

Buffalo-Assisted Harvesting (BAH) in Oil Palm Plantations: Challenges and Opportunities

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*Buffalo-assisted harvesting (BAH) is a long-established practice in Malaysian oil palm plantations, particularly in areas where soil conditions and frequent flooding restrict mechanisation. This paper evaluates the operational performance, cost implications, and management requirements of using swamp buffalo (*Bubalus bubalis*) for in-field crop collection. Field experience indicates that BAH increases harvester area coverage by 22 per cent and labour productivity by 25 per cent compared with the conventional wheelbarrow method, while reducing harvesting costs by approximately 8 per cent. Proper selection of buffalo, carts, and yokes, together with adequate nutrition and veterinary care, is essential to sustain draught efficiency and animal welfare. The study confirms that buffalo draught power remains a practical and relevant complement to mechanisation in oil palm estates.*

Keywords: Buffalo, oil palm, BAH, mechanisation.



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