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

### RAJYA SABHA STARRED QUESTION NO. 302 TO BE ANSWERED ON THE 28/03/2025

# ACCURACY AND SECURITY OF DATA COLLECTED UNDER THE DIGITAL CROP SURVEY

\*302. SHRI TEJVEER SINGH:

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

- (a) the mechanisms that are in place to verify the accuracy of data collected under the Digital Crop Survey to prevent duplication or errors;
- (b) the special security measures that are being implemented to protect farmers' personal data; and
- (c) the manner in which Government would ensure that women farmers have equal access to Digital Farmer ID?

#### **ANSWER**

THE MINISTER OF AGRICULTURE AND FARMERS' WELFARE (SHRI SHIVRAJ SINGH CHOUHAN)

(a) to (c): A statement is laid on the Table of the House.

# STATEMENT IN RESPECT OF PARTS (a) TO (c) OF THE RAJYA SABHA STARRED QUESTION NO. 302 FOR 28.03.2025 REGARDING "ACCURACY AND SECURITY OF DATA COLLECTED UNDER THE DIGITAL CROP SURVEY"

(a) The Government has approved the Digital Agriculture Mission in September 2024 with a total outlay of Rs. 2817 Crores. The Mission envisages the creation of a Digital Public Infrastructure (DPI) for Agriculture such as AgriStack, Krishi Decision Support System, and a comprehensive Soil Fertility & Profile Map to enable a robust digital agriculture ecosystem in the country. This, in turn, would drive innovative farmer-centric digital solutions and make reliable crop-related information available to all the farmers on time.

The AgriStack DPI consists of three foundational registries or databases associated with the agriculture sector, i.e., Geo-Referenced Village Maps, Crop Sown Registry and the Farmers Registry - all created and maintained by the State Governments/ Union Territories. The Geo-Referenced Village Maps are location-based digital maps created by using Satellite and GIS technology. The Crop Sown Registry has been created through the Digital Crop Survey (DCS). Under DCS, details of crop sown in a plot of land, viz. the type of Crop, Area of the plot covered by the crop, Irrigation particulars, if any, among others are also captured. The database, thus, created provides an accurate, real-time crop-area information for every plot of land. The Farmers Registry has been envisaged as a dynamic, accurate, verified and approved database of farmers created and managed by the States/ Union Territories. It provides for comprehensive and useful data on farmers comprising of authenticated demographic details, land holdings, family details, crops sown, soil health, livestock owned, fishery assets owned and other vocations. It enables the farmers to digitally identify and authenticate themselves for accessing various benefits and services associated with the agriculture and allied activities viz. credit, insurance, procurement, marketing facilities etc.

Digital Crop Survey (DCS) is conducted to collect crop-sown details via a mobile application interface, ensuring that data is captured directly from the field. As all the plots in a Gram Panchayat (GP) are geo-referenced, it ensures accurate, real-time crop-area information for every agricultural plot and is obtained to arrive at an accurate estimation of the production figures. Elaborate administrative and technical mechanisms have been adopted to ensure the quality and accuracy of data in the Digital Crop Survey. The survey has to be done at the field level in which it is mandated to capture the field photograph closer to the crop sown at the plot location. Thereafter, the survey information captured by the field staff requires the approval of the Supervisors. Further, the States are to ensure the authenticity of this data by conducting a minimum of 2 percent sample check through the State Agricultural Statistics Authority (SASA) and/ or National Sample Survey Office

- (NSSO). This also ensures the qualitative check on the quality of data being captured at the plot-level.
- (b): The State Farmer Registry has been built in a federated architecture, which means the onus of ownership of the data is vested with the respective States/Union Territories. The Ministry of Agriculture and Farmers Welfare has developed the AgriStack complying with the various provisions of the Information Technology Act, 2000 and the Digital Personal Data Protection Act, 2023. This would not only ensure the complete privacy of farmers' data by ensuring that farmers' data is collected only with their consent but also the farmers have full control over their data for sharing only with the authorized entities for specific intent and purpose. The Government of India also ensures robust data security in the AgriStack, which is fully compliant with the Information Technology Act, 2000 and the various cyber security guidelines of the Ministry of Electronics and Information Technology (MeitY), Unique Identification Authority of India, the Computer Emergency Response Team of India (CERT-In) amongst others. AgriStack maintains the farmers' information in an encrypted manner so that only the designated systems can read it. Secure APIs and token-based authentication govern all data exchanges, ensuring controlled access to data. In addition, the government conducts regular security audits of all these IT systems to protect the data stored in the IT systems. Since, these are all governed by the relevant provisions of various Information Technology Act, 2000 and the Digital Personal Data Protection Act, 2023 amongst others, the penal provisions in the instances of data-breach and negligent handling of such sensitive data would invoke the relevant penal provisions as mandated in exercise of these Acts.
- (c): The State Farmer Registry presently covers all the land-holding farmers, including the women farmers, providing them with a Digital Identity, which, if required, can be verifiable digitally. Any of the farmer's can use the existing support structures like Farmer Producer Organizations (FPOs), Krishi Sakhis, and Common Service Centres (CSCs) to get them registered in the Farmers Registry in addition to the self-enrolment mechanisms in place. Further, the States/ Union Territories have been encouraged to organize camps so that no farmer is left behind from availing of the benefits of AgriStack. The Government is providing administrative and technical support to all the States/ Union Territories for implementation of AgriStack.

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