

GOVERNMENT OF INDIA  
MINISTRY OF CHEMICALS AND FERTILIZERS  
DEPARTMENT OF FERTILIZERS

**LOK SABHA**

**UNSTARRED QUESTION NO. 1782 TO BE ANSWERED ON: 16.12.2022**

**production of nano fertilizer**

**1782: SHRI E.T. MOHAMMED BASHEER:  
SHRIMATI SUNITA DUGGAL:**

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

- (a) the current production capacity of nano urea fertilizer in the country;
- (b) whether the Government plans to further increase the production capacity and if so, the details thereof;
- (c) whether the Government has any estimates about the demand of nano urea in the domestic market, if so, the details thereof;
- (d) the details of nano urea which has been sold in the market since its launch, State/UT-wise;
- (e) whether the Government has received proposals from other countries to export nano urea to them and if so, the details thereof;
- (f) whether the Government has taken note that the Nano fertilizer is not advantageous for the farmers economically and environmentally and if so, the details thereof; and
- (g) whether the Government has any time-bound action plan with regard to nano fertilizer production in the country and if so, the details thereof?

**ANSWER**

MINISTER OF STATE FOR CHEMICALS AND FERTILIZERS  
(**SHRI BHAGWANTH KHUBA**)

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(a): IFFCO has set up first manufacturing facility with a production capacity of 1,50,000 bottles per day (500 ml size) of Nano Urea (Liquid) fertilizers at its Kalol unit in Gujarat and the commercial production has commenced w.e.f 1<sup>st</sup> August, 2021.

(b) & (g): Two Central Public Sector Undertaking (CPSUs) namely National Fertilizers Limited (NFL) and Rashtriya Chemicals and Fertilizers Limited (RCF) have also signed MoUs with IFFCO for transfer of technology of Nano Urea with a view to set up 8 more nano urea plants (with a production capacity of 44 crore bottles per year) in the country.

(c): The all India demand of nano Urea, furnished by States and UTs for Rabi 2022-23 season is 19855060 (number of bottles of 500 ml each). The state-wise details are **Annexure-I.**

(d): During 2021-22, 212 lakh bottles (500 ml each) were sold within the country where as 3.06 lakh bottles (500 ml each) were exported to Srilanka. During 2022-23 (12<sup>th</sup> December, 2022), 201 lakh bottles (500 ml each) were sold within the country where as 0.6 lakh bottles (500 ml each) were exported to Nepal. The State/UT- wise sale details are placed as **Annexure-II**.

(e): Department of Fertilizers have accorded the permission to IFFCO to export the Nano Urea (Liquid) fertiliser to various international buyers from countries like Sri Lanka, Nepal, Suriname, Kenya, Phillippines, Malaysia, Mexico, Maldives, Singapore, Myanmar, Canada, UAE, Nigeria, USA, Dubai, Uzbekistan, Kuwait, Mauritius, Colombia, Jordan, Denmark, Zambia, Brazil, Costa Rica, Malawi and Mozambique.

(f): Price of Nano Urea (liquid) is Rs 225 / 500 ml bottle. It is 16 % less than the price of a 45 Kg bag of conventional Urea. Nano Urea (liquid) when sprayed on the leaves easily enters through stomata and other openings and fulfils nitrogen requirement of crops. Because of its unique size and higher surface area to volume ratio, it effectively addresses crop nutrient requirement which results in reduced nutritional stress, better growth, and yield attributes of crops. Further, Nano fertilizers were validated for bio-safety and bio-toxicity as per the "Guidelines for Evaluation of Nano based Agri Input and Food Products in India" of Department of Biotechnology (DBT), Govt of India. These tests were essential for including nano urea under Fertilizer Control Order (FCO) – 1985 as provisional fertilizer.

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<b>REQUIREMENT OF NANO UREA FOR RABI 2022-23</b>	
<b>UREA</b>	<b>UNIT: NUMBER OF BOTTLES OF 500 ML EACH</b>
<b>State/Union</b>	<b>Total Rabi</b>
<b>Territory</b>	<b>2022-23</b>
<b><u>SOUTH ZONE</u></b>	
ANDHRA PRADESH	0.00
TELANGANA	934832.00
KARNATKA	1375000.00
KERALA	NA
TAMILNADU	
PUDUCHERRY	
ANDAMAN & NICOBAR	
<b>TOTAL</b>	<b>2309832.00</b>
<b><u>WEST ZONE</u></b>	
GUJARAT	600000.00
MADHYA PRADESH	1600000.00
CHHATTISGARH	
MAHARASHTRA	1200000.00
RAJASTHAN	750000.00
GOA	
DAMAN & DIU	
DADAR&NAGAR HAV	
<b>TOTAL</b>	<b>4150000.00</b>
<b><u>NORTH ZONE</u></b>	
HARYANA	3200000.00
PUNJAB	2000000.00
UTTAR PRADESH	5000000.00
UTTARAKHAND	372000.00
HIMACHAL PRADESH	206000.00
JAMMU & KASHMIR	150000.00
DELHI	
<b>TOTAL</b>	<b>10928000.00</b>
<b><u>EAST ZONE</u></b>	
BIHAR	
JHARKHAND	268400.00
ODISHA	255000.00
WEST BENGAL	1000000.00
<b>TOTAL</b>	<b>1523400.00</b>
<b><u>NORTH-EAST ZONE</u></b>	
ASSAM	942900.00
TRIPURA	928.00
MANIPUR	
MEGHALAYA	
NAGALAND	
ARUNACHAL PRADESH	
MIZORAM	
SIKKIM	0.00
<b>TOTAL</b>	<b>943828.00</b>
<b>ALL INDIA</b>	<b>19855060.00</b>



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**Annexure-II**

**State wise Sales of IFFCO Nano Urea during 2021-22 and 2022-23 (Up to 12<sup>th</sup> December 2022)**

(Sale Qty. in no. of Bottles of 500 ml each)

S. No.	State	Nano Urea Sales during August 2021 to March 2022	Nano Urea Sales during April 2022 to 12 <sup>th</sup> December 2022	Nano Urea Sales during August 2021 to 12 <sup>th</sup> December 2022
1	Punjab	17,77,354	12,62,856	30,40,210
2	Haryana & Delhi	16,28,732	7,19,606	23,48,338
3	Rajasthan	15,02,316	16,42,394	31,44,710
4	Jammu and Kashmir	2,00,612	97,306	2,97,918
5	Himachal Pradesh	1,50,120	59,678	2,09,798
6	Gujarat	8,75,184	9,19,208	17,94,392
7	Madhya Pradesh	16,11,682	12,96,316	29,07,998
8	Chhattisgarh	5,23,368	9,31,502	14,54,870
9	Maharashtra & Goa	16,51,162	16,02,366	32,53,528
10	Uttar Pradesh	40,62,930	38,56,106	79,19,036
11	Uttarakhand	1,40,004	1,45,866	2,85,870
12	Bihar	14,83,992	15,83,932	30,67,924
13	Jharkhand	1,55,150	2,57,726	4,12,876
14	West Bengal	13,02,222	15,92,944	28,95,166
15	Assam & NE	4,38,628	2,90,876	7,29,504
16	Odisha	4,17,922	8,86,710	13,04,632
17	Andhra Pradesh	5,80,144	2,81,596	8,61,740
18	Telangana	5,86,700	3,63,514	9,50,214
19	Karnataka	8,18,176	16,16,890	24,35,066
20	Tamil Nadu	12,06,720	6,11,784	18,18,504
21	Kerala	1,00,128	99,898	2,00,026
22	<b>Grand Total (Domestic Sale)</b>	<b>2,12,13,246</b>	<b>2,01,19,074</b>	<b>4,13,32,320</b>
23	Export *	3,06,456	60,000	3,66,456
24	<b>Grand Total</b>	<b>2,15,19,702</b>	<b>2,01,79,074</b>	<b>4,16,98,776</b>

**\*3,06,456 Bottles of Nano Urea Export to Sri Lanka during 2021-22 and 60,000 Bottles Export to Nepal.**

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