

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

**LOK SABHA**  
**UNSTARRED QUESTION NO. 1897**  
TO BE ANSWERED ON THE 1<sup>ST</sup> AUGUST, 2023

**USE OF FERTILIZERS**

1897. SHRI RAHUL KASWAN:

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

- (a) the quantity of chemical fertilizers used/being used across the entire country during each of the last three years and the current year, State- wise including Rajasthan;
- (b) whether the Government has conducted any research to find out the extent to which excessive use of chemical fertilizers reduces soil fertility leading to various types of incurable diseases and other problems and if so, the details thereof and the follow-up action taken by the Government on the findings of the said research;
- (c) whether the Government has launched any programme/campaign to create awareness among farmers regarding the use of conventional and harmless fertilizers or the benefits of organic farming; and
- (d) if so, the details thereof?

**ANSWER**

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री

(SHRI NARENDRA SINGH TOMAR)

- (a): The quantity of major chemical fertilizers used in the country during last three years and the current year (Upto 26.7.2023), State wise including Rajasthan is placed at Annexure –I.
- (b): As such, there is no harmful effect of chemical fertilizers on soil health with balanced and judicious use. Investigations carried out under All India Coordinated Research Project on 'Long Term Fertilizer Experiments' over five decades at fixed sites have indicated that continuous indiscriminate/over use of chemical fertilizers may lead to multi-nutrient deficiencies affecting soil health and crop productivity. Recommended doses of NPK with organic manure sustain good soil health and higher crop productivity. There is also possibility of nitrate contamination in

groundwater above the permissible limit of 10 mg NO<sub>3</sub>-N /L due to excessive use of nitrogenous fertilizers particularly in light textured soils that has consequence on human/animal health if used for drinking purpose.

Indian Council of Agricultural Research (ICAR) recommends soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources of plant nutrients with 4Rs approach i.e right quantity, right time, right mode and right type of fertilizer to ensure judicious use of chemical fertilizers preventing deterioration of soil health, environment and contamination of groundwater.

ICAR has developed technology to prepare various types of organic manures such as phosphocompost, vermi-compost, bio-enriched compost, municipal solid waste compost, etc. from various organic wastes. Besides, the Council has also developed improved and efficient strains of biofertilizers specific to different crops and soil types under Network project on **Soil Biodiversity-Biofertilizers**. Liquid Biofertilizer technology with higher shelf-life has also been developed. The ICAR also imparts training, organises front-line demonstrations etc. to educate farmers on all these aspects. Indian Council of Agricultural Research through its Plan Scheme **“Network Project on Organic Farming” (NPOF)** is undertaking research in 20 centres covering 16 states to develop location specific organic farming package of practices for crops and cropping systems. ICAR also provides technical backstopping and imparts training to educate farmers on organic farming.

(c) & (d): Government is promoting use of bio-fertilizers and organic fertilizers and bio-pesticides under organic farming through the scheme of Paramparagat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain Development in North East Region (MOVCDNER) since 2015-16. Under these schemes, farmers are primarily encouraged for organic cultivation using organic inputs and end to end support to farmers i.e. from production to marketing of organic produce is ensured. Hands-on training to farmers about on-farm production of organic fertilizers and its use are integral part of these schemes. Farmers are provided subsidy of Rs 31000/ ha / 3 years under PKVY and Rs 32500/ ha/ 3 years under MOVCDNER for on-farm organic inputs including bio-fertilizers and bio-pesticides as well as for procurement of off-farm organic inputs.

Under Soil Health Card (SHC) scheme of Rashtriya Krishi Vikas Yojana (RKVY), States are provided assistance to promote Integrated Nutrient Management (INM) through judicious use of Chemical Fertilizers in conjunction with organic manures and bio-fertilizers. Under SHC scheme, various training and demonstration programmes as well as farmer's melas and workshops are organized.

**STATE WISE CONSUMPTION OF ALL FERTILIZERS DURING THE FY 2020-21**

S.No	State	CONSUMPTION (in LMT)			
		UREA	DAP	MOP	NPKS
1	Andaman and Nicobar Islands	0.00	0.00	0.00	0.00
2	Andhra Pradesh	15.92	4.21	2.94	17.27
3	Arunachal Pradesh	0.00	0.00	0.00	0.00
4	Assam	3.46	0.79	0.80	0.14
5	Bihar	23.30	8.12	2.61	3.63
6	Chandigarh	0.00	0.00	0.00	0.00
7	Chhattisgarh	9.17	4.51	1.12	1.19
8	Dadra and Nagar Haveli	0.01	0.01	0.00	0.00
9	Daman and Diu	0.00	0.00	0.00	0.00
10	Delhi	0.22	0.04	0.00	0.00
11	Goa	0.02	0.00	0.01	0.03
12	Gujarat	23.82	6.55	1.51	7.79
13	Haryana	21.52	6.32	0.60	0.23
14	Himachal Pradesh	0.72	0.02	0.08	0.34
15	Jammu and Kashmir	2.16	0.80	0.48	0.02
16	Jharkhand	2.58	1.08	0.05	0.36
17	Karnataka	16.43	6.82	3.35	18.24
18	Kerala	1.27	0.21	1.09	1.44
19	Lakshadweep	0.00	0.00	0.00	0.00
20	Madhya Pradesh	30.18	16.07	1.50	3.98
21	Maharashtra	24.62	8.17	4.09	26.89
22	Manipur	0.22	0.04	0.03	0.00
23	Meghalaya	0.00	0.00	0.00	0.00
24	Mizoram	0.02	0.00	0.00	0.00
25	Nagaland	0.01	0.00	0.00	0.00
26	Odisha	5.27	2.52	1.38	2.65
27	Puducherry	0.14	0.01	0.02	0.09
28	Punjab	29.37	7.73	0.85	0.36
29	Rajasthan	23.21	9.17	0.32	0.64
30	Sikkim	0.00	0.00	0.00	0.00
31	Tamil Nadu	9.88	2.72	3.07	7.38
32	Telangana	17.54	3.14	2.47	15.18
33	Tripura	0.14	0.05	0.04	0.01
34	Uttarakhand	2.40	0.38	0.06	0.31
35	Uttar Pradesh	74.13	25.76	2.78	6.26
36	West Bengal	12.78	3.94	3.06	11.39
	<b>All India</b>	<b>350.51</b>	<b>119.18</b>	<b>34.32</b>	<b>125.82</b>

## STATE WISE CONSUMPTION OF ALL FERTILIZERS DURING THE FY 2021-22

S.No	State	CONSUMPTION (in LMT)			
		UREA	DAP	MOP	NPKS
1	Andaman and Nicobar Islands	0.00	0.00	0.00	0.00
2	Andhra Pradesh	14.83	3.60	1.78	13.99
3	Arunachal Pradesh	0.00	0.00	0.00	0.00
4	Assam	3.60	0.52	0.55	0.19
5	Bihar	21.53	5.52	1.38	3.96
6	Chandigarh	0.00	0.00	0.00	0.00
7	Chhattisgarh	8.00	3.53	0.83	1.31
8	Dadra and Nagar Haveli	0.00	0.00	0.00	0.00
9	Daman and Diu	0.00	0.00	0.00	0.00
10	Delhi	0.26	0.03	0.00	0.00
11	Goa	0.02	0.00	0.00	0.03
12	Gujarat	21.90	5.00	1.09	6.69
13	Haryana	20.75	4.96	0.57	0.54
14	Himachal Pradesh	0.74	0.00	0.04	0.19
15	Jammu and Kashmir	1.67	0.44	0.19	0.00
16	Jharkhand	2.57	0.91	0.01	0.45
17	Karnataka	17.84	5.73	2.54	18.72
18	Kerala	1.15	0.14	0.77	1.26
19	Lakshadweep	0.00	0.00	0.00	0.00
20	Madhya Pradesh	29.18	12.03	1.18	4.96
21	Maharashtra	23.68	5.87	3.26	25.75
22	Manipur	0.14	0.01	0.00	0.01
23	Meghalaya	0.00	0.00	0.00	0.00
24	Mizoram	0.01	0.00	0.00	0.00
25	Nagaland	0.01	0.00	0.00	0.00
26	Odisha	5.53	2.37	1.07	2.49
27	Puducherry	0.15	0.01	0.02	0.07
28	Punjab	31.34	6.27	0.64	1.21
29	Rajasthan	22.59	6.10	0.24	1.20
30	Sikkim	0.00	0.00	0.00	0.00
31	Tamil Nadu	10.40	2.39	2.53	8.17
32	Telangana	17.12	2.98	1.39	13.24
33	Tripura	0.18	0.01	0.01	0.01
34	Uttarakhand	2.09	0.31	0.04	0.22
35	Uttar Pradesh	71.12	21.20	1.91	6.36
36	West Bengal	13.30	2.70	1.89	10.34
	<b>All India</b>	<b>341.73</b>	<b>92.64</b>	<b>23.93</b>	<b>121.37</b>

**STATE WISE CONSUMPTION OF ALL FERTILIZERS DURING THE FY 2022-23**

S.No	State	CONSUMPTION (in LMT)			
		UREA	DAP	MOP	NPKS
1	Andaman and Nicobar Islands	0.00	0.00	0.00	0.00
2	Andhra Pradesh	15.87	4.64	1.18	13.73
3	Arunachal Pradesh	0.01	0.00	0.00	0.00
4	Assam	3.56	0.63	0.47	0.19
5	Bihar	21.96	5.66	1.26	4.25
6	Chandigarh	0.00	0.00	0.00	0.00
7	Chhattisgarh	8.38	3.14	0.56	1.06
8	Dadra and Nagar Haveli	0.01	0.00	0.00	0.00
9	Daman and Diu	0.00	0.00	0.00	0.00
10	Delhi	0.28	0.05	0.00	0.00
11	Goa	0.02	0.00	0.00	0.03
12	Gujarat	24.73	6.10	0.81	5.23
13	Haryana	20.46	5.59	0.35	0.26
14	Himachal Pradesh	0.74	0.02	0.04	0.35
15	Jammu and Kashmir	1.60	0.48	0.17	0.00
16	Jharkhand	2.56	0.77	0.04	0.45
17	Karnataka	18.21	6.21	1.41	16.67
18	Kerala	1.12	0.19	0.78	1.02
19	Lakshadweep	0.00	0.00	0.00	0.00
20	Madhya Pradesh	32.39	13.85	0.62	4.79
21	Maharashtra	24.66	7.18	1.38	20.46
22	Manipur	0.31	0.04	0.04	0.03
23	Meghalaya	0.00	0.00	0.00	0.00
24	Mizoram	0.10	0.01	0.00	0.00
25	Nagaland	0.01	0.00	0.00	0.00
26	Odisha	5.60	1.94	0.61	2.63
27	Puducherry	0.17	0.02	0.01	0.06
28	Punjab	29.45	7.17	0.41	0.58
29	Rajasthan	25.17	8.47	0.14	0.72
30	Sikkim	0.00	0.00	0.00	0.00
31	Tamil Nadu	10.05	2.76	1.65	7.38
32	Telangana	18.83	3.71	0.74	12.90
33	Tripura	0.19	0.02	0.02	0.02
34	Uttarakhand	2.05	0.52	0.03	0.11
35	Uttar Pradesh	74.72	22.38	1.22	4.79
36	West Bengal	14.05	3.77	2.36	9.61
	<b>All India</b>	<b>357.26</b>	<b>105.31</b>	<b>16.32</b>	<b>107.31</b>

**STATE WISE CONSUMPTION OF ALL FERTILIZERS DURING THE FY 2023-24 upto 26.7.2023**

S.No	State	CONSUMPTION (in LMT)			
		UREA	DAP	MOP	NPKS
1	Andaman and Nicobar Islands	0.00	0.00	0.00	0.00
2	Andhra Pradesh	2.07	0.52	0.20	1.47
3	Arunachal Pradesh	0.00	0.00	0.00	0.00
4	Assam	1.11	0.17	0.14	0.03
5	Bihar	3.76	0.99	0.09	0.47
6	Chandigarh	0.00	0.00	0.00	0.00
7	Chhattisgarh	4.79	2.81	0.36	0.73
8	Dadra and Nagar Haveli	0.00	0.00	0.00	0.00
9	Daman and Diu	0.00	0.00	0.00	0.00
10	Delhi	0.09	0.01	0.00	0.00
11	Goa	0.01	0.00	0.00	0.01
12	Gujarat	6.79	2.26	0.12	1.65
13	Haryana	7.12	1.55	0.11	0.05
14	Himachal Pradesh	0.21	0.00	0.01	0.05
15	Jammu and kashmir	0.57	0.13	0.05	0.00
16	Jharkhand	0.60	0.22	0.00	0.08
17	Karnataka	5.80	3.00	0.44	4.74
18	Kerala	0.25	0.04	0.18	0.32
19	Lakshadweep	0.00	0.00	0.00	0.00
20	Madhya Pradesh	10.12	5.89	0.21	1.23
21	Maharashtra	8.83	3.30	0.41	8.71
22	Manipur	0.01	0.00	0.00	0.00
23	Meghalaya	0.01	0.00	0.00	0.00
24	Mizoram	0.04	0.00	0.00	0.00
25	Nagaland	0.00	0.00	0.00	0.00
26	Odisha	1.68	0.90	0.19	0.55
27	Puducherry	0.04	0.00	0.00	0.02
28	Punjab	11.72	1.51	0.12	0.06
29	Rajasthan	7.36	3.06	0.05	0.16
30	Sikkim	0.00	0.00	0.00	0.00
31	Tamil Nadu	2.66	0.70	0.35	1.94
32	Telangana	3.24	1.22	0.07	2.71
33	Tripura	0.02	0.01	0.01	0.00
34	Uttarakhand	0.90	0.12	0.00	0.05
35	Uttar Pradesh	18.97	4.34	0.14	0.92
36	West Bengal	2.54	0.37	0.18	1.12
	<b>All India</b>	<b>101.32</b>	<b>33.13</b>	<b>3.44</b>	<b>27.08</b>

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