Remote Diagnostic System for electric locomotives have been developed by Indian Railways and already provided in 3361 diesel locomotives and 134 electric locomotives respectively. The information on parameters of important equipments on locomotive is being collected and transmitted online to home shed of the locomotive where expert technical personnel observe and monitor performance and health of the locomotive. The expert personnel with the available information plan in advance locomotive maintenance before the locomotive arrives in shed and also guide the loco pilot with necessary details in case any problems are being faced so as to enable effective troubleshooting on the locomotive as and when required.

## Cold storage and infrastructure facilities

- \*67. SHRI RAM KUMAR KASHYAP: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:
- (a) whether post-harvest management, preservation, transportation and value addition are not adequate in farm sector, resulting in huge wastage at each stage of supply chain due to lack of cold storage and infrastructure facilities;
- (b) whether surplus production of perishable items like potato, tomato, onions, etc., get wasted, resulting in huge losses to farmers;
- (c) if so, the measures proposed by Government to minimize harvest and post harvest losses to farmers; and
- (d) whether there is any proposal to develop low-cost storage and preservation facility to increase shelf-life of perishable items so as to benefit small farmers?

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI RADHA MOHAN SINGH) (a) to (d) A study commissioned by Ministry of Food Processing Industries and carried out by Central Institute of Post Harvest Engineering and Technology (CIPHET), Indian Council of Agricultural Research (ICAR), in 2015, estimated that quantum of harvest and post-harvest losses of fruits and vegetables were in the range of 6.70% to 15.88% (fruits) and 4.58% to 12.44% (vegetables) at various stages such as harvesting, cleaning, sorting/grading, packing, transportation, storage channels, weight loss in storage, etc. A recent study (2015) conducted by NABARD Consultancy Services (NABCONS) assessed the shortfall in number of cold storages to be within 10% of the nationwide requirement.

The production of fruits and vegetables including potato, tomato and onions etc. has been increasing due to various intervention of Government of India. The production of potato, tomato and onion has increased from 454 lakh MT, 182 lakh MT and 168 lakh MT in 2012-13 to 466 lakh MT, 197 lakh MT and 215 lakh MT in 2016-17 respectively. The quantitative harvest and post-harvest losses as estimated by CIPHET were 8.20% for onion, 12.44% for tomato and 7.32% for potato.

In order to minimize harvest and post-harvest losses, Government is implementing Mission for Integrated Development of Horticulture (MIDH) which includes assistance for establishment of post-harvest infrastructure. Under MIDH, credit-linked back ended subsidy @ 35% of the project cost in general areas (and 50% in the case of hilly and schedule areas) is available for various components of post-harvest infrastructure, including cold chain. The component is demand/entrepreneur-driven from among entrepreneurs, private companies, cooperatives, farmers groups etc through commercial ventures. Ministry of Food Processing Industries and Agricultural Processed Food Products Export Development Authority (APEDA) under Ministry of Commerce are also implementing programmes for creation of post-harvest infrastructure.

Further, for the benefit of farmers, MIDH also provides assistance for creation of storage facilities at farm level through establishment of pack houses, pre-cooling units, staging cold room, evaporation/low energy cool chamber, preservation unit, onion storage unit and Pusa zero-energy cool chambers.

## Potential job losses in IT services business

\*68. SHRI A.K. SELVARAJ: Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) whether it is a fact that there are concerns over potential job losses in the IT services business;
- (b) whether it is also a fact that though the pace of growth in IT services business has come down, the employment opportunities have not been affected; and
- (c) whether it is also a fact that hiring is still a reality and it is only the nature of business that is changing, if so, the details thereof?

THE MINISTER OF ELECTRONICS AND INFORMATION TECHNOLOGY (SHRI