GOVERNMENTOF INDIA
MINISTRY OF FOOD PROCESSING INDUSTRIES
RAJYA SABHA
UNSTARRED QUESTION NO. 2473
TO BE ANSWERED ON 21ST MARCH, 2025

ENERGY CONSUMPTION IN FOOD PROCESSING AND PACKAGING

2473. SHRI RAVI CHANDRA VADDIRAJU:

Will the Minister of ***FOOD PROCESSING INDUSTRIES*** be pleased to state:

(a) whether food processing and packaging account for the highest energy consumption in the food supply chain globally, as per recent studies;

(b) the steps being taken to reduce energy intensity in food processing, refrigeration, and packaging in India;

(c) whether Government is promoting the use of energy-efficient technologies and renewable energy in food processing units; and

(d) the details of any incentives or schemes available to food processing industries for adopting sustainable practices?

ANSWER

THE MINISTER OF STATE FOR FOOD PROCESSING INDUSTRIES
(SHRI RAVNEET SINGH)

(a) to (d): Ministry of Food Processing Industries (MoFPI) has not conducted any study to assess the energy consumption in the food supply chain globally. MoFPI encourages the adoption of energy-efficient equipment and renewable energy sources under the Central Sector Umbrella Scheme viz. Pradhan Mantri Kisan SAMPADA Yojana (PMKSY). National Institute of Food Technology, Entrepreneurship and Management (NIFTEM), Kundli, an autonomous body under MoFPI, is working on improving energy efficiency and reducing energy costs. The equipment developed by NIFTEM for use of renewable/ alternate energy are as below:

(i). Evacuated Tube Solar Dryer (ETSD)
(ii). Evacuated Tube Hybrid Dryer (ETHD)
(iii). Hybrid Solar Greenhouse Dryer (HGHD)
(iv). Solar Assisted Reefer Transportation with Hybrid controls and Intelligence (SARTHI)

Further, Ministry of New and Renewable Energy (MNRE) has notified a "Design Specifications, Performance Guidelines and Testing Procedure for Solar Cold Storage with Thermal Energy Storage Backup" to promote the quality installation and its use in the country. Solar powered cold storages are expected to reduce post-harvest losses and enhance farmers' incomes by allowing them to store, produce and sell at more favourable times. Moreover, a National Centre for Cold-chain Development (NCCD) has been set up under Department of Agriculture, Cooperation and Farmers Welfare to recommend technical standards for cold chain infrastructures for perishable food items including fresh fruits & vegetables and undertake their periodic revision keeping pace with technological advancements. The main objectives of the centre are to recommend standards and protocols for cold-chain infrastructure, suggest guidelines for human resource development and to recommend appropriate policy frame-work for development of cold-chain. National Horticuture Board has also been set up under Ministry of Agriculture and Farmers Welfare with the objectives to develop production clusters/hubs for integrated Hi-tech commercial horticulture, development of Post-harvest management infrastructure and development of integrated, energy efficient cold chain infrastructure for fresh horticulture produce, etc.

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