

Development of an ergonomic evaluation facility for Indian tractors.

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ABSTRACT

The design of tractors manufactured in low-income countries like India has not changed much in the past two decades, especially from an ergonomic point of view. Moreover, in these countries tractors are used for transportation purposes in addition to farming operations. Therefore, the design criteria for these tractors need to be different from those in high-income countries. This paper describes the development of an ergonomic facility for improvement of tractor design. An ergonomic evaluation facility has been developed consisting of a work place envelope for the Indian population, a layout measuring device and an ergonomic rig. This facility can be used for comparative evaluation of the display and control layouts of different tractors in order to develop an optimum layout. The ergonomic rig has the facility to simulate the improved layout for subjective evaluation.