

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO- 489**  
ANSWERED ON- 26/07/2024

**INCREASE IN USE OF CHEMICAL PESTICIDES**

489. SHRI NEERAJ SHEKHAR:

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

- (a) whether use of chemical pesticides in agriculture has increased in the country in recent years;
- (b) if so, the details thereof for last three years and the current year, year-wise and Statewise;
- (c) the percentage of chemical and bio pesticides being used in agriculture in the country, State-wise; and
- (d) the details of increase/decrease in use of bio-pesticides in agriculture in the country during last three years and the current year, year-wise and State-wise?

**ANSWER**

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE  
(SHRI SHIVRAJ SINGH CHOUHAN)

**(a) to (d):** State Governments and Union Territories report data related to consumption of pesticides to Central Government. As per the provided data, the trend of consumption of chemical pesticides has varied from year to year and State to State. Further, the use of pesticides depends on several factors like area under cultivation, type of crop, cropping intensity, agro climatic conditions, soil condition, weed, insect and disease situation etc. The state wise details of use of chemical pesticides during last three years is enclosed at **Annexure-I**. The percentage of chemical and bio-pesticides being used in agriculture during last three years in the country is attached at **Annexure-II**. The details of increase/decrease in use of bio-pesticides in agriculture in the country during last three years, year-wise and State-wise is enclosed at **Annexure-III**.

## Annexure-I

## State-wise details of use of Chemical Pesticides during the last three year

Unit: Metric Tonne (Technical Grade)

S. No.	States/UTs	2021-22	2022-23	2023-24
1	Andhra Pradesh	1759.26	2200.01	1827.94
2	Bihar	850.00	1020.00	995.00
3	Chhattisgarh	1740.00	1775.00	1781.00
4	Goa	32.40	34.39	34.81
5	Gujarat	1869.00	1747.00	1835.00
6	Haryana	4066.00	4066.00	4064.00
7	Himachal Pradesh	278.99	470.35	277.32
8	Jharkhand	450.00	507.00	455.00
9	Karnataka	2224.00	1875.00	1830.00
10	Kerala	531.72	539.86	528.92
11	Madhya Pradesh	654.00	598.00	599.00
12	Maharashtra	13175.00	6814.00	8718.00
13	Orissa	1239.93	1347.55	1143.88
14	Punjab	5376.00	5130.00	5257.00
15	Rajasthan	2104.00	1865.00	1898.00
16	Tamil Nadu	1851.00	1922.00	1970.00
17	Telangana	4920.00	4920.00	4920.00
18	Uttar Pradesh	11688.00	11824.00	11828.00
19	Uttarakhand	213.24	199.84	78.73
20	West Bengal	3630.02	3761.64	4081.18
21	Arunachal Pradesh	1.40	2.55	2.55
22	Assam	474.18	543.05	472.00
23	Manipur	NR	27.18	21.69
24	Meghalaya	NR	13.63	NR
25	Mizoram	28.64	35.80	93.77
26	Nagaland	40.97	NR	26.17
27	Sikkim	<i>Organic State</i>	<i>Organic State</i>	<i>Organic State</i>
28	Tripura	NR	NR	NR
29	Andaman & Nicobar	NR	NR	NR
30	Chandigarh	NR	NR	NR
31	Dadra & Nagar Haveli & Daman & Diu	NR	NR	NR
32	Delhi	NR	NR	21.00
33	Jammu & Kashmir	NR	391.34	433.20
34	Ladakh	NR	NR	NR
35	Lakshadweep	NR	NR	NR
36	Pondicherry	NR	NR	NR
<b>Grand Total</b>		<b>59197.75</b>	<b>53630.19</b>	<b>55193.15</b>

Source: States/UTs reports on Inputs of Plant Protection for Kharif/Rabi Seasons

NR- Not Reported

## Annexure-II

## State-wise details of Percentage of use of Chemical Pesticides &amp; Bio-pesticides in the States/UTs during 2021-22 to 2023-24

S. No.	States/UTs	2021-22		2022-23		2023-24	
		Chemical pesticides	Bio-pesticides	Chemical pesticides	Bio-pesticides	Chemical pesticides	Bio-pesticides
1	Andhra Pradesh	2.97%	0.49%	4.10%	0.78%	3.31%	0.60%
2	Bihar	1.44%	3.86%	1.90%	5.00%	1.80%	4.62%
3	Chhattisgarh	2.94%	7.56%	3.31%	10.27%	3.23%	10.10%
4	Goa	0.05%	0.06%	0.06%	0.07%	0.06%	0.07%
5	Gujarat	3.16%	4.21%	3.26%	7.61%	3.32%	7.42%
6	Haryana	6.87%	4.72%	7.58%	6.18%	7.36%	5.65%
7	Himachal Pradesh	0.47%	0.05%	0.88%	0.01%	0.50%	0.01%
8	Jharkhand	0.76%	1.04%	0.95%	1.29%	0.82%	1.31%
9	Karnataka	3.76%	6.49%	3.50%	6.75%	3.32%	6.03%
10	Kerala	0.90%	6.77%	1.01%	8.45%	0.96%	7.83%
11	Madhya Pradesh	1.10%	3.74%	1.12%	5.20%	1.09%	4.52%
12	Maharashtra	22.26%	10.02%	12.71%	0.20%	15.80%	0.37%
13	Orissa	2.09%	1.31%	2.51%	1.12%	2.07%	1.79%
14	Punjab	9.08%	1.77%	9.57%	2.40%	9.52%	2.48%
15	Rajasthan	3.55%	13.60%	3.48%	2.36%	3.44%	1.98%
16	Tamil Nadu	3.13%	9.56%	3.58%	12.96%	3.57%	12.28%
17	Telangana	8.31%	5.60%	9.17%	7.25%	8.91%	5.93%
18	Uttar Pradesh	19.74%	0.56%	22.05%	0.73%	21.43%	0.72%
19	Uttarakhand	0.36%	4.39%	0.37%	2.10%	0.14%	1.80%
20	West Bengal	6.13%	10.91%	7.01%	14.42%	7.39%	20.22%
21	Arunachal Pradesh	0.002%	0.17%	0.005%	0.21%	0.005%	0.20%
22	Assam	0.80%	2.89%	1.01%	4.41%	0.86%	3.62%
23	Manipur	NR	NR	0.05%	0.03%	0.04%	0.03%
24	Meghalaya	NR	0.08%	0.03%	0.09%	NR	0.12%
25	Mizoram	0.05%	NR	0.07%	NR	0.17%	0.06%
26	Nagaland	0.07%	0.09%	NR	NR	0.05%	0.23%
27	Sikkim	NR	NR	NR	0.09%	NR	0.01%
28	Tripura	NR	NR	NR	NR	NR	NR
29	Andaman & Nicobar	NR	NR	NR	NR	NR	NR
30	Chandigarh	NR	NR	NR	NR	NR	NR
31	Dadra & Nagar Haveli & Daman & Diu	NR	NR	NR	NR	NR	NR
32	Delhi	NR	NR	NR	NR	0.04%	NR
33	Jammu & Kashmir	NR	0.04%	0.73%	0.02%	0.78%	0.01%
34	Ladakh	NR	NR	NR	NR	NR	NR
35	Lakshadweep	NR	NR	NR	NR	NR	NR
36	Pondicherry	NR	0.04%	NR	NR	NR	NR

Source: States/UTs reports on Inputs of Plant Protection for Kharif/Rabi Seasons

NR- Not Reported

**Annexure-III**

**State-wise details on Consumption of Bio- Pesticides during the last three year**

Unit: MetricTonne(Formulations)

S. No.	States/UTs	2021-22	2022-23	2023-24
1	Andhra Pradesh	45.22	56.41	46.87
2	Bihar	360.00	360.00	360.00
3	Chhattisgarh	705.00	740.00	787.00
4	Goa	5.30	5.30	5.30
5	Gujarat	392.00	548.00	578.00
6	Haryana	440.00	445.00	440.00
7	Himachal Pradesh	4.37	0.37	0.60
8	Jharkhand	97.00	93.00	102.00
9	Karnataka	605.00	486.00	470.00
10	Kerala	630.81	609.12	609.87
11	Madhya Pradesh	349.00	375.00	352.00
12	Maharashtra	934.41	14.63	28.78
13	Orissa	121.96	80.99	139.46
14	Punjab	165.00	173.00	193.00
15	Rajasthan	1268.00	170.00	154.00
16	Tamil Nadu	891.00	934.00	957.00
17	Telangana	522.00	522.00	462.00
18	Uttar Pradesh	51.78	52.78	56.21
19	Uttarakhand	408.97	151.08	140.25
20	West Bengal	1017.00	1039.00	1575.00
21	Arunachal Pradesh	15.45	15.45	15.45
22	Assam	269.50	317.55	282.30
23	Manipur	NR	1.92	2.23
24	Meghalaya	7.03	6.37	9.42
25	Mizoram	NR	NR	4.84
26	Nagaland	8.12	NR	17.81
27	Sikkim	NR	6.38	0.96
28	Tripura	NR	NR	NR
29	Andaman & Nicobar	NR	NR	NR
30	Chandigarh	NR	NR	NR
31	Dadra & Nagar Haveli & Daman & Diu	NR	NR	NR
32	Delhi	NR	NR	NR
33	Jammu & Kashmir	3.75	1.33	0.80
34	Ladakh	NR	NR	NR
35	Lakshadweep	NR	NR	NR
36	Pondicherry	3.75	NR	NR
<b>Grand Total</b>		<b>9321.42</b>	<b>7204.68</b>	<b>7791.16</b>

Source: States/UTs reports on Inputs of Plant Protection for Kharif/Rabi Seasons

NR- Not Reported

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