

# **HIRARC Method Approach as Analysis Tools in Prevention of Fatal Farm Tractor Accidents at Oil Palm Plantations in Malaysia**

JAYA RAJ, B, SARAVANAN, D and PATRICK NG HONG CHUAN

*Based on a fatal accident case report from the Department of Occupational Safety and Health (DOSH), 42 fatal farm tractor accidents were reported at oil palm estates in Malaysia from 2010 to 2024. These deadly accidents occurred due to rollovers (43%), runovers (40%), mechanical accidents (14%), and collisions (3%). The Hazard Identification, Risk Assessment, and Risk Control (HIRARC) analysis identified 26 hazards from eight work activities that could cause fatal accidents. Engineering and administrative control measures are suggested to control these hazards.*

*Keywords: HIRARC, DOSH, hazards, tractor, rollover, and runover.*

