GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

LOK SABHA

UNSTARRED QUESTION **NO. 2326** TO BE ANSWERED ON: **13.02.2026**

Adoption of Nano Urea and Nano DAP

2326. Shri Yaduveer Wadiyar

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

(a) the extent of adoption of Nano Urea and Nano DAP among farmers particularly tobacco and ginger growers in Karnataka during the last three years, district-wise including the Mysuru–Kodagu district;
(b) the data on the sale and usage of Nano Urea and Nano DAP along with the comparative figures for conventional urea and DAP consumption in the said district;
(c) whether the Government has assessed the impact of Nano fertilizers on input cost reduction, soil health, crop productivity and fertilizer subsidy savings, especially in commercial crops such as tobacco and spices, if so, the details thereof;
(d) the steps taken to promote awareness, field demonstrations and extend support for Nano fertilizers among farmers in the said district including collaboration with Krishi Vigyan Kendras and State Agriculture Departments, district-wise; and
(e) whether the Government proposes any crop or region-specific promotion strategy for Nano fertilizers to improve adoption and reduce subsidy dependence in high-input cropping regions, if so, the details thereof?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS
(SMT. ANUPRIYA PATEL)

(a) The consumption of Nano Urea and Nano DAP is increasing over the years in the State of Karnataka. Among tobacco and ginger cultivators, particularly in Mysuru and Kodagu districts, there is increased trend in the adoption of nano urea and nano DAP. A total of 1,70,827 bottles of Nano urea and 62,360 bottles of Nano DAP were sold in Mysuru and a total of 51,022 bottles of Nano urea and 35,170 bottles of Nano DAP were sold in Kodagu districts from 2022-23 to 2024-25. District wise consumption of Nano Urea and Nano DAP is placed at **Annexure- I.**

(b) The sales and usage of Nano Urea and Nano DAP along with the comparative figures for conventional Urea and DAP in Mysuru and Kodagu district for the period from 2022-23 to 2024-25 is placed at **Annexure-II.**

(c) In order to assess the impact of Nano fertilizers, an MoU has been signed between National Productivity Council (NPC) of India and Department of Fertilizers on 5th March, 2024 to undertake the study of Nano Urea on "Evaluating Efficacy, Utility and Impact of Nano Urea in comparison to Conventional Urea". A Phase-II study by NPC has also been signed on 14.11.2025 for evaluating the extent of replacement of Conventional Urea by Nano Urea. As per the NPC assessment based on the farmers feedback, crop yield in the tobacoo (Gujarat), Coriander (Madhya Pradesh), Chilli (Andhra Pradesh, Gujarat, Uttar Pradesh), Garlic (Madhya Pradesh) improved as a result of mixed use of Nano Urea and Conventional Urea.

Additionally, an MoU has been signed with ICAR on 03.11.2025 for undertaking a Network Project on the evaluation of nano urea on crop productivity and nitrogen use efficiency in diverse Agro-Ecological zones of India, jointly funded by fertilizer PSUs/cooperatives for implementing across multiple collaborating agricultural institutions for a period of five years.

Furthermore, ICAR has also initiated a 2024–26 project funded by the Indian Council for Fertilizers and Fertilizer Technology Research (ICFFTR), with a total outlay of ₹160 lakh, to evaluate the impact of Nano Fertilizers on crop growth, soil health, and nutrient uptake across various agro-ecological zones. This project, too, involves several collaborating agricultural institutions.

(d) The Government of Karnataka informed that Nano Urea and Nano DAP are being promoted as alternatives to conventional Urea and DAP in the concerned districts through the Department of Agriculture, in coordination with Krishi Vigyan Kendras (KVKs) and nano fertilizer manufacturers. Extensive awareness programmes have been conducted to educate farmers and public representatives on the benefits of nano fertilizers and the judicious use of conventional fertilizers through handouts, posters, mobile vans, and advertisements in print and electronic media. Field demonstrations, including drone-based applications under the Food and Nutrition Security programme, have also been organized in farmers' fields and at KVKs to encourage adoption.

Nano fertilizer manufacturers informed that various awareness campaigns and demonstration programs have been conducted to educate farmers across Karnataka, including the Mysuru and Kodagu districts. The promotional activities have been conducted by Nano fertilizer manufacturers (during the period FY 2023-24 to FY 2025-26 (till January 2026)) are as follows:-

S.no	Promotional Activities	Mysuru	Kodagu
(i)	Joint meeting with Department of Agriculture & KVK/Crop Seminar	146	71
(ii)	Organized Farmer meetings	81	10
(iii)	Crop Shows/Field Day	8	0

(iv)	Demonstrations on ginger and tobacco	1146	88
(v)	Group Farmer meetings	305	41
(vi)	One to One Farmer Visit	18,983	341
(vii)	Jeep Campaign	365	128
(viii)	Kisan Goshthis and Kisan Sangoshthis	45	23
(ix)	Distribution of technical literature in Kannada	60,000	20,000

Nano fertilizer manufacturers have also informed that the mass media platforms utilized for the campaign include cable TV networks, TV news channels, digital media platforms, and All India Radio.

(e) Government of India, in coordination with State Governments, is adopting a crop- and region-specific approach for the promotion of nano-fertilizers with the objective of improving adoption, enhancing nutrient use efficiency and reducing long-term dependence on fertilizer subsidies in high-input cropping regions. Promotion strategies include targeted demonstrations, farmer awareness programmes and integration of nano-fertilizers with existing extension mechanisms, particularly in regions with intensive fertilizer usage and high subsidy outgo.

Further, the Government of Gujarat has taken a proactive initiative by providing 50% subsidy for the adoption of nano urea in the State. Additionally, large-scale awareness and outreach activities were conducted under the Viksit Bharat Yatra during the Kharif 2025 season, through village-level programmes to disseminate information on the benefits and application of nano urea to farmers. These initiatives reflect a focused effort to encourage responsible adoption of nano-fertilizers through region-specific support mechanisms.

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Annexure-I

Annexure referred to in reply to part (a) of Lok Sabha Unstarred Question No. 2326 for answering on 13.02.2026

Consumption of Nano urea and Nano DAP (in 500 ml bottles) in 2022-23 , 2023-24 and 2024-25

Sl. No.	District	2022-23		2023-24		2024-25	
		Nano urea	Nano DAP	Nano urea	Nano DAP	Nano urea	Nano DAP
1	Bagalkot	1,10,136	6,960	25,728	9,220	80,280	32,173
2	Bangalore Rural	18,094	5,496	5,974	8,516	11,633	14,853
3	Belagavi	2,27,612	17,232	74,880	22,062	1,25,984	69,727
4	Bellary	1,43,816	12,792	46,820	18,562	50,768	67,776
5	Bengaluru Urban	20,714	4,584	15,890	5,684	5,517	8,060
6	Bidar	63,528	14,264	31,728	14,854	60,354	20,638
7	Vijayapura	1,57,848	12,216	54,168	15,606	1,21,176	74,353
8	Chamarajnagar	52,112	4,608	25,968	6,108	28,630	12,344
9	Chikballapur	41,448	11,424	23,088	13,884	30,856	30,386
10	Chikmagalur	55,008	8,256	13,632	10,256	26,702	17,678
11	Chitradurga	90,044	5,448	20,972	6,288	27,043	10,914
12	Dakshin Kannada	47,333	11,856	25,565	11,856	3,656	4,565
13	Davangere	1,80,161	5,256	59,897	8,686	51,554	30,710
14	Dharwad	1,51,348	6,312	50,572	7,182	53,592	12,259
15	Gadag	1,08,524	6,168	34,988	8,308	68,028	20,806
16	Kalaburagi	88,464	12,288	29,304	15,018	1,16,954	34,904
17	Hassan	1,61,544	12,864	43,032	14,004	72,220	23,447
18	Haveri	1,75,614	13,632	77,766	15,632	1,02,744	23,983
19	Kodagu	19,518	4,152	7,608	5,042	9,384	6,850
20	Kolar	42,504	9,144	19,224	10,874	22,884	21,187
21	Koppal	1,67,325	9,768	27,909	11,968	58,560	31,677
22	Mandya	72,336	5,328	29,040	9,438	23,476	15,591

23	Mysore	69,984	4,632	31,560	5,932	30,098	19,630
24	Raichur	2,09,352	33,240	39,336	38,180	1,23,516	1,34,169
25	Ramanagara	36,648	864	16,560	1,024	19,316	2,390
26	Shivamogga	1,21,656	14,208	31,464	15,508	62,256	20,196
27	Tumkur	66,076	6,432	33,268	8,882	34,402	19,948
28	Udupi	2,747	380	3,275	380	2,404	696
29	Uttar Kannada	19,866	1,128	14,682	1,238	11,712	5,736
30	Vijayanagara	1,00,144	7,320	48,964	9,380	48,555	15,948
31	Yadgir	1,02,408	16,200	31,969	19,040	75,658	54,394
	Total	**29,23,912**	**2,84,452**	**9,94,831**	**3,48,612**	**15,59,912**	**8,57,988**

Annexure-II

Annexure referred to in reply to part (b) of Lok Sabha Unstarred Question No. 2326 for answering on 13.02.2026

Consumption of conventional Urea, DAP, Nano Urea and Nano DAP in the Mysuru and Kodagu District of Karnataka State

Year	Mysuru District				Kodagu District			
	Conventional Urea (in MT)	Nano Urea (in 500ml bottles)	Conventional DAP (in MT)	Nano DAP (in 500ml bottles)	Conventional Urea (in MT)	Nano Urea (in 500ml bottles)	Conventional DAP (in MT)	Nano DAP (in 500ml bottles)
2022-23	62,614	69,984	15,054	4632	26,286	19,518	9,838	4152
2023-24	61,087	31,560	15,789	5932	23,877	7,608	12,330	5042
2024-25	63,171	30,098	17,115	19,630	23,928	9,384	11,475	6,850