



भारतीय कृषि एवं खाद्य परिषद
INDIAN COUNCIL OF FOOD AND AGRICULTURE



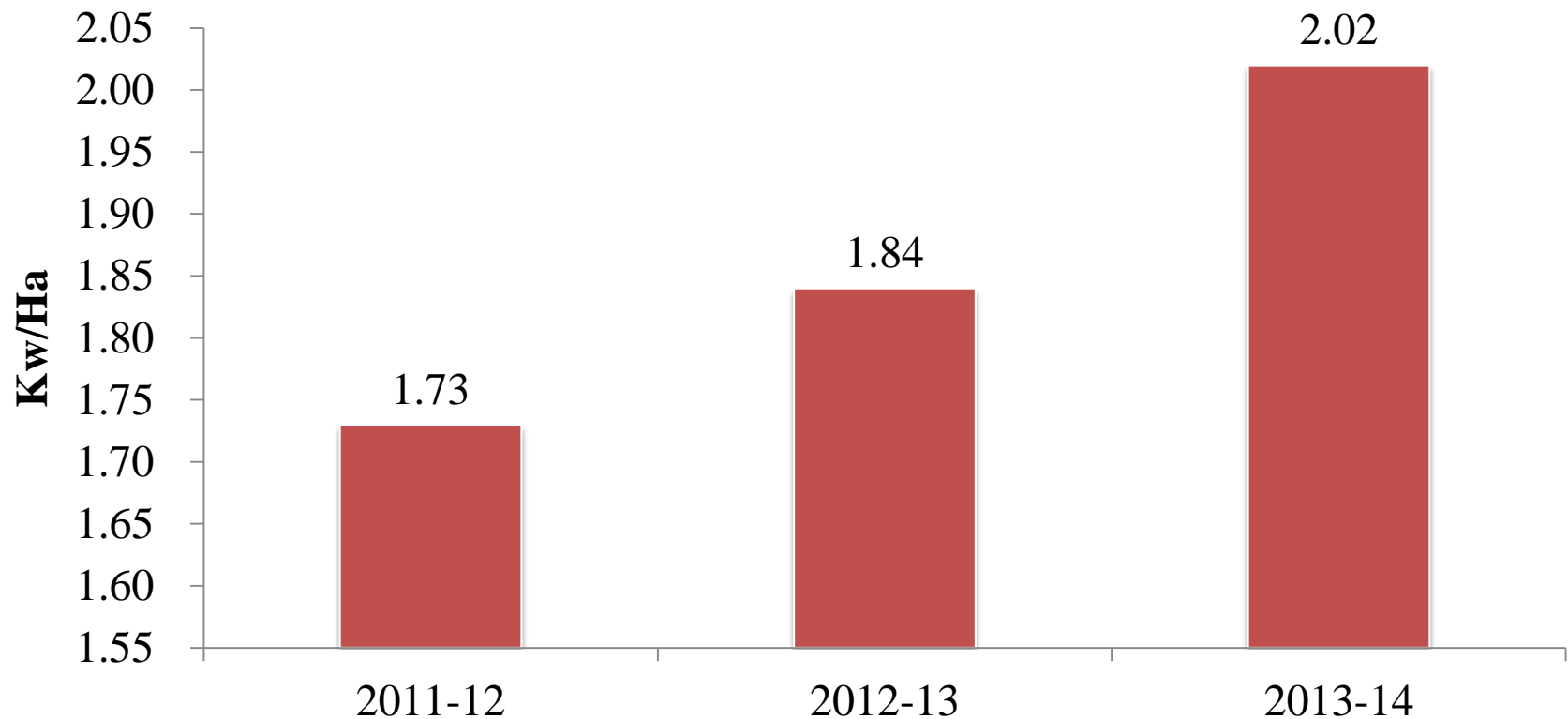
FARM MECHANIZATION

MARKET UPDATE

Farm Power Available

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Farm Power Available on Indian Farms; 2011-14

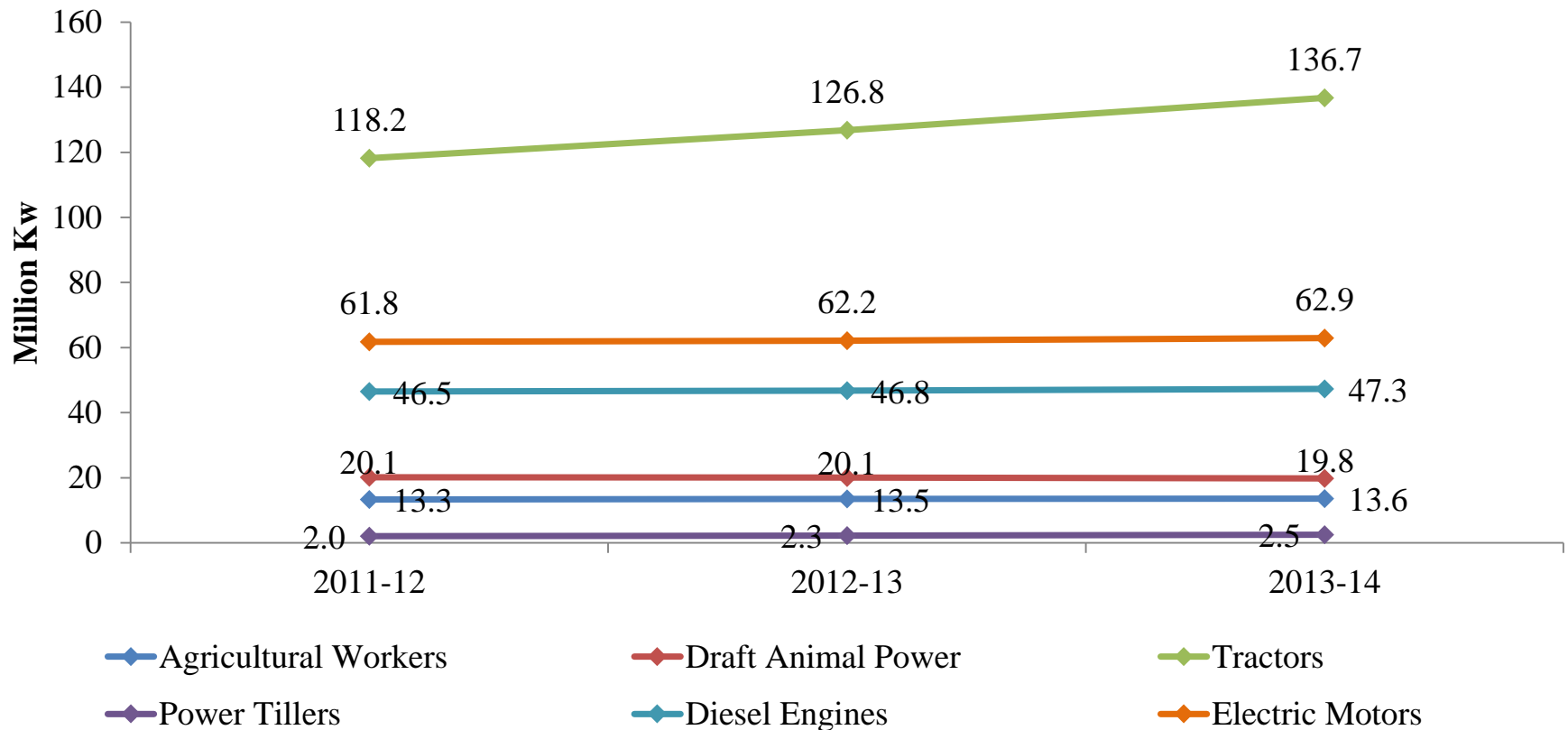


Source: Country presentation paper, Agricultural Machinery Manufacturers Association (AMMA) India, October 2014

Farm Power Available

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Farm Power Available on Indian Farms by Different Sources; 2011-14

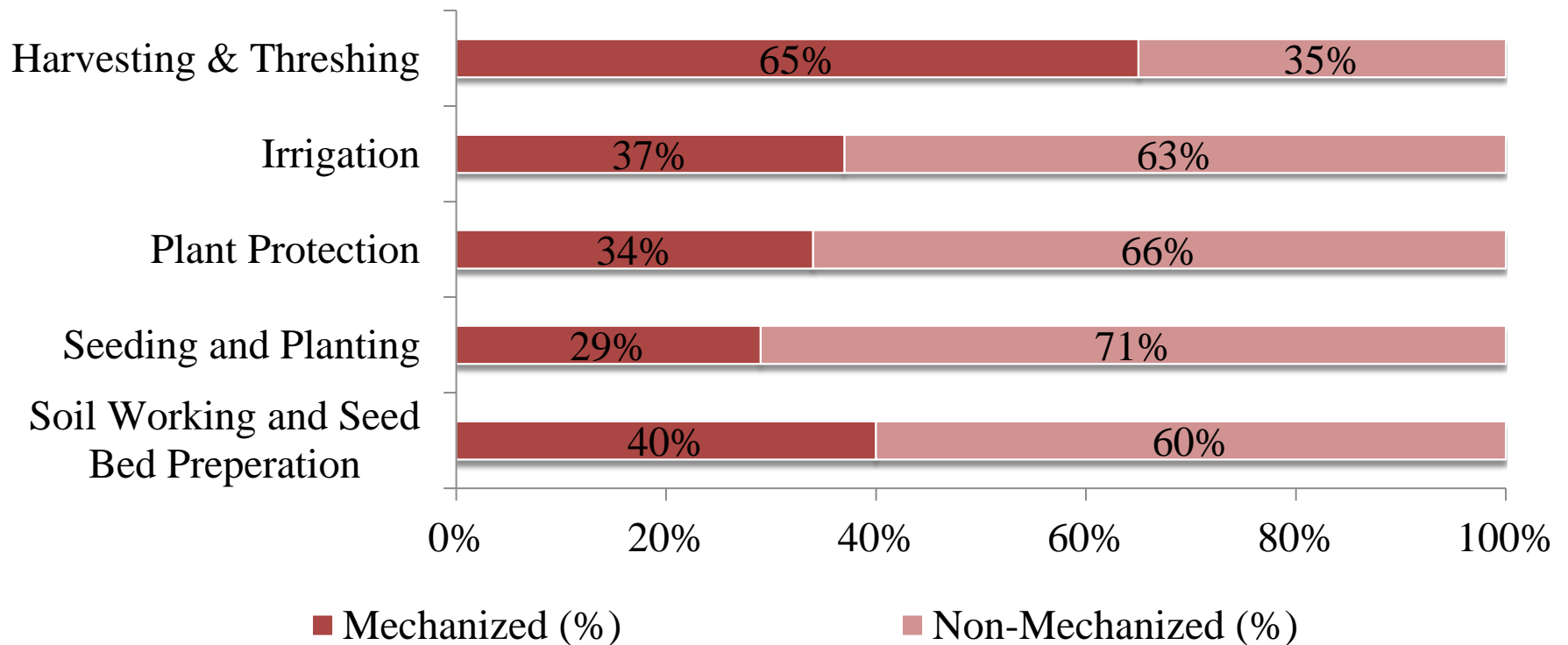


Source: Singh (2013); Singh et al. (2010); Singh et al. (2009)

Farm Power Available

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Extent of Farm Mechanization at Different Levels of Value Chain Process

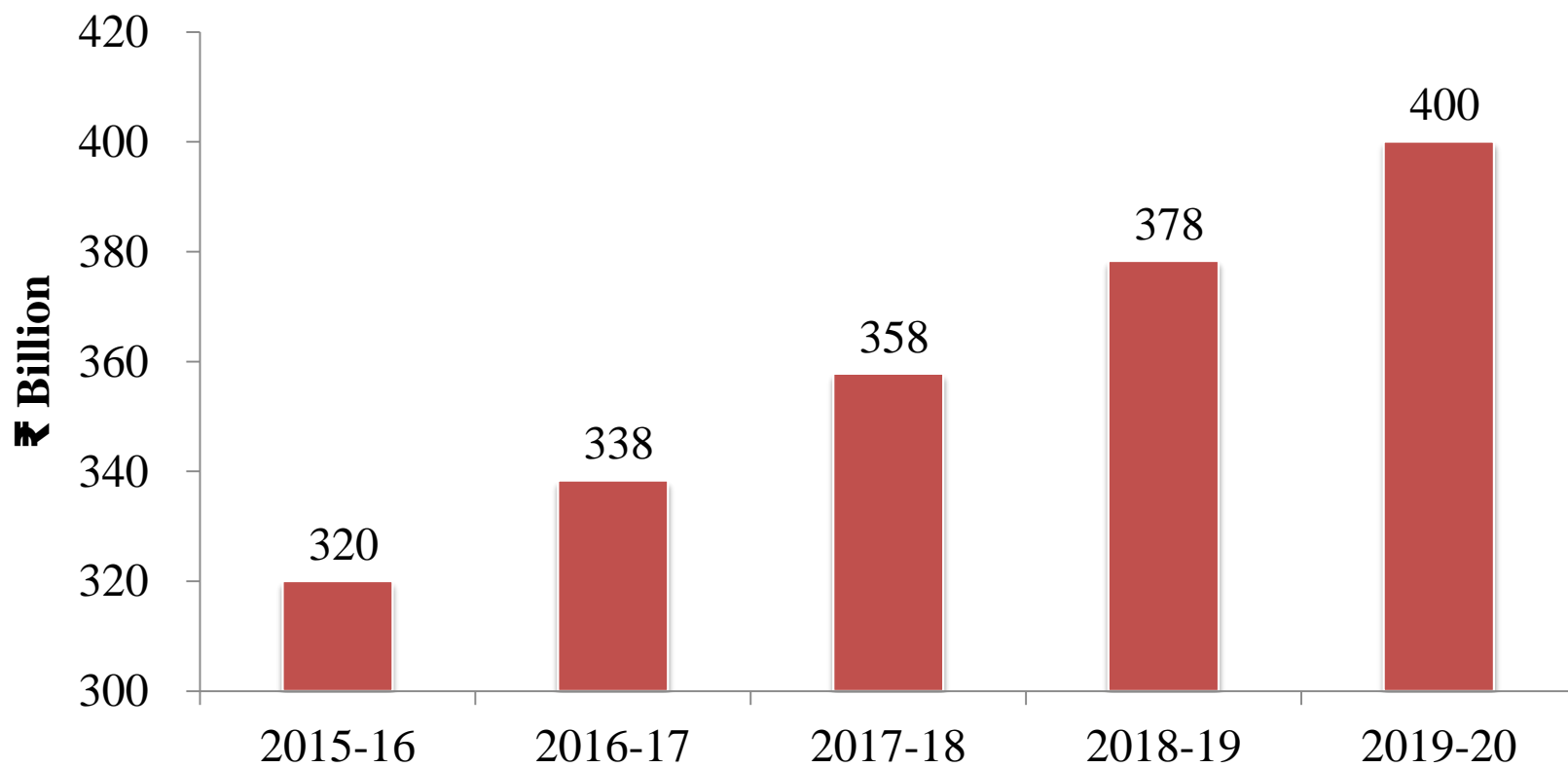


Source: UNESCAP CSAM

Indian Farm Mechanization Market

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Indian Farm Mechanization Market; 2015-20

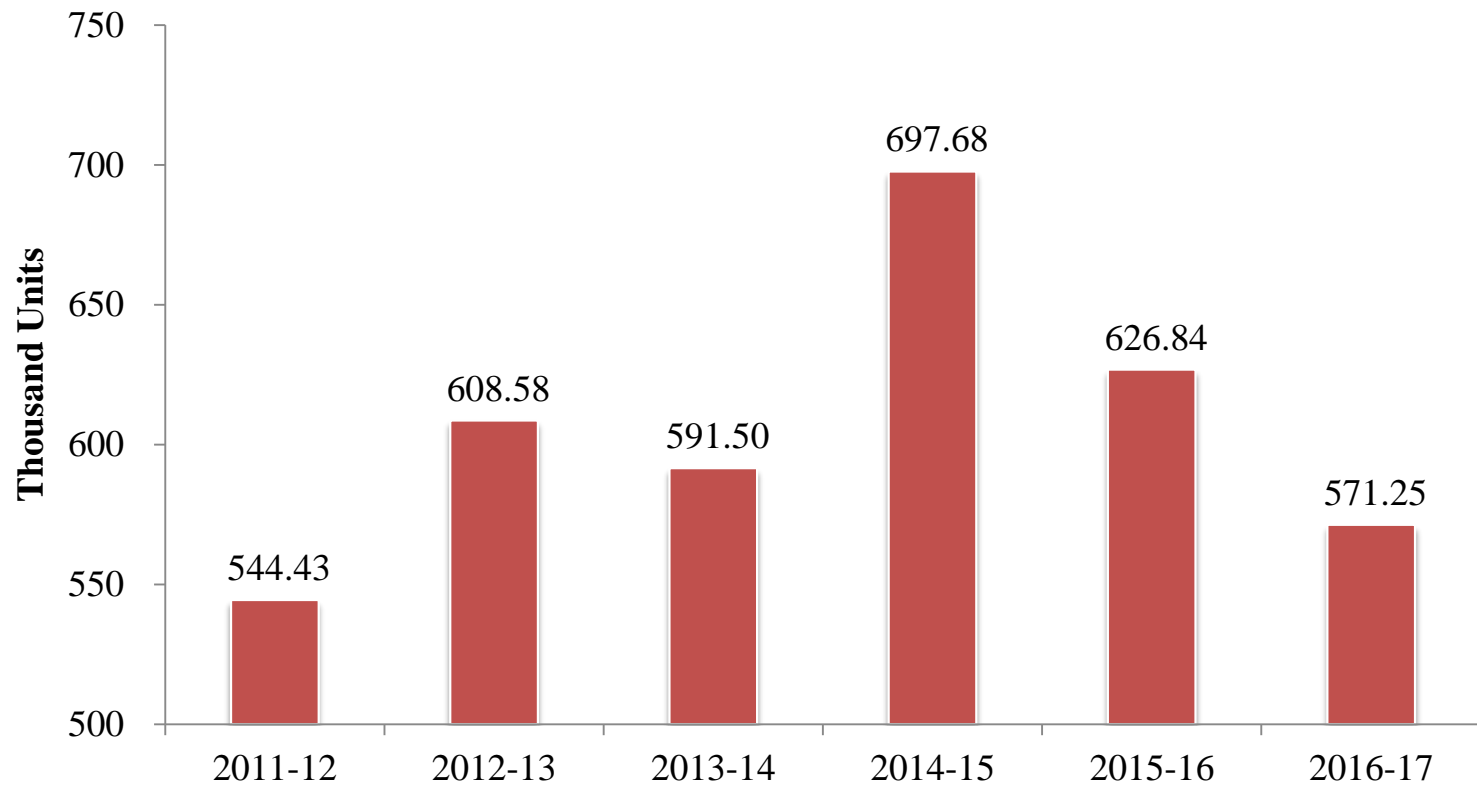


Source: agrination.org.in

Indian Tractor Market

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Indian Tractor Market by Volume; 2011-17

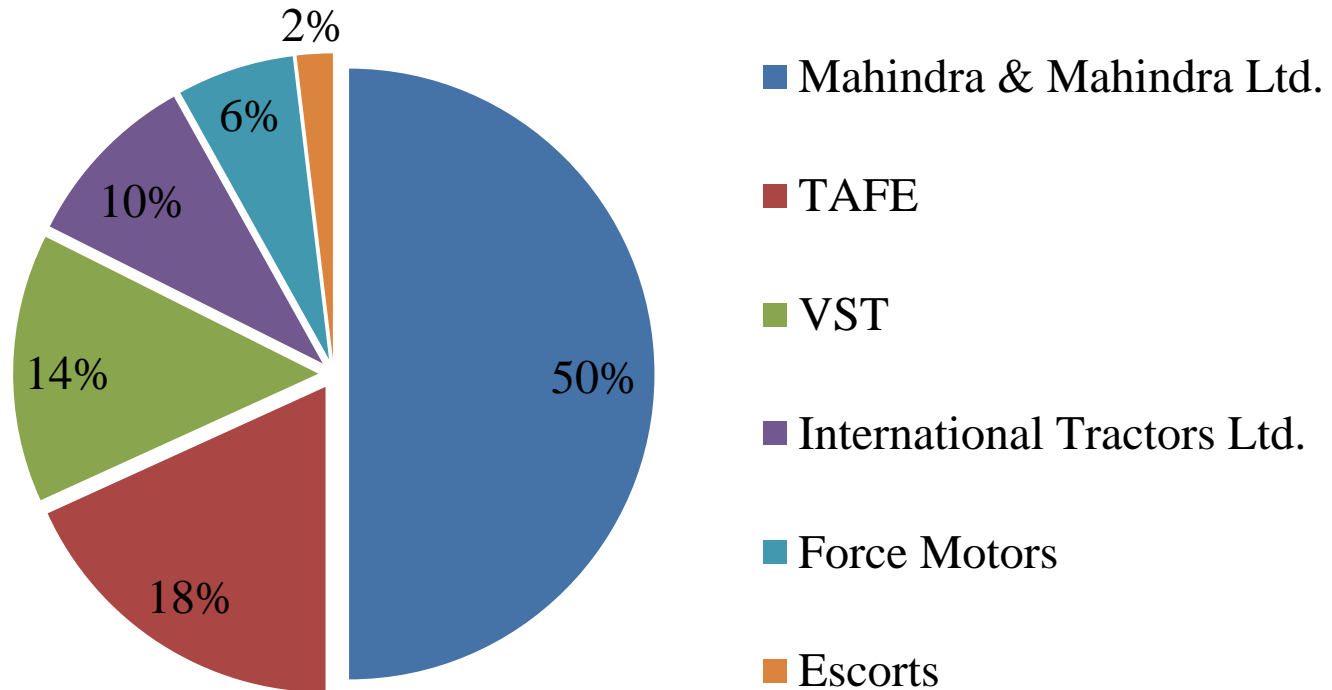


Source: Department of Agriculture and Cooperation, State of Indian Agriculture 2013-14, ICRA, A report on 'Farm Mechanization in India', TechSci Research

Indian Tractor Market

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Indian Tractor Market by Market Players; 2016-17

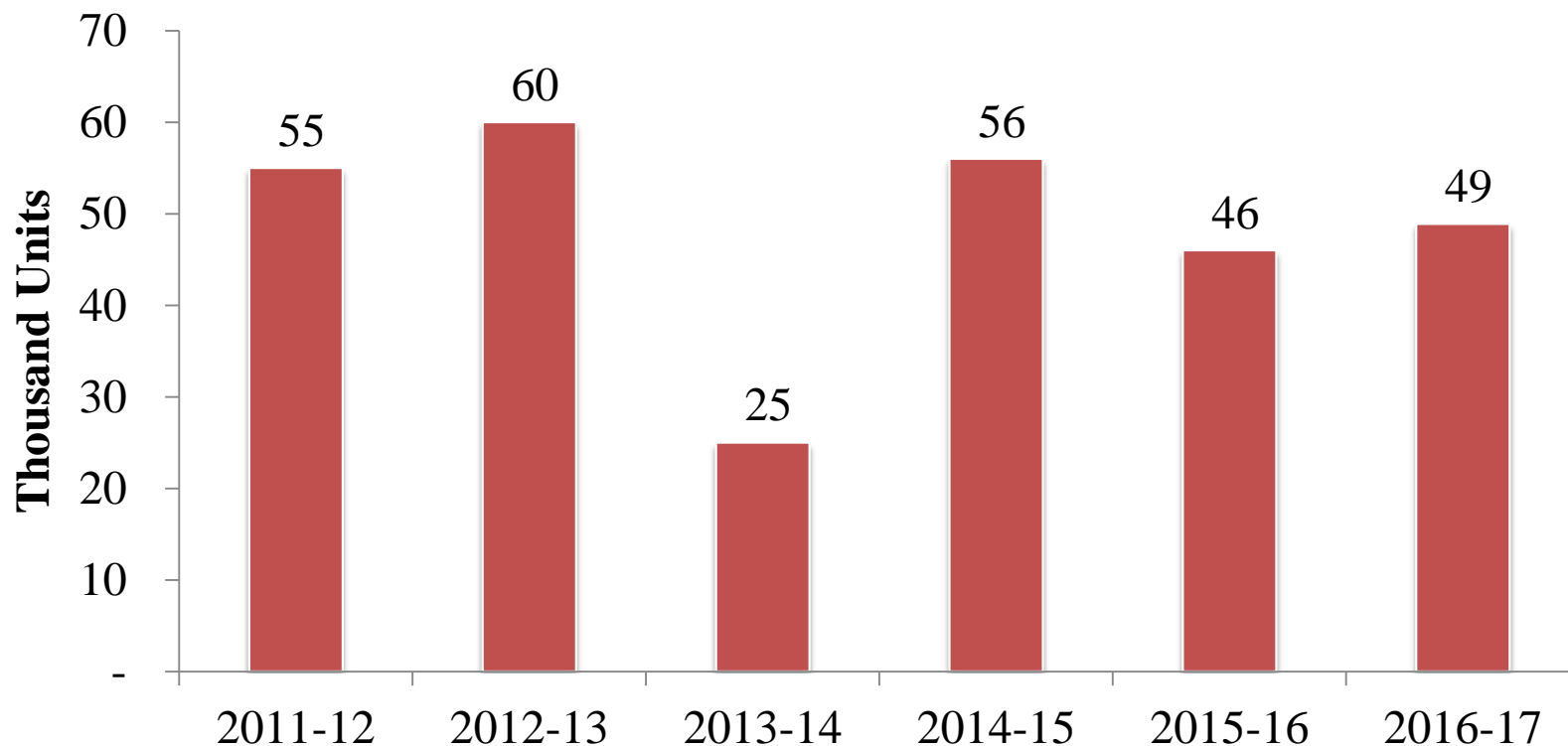


Source: Company Reports

Indian Power Tiller Market

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Indian Power Tiller Market by Volume; 2011-17



Source: Department of Agriculture and Cooperation, A report on 'Indian Tractor Industry' by ICRA, TechSci Research, DAC - Dept. of Agriculture and Cooperation

Market Drivers

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- ❑ **Labor shortage** is being experienced at peak seasons due to which labor is available at a higher cost per hectare hence increased demand for mechanization.
- ❑ The continuation and growth of **contract farming** with more entities getting involved provides future opportunities for the expansion of the industry.
- ❑ The government is promoting ‘**balanced farm mechanization**’ by providing subsidy on various equipments and by supporting bulk buying through front-end agencies.
- ❑ The government also provides credit and **financial assistance** to support **local manufacturing** of farm mechanization equipment.
- ❑ The **penetration of farm equipments is low** with the small and marginal farmers who own land less than 5 hectares. This segment forms over 80% of the land holdings in the country. Thus, there is a lot of potential for increasing the penetration and therefore growing the market size.
- ❑ **Rise in demand of Food Grains** by 2030 to 355 MT

Market Challenges

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- ❑ Small and Scattered Land Holdings
- ❑ Tractorization is practiced rather than Mechanization
- ❑ The entire process of acquiring farm equipment is very tedious and cumbersome for a farmer.
- ❑ An issue that has been persistent in financing is the purchase of standalone implements.
- ❑ Farm equipment, especially the energy-efficient options, is capital intensive and is a major investment for most of the farmers in India.
- ❑ The quality and after-sales service of farm equipment is another concern, since agriculture is largely carried out in rural parts of India.

Recommendations

- Government can set up custom hiring centers which would facilitate hiring of equipments by small and marginal farmers. It is further submitted that PPP model should be employed for the purpose.
- Farmers should be extended with financial assistance in the form of subsidy for the purchase of agricultural equipments and should have the discretion to select the quality machinery to be purchased with subsidy rather than it being pre decided vide norms.
- KVK along with corporate participation in PPP model may be utilized to increase knowledge of farmers on the benefits of using latest farm machinery and to train them for appropriate use of the machinery.
- There is a need to develop customized farm machines and equipments with special focus on small and marginal land holders. Therefore, dedicated funds are required to promote research to come up with technology suitable to small and marginal farmers.

Recommendations

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- Awareness Campaign should be initiated to sensitize rural youth about available employment opportunities and support provided by the government to promote training of personnel.
- After sale service, operational education and performance warranty for at least three years should be inbuilt into the marketing and sale process to avoid hardship to users. Government should intervene and have a regulatory mechanism to ensure after sales services to farmers.
- In order to expedite the process and conserve resources, it is suggested that imported machinery, if approved by recognized agency need not be retested. Further, some agencies involved in testing and approval of farm machinery worldwide can be enlisted and recognized for the purpose.

Thank You