



**OCCUPATIONAL STRESS OF WOMEN WORKER IN MANUAL RICE
TRANSPLANTING OPERATIONS****MOHANTY G* AND MOHANTY SK**Dept of Farm Machinery and Power, College of Agricultural Engineering and Technology,
OUAT, Bhubaneswar, Odisha, 751003***Corresponding Author: gavatr45@gmail.com**Received 11th July 2016; Revised 20th August 2016; Accepted 20th Sept. 2016; Available online 7th October. 2016**ABSTRACT**

Transplanting of rice is very tedious job mostly done by female workers during Kharif season .It is presumed that during 2020 there would be 50 per cent women against 42 per cent at present. According to Srivastava (1985) women irrespective of land status of the family provides 14 to 18 hours of productive physical labor in different chores. The energy spent by them in performing these tasks is more than it is physically feasible for them to spend particularly in a below subsistence level of living .Manual hand transplanting consumes a lot of energy and time and full of fatigue, but the poor socio-economic condition does not allow them to adopt power operated transplanter. Transplanting operation by different research centers have been developed as 2 row, 3 row paddy transplanter. Still majority of the area covered under transplanting is mostly done by manual method i.e. adopting bending posture . Keeping this in view twelve female subjects were selected in the age group 18-45years to study its efficiency. The mean value of age, weight, height, VO₂ max and Body surface area were found to be 31.1 years, 51.7 Kg, 153 cm, 1.71 l/min and 1.52 m² .Physiological parameters like Heart rate, Oxygen consumption rate and Relative cost of workload were measured in different transplanting operations. The mean value of working heart rate was observed to be maximum 135.4 beats/min in 4 row paddy transplanter followed by 127.6 beats/min in 3 row transplanter and 126.5 beats/min in 2 row transplanter and 114.5 beats/min in local transplanting. The Oxygen consumption rate and Relative cost of workload were observed to be 53.0 percent in 3 row transplanter followed by 0.91 l/min and 50.3 percent in 2 row transplanter and lowest in local practices, i.e. 0.58 l/min and 32 percent. The field capacity was observed to be maximum 0.012 in 3 row transplanting followed by 0.008,