

inefficient utilisation of Indian workforce. This needs to be countered through skilling of rural youths and promotion of agricultural mechanisation.

NEED FOR AGRICULTURAL MECHANIZATION

- The agricultural mechanization can reduce the increasing labour costs in the rural areas. It can enable the farmers to grow a greater number of crops in a single year due to reduction in the harvesting time.
- There has been feminization of Indian agriculture with women farmers accounting for almost 1/3 of the total farmers. Mechanization would help address the needs of women farmers.
- According to the Dalwai Committee, the adoption of agricultural mechanization would reduce the input costs by 25%, enhance the productivity by 20% and increase the incomes of the farmers by 25-30%.

PRESENT STATUS OF MECHANISATION

- **Farm Mechanization in India:** 40-25%; Even though India is the largest producer of tractors, a significant share of production is exported.
- **Farm Mechanization in other countries:** USA (95%); Brazil (75%); China (57%).
- **Regional Disparities:** Northern India has higher levels of mechanization compared to other regions. (Rice

and Wheat crops having the largest extent of mechanization)

CHALLENGES WITH ADOPTION OF AGRICULTURAL MECHANIZATION

Dominance of Fragmented landholdings: The average landholding size has reduced to 1.23 ha. 83% of the farmers in India are small and marginal and they own around 40% of the agricultural land.

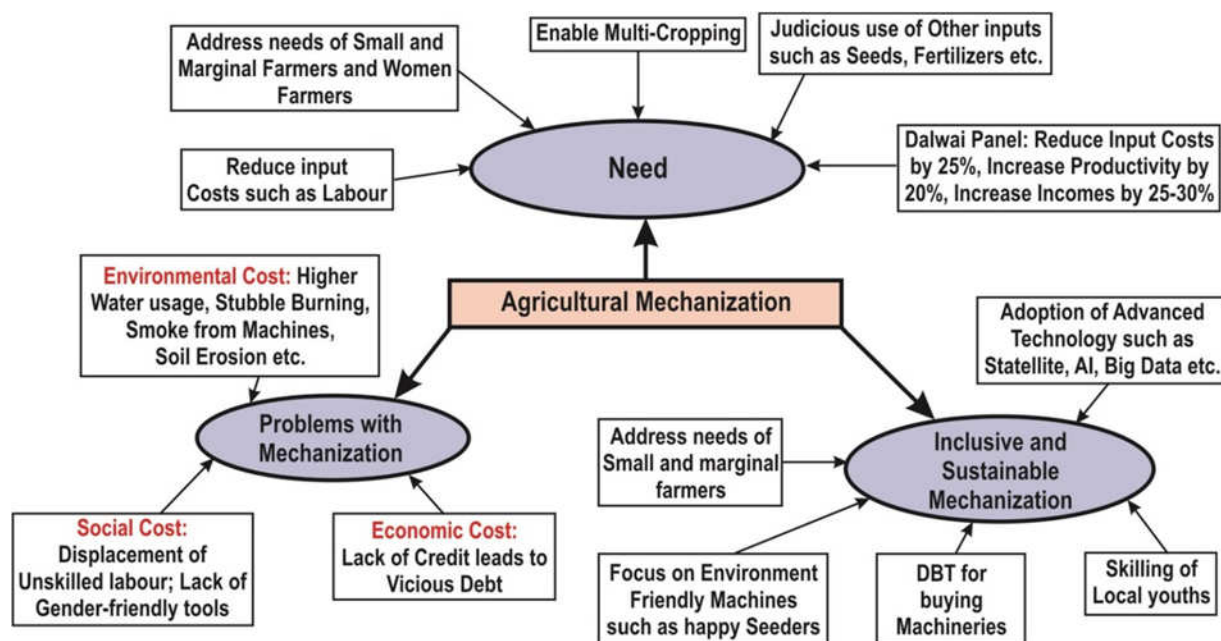
Capital Intensive: The agricultural machinery such as tractors, harvesters etc. are quite costly and hence unaffordable to the vast section of Indian society.

GOVERNMENT INITIATIVES

Sub-Mission on Agricultural Mechanization (2014): Assistance to the Farmers for procurement of agricultural machineries; Custom Hiring Centres; Demonstration of Newly Developed Agricultural/ Horticultural Equipment.

Promotion of Agricultural Mechanisation for in-situ Management of Crop residue: Implemented in Punjab, Haryana, UP and NCT of Delhi; Setting of Custom hiring centres; Financial Assistance to the farmers for buying environment friendly agricultural machinery.

FARMS (Farms Machinery Solutions) Mobile App: Facilitates the farmers to hire agricultural machineries and tools.



► YIELD GAPS & TOTAL FACTOR PRODUCTIVITY IN AGRICULTURE

Present Status: There exists large scale yield gaps in the Indian Agriculture. This yield gap exists at two levels —

Firstly, between the best scientific practices and the best field practices, and second, between the best field practices to the average farmer practices. These yield gaps exist in almost all crops such as Rice, Wheat, Pulses, Maize, Sugarcane etc. For example, only 2 per cent of