

GOVERNMENT OF INDIA
MINISTRY OF CHEMICALS AND FERTILIZERS
DEPARTMENT OF FERTILIZERS

RAJYA SABHA

UNSTARRED QUESTION NO. 500 TO BE ANSWERED ON: 07.02.2023

Development of nano fertilizers

500: SHRI GHANSHYAM TIWARI:

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

- (a) the details of efforts made by Government for the development of nano fertilizers during the last three years;
- (b) the details of the manner in which nano fertilizers would be beneficial for the farmer and the crop;
- (c) whether Government is giving any subsidy on the purchase of nano fertilizers; and
- (d) if so, the details thereof?

ANSWER

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

(a): 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. Overall, three Nano Urea plants at Kalol, Phulpur and Aonla with capacity of 17 crore bottles (500 ml each) per annum have been set up by IFFCO.

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. Accordingly, five more nano urea plants are being established at Bengaluru (Karnataka), Trombay (Maharashtra), Nangal (Punjab), Deoghar (Jharkhand) and Assam.

(b): 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. During the field trails undertaken in 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. Further, Nano Urea is available at cheaper price than conventional urea.

(c) & (d): No, Sir.
