

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

RAJYA SABHA

UNSTARRED QUESTION NO. 515 TO BE ANSWERED ON: 25.07.2023

Liquid Nano Urea

515: SHRI PRABHAKAR REDEEY VEMIREDDY:

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

- (a) the benefits of Nano Urea developed by IFFCO;
- (b) whether it is a fact that 500 ml of liquid Nano Urea is equal to 40 kg bag of Urea and is much cheaper and effective than solid Urea;
- (c) if so, the details thereof ;
- (d) the manner in which Government is planning to push replacing solid Urea with Nano Urea in the country;
- (e) the details of demand and supply of Urea in the country during the last five years and the current year, year-wise and State-wise; and
- (f) the use of Nano Urea in the country so far, State-wise?

ANSWER

MINISTER OF STATE FOR CHEMICALS & FERTILIZERS
(SHRI BHAGWANTH KHUBA)

(a) to (c): Indian Council of Agricultural Research (ICAR) has informed that trials were conducted at 20 selected locations in selected crops to study the effect of IFFCO nano-urea (liquid) used as foliar spray. The study indicated that nano-urea can be used as foliar spray for top-dressing instead of conventional urea. In addition, foliar application of nano urea along with basal application of recommended dose of conventional urea has yield advantage of 3-8% over conventional fertilizer application.

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. 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.

(d): Use of Nano Urea is being promoted through different activities such as awareness camps, webinars, nukkad nataks, field demonstrations, Kisaan Sammelans and films in regional languages etc. Nano Urea is being also made available at PMKSKs by concerned companies. Moreover, Nano Urea has been included under monthly supply plan issued by Department of Fertilizers regularly.

(e) & (f): The details of sales of Nano Urea bottles in the country is placed at **Annexure**.

Annexure

(Qty. in no. of 500 ml Bottles)

S.No.	State	August 2021 - March 2022	April 2022 - March 2023	April 2023 - 18th July 2023	Total
1	Andhra Pradesh	5,80,144	4,79,820	19,608	10,79,572
2	Assam & NE	4,38,628	6,09,448	1,60,522	12,08,598
3	Bihar	14,83,992	28,55,860	2,54,882	45,94,734
4	Chhattisgarh	5,23,368	11,01,742	1,09,124	17,34,234
5	Gujarat	8,75,184	17,60,244	1,53,020	27,88,448
6	Haryana & Delhi	16,28,732	12,69,458	94,396	29,92,586
7	Himachal Pradesh	1,50,120	1,26,750	16,490	2,93,360
8	Jammu and Kashmir	2,00,612	3,00,120	75,424	5,76,156
9	Jharkhand	1,55,150	3,66,080	46,456	5,67,686
10	Karnataka	8,18,176	19,64,482	2,23,378	30,06,036
11	Kerala	1,00,128	1,20,382	11,712	2,32,222
12	Madhya Pradesh	16,11,682	23,38,296	1,17,890	40,67,868
13	Maharashtra & Goa	16,51,162	25,04,044	2,75,088	44,30,294
14	Odisha	4,17,922	11,21,052	3,25,704	18,64,678
15	Punjab	17,77,354	22,70,974	3,22,548	43,70,876
16	Rajasthan	15,02,316	25,22,692	3,12,004	43,37,012
17	Tamil Nadu	12,06,720	10,01,928	83,854	22,92,502
18	Telangana	5,86,700	6,00,120	94,848	12,81,668
19	Uttar Pradesh	40,62,930	63,52,028	4,41,166	1,08,56,124
20	Uttarakhand	1,40,004	2,34,006	55,054	4,29,064
21	West Bengal	13,02,222	26,35,730	1,31,472	40,69,424
22	Total Sale in India	2,12,13,246	3,25,35,256	33,24,640	5,70,73,142
