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

## Lok SABHA UNSTARRED QUESTION NO. 2649 TO BE ANSWERED ON THE 14<sup>TH</sup> DECEMBER. 2021

## **TESTING OF SOIL QUALITY**

2649. SHRI PARVESH SAHIB SINGH VERMA: SHRI T.R.V.S. RAMESH:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) the details of the current method of testing soil quality as employed by the Government:
- (b) whether the Government has considered the adoption of various sensor technologies such as temperature, pH, soil moisture and humidity in collaboration with the Internet of Things (IoT) to give remote access to the farmers so they could monitor, control and manage the quality of the soil themselves and if so, the details thereof; and
- (c) if not, the alternative measures which the Government is considering for the empowerment of farmers in testing soil quality?

## **ANSWER**

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री ( SHRI NARENDRA SINGH TOMAR )

(a) to (c): The Indian Council of Agricultural Research (ICAR) has suggested 12 parameters as essential for soil health management in India, they are pH, electrical conductivity (EC), Organic Carbon, available N, P, K, S and micronutrients (Zn, Cu, Fe, Mn & B). These parameters are included in soil health card and soil samples are processed following standard procedures and analyzed in static and mobile soil testing labs.

The Indian Council of Agricultural Research (ICAR) has developed two digital soil test kits for rapid estimation of all the 12 parameters enlisted in soil health card. The kits facilitate soil testing service at farmers' doorstep.

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