

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1938**  
TO BE ANSWERED ON 17/03/2023

**MECHANISATION OF AGRICULTURE**

1938. SHRI SANJAY SINGH:

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

- (a) the percentage of mechanization of agriculture in the country and the increase marked therein, in terms of percentage, during the last five years;
- (b) the level of mechanization of agriculture in the country as compared to USA, China, Russia, Brazil and other countries;
- (c) the details of expenditure and allocated funds for modernization and mechanization of agriculture sector during the said period, year-wise; and
- (d) the details of estimated production losses per year, due to the low level of mechanization of agriculture sector in the country?

**ANSWER**

MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

(a) and (b): The adoption of mechanization by the farmers depends on various factors such as socioeconomic conditions, geographical conditions, crops grown, irrigation facilities etc. The average level of farm mechanization as assessed by Indian Council of Agricultural Research (ICAR) for major crops is around 47%. The seedbed preparation operation is highly mechanized (more than 70%) for major crops whereas, harvesting and threshing operation is the least mechanized (lower than 35%) for major crops except for rice and wheat crops. The mechanization level for sowing operation is the highest for wheat crop (65%) whereas, the mechanization levels in planting/transplanting operation for sugarcane and rice crops are 25% and 35%, respectively. In case of harvesting and threshing, the mechanization levels in rice and wheat crops are more than 60% and very less in cotton crop. The percentage increase in level of farm mechanization during the last five years is estimated to be 8-10 percent. The average level of farm mechanization in USA is 95%, China 60%, Russia 85%, Brazil 75% and Europe 95%.

(c): For promotion of agricultural mechanization in the country, a Centrally Sponsored Scheme 'Sub-Mission on Agricultural Mechanization' (SMAM) is being implemented through the State

Governments w.e.f. 2014-15. The allocation and expenditure of funds under this scheme during the last 5 years is as under:

Year	Allocation (Rs. in Crores)	Expenditure (Rs. in Crores)
2017-18	577.58	791.04
2018-19	1200.00	1126.77
2019-20	1033.34	992.19
2020-21	1033.09	1026.63
2021-22	1080.66	844.38

(d): The farm mechanization helps in increasing the productivity of farms by optimizing the use of various inputs. However, the production losses per year exclusively due to the low level of mechanization in the country has not been estimated.

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