

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

RAJYA SABHA
UNSTARRED QUESTION NO. 2258
TO BE ANSWERED ON 08/08/2025

DEFICIENCY OF ESSENTIAL MINERAL SALTS IN SOIL

2258. Dr. RADHA MOHAN DAS AGRAWAL:

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

- (a) the quantum of Nitrogen, Phosphorus, Zinc, Potassium, Organic Carbon, Sulphur, Iron, Copper and Manganese found in the country-wide Soil Health Card (SHC) test in the year 2024 and the amount by which it is less than the required minimum amount and whether it is affecting the citizens health; and
- (b) the effective steps Government is considering to address this shortfall of essential mineral in the soil?

ANSWER

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

(a) & (b): The status of nutrients i.e. Nitrogen, Phosphorus, Zinc, Potassium, Organic Carbon, Sulphur, Iron, Copper and Manganese based on Soil Health Card (SHC) generated during 2024-25 along with range for low/medium/high and sufficient/deficient is at Annexure-I.

Government is implementing Soil Health & Fertility Scheme since 2015 to assist 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). 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. As on 30.06.2025, 25.13 Crore SHCs have been generated in the country and 6.8 lakh demonstrations, 93,781 farmer's training programmes and 7,425 farmer's mela have been organized to educate farmers regarding proper use of fertilizers as per recommendation of Soil Health Card to improve soil quality.

Status of Nutrient based on SHC generated during year 2024-25

1.Nitrogen

	Range (kg/ha)	No. of Samples
High	>280	545426
Medium	280-560	2399555
Low	<280	5014968

2.Phosphorous

	Range (kg/ha)	No. of Samples
High	>25	4053032
Medium	10-25	3748865
Low	<10	1254247

3.Potassium

	Range (kg/ha)	No. of Samples
High	>280	2983519
Medium	120-280	4759233
Low	<120	1319270

4.Organic Carbon

	Range (%)	No. of Samples
High	>0.75	2179166
Medium	0.50-0.75	2568744
Low	<0.50	4328875

5.Zinc

	Range (ppm)	No. of Samples
Sufficient	>0.6	5794156
Deficient	<0.6	3160522

6.Sulphur

	Range (ppm)	No. of Samples
Sufficient	>10.0	6665586
Deficient	<10.0	2161209

7.Iron

	Range (ppm)	No. of Samples
Sufficient	>4.5	6861048
Deficient	<4.5	2106073

8.Copper

	Range (ppm)	No. of Samples
Sufficient	>0.2	8461928
Deficient	<0.2	491353

9.Manganese

	Range (ppm)	No. of Samples
Sufficient	>2.0	7881184
Deficient	<2.0	1087743
