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

LOK SABHA UNSTARRED QUESTION NO.2216 TO BE ANSWERED ON THE 31ST JULY, 2018

FERTILITY OF SOIL

2216. SHRI RAJU SHETTY: SHRI LAKHAN LAL SAHU:

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

- (a) whether the Government has evaluated the fertility of soil across the country and provided soil health card to all the farmers;
- (b) if so, the norms adopted for the purpose and the extent of soil nutrients and micro, nutrients deficiency noticed in the soil, State/UT-wise;
- (c) the details of the schemes and projects under implementation to check the declining fertility of agricultural land and improve the fertility of soil for increasing agricultural production in the country including Maharashtra and the success achieved thereunder during the current year;
- (d) the details of the financial assistance provided to farmers under the National Project on Management of Soil Health and Fertility (NPMSH&F) to improve the soil health and fertility during each of the last three years and the current year, State-wise; and
- (e) the details of the soil-testing centres set-up across the country so far, State-wise?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री (SHRI GAJENDRA SINGH SEKHAWAT)

(a): Yes, a dedicated scheme on "Soil Health Card" has been launched to take care of Soil Health for the first time in a uniform manner to evaluate the soil fertility across the country by the GOI in cooperation with state governments Soil Health Card contains the status of soils with respect to 12 parameters, namely – N, P, K (Macro-nutrients), S (Secondary-nutrients), Zn, Fe, Cu, Mn, B (Micro-nutrients) and pH, EC, OC (Physical Parameters). It also provides crop wise fertiliser recommendations. Soil Health Card helps farmers to improve productivity by maintaining soil health. SHC also promotes the judicious use of the fertilisers thus reducing the cost of cultivation.

In all, 10.73 crore Soil Health Cards have been distributed during Cycle-I (2015-17) whereas 4.71 crore Soil Health Cards have been distributed to the farmers across the country during Cycle-II (2017-19).

- (b): A GPS based unified criteria for Collection of Soil Samples at a grid of 2.5 ha in irrigated and 10 ha in rainfed areas are being adopted throughout the country as per suggestion of ICAR. To evaluate the extent of nutrient deficiencies in the soils, Soil Fertility Assessment and Nutrient Mapping is being done by the NRSC, Hyderabad, using soil health card data. Besides, based on soil test results available, nutrient maps are also being generated by the NIC which can be drilled down to the block / village and farmer level. Moreover, the ICAR through Indian Institute of Soil Science and All India Coordinated Research Projects (AICRPs) on Soil Test Crop Response (STCR), Micro- and Secondary Nutrients and Pollutant Elements (MSNP) in soils and Plants, Long Term Fertilizer Experiments (LTFE) and Network Project on Soil Biodiversity-Biofertilizers are providing technological backstopping to various schemes related to soil fertility and fertilizer use in the country including Maharashtra. The ICAR imparts training, organises Front Line Demonstrations (FLDs) to educate farmers on soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (FYM, compost, biofertilizers etc.) of plant nutrients to improve soil fertility.
- (c): A new scheme, "Soil Health Card" for every farmer at an interval of 2 years has been launched by Hon'ble Prime Minister on 19th February, 2015 with an aim to assist state government and union territory to provide Soil Health Cards for all farm holdings across the country.

Soil health card provides information to the farmers on fertility status of their soils to enables them to apply soil health card based recommended dosages of fertilizers including micro-nutrients, bio-fertilizers, manures as well as soil ameliorants so as to check the declining fertility of agriculture land and improve the fertility of soils to increase productivity across the country including Maharashtra besides enhancing farmers income.

- (d): Government is implementing Soil Health Management and Soil Health Card Scheme to improve soil health and fertility. Under these schemes financial assistance are provided to State Governments and not farmers directly. State-wise fund released for the last three years and current financial year is given at **Annexure-I & II** respectively.
- (e): A statement showing state-wise number of soil testing Centres are given at Annexure-III.

Annexure-I State-wise Fund Released under Soil Health Management

(Rs. In lakh)

SI.	State	2015-16	2016-17	2017-18	2018-19	Total
No		Released	Released	Released	Released	Released
1	Andhra Pr.	289.05	652.21	1221.80	1393.06	3556.12
2	Arunachal Pr.	0.00	51.14	17.05	0.00	68.19
3	Assam	102.33	0.00	138.38	0.00	240.71
4	Bihar	151.88	0.00	0.00	0.00	151.88
5	Chhattisgarh	225.00	619.95	124.25	0.00	969.20
6	Goa	0.00	0.00	0.00	0.00	0.00
7	Gujarat	0.00	0.00	338.76	0.00	338.76
8	Haryana	0.00	258.07	450.00	0.00	708.07
9	Himachal Pr.	90.60	180.71	56.30	0.00	327.61
10	J&K	25.31	0.00	0.00	0.00	25.31
11	Jharkhand	16.88	337.13	0.00	0.00	354.00
12	Karnataka	292.50	927.16	432.36	711.89	2363.90
13	Kerala	40.48	0.00	0.00	0.00	40.48
14	Madhya Pr.	0.00	3877.14	0.00	0.00	3877.14
15	Maharashtra	319.50	1721.07	0.00	0.00	2040.57
16	Manipur	0.00	0.00	67.50	0.00	67.50
17	Meghalaya	0.00	41.57	0.00	0.00	41.57
18	Mizoram	0.00	44.35	0.00	0.00	44.35
19	Nagaland	40.50	0.00	0.00	0.00	40.50
20	Odisha	196.88	0.00	298.12	114.75	609.75
21	Punjab	0.00	0.00	246.76	11.25	258.01
22	Rajasthan	771.30	0.00	0.00	0.00	771.30
23	Sikkim	15.00	0.00	0.00	0.00	15.00
24	Tamil Nadu	305.76	60.00	0.00	250.13	615.89
25	Telengana	167.50	441.00	802.05	0.00	1410.55
26	Tripura	28.40	288.74	0.00	0.00	317.14
27	Uttar Pr.	838.13	0.00	0.00	0.00	838.13
28	Uttarakhand	19.75	0.00	24.75	48.46	92.96
29	West Bengal	478.13	0.00	0.00	0.00	478.13
30	Puducherry	0.00	50.00	0.00	0.00	50.00
31	FACT Kochi	24.02	0.00	0.00	0.00	24.02
	Total	4438.89	9550.22	4218.07	2529.54	20736.72

Annexure-II State-wise fund released under Soil Health Card Scheme

(Rs. In lakh)

No Released Released Released Released 1 Andhra Pra. 457.75 1394.47 1225.67 672.98 3 2 Arunachal Pr. 17.18 37.37 20.79 49.40 3 Assam 142.07 365.03 0.00 0.00 4 Bihar 488.17 0.00 0.00 0.00 5 Chhattisgarh 281.03 342.72 888.12 350.05 1 6 Goa 12.42 0.00 0.00 0.00 0.00 7 Gujarat 603.46 528.69 1990.36 0.00 3 8 Haryana 288.22 0.00 1065.05 800.23 2 9 Himachal Pr. 47.34 29.42 136.34 113.09 10 J & K 77.16 0.00 0.00 246.54 11 Jharkhand 53.97 64.18 0.00 0.00 12 Karnataka 650.25	eased 3750.87 124.74 507.10 488.17 861.91 12.42 3122.51 2153.50 326.19 323.70 118.15 3651.01
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18 Mizoram 13.79 6.15 12.25 17.48 19 Nagaland 22.46 17.55 0.00 40.03	91.34
	49.67
20 Odisha 269.89 304.48 451.33 341.96 1	80.04
	367.66
21 Punjab 304.98 0.00 0.00 0.00	304.98
22 Rajasthan 875.79 1108.29 0.00 2109.67 4	093.75
23 Sikkim 11.81 0.00 13.51 66.35	91.67
24 Tamil Nadu 469.51 644.92 868.91 964.64 2	947.98
	526.56
26 Tripura 22.71 59.21 33.48 26.42	141.82
	734.13
28 Uttarakhand 65.19 144.70 92.54 163.85	466.27
	2803.27
30 Puducherry 0.00 0.00 13.64 0.00	13.64
31 A&N Island 0.00 0.00 5.78	5.78
32 D&N Haveli 0.00 0.00 0.00 6.26	6.26
	742.20

Annexure-III

Statement of State-wise number of Soil Testing Labs

SI. No	State	Number of STLs
1	Andhra Pradesh	97
2	Karnataka	71
3	Kerala	28
4	Tamil Nadu	50
5	Puducherry	2
6.	A & N Islands	1
7.	Telangana	3
8	Gujarat	141
9.	Madhya Pradesh	338
10	Maharashtra	206
11	Rajasthan	114
12.	Chhattisgarh	33
13	Goa	4
14	Haryana	41
15	Punjab	71
16	Uttarakhand	16
17	Uttar Pradesh	291
18	Himachal Pradesh	21
19	Jammu & Kashmir	24
20.	Delhi	1
21.	Bihar	45
22.	Jharkhand	8
23	Orissa	33
24.	West Bengal	36
25.	Assam	15
26.	Tripura	10
27.	Manipur	8
28.	Meghalaya	6
29.	Nagaland	4
30.	Arunachal Pradesh	8
31.	Sikkim	6
32.	Mizoram	6
	Total	1738
