

## **Status and utilization of tractor power in Mahakoshal region, Madhya Pradesh, India**

**Abhay Kumar Sinha, Atul Kumar Shrivastava and Avinash Kumar Gautam**

Received September 20, 2016 and Accepted December 20, 2016

**ABSTRACT :** The farm power and machinery jointly represent the largest single item of expenditure constituting about 60% of the total investment on a farm. Tractor industries play an important role as agriculture sector has major contribution to India's GDP. There are currently 19 manufactures of tractors in India. Tractors (35 hp) were possessed by 75% of the farmers. The percentage of tractor used for own work was 66 and rest at the time when tractors were used for custom work. Maximum use of tractor was found in tillage operations, which were 42.30 per cent, whereas the minimum use was found in threshing operations, which was 3.03 per cent. Average cost of operations of tractor per hour was found to be Rs 227.18. Average cost per hour was Rs 198.66 for small size (15 to 18 KW) of tractor and Rs 432.65 for large size (60KW) of tractor. Average cost of operation of tractor decreased initially upto the age of 4 to 6 years and thereafter it increased with the increase in age. The net cost of operation per hectare decreased with the increase in farm size. The break-even point increased with increase in size of the tractor. Maximum break-even-point was 521 hours. Since average annual use of tractor is 856 hours, which is more than break-even-point. Therefore, the purchase of tractor is profitable in the region.

**Key Words :** Tractor, custom work, break-even point, annual use.