

A Region-wise Analysis of Impact of Farm Mechanisation on Draught Animal Power Availability in Maharashtra

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During the last four decades, the bovine economy of Maharashtra witnessed many changes. Contrary to studies which showed a decline in work animal population in some regions of the country, the draught animal population of Maharashtra has not declined much. The issue of economic viability along with socio-economic acceptability of species and breeds will become more pertinent under the changed situation in the state. Although the estimates reveal an increase in the intensity of mechanization, this did not seem to have contributed to any significant displacement of work animals per hectare of net sown area. Growth in mechanical power served largely as a supplementary source of animal power. The impact of tractorisation in respect of displacement of work animals was also very slow. Since the rate of mechanization of irrigation was faster than of tillage, its overall effect in terms of displacement of work animals has been slow. It can further be inferred that since the use of draught animals shows no significant growth, farmers should resort to modern techniques of tilling as a substitute to animal power. Finally, the increasing use of mechanical equipment for cultivation will increase the rural demand for energy, i.e., electricity, diesel, etc. Therefore, there must be adequate investment in power sector to meet the additional demand.

I Introduction

For ages, man has been husbanding livestock with the aim of improving their quality and making them more useful. Cattle not only provide valuable animal protein but are also the source of power supply for cultivation. The contribution of power supply by livestock has been recognized even in some of the industrially developed countries. In developing countries, the bulk of the agricultural operations are done by the use of animal power. In India draught animals constitute roughly about 30 per cent of the total bovine population and are considered the mainstay of draught power (Nair and Dhas 1987). Although recently mechanization of agriculture has attracted the attention of many farmers due to time and labour saving devices and the quicker and more efficient output of work, Indian agriculture is expected to depend mainly upon bullock power for