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Effects of low technical competences of forest and sawmill workforces on the wood fibre loss in the forest-wood chain of four wood firms in Ghana

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Abstract: This study assessed the effects of low technical competences of forest's and sawmill's employees on wood fibre loss in the forest-wood chain of four wood firms in Ghana. The logging and sawnwood conversion techniques and practices in each of the sampled firms were observed during normal logging operations and sawnwood conversion for a period of two weeks. In addition, the merchantable wood used as wood fibre raw material lost during logging operations and sawnwood conversion was measured and quantified. The study showed that lack of proper felling and bucking techniques and poor supervision accounted for the fibre loss of merchantable wood at the logging sites. Log splitting was common during tree felling, which resulted in both volume and quality loss of wood fibre. The factors observed as having accounted for low sawnwood recovery at the studied mills included poor log quality resulting from long storage periods between felling and conversion, the inability of the operators at the primary breakdown machine centre to manipulate the saw logs to increase grade volume, poor edging practices, excessive trimming losses, lack of proper management of logs, lack of adequate logistic planning and poor management decisions. Even though this study focused on a limited number of cases, which represented a small fraction of the forest and sawmill industry in Ghana, there is a reason to believe that conditions prevailing in other forest operations and sawmills are not different from those observed in these case study mills. It is concluded that Ghanaian sawmills stand to benefit economically if they could improve the competences of their workforces, their logistical planning and integrate production lines devoted to recovering fibre from off-cuts and trimmings. Providing training in both harvesting and conversion operations could therefore enhance the competencies of the workforce.

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