals of chemicals for spraying purpose
- Revision in GST rates (5% GST on sale of drones and 0% GST on services using agri drones).
- Rationalization of MIDH cost norms according to current price norms

## PPP Model

- **Integration:** Industry and Government to define the nuances of the PPP model to implement digital agriculture initiatives.
- **Enabling Predictability:** PPP Model desired in seed traceability, climate adoption agriculture, traceability, tracking major commodity price volatility and integrated pest management

# Suggestions & Feedback

## Involving Stakeholders

- **Collaborative efforts** ; In order to provide Drone Pilot training along with agriculture best practices knowledge to Farmers, industry has requested GOI to associate industry with ICAR/SAUs/KVKs/FPOs
- Industry has also requested support of NABARD, NAFED, FIFA in connecting with FPOs to provide capacity building and increase service uptake.
- Strengthening of KVKs/ICAR/SAUs for skill development of farmers and demonstration of Hi-Tech technology including rural youth

## Access to Data

- Sharing of digitised knowledge and records of government institutions (can be monetized)
- Government digitised data to be augmented with data of private players for better implementation of extension activities to the farmers
- Provide access to Agri stack, geo tagged cadastral maps with farmland ownership
- Data sharing mechanism between MPEDA, CAA & Dept of Fisheries to enable effective lending mechanisms to aqua formers
- Pre recorded extension videos in SD cards to be distributed to rural farmers

## Land Digitization

- Creation of Drone Digital land bank and sharing of API's with industry to enable accurate digital services.

## Infrastructure

- IoT based control, monitoring and data analytic system for cold chain.

# Suggestions & Feedback

## Credit & Lending

- Need to accelerate rural lending for farmers to have dispensable cash to avail smart agricultural services.
- Use of digitised land records by banking and financial institution for better decision making in lending capital
- Cold Storage should be included in priority sector lending by banking institutions
- Use of AI and ML in credit scoring, gauging risk etc. This will help lending institutions in designing financial instruments specifically for agriculture sector