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Comparison of agricultural mechanization parameters between Bundelkhand and Eastern region of Uttar Pradesh, India

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■ **ABSTRACT :** Agriculture is the main occupation in the Uttar Pradesh about 59.3 per cent of total workers in the state are engaged in agriculture. The Bundelkhand region is characterized as low rainfall and dry with vast marginal lands. A sizeable area (84%) was allocated to food grain crops in this region. Among cereals, wheat was the important crop. Eastern region of Uttar Pradesh is flood prone. Poverty is acute in this region. Therefore, household food security is the primary concern of the farm households in this region. Agricultural mechanization technology further varies from location to location and crop to crop. Thus, the quality of inputs of mechanization and consequently land and labour productivity may differ considerably. After selection of variables, a questionnaire was prepared to collect primary data from each agro-climatic zone of Bundelkhand region and eastern region. In Bundelkhand region primary data were collected from 100 farmers from 10 villages of 2 districts *i.e.* 50 farmers from each district. In eastern region primary data were collected from 180 farmers from 18 villages of 3 districts *i.e.* 60 farmers from each district. The mechanization index, power availability, cropping intensity, irrigation intensity, annual farmers income, annual input cost, mechanical energy, total energy were higher in western region in comparison to eastern region but human energy was more in eastern region than Bundelkhand region. The average value of mechanization index, power availability, cropping intensity, irrigation intensity, annual farmers income, annual input cost, human energy mechanical energy, total energy in Bundelkhand region and eastern region of Uttar Pradesh were 0.921, 1.61 kW/ha, 124.59 per cent, 124.59 per cent, Rs. 119852, Rs.32463, 26.63 kWh/ha, 400.31 kWh/ha and 426.94 kWh/ha, 0.951, 2.61 kW/ha, 160.42 per cent, 160.42 per cent, Rs.177125, Rs.49586, 81.98 kWh/ha, 655.49 kWh/ha and 735.94 kWh/ha, respectively. Similarly, degree of mechanization was highest in eastern region than Bundelkhand region but threshing operation and diesel pumps are more mechanized in Bundelkhand region than eastern.

■ **KEY WORDS :** Mechanization index, Farm power, Degree of mechanization, Cropping intensity, Human energy, Mechanical energy, Total energy

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