

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

RAJYA SABHA

UNSTARRED QUESTION NO. 1792 TO BE ANSWERED ON: 19.12.2023

Programmes for Farmer Education on Fertilizer Use and Sustainability

1792: DR. FAUZIA KHAN:

Will the Minister of **CHEMICALS AND FERTILIZERS** be pleased to state:

- (a) whether Government has taken initiatives for educating farmers about the risks associated with fertilizer overuse and promoting sustainable and responsible fertilizer usage in agriculture, in the light of findings from the All India Coordinated Research Project on 'Long Term Fertilizer Experiments' highlighting the deleterious effects of continuous nitrogenous fertilizer use on soil health and crop productivity;
- (b) if so, the State-wise details and statistics or outcomes associated with these initiatives;
- (c) whether financial allocation has been made for these programs in each of the States;
- (d) if so, the details thereof; and
- (e) if not, the reasons therefor?

ANSWER

MINISTER OF STATE FOR CHEMICALS & FERTILIZERS
(SHRI BHAGWANTH KHUBA)

(a) & (b): Soil Health Card/ Soil Health Management Schemes under National Project on Management of Soil Health & Fertility are implemented through the State Government since 2014-15. Now, this scheme has been merged in Rashtriya Krishi Vikas Yojana as Soil Health & Fertility component from year 2022-23. Under the scheme, since, 2014-15, so far 23.59 crore soil health cards have been issued across the country

The main objective of the scheme is 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. Under the scheme, Soil Health Cards are distributed throughout the country which provides information to farmers on soil nutrient

status and recommends appropriate dosage of nutrients to be applied for improving soil health and its fertility. Soil Samples are processed following standard procedures and analyzed for various parameters viz, pH, electrical conductivity (EC), Organic Carbon, available N, P, K, S and micronutrients (Zn, Cu, Fe, Mn& B).

Crop based fertilizer usage advisories as per soil health cards are issued to farmers through State Governments, Krishi Vigyan Kendras (KVKs) and Agriculture Technology Management Agencies (ATMAs) Network from time to time. The demonstrations on balanced use of fertilizers, based on soil health card recommendations and training to the farmers on proper & integrated use of fertilizers are integral part of the scheme. Indian Council of Agricultural Research (ICAR) also imparts training, organizes front line demonstrations to educate farmers on these aspects. The Rural Awareness Works Experience (RAWE) programme is restructured for Agriculture graduates to generate awareness among farmers on use of soil health card for addressing soil health.

Since 2015, around 6.45 lakh demonstrations, 93781 farmers' trainings and 7425 farmer melas have been organized through the State Governments under the Scheme. The State-wise details are at **Annexure-I**.

The all India Coordinated Research Project on Soil Test Crop Response Correlation of ICAR-IISS, Bhopal conducted numerous Trainings, Frontline Demonstrations and Kishan melas to educate and disseminate balanced use of fertilizers. These frontline demonstrations are conducted in farmers field and provide a direct interface between scientists and farmers. Training on soil testing and precise fertilizer recommendation is at **Annexure-II** and Details of Frontline demonstrations conducted is at **Annexure-III**

In addition, through STC (Schedule Tribe Component)/TSP (Tribal Sub Plan) scheme under All India Coordinator Research Project on Long Term Fertilizer Experiments, ICAR scientists reach out to the farmers in the states.

(c) to (e): Yes. The state-wise financial allocation details since 2014-15 are at **Annexure-IV**.

These awareness / educating farmers on the ill effects are part of research activity under taken under AICRP by ICAR-IISS, Bhopal.

Annexure-I

State-wise Demonstrations, Farmer Melas and Farmer Training sanctioned to be organized from the year 2014-15 to 2023-24 under the scheme

(In numbers)

Sl. No	States	Demonstrations	Farmer Melas	Farmer Training
1	Andaman & Nicobar Islands	334	7	2
2	Andhra Pradesh	46449	666	5098
3	Arunachal Pradesh	2865	122	114
4	Assam	25698	238	4154
5	Bihar	29354	544	7024
6	Chhattisgarh	20000	146	3189
7	Dadra & Nagar Haveli and Daman & Diu	87	3	2
8	Goa	550	11	2
9	Gujarat	34271	473	2999
10	Haryana	8414	143	1109
11	Himachal Pradesh	6698	79	3219
12	Jammu & Kashmir	10799	310	1429
13	Jharkhand	19254	263	5060
14	Karnataka	37577	177	4795
15	Kerala	9097	152	19
16	Ladakh	108	-	108
17	Madhya Pradesh	55893	413	8720
18	Maharashtra	51513	351	3742
19	Manipur	1742	49	406
20	Meghalaya	1892	42	1064
21	Mizoram	779	26	133
22	Nagaland	3528	76	225
23	Odisha	29334	324	8046
24	Puducherry	286	5	20
25	Punjab	10943	139	1996
26	Rajasthan	51847	315	7115
27	Sikkim	2573	42	78
28	Tamil Nadu	30291	385	2618
29	Telangana	37281	584	1621
30	Tripura	3274	59	144
31	Uttar Pradesh	81542	825	16833
32	Uttarakhand	5947	108	2620
33	West Bengal	25104	348	77
	Total	645324	7425	93781

Annexure-II

Training on soil testing and precise fertilizer recommendation

Centre	State	No. of training organized	No. of participants
CSKHPKV, Palampur	Himachal Pradesh	2	200
TNAU, Coimbatore	Tamil nadu	5	199
ICAR-CRIJAF, Barrackpore	West Bengal	1	15
BAU Ranchi	Jharkhand	7	244
AAU, Jorhat	Assam	3	124
KAU, Vellanikkara	Kerala	2	25
IGKV, Raipur	Chhattisgarh	6	170
ICAR-RC for NEH, Manipur	Manipur	4	80
PJTSAU, Hyderabad	Telangana	11	606
GBPUAT, Pantnagar	Uttarakhand	2	25
BHU, Varanasi	Uttar Pradesh	2	130
Total		29	1160

Details of Frontline demonstrations conducted

Centre	State	Crop	Nos.
CCSHAU, Hisar	Haryana	Rapeseed	10
CSHPKVV, PALAMPUR	Himachal Pradesh	Toria	30
		Soybean	39
GBPUAT, Pantnagar	Uttarakhand	Rice	2
ICAR-RC FOR NEH REGION, Imphal	Manipur	Rice	34
AAU, JORHAT	ASSAM	Rice	32
UAS, Bengaluru	Karnataka	Finger millet (ragi)	15
		Hybrid maize	6
		Groundnut	6
		Foxtail millet	2
PJ TSAU, Hyderabad	Telangana	Rice	1
		Soybean	6
		Rice	27
		Maize	6
KAU, Vellanikkara	Kerala	Bhindi	7
		Ash gourd	8
		Groundnut	8
		Tomato	2
		Cowpea	2
		Amaranthus	1
		Ginger	1
		Snake gourd	3
TNAU, Coimbatore	Tamil Nadu	Rice	2
IGKV, Raipur	Chhattisgarh	Rice	6
		Chickpea	5

State-wise Allocation since 2014-15 under Soil Health & Fertility of RKVY

(Rs. in lakh)

Sl. No.	Name of the State	2014-15		2015-16		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24	
		Allocated	Released	Allocated	Released	Allocated	Released	Allocated	Released	Allocated	Released	Allocated	Released	Allocated	Released	Allocated	Released	Allocated	Released	Allocated	Released
1	Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.70	5.78	38.14	33.70	10.81	0.00	0.00	0.00	27.03	0.00	0.00	18.00
2	Andhra Pradesh	517.49	517.49	1167.24	746.80	2144.82	2046.68	1729.54	2447.47	1957.04	3191.15	1404.64	1404.64	891.88	891.88	168.00	0.00	436.90	0.00	952.00	420.00
3	Arunachal Pradesh	74.61	74.61	42.89	17.18	80.79	88.51	27.72	37.84	82.62	106.89	159.07	119.30	517.64	469.16	202.50	0.00	459.41	0.00	118.00	26.00
4	Assam	233.22	233.22	450.91	241.46	982.96	365.03	715.56	138.38	1010.94	679.83	610.81	691.48	2420.70	1621.18	0.00	0.00	801.87	0.00	1613.00	403.00
5	Bihar	805.79	805.79	1031.27	640.04	1906.57	0.00	1985.90	0.00	1764.47	1030.50	1678.16	1151.21	1827.66	685.05	405.00	0.00	1241.14	310.28	683.00	0.00
6	Chhattisgarh	188.04	188.04	706.59	506.03	1305.64	962.67	961.88	1012.37	1128.33	1140.40	609.76	405.13	686.60	301.61	0.00	0.00	579.87	0.00	505.00	126.00
7	Dadra & Nagar Haveli and Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.34	6.25	5.53	4.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Goa	201.36	201.36	22.49	12.42	63.70	0.00	91.50	0.00	33.48	71.14	19.74	14.81	86.39	0.00	216.00	0.00	116.28	0.00	124.00	0.00
9	Gujarat	80.76	80.76	1492.09	603.46	2495.25	528.69	2134.17	2329.02	2702.67	1150.56	432.78	552.66	893.97	369.07	0.00	8.23	331.67	0.00	661.00	405.00
10	Haryana	34.13	34.13	645.24	288.22	809.57	258.07	1729.80	1515.05	1924.53	1391.38	2007.96	171.04	1844.39	53.27	117.00	0.00	1220.94	453.91	455.00	0.00
11	Himachal Pradesh	222.78	222.78	107.81	137.94	156.80	210.13	210.06	192.64	200.14	338.41	172.76	236.16	827.05	454.29	0.00	0.00	102.82	25.71	192.00	0.00
12	Jammu & Kashmir	768.04	768.04	194.19	102.47	546.99	0.00	223.18	0.00	316.72	365.21	2078.53	335.03	1184.53	592.27	295.00	0.00	1705.75	0.00	173.00	0.00
13	Jharkhand	50.69	50.69	146.61	70.85	286.73	401.30	103.77	0.00	245.90	150.54	419.86	564.15	873.28	403.74	45.00	0.00	316.10	0.00	414.00	0.00
14	Karnataka	177.42	177.42	2046.34	942.75	3418.51	1956.96	2075.66	1567.99	2669.01	2761.10	649.15	486.87	1340.65	1309.57	15.00	0.00	451.53	112.99	671.00	0.00
15	Kerala	213.42	213.42	169.79	101.41	444.69	0.00	114.83	0.00	321.62	154.52	588.83	386.54	188.93	0.00	0.00	0.00	570.02	0.00	410.00	0.00
16	Ladakh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	173.40	0.00	156.69	78.34	12.00	0.00	176.46	0.00	35.00	9.00
17	Madhya Pradesh	702.86	702.86	2260.65	888.05	4348.69	5250.68	2691.22	2669.47	3740.11	2165.06	7583.49	501.48	1738.52	334.67	0.00	0.00	8377.86	2094.45	3216.00	100.00
18	Maharashtra	719.96	719.96	2468.22	1251.80	5003.53	3631.80	2202.41	1066.77	4688.54	4780.30	854.69	989.86	615.15	370.75	0.00	0.00	599.79	393.63	1162.00	291.00
19	Manipur	12.80	12.80	42.60	17.58	101.84	0.00	117.96	67.50	49.55	0.00	100.66	75.50	830.39	536.26	0.00	0.00	68.85	52.00	178.00	45.00
20	Meghalaya	13.62	13.62	53.99	20.60	173.15	41.57	85.10	40.26	84.20	320.97	59.31	29.66	258.11	139.44	45.00	0.00	36.22	0.00	173.00	0.00
21	Mizoram	20.28	20.28	31.07	13.79	48.54	50.50	20.68	12.25	32.76	61.78	75.90	87.37	206.05	118.84	0.00	0.00	89.02	97.20	115.00	29.00
22	Nagaland	53.18	53.18	62.45	62.96	193.78	17.55	300.72	0.00	83.10	40.03	1438.48	1078.86	1453.96	1099.93	1485.00	747.89	713.96	1024.21	170.00	86.00
23	Odisha	231.43	231.43	686.97	466.77	1387.45	304.48	601.77	749.45	1102.15	456.71	638.08	711.12	1603.70	1308.63	0.00	0.00	826.20	0.00	668.00	166.00
24	Puducherry	0.00	0.00	0.00	0.00	0.00	50.00	18.00	13.64	19.87	52.40	60.52	13.94	45.98	4.06	0.00	0.00	83.13	0.00	0.00	0.00
25	Punjab	200.89	200.89	693.61	304.98	1608.49	0.00	1745.02	246.76	1168.80	504.79	1235.71	151.07	750.80	1308.87	204.00	0.00	119.75	0.00	465.00	0.00
26	Rajasthan	143.42	143.42	2452.45	1647.09	4181.34	1108.29	2577.60	0.00	5862.24	2574.35	577.76	530.44	1125.53	1328.34	0.00	0.00	287.52	0.00	871.00	0.00
27	Sikkim	623.50	623.50	25.53	26.81	454.07	0.00	290.29	13.51	95.40	92.09	456.51	258.12	65.23	49.61	0.00	120.30	216.65	167.34	88.00	44.00
28	Tamil Nadu	316.91	316.91	998.90	775.27	1890.37	704.92	1147.08	868.91	1745.67	1618.19	1122.46	983.37	899.84	865.46	294.00	0.00	999.49	499.74	1002.00	501.00
29	Telangana	463.33	463.33	891.92	520.42	1743.17	909.25	1863.11	1507.44	1458.81	2098.67	1924.27	2209.00	249.60	0.00	120.00	0.00	151.80	0.00	696.00	0.00
30	Tripura	68.78	68.78	57.79	51.11	115.34	347.95	80.19	33.48	75.89	115.46	205.44	216.18	188.98	137.68	0.00	0.00	123.93	30.98	449.00	113.00
31	Uttar Pradesh	1033.32	1033.32	3510.54	2554.54	7152.41	2442.05	4767.74	2256.36	6128.09	3224.98	1694.51	997.77	2769.77	4312.74	408.00	0.00	1134.50	0.00	1772.00	650.00
32	Uttarakhand	23.40	23.40	166.82	84.94	338.11	144.70	183.25	117.29	281.80	285.11	225.41	225.37	883.62	850.18	153.00	0.00	479.90	0.00	495.00	124.00
33	West Bengal	491.75	491.75	1014.07	958.25	2252.79	1094.96	1326.32	591.01	1734.66	637.18	656.19	328.10	1029.52	0.00	72.00	0.00	667.08	0.00	996.00	498.00
Total		8687.18	8687.18	23641.04	14055.99	45636.09	22916.71	32122.03	19494.84	42725.15	31571.70	29958.51	15944.07	28465.92	19994.85	4256.50	876.42	23513.44	5262.44	19522.00	4054.00
