

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

RAJYA SABHA
UNSTARRED QUESTION NO. 2411
TO BE ANSWERED ON 21/03/2025

**IMPACT OF SHC SCHEME ON SOIL FERTILITY AND AGRICULTURAL
PRODUCTIVITY**

2411. SHRI MAHARAJA SANAJAOBA LEISHEMBA:
SHRI MITHLESH KUMAR:

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

- (a) the manner in which the Soil Health Card (SHC) Scheme has improved soil fertility and agricultural productivity over the last decade;
- (b) the manner in which the above programme affected the fertilizer use pattern of farmers and reduced dependence on chemical fertilizers;
- (c) the details of new measures or improvements being incorporated in the plan for the next phase of the Scheme; and
- (d) the steps taken by the Ministry to ensure that farmers understand the recommendations given in the Scheme and use them effectively?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
(SHRI RAMNATH THAKUR)

(a) & (b): Soil Health & Fertility Scheme assists states in promoting Integrated Nutrient Management (INM) through judicious use of chemical fertilizers including secondary and micro nutrients, in conjunction with organic manures & bio-fertilizers for improving soil health and its productivity. Soil samples are processed following standard procedures and analyzed for various parameters viz, pH, electrical conductivity (EC), Organic Carbon, available Nitrogen, Phosphorus, Potassium, Sulphur and micronutrients (Zinc, Copper, Iron, Manganese & Boron). Soil Health Card (SHC) provides information to farmers on soil nutrient status (low, medium & high) and recommendation on appropriate dosage of nutrients to be applied for improving soil health to increase agricultural production.

An impact study of Soil Health & Fertility scheme (November 2017) was conducted by National Institute of Agricultural Extension Management (MANAGE), Hyderabad. The major findings indicate that there is reduction in fertilizer use, especially Nitrogen and increase in bio-fertilizers and other micro-nutrients use. Overall, paddy farmers reduced use of urea by 9%,

Di Ammonium Phosphate / Single Super Phosphate by 7% but increased use of Potassium by 20%. Balanced use of fertilizers is gaining ground as per the findings.

National Productivity Council carried out a study on 'Soil Testing Infrastructure for Faster Delivery of Soil Health Card in India' in 2017. The study found that application of fertilizer and micronutrients based on SHC recommendations resulted in 8-10% of savings and overall increase in the yield of crops to the tune of 5-6%.

(c): The various measures incorporated in Soil Health & Fertility Scheme are as follows: -

i. In order to make the scheme farmer-friendly, the Soil Health Card portal has been revamped with the following features:

- Introduction of a mobile application for soil sample collection capturing geo coordinates of farmers field.
- Real time information on soil sample collection, testing and generation of SHC.
- Farmers can download SHCs from the portal by entering registered mobile number.
- Introduction of fertilizer management, nutrient dashboard, heat maps of nutrients on the portal to guide the policymakers
- Introduction of QR code enabled sample collection
- Onboarding of all Soil Testing Labs on the SHC Portal.

ii. Citizen Charter has been introduced to deliver SHC.

iii. The School Soil Health Program has been rolled out to involve school students.

iv. Soil testing and advisory is compulsorily included in the field internship of Undergraduate, Post-graduate and Diploma students of Agricultural University and Rural Agricultural Work Experience programme (RAWE) Internship.

(d): Under Soil Health & Fertility Scheme, around 7 Lakh demonstrations, 93,781 farmer's training programmes and 7,425 farmer's mela have been organized on the balanced use of fertilizers to improve soil quality. Advisories are issued to farmers through Agricultural Technology Management Agency (ATMA) and Krishi Vigyan Kendras (KVKs). In addition, 70,002 Krishi Sakhis are trained to support farmers in understanding SHCs among other issues.
