

Ergonomics observation: harvesting tasks at oil palm plantation

ABSTRACT

Objectives: Production agriculture is commonly associated with high prevalence of ergonomic injuries, particularly during intensive manual labor and during harvesting. This paper intends to briefly describe an overview of oil palm plantation management highlighting the ergonomics problem each of the breakdown task analysis. **Methods:** Although cross-sectional field visits were conducted in the current study, insight into past and present occupational safety and health concerns particularly regarding the ergonomics of oil palm plantations was further exploited. Besides discussion, video recordings were extensively used for ergonomics analysis. **Results:** The unique commodity of oil palm plantations presents significantly different ergonomics risk factors for fresh fruit bunch (FFB) cutters during different stages of harvesting. Although the ergonomics risk factors remain the same for FFB collectors, the intensity of manual lifting increases significantly with the age of the oil palm trees-weight of FFB. **Conclusions:** There is urgent need to establish surveillance in order to determine the current prevalence of ergonomic injuries. Thereafter, ergonomics interventions that are holistic and comprehensive should be conducted and evaluated for their efficacy using approaches that are integrated, participatory and cost-effective.

Keyword: Ergonomics; Harvesters; Musculoskeletal disorders; Oil palm; Sustainability