

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

RAJYA SABHA

STARRED QUESTION NO. 141* TO BE ANSWERED ON: 20.12.2022

Nano Fertilizers

141* SHRI S. NIRANJAN REDDY:

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

- (a) the benefits of strategic application of nano fertilizers;
- (b) whether it is a fact that at present, the only approved nano fertilizer is IFFCO Nano Urea;
- (c) If so, the production capacity of nano urea in the IFFCO plant in Kalol, Gujarat;
- (d) whether Government has considered any other chemical fertilizers to be converted into nano fertilizer for future use; and
- (e) if so, the details thereof, and if not, the reasons therefore

ANSWER

MINISTER OF HEALTH & FAMILY WELFARE AND CHEMICALS & FERTILIZERS

(DR. MANSUKH MANDAVIYA)

(a) to (e): A Statement is laid on the table of the house.

**STATEMENT REFERRED TO RAJYA SABHA STARRED QUESTION NO. 141*
FOR 20.12.2022 REGARDING "NANO FERTILIZER" TABLED BY SHRI S.
NIRANJAN REDDY.**

(a) to (c): 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. 1st August, 2021. Nano Urea developed by IFFCO has been provisionally included in Fertilizer Control Order (FCO)-1985, based on the preliminary experimental trials undertaken in several Indian Council of Agricultural Research (ICAR)/state agricultural Universities.

Nano-Urea spray on different crops gave comparable yields to those obtained under fully recommended doses of fertilizers with 50% savings in top dressed 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. It results in reduced nutritional stress, better growth, and yield attributes of crops.

(d) & (e): Keeping in view the importance of Nano fertilizers, Government of India has notified guidelines for inclusion of these fertilizers in Fertilizer Control, 1985. Any proposal, as and when received from manufacturers of Nano fertilizers, would be considered for inclusion of specification of these fertilizers based on these guidelines.
