GOVERNMENT OF INDIA MINISTRY OF CHEMICALS AND FERTILIZERS DEPARTMENT OF FERTILIZERS

LOK SABHA

UNSTARRED QUESTION NO. 3315 TO BE ANSWERED ON: 08.08.2025

Effect of Salt Index on Soil

†3315:SHRI SANJAY UTTAMRAO DESHMUKH:

SHRI BHAUSAHEB RAJARAM WAKCHAURE:

SHRI SANJAY HARIBHAU JADHAV:

SHRI OMPRAKASH BHUPALSINH ALIAS PAVAN RAJENIMBALKAR:

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

- (a) the policy formulated by the Government to ensure that all farmers get adequate quantity/availability of all the fertilizers in the country, especially in rural and deprived areas;
- (b) whether the Government has conducted an inquiry in respect of non-availability of Sulphur coated Urea for the Kharif crop year during the financial year 2025-26 in Maharashtra, if so, the reasons therefor, along with the steps taken to ensure its supply;
- (c) the details of the fertilizer salt index and its importance in crop production;
- (d) whether the Government has conducted any experiment/study on the effects of Salt Index and Calcium Carbonate Equivalent (CCE) of various fertilizers on soil and Foliar Spray, if so, the outcome thereof;
- (e) whether any training has been provided to the farmers regarding the use of CCE in agriculture and the fertilizers therein suitable according to it and if so, the details thereof: and
- (f) the reasons for not providing information on the Salt Index and CCE on the packing of the fertilizers?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS

(SMT. ANUPRIYA PATEL)

- (a) Following steps are taken by the Government before every cropping season for ensuring timely and adequate availability of fertilizers in the country including rural and deprived areas:
- i. Before the commencement of each cropping season, Department of Agriculture and Farmers Welfare (DA&FW), in consultation with all the State Governments, assesses the state-wise & month-wise requirement of fertilizers.

- ii. On the basis of requirement projected by DA&FW, D/o Fertilizers allocates adequate quantities of fertilizers to States by issuing monthly supply plan and continuously monitors the availability.
- iii. The movement of all major subsidized fertilizers is monitored throughout the country by an on-line web-based monitoring system called integrated Fertilizer Monitoring System (iFMS);
- iv. Regular Weekly Video Conference is conducted jointly by DA&FW and D/o Fertilizers with State Agriculture Officials and corrective actions are taken to dispatch fertilizers as indicated by the State Governments.
- (b) The government has introduced Sulphur Coated Urea with the name of "**Urea Gold**" in the year 2023. At present, two Urea plants namely RCF-Trombay and NFL-Panipat are producing Sulphur Coated Urea. The cumulative production of these two units till 15.07.2025 is 30,735.82 MT while the sales stands at 30,632.72 MT. During the year 2025-26, RCF Trombay has produced 700 MT while NFL Panipat has produced 105 MT till 15.07.2025.

Further, State Government of Maharashtra has informed that no complaint regarding non-availability of Sulphur coated Urea has been received to the State agriculture department and 1,660 MT of Sulphur coated Urea has been supplied by RCF in the State, during the ongoing Kharif 2025 season, till 04.08.2025.

(c) to (f) The salt index and calcium carbonate equivalent (CCE) of fertilizers significantly influence both soil health and plant response. Fertilizers with a high salt index can increase soil salinity, reduce water uptake by roots, and cause root burn, particularly in arid soils or when overapplied. In foliar sprays, high salt index materials may lead to leaf scorch or phytotoxicity, especially under hot and dry conditions.

The CCE indicates a fertilizer's liming or acidifying effect on soil pH. Fertilizers with a positive CCE (e.g., calcium nitrate) help neutralize soil acidity, whereas those with a negative CCE (e.g., ammonium sulphate, urea) tend to acidify the soil over time, impacting nutrient availability and microbial activity. Therefore, understanding both the salt index and CCE is essential for selecting appropriate fertilizers, managing application rates, and ensuring balanced nutrient supply without harming soil health or crop productivity—especially in sensitive crops or degraded soils.

ICAR imparts training to the farmers on safe application of fertilizers to avoid any human and crop burns.
