Indian Journal of Ecology (2016) 43 (1): 75-79

Manuscript Number: 2270 NAAS Rating: 4.47

## Energy Requirement under Different Planting Methods of Sugarcane with and without Preparatory Tillage

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**Abstract:** The output energy was higher by 1.73 % in no pre-planting tillage than conventional due to 1.4 t ha<sup>-1</sup> higher cane yield. Energy use efficiency and energy productivity were also higher by 3.7 and 4.1 % in the absence of pre-planting tillage over the conventional tillage treatment. In contrast, energy intensity was higher by 3.7 % in conventional than no pre- planting tillage indicating more energy requirement to produce per unit cane yield. Trench method recorded the maximum energy use efficiency, energy productivity and net energy gain and was the lowest energy intensive.

Key Words: Energy, Planting method, Productivity, Sugarcane, Tillage