

Standing Committee Report Summary

Farm Mechanisation for Small and Marginal Farmers

- The Standing Committee on Agriculture, Animal Husbandry and Food Processing (Chair: Mr P.C. Gaddigoudar) presented its report on ‘Research and Development in Farm Mechanisation for Small and Marginal Farmers in the Country’ on July 21, 2023. Mechanisation of agriculture improves productivity, ensures judicious input use, and enables farmers to undertake commercial agriculture instead of subsistence farming. Key observations and recommendations of the Committee include:
- Status of farm mechanisation:** As of August 2022, 47% of agricultural activities are mechanised in India. This is lower than other developing countries such as China (60%) and Brazil (75%). Further, small and marginal agricultural holdings (less than two hectares) account for 86% of total operational holdings. The Committee highlighted that unless machines appropriate for small holdings are made available or substantial farm land consolidation takes place, small farmers will find it difficult to purchase their own machinery. It also noted that it would take about 25 years for the country to achieve 75-80% mechanisation. The Committee highlighted that there is an urgent need to enable farmers to take on additional crops, which will make agriculture attractive and profitable. While noting various initiatives such as the Sub-Mission on Agricultural Mechanisation, the Committee recommended that the government must prioritise mechanisation of small farms. It also recommended that the government achieve 75% mechanisation in less than 25 years.
- Table 1: Mechanisation level across crops**

Crop	Rice	Wheat	Pulses	Sugarcane	Overall
Level	53%	69%	41%	35%	47%
- Portability of farm equipment:** Since farm machinery is expensive, small farmers find it difficult to purchase this equipment. The Committee observed that the government has introduced custom hiring centres and farm machinery banks, where farmers can share machines. So far 37,097 custom hiring centres which include 17,727 farm machinery banks have been established. A well-established centre provides mechanisation to about 100-200 farmers. The Committee noted that farm machinery banks have been established in almost all states. However, it noted that their benefits have not percolated to the district, taluka, panchayat, and gram sabha levels. It recommended that the government widely publicise such schemes, and develop an app to locate and contact nearby centres/banks.
- The Committee also noted that standardisation of farm machinery is complex and the government must make a concrete policy to enforce interchangeability at the stage of manufacturing. Availability of standard parts makes production simpler. It noted that design standardisation may be achieved at the level of Bureau of Indian Standards, and implementation of such standards at the manufacturer level.
- Sub-Mission on Agricultural Mechanisation:** Under the Mission, the government provides 40-50% of the cost of purchasing tractors, power tillers, or combine harvesters to small and marginal farmers. It is being implemented through states/UTs. In September 2022, the Mission was merged with the Rashtriya Krishi Vikas Yojana. Since the implementation of the Mission in 2014-15, 14.2 lakh machines were distributed. The Committee highlighted that to ensure affordability to small farmers, the government promote low-cost equipment. It also recommended that since the merger of the two schemes, the mandate of Sub-Mission on Agricultural Mechanisation must not be diluted.
- Availability of farm power:** The Committee noted that availability of farm power impacts crop yield. It noted that the average farm power availability is 2.5 kW per hectare, which must be increased to 4 kW per hectare by 2030. It also noted a disparity in farm power availability between states, which must be reduced. For instance, Punjab has a power availability of 6 kW per hectare, as compared to Mizoram with 0.7 kW per hectare. Since an improvement in power supply ensures that more tasks are completed at the right time, greater areas can be farmed which increases production.
- Study to assess farm mechanisation:** The Committee noted that no formal study has been conducted to assess farm mechanisation. The Indian Council for Agricultural Research has proposed that a state-wise study be conducted to identify gaps in mechanisation and recommend suitable strategies. The Committee recommended that the Department of Agriculture and Farmers’ Welfare prepare a plan for such a study. The Committee noted that there is a lack of engineering manpower to demonstrate, train, and guide farmers. Presently, the Directorate of Agricultural Engineering exists in Madhya Pradesh and Tamil Nadu only. The Ministry has informed states that they must establish a Directorate in their states. The Committee also recommended that a Directorate be set up in each state.

DISCLAIMER: This document is being furnished to you for your information. You may choose to reproduce or redistribute this report for non-commercial purposes in part or in full to any other person with due acknowledgement of PRS Legislative Research (“PRS”). The opinions expressed herein are entirely those of the author(s). PRS makes every effort to use reliable and comprehensive information, but PRS does not represent that the contents of the report are accurate or complete. PRS is an independent, not-for-profit group. This document has been prepared without regard to the objectives or opinions of those who may receive it.