

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

RAJYA SABHA
UNSTARRED QUESTION NO. 3227
TO BE ANSWERED ON THE 20/03/2026

LOW RATE OF TECHNOLOGY ADOPTION AMONG SMALL AND MARGINAL FARMERS

3227 SHRI SANJAY KUMAR JHA:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether it is a fact that while there have been advancements in agricultural technology, the adoption rate among small and marginal farmers remains low;
- (b) if so, whether this could be addressed by policy intervention by the Ministry; and
- (c) if so, the specific policy intervention envisaged to address this concern?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
(SHRI RAMNATH THAKUR)

(a) to (c): The Government of India introduced Sub Mission on Agricultural Mechanization (SMAM) during 2014-15 under the National Mission on Agricultural Extension and Technology and since 2022-23, merged under the umbrella of PM -RKVY with the objectives of increasing the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low; promoting 'Custom Hiring Centres' and 'Hi-tech Hubs of High Value Machines' to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership; Creating awareness among stakeholders through demonstration and capacity building activities of various farm mechanization technologies including technologies developed by Indian Council of Agricultural Research (ICAR) and ensuring performance testing and certification of agricultural machines at Central Farm Machinery Training and Testing Institute (FMTTIs) and designated testing centers located all over the country.

The adoption of farm mechanization by the farmers of various States depends on varying factors such as socio-economic conditions, geographical conditions, crops grown, irrigation facilities etc. As per the estimates of 2020-21 of Indian Council of Agricultural Research (ICAR), agricultural mechanization level varies across different crops and their farm operations in the country. Overall, the operation-wise average mechanization levels across crops are 70% for seed-bed preparation, 40% for sowing/planting/transplanting, 32% for weeding and inter-culture, and 34% for harvesting and threshing, resulting in an overall average mechanization level of 47%.

Under this Scheme, during the period from 2014-15 to 2025-26 (as on date), the central funds amounting to Rs. 9721.57 Crores have been released to various States and 21,63,009 number of machines have been distributed on subsidy to individual farmers, 27,554 CHCs, 649 Hi-tech Hubs and 25,608 FMBs have been established.
