GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO–5386
ANSWERED ON 25/03/2026

GAMMA IRRADIATION FACILITIES IN LADAKH

5386. SHRI MOHMAD HANEEFA

Will the PRIME MINISTER be pleased to state:-

(a) the current status of setting up Gamma Irradiation facilities in Ladakh for shelf-life extension of fruits and vegetables, as announced by the Department of Atomic Energy;
(b) the timeline for completion and operationalization of these facilities;
(c) the expected benefits for local farmers and agri-businesses including the projected increase in shelf life and reduction in post-harvest losses;
(d) whether any pilot projects or trails have been conducted so far and if so, the results thereof; and
(e) the steps taken to ensure local participation and training of Ladakhi youth in the operation and maintenance of these facilities?

ANSWER

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

(a),(b),(c),(d)&(e) This is ongoing process. Bhabha Atomic Research Centre (BARC), a constituent unit of Department of Atomic Energy (DAE) is involved in Research and Development (R&D) activities pertaining to the development of Standard Operating Procedures (SOPs) for preserving different agricultural produce commodities, preparing standards and guidelines pertaining to food irradiation to help regulators, developing radiation facilities with improvised design as well as promotion of the technology for wider deployment. BARC developed radiation technologies not only extend the shelf life of perishable agricultural produce and prevent post-harvest losses, but also help Indian exporters to meet international

quarantine requirements for export of such commodities, thereby enabling access to high-value markets. Notably, the shelf life of onion and potatoes has been extended up to 7.5 months and 8 months respectively, while retaining the quality attributes. India has been exporting mangoes and pomegranate through sea route in a cost-effective manner to the United States of America (USA), Australia, South Africa and Malaysia using irradiation as a mandatory phytosanitary treatment. SOPs have also been developed for shelf-life extension of cereals, wheat, spices, mushroom, fruits and vegetables such as green tomato and broccoli, cherry fruits, semi dried apricot etc., benefiting farmers, traders and consumers. Radiation processing also enables chemical-free preservation of grains and spices by eliminating insects and microbes. The radiation based food preservation technology has been transferred to private entrepreneurs on non-exclusive basis for commercialization. At present 32 commercial food irradiation facilities are operational across the country which includes seven plants by Central / State Government Sector and 25 by private firms.

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