

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

LOK SABHA

UNSTARRED QUESTION NO. 2156 TO BE ANSWERED ON: 15.12.2023

Benefits of Nano Urea

2156: SHRI M.K. RAGHAVAN:

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

- (a) whether the Government has taken note that Nano urea is much more cost effective and more beneficial for our plants than traditional urea fertilizer;
- (b) if so, the details thereof;
- (c) the steps taken/proposed to be taken for promotion of Nano urea in the country;
- (d) whether the Government has taken note that large quantities of Nano urea provided to Kerala State for benefit of farmers is lying underutilized and if so, the details thereof;
- (e) whether the Government has any data regarding the amount of fertilizers such as Nano urea and others provided by the Union Government to the State of Kerala; and
- (f) if so, the details thereof along with the rate of utilisation of the same?

ANSWER

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

(a) & (b): Based on the multi-locational trials in the State Agricultural Universities (SAUs) and Indian Council of Agricultural Research (ICAR) institutions, Department of Agriculture & Farmers Welfare (DA&FW) had provisionally notified Nano Urea developed by M/s Indian Farmers Fertilizers Cooperative Limited (IFFCO), as Nano Nitrogen Fertilizers in Fertilizer Control Order, 1985. Indian Council of Agricultural Research (ICAR) has informed that experimental trials of Nano urea revealed that two spray of nano urea as top-dressing alongwith recommended basal dose of nitrogen gave comparable yield to that obtained with full recommended dose of nitrogen with yield advantage of 3-8% and urea saving of 25-50% in various crops. Price of IFFCO Nano Urea (liquid) is Rs 225 / 500 ml bottle, which is 16 % less than the price of a 45 Kg bag of conventional Urea. Further, Nano Urea developed by M/s Ray Nano Science & Research Centre and M/s Zuari Farm Hub Limited have also been included in Fertilizer Control Order (FCO)-1985.

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.

(c): The following steps are taken to promote the use of “Nano Urea” amongst the farmers:-

- i. Use of Nano Urea is promoted through different activities such as awareness camps, webinars, nukkad nataks, field demonstrations, Kisaan Sammelans and films in regional languages etc.
- ii. Nano Urea is made available at Pradhan Mantri Kisan Samridhi Kendras (PMKSKs) by concerned companies.
- iii. Nano Urea has been included under monthly supply plan issued by Department of Fertilizers regularly.
- iv. ICAR through Indian Institute of Soil Science, Bhopal recently organized National Campaign on “Efficient and Balanced Use of Fertilizer (including Nano-fertilizers).
- v. Promotion of use of nano fertilizers has been included as one of the activity under the Viksit Bharat Sankalp Yatra (VBSY) which was launched on 15th November, 2023 with the objective to reach out to people to create awareness and to provide benefits of flagship Government schemes.
- vi. For ease in application and utilization of Nano fertilizers like Nano Urea through foliar application, initiatives such as innovative spraying options like 'Kisan Drones' and distribution of battery operated Sprayers at retail points are undertaken. For this purpose, pilot training and custom hiring spraying services through Village Level Entrepreneurs are actively promoted.
- vii. Nano Urea is made available for sale through various platforms & marketing channel so as to increase overall reach of Nano fertilizers for the farmers. It is also available for sale on IFFCO's digital platform 'www.iffcobazar.in' through e-commerce.
- viii. CCEA has approved the Central Sector Scheme “Prime Minister–Mahila Kisan Drone Kendra”, which will also ensure application of nano fertilizers using women SHG operated Drones.

(d) to (f): IFFCO has informed that from August, 2021 to November, 2023, 2.75 lakh bottles have been dispatched to the state of Kerala against which the sales are 2.57 lakh bottles. IFFCO has reported that there was deficient Rainfall (-34%) during Kharif 2023 in Kerala. Consequently, the Kharif season was delayed and use of Nano Urea by farmers was slow. Now, the season has started and actual lifting by the farmers is gaining momentum.