

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 2914
TO BE ANSWERED ON 10.07.2019

RADIATION TECHNOLOGY FOR FOOD LOSS

2914. SHRIMATI MEENAKASHI LEKHI:

Will the PRIME MINISTER be pleased to state:

- (a) whether any research is going on to develop radiation technologies that can prevent food loss in post harvest stage and if so, the details thereof;
- (b) whether use of radiation techniques has helped in increasing the food production in the country; and
- (c) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (Dr. JITENDRA SINGH):

- (a) Yes, Sir. Bhabha Atomic Research Centre (BARC) has been actively involved in the use of ionizing radiation for preservation of food and allied products for more than 50 years with an objective to improve food security and food safety of the country. The Department of Atomic energy has the necessary expertise and know-how for setting up radiation processing plants. It has set up two technology demonstration units, one commissioned in the year 2000 for high dose irradiation at Vashi, Navi Mumbai, primarily for hygeinization of spices, and a low dose irradiation facility, KRUSHAK at Lasalgaon, near Nashik, for sprout control during storage for potato and onion and insect disinfestation of agricultural commodities in 2002. Besides, fourteen food irradiation plants have been installed in public domain. Six new irradiation facilities are scheduled to be functional by 2020.
- (b)&(c) Yes, Sir. Radiation techniques has been extensively used for seed development program to meet the desirable traits in many crops thereby helped in increasing the food production in the country. Using radiation induced mutagenesis along with cross breeding, BARC has developed 44 varieties in oilseeds (groundnut, mustard, soybean and sunflower), pulses (urdbean, mungbean, pigeonpea, cowpea), rice and jute, which have been released and notified for commercial cultivation across the country. Some of the desirable traits in these crops include higher yield, seed size, improved agronomic and quality traits, early maturity and resistance to biotic and abiotic stresses. Several of these varieties have high patronage from the farming community and are extensively grown in the country.
