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The Need To Move Beyond Tractorization

Indian agriculture is counted among the world's largest agricultural economies. The country has been a steady supplier of agricultural produce to the world, and food security hasn't been in red ever since green revolution. With around 50 percent of the population deriving employment from this sector, the agriculture segment appears to be well placed in India. But with changing times, any sector has to be suitably interjected with interventions and innovations. Plateauing productivity and increasing demands have repeatedly pointed towards this important detail, which needs to be addressed.

Agriculture mechanization is an important step towards sustaining agriculture growth. The recent changes in Indian economy have seen a labour drain from the agriculture sector, creating labour shortages especially during peak seasons. It has become imperative to make the sector technology driven and less labour intensive.

Over the last five decades, mechanization largely got limited to tractorization, despite the increasing demand for low cost farm tools and equipment. In the last few years, powered by the policy push, mechanization in real terms has picked up. Several tractor companies have diversified their portfolios and many new companies have got into farm machinery manufacturing. It is an assuring fact that tractor sales in India have gone up in recent years. India's farm equipment market is 7% of the global market, with more than 80% of the value contribution coming from tractors. Mechanization has to go beyond tractorization. Harvesters, laser land levelers, mowers, threshers, combine harvesters can bring about a perceptible change in Indian agriculture.

High cost of equipment and poor access to finance continue to pose challenges. The agriculture units in India are diverse, fragmented and small. Farm machines and equipment have to be customized and remodeled

according to Indian conditions. Women are now playing a key role in the farm sector. Gender sensitive farm machineries will be an added advantage.

There is active integration of technology in the farm machinery segment. Precision agriculture, big data-based technologies, Internet of Things (IoT)-inspired mechanization and involvement of artificial intelligence in mechanization technologies are preparing Indian agriculture well for the future.

