

GOVERNMENT OF INDIA  
MINISTRY OF CHEMICALS AND FERTILIZERS  
DEPARTMENT OF FERTILIZERS

**LOK SABHA**

**UNSTARRED QUESTION NO. 1417 TO BE ANSWERED ON: 10.02.2023**

**Nano urea manufactured by IFFCO**

**1417: SHRI. MANOJ KOTAK AND OTHERS:**

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

- (a) whether the Government proposes usage of nano urea developed and manufactured by Indian Farmers Fertilizer Cooperative Limited (IFFCO) and if so, the details thereof;
- (b) the details on the benefits of strategic application of nano fertilisers in the country;
- (c) whether the usage of such urea is more effective than the granular urea;
- (d) if so, the details thereof;
- (e) whether it is true that at present, the only approved nano fertilizer is IFFCO Nano Urea;
- (f) if so, the details thereof along with the production capacity of nano urea in the IFFCO plant in Kalol, Gujarat;
- (g) whether the Government has considered any other chemical fertilizers to be converted into nano fertilizers for future use; and
- (h) if so, the details thereof and if not, the reasons therefor?

**ANSWER**

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

---

(a) to (d) : Nano Urea developed by IFFCO has been provisionally included in Fertilizer Control Order (FCO)-1985, based on the experimental trials undertaken in several Indian Council of Agricultural Research (ICAR)/State Agricultural Universities. Two Nano urea spray as top dressing along with the recommended basal dose of nitrogen. The results gave comparable yield to that of recommended dose of fertilizers. On account of higher nutrient content and use efficiency, it can reduce the cost of fertilizer.

Nano Fertilizers hold great promise for application in plant nourishment because of the size-dependent qualities, high surface-volume ratio and unique optical properties. Nano fertilizer releases plant nutrients in a controlled manner contributing to higher nutrient use efficiency.

At various forums the state were advised to encourage its use. Also the State were also requested to assess the requirement of nano urea. 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).

(e) to (f): Overall, three Nano Urea plants at Kalol (Capacity: 5 crore bottles of 200 ml each per year), Phulpur and Aonla have been set up by IFFCO. Further, Department of Fertilizers is encouraging its PSUs for setting up Nano Urea plants. National Fertilizers Limited (NFL) and Rashtriya Chemicals and Fertilizers Limited (RCF), under administrative control of Department of Fertilizers, has signed Non-Disclosure Agreement (NDA) & Memorandum of Understanding (MoU) with Indian Farmers Fertilizer Cooperative (IFFCO) to transfer the technology of Nano Urea from IFFCO.

(g) & (h): Keeping in view the importance of nano fertilizers, Government of India has notified guidelines for inclusion of these fertilizers in Fertilizer Control Order, 1985. Any proposal, as and when received from manufacturers of nano fertilizers, would be considered for inclusion of specifications of these fertilizers based on these guidelines. Some proposals for inclusion of Nano DAP have been considered.

\*\*\*\*\*