

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE, COOPERATION AND FARMERS WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO. 2738
TO BE ANSWER ON THE 19/03/2021

EXCESSIVE USE OF FERTILIZERS AND PESTICIDES IN AGRICULTURE

2738 SHRI PRASANNA ACHARYA

Will the Minister of Agriculture and Farmers Welfare be pleased to state:

- (a) the intensity of use of fertilizers and pesticides in agriculture in irrigated and non-irrigated agricultural land, state-wise;
- (b) whether it is a fact that due to excessive use of fertilizer and pesticide in certain areas, farmer and consumers are showing sign of dreaded diseases like cancer etc.; and
- (c) if so, the name of areas and the remedial step Government has taken to mitigate the situation?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

- (a): Use of fertilizers and pesticide depends on several factors like area under cultivation, type of crop, cropping intensity, agro climatic conditions, soil condition, weed, pests disease situation etc. The state wise details of consumption of fertilizers in terms of Nutrient (kg/hac), pesticides and bio-pesticides is attached at Annexure-I , II and III respectively.
- (b): Pesticides are toxic substances but may not pose any adverse effect on human beings, animals and the environment if they are used as per the label and leaflet approved by the Registration Committee. However, Government has been making concerted efforts through various programmes to encourage farmers for judicious use of chemical fertilizers and pesticides. Indian Council of Medical Research (ICMR) under Ministry of Health & Family welfare has initiated a multi-centric study to assess exposure & the health effects of pesticides.
- (c): Further, Government of India is advocating the concept of Balanced and judicious use of fertilizers in conjunction with biofertilisers, organic fertilizers, farm yard manure etc. through Soil Health Card scheme launched in February, 2015. The soil health card besides providing the soil health card status, also recommends crop wise required dosage of fertilizers.

Under 'Sub-Mission on Plant Protection and Plant Quarantine ' trainings are imparted to state extension officers, farmers on Integrated Pest Management (IPM). During the trainings, major emphasis is given on judicious use of chemical pesticide as a last resort, safety in use of pesticides, alternate tools for pest management viz; cultural, physical, mechanical methods of pest control as well as use of bio-pesticides and bio-control agents, effects of pesticides on natural enemies of pests, do's and don'ts of pesticide including proper application equipment and the technique.

Consumption of Major Fertilizers during 2015-16 to 2019-20 (in kg/hectare)

State/U.T.	2015-16	2016-17	2017-18	2018-19	2019-20
Andhra Pradesh	225.47	212.07	184.80	167.49	195.81
Telangana	269.00	243.46	252.96	241.48	206.52
Karnataka	148.21	162.58	164.46	180.09	152.21
Kerala	87.01	34.38	47.62	37.56	36.49
Tamil Nadu	188.40	154.48	149.45	192.42	161.82
Puducherry	405.99	289.24	268.88	227.88	244.77
A&N Islands	0.00	166.75	20.03	15.83	0.00
Lakshadweep					
Gujarat	131.64	127.98	144.73	135.47	130.75
Madhya Pradesh	82.93	79.70	81.99	90.29	102.49
Chattishgarh	113.05	102.07	86.76	86.29	111.26
Maharashtra	116.10	114.75	123.94	125.95	117.74
Rajasthan	61.19	54.93	47.40	60.75	62.28
Goa	30.76	45.51	39.07	36.56	31.21
Daman & Diu	57.14	41.03	35.90	38.56	0.00
D&N Haveli	37.54	73.13	31.72	13.88	0.00
Haryana	206.96	218.18	212.85	224.46	212.86
Punjab	246.93	232.17	213.79	224.49	243.06
Uttar Pradesh	161.43	153.51	168.22	170.09	180.37
Uttrakhand	185.81	171.01	152.05	140.71	136.46
Himachal Pradesh	60.31	57.49	63.22	63.32	64.24
Jammu&Kashmir	105.49	62.91	70.72	61.97	40.85
Delhi	95.26	76.77	77.01	112.22	140.97
Bihar	224.08	198.42	213.02	227.65	245.25
Jharkhand	93.43	43.62	50.58	59.79	60.32
Odisha	108.21	56.78	68.67	72.44	67.19
West Bengal	163.51	158.28	162.94	161.12	167.90
Assam	59.76	41.26	63.49	67.86	61.51
Tripura	45.87	46.11	27.44	0.00	34.71
Manipur	33.85	34.67	58.04	68.34	51.90
Meghalaya	0.00	0.00	0.00	0.00	0.00
Nagaland	4.99	34.71	7.44		
Arunachal Pradesh	1.86	0.00	0.00		
Mizoram	12.32	22.88	36.83	55.88	31.97
Sikkim					
All India (Total)	135.76	123.41	127.55	132.57	133.44
Source :- State Governments					

**CONSUMPTION OF CHEMICAL PESTICIDES IN VARIOUS STATES/UTs
DURING 2015-16 TO 2019-20**

Unit: MT Tech. Grade

S. No.	States/UTs	2015-16	2016-17	2017-18	2018-19	2019-20
1	Andhra Pradesh	2713	2015	1738	1689	1559
2	Bihar	831	790	840	850	850
3	Chhattisgarh	1625	1660	1685	1770	1672
4	Goa	48	22	24	25	30
5	Gujarat	1980	1713	1692	1608	1784
6	Haryana	4100	4050	4025	4015	4200
7	Himachal Pradesh	450	341	467	322	881
8	Jharkhand	493	541	619	646	681
9	Karnataka	1434	1288	1502	1524	1568
10	Kerala	1123	895	1067	995	656
11	Madhya Pradesh	732	694	502	540	540
12	Maharashtra	11665	13496	15568	11746	12783
13	Orissa	994	1050	1633	1609	1115
14	Punjab	5743	5843	5835	5543	4995
15	Rajasthan	2475	2269	2307	2290	2088
16	Tamil Nadu	2096	2092	1929	1901	2225
17	Telangana	993	3436	4866	4894	4915
18	Uttar Pradesh	10457	10614	10824	11049	12217
19	Uttarakhand	217	198	210	195	224
20	West Bengal	3712	2624	2982	3190	3630
Sub Total		53881	55631	60316	56402	58613
North-Eastern						
21	Arunachal Pradesh	17	18	NR	5	5
22	Assam	185	306	241	256	410
23	Manipur	30	33	27	NR	25
24	Meghalaya	<i>Organic State</i>	<i>Organic State</i>	<i>Organic State</i>	<i>Organic State</i>	<i>Organic State</i>
25	Mizoram	NR	9	NR	26	27
26	Nagaland	20	20	20	21	19
27	Sikkim	<i>Organic State</i>	<i>Organic State</i>	<i>Organic State</i>	<i>Organic State</i>	<i>Organic State</i>
28	Tripura	293	298	330	349	364
Sub Total		544	684	617	657	851
Union Territories						
29	Andaman & Nicobar	NR	NR	NR	NR	NR
30	Chandigarh	NR	NR	NR	NR	NR
31	Dadra & Nagar Haveli	NR	NR	NR	NR	NR
32	Daman & Diu	NR	NR	NR	NR	NR
33	Delhi	NR	88	NR	110	NR
34	Jammu & Kashmir	2251	2188	2430	2459	2198
35	Ladakh	NR	NR	NR	NR	NR
36	Lakshadweep	NR	NR	NR	NR	NR
37	Pondicherry*	43	43	43	42	40
Sub Total		2295	2319	2473	2611	2238
Grand Total		56720	58634	63406	59670	61702

**CONSUMPTION OF BIO- PESTICIDES IN VARIOUS STATES/UTs
DURING 2015-16 TO 2019-20**

Unit: MT

S. No.	States/UTs	2015-16	2016-17	2017-18	2018-19	2019-20
1	Andhra Pradesh	25	9	5	10	9
2	Bihar	286	314	320	350	360
3	Chhattisgarh	370	380	405	505	605
4	Goa	14	3	5	6	6
5	Gujarat	273	305	354	306	307
6	Haryana	340	380	390	410	400
7	Himachal Pradesh	16	2	1	2	4
8	Jharkhand	7	11	38	41	91
9	Karnataka	505	473	544	544	564
10	Kerala	606	662	717	862	779
11	Madhya Pradesh	395	1063	326	322	322
12	Maharashtra	1173	1454	1271	1164	1082
13	Orissa	271	310	310	310	333
14	Punjab	138	134	259	246	219
15	Rajasthan	9	9	10	15	929
16	Tamil Nadu	286	294	630	500	820
17	Telangana	94	85	77	84	330
18	Uttar Pradesh	46	46	46	47	48
19	Uttarakhand	30	31	50	52	155
20	West Bengal	950	838	951	997	1017
Sub Total		5834	6802	6710	6772	8379
North-Eastern						
21	Arunachal Pradesh	NR	NR	NR	17	18
22	Assam	150	188	217	234	243
23	Manipur	1	1	1	NR	1
24	Meghalaya	23	24	75	NR	8
25	Mizoram	NR	NR	NR	NR	NR
26	Nagaland	12	12	14	18	19
27	Sikkim	NR	NR	NR	NR	NR
28	Tripura	95	146	142	138	167
Sub Total		280	372	449	406	457
Union Territories						
29	Andaman & Nicobar	NR	NR	NR	NR	NR
30	Chandigarh	NR	NR	NR	NR	NR
31	Dadra & Nagar Haveli	NR	NR	NR	NR	NR
32	Daman & Diu	NR	NR	NR	NR	NR
33	Delhi	NR	1	NR	13	NR
34	Jammu & Kashmir	1	1	1	2	2
35	Ladakh	NR	NR	NR	NR	NR
36	Lakshadweep	NR	NR	NR	NR	NR
37	Pondicherry	33	14	14	11	10
Sub Total		34	16	16	25	12
Grand Total		6148	7190	7174	7203	8847
