

Farm forestry and small-diameter trees in Mt Meru areas, Tanzania

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As a means to reduce demand on natural forests and tree plantations and stave off vegetation destruction in tropical countries, timber production outside forests, especially farm forestry by smallholders, has been a focus of attention. Trees managed in farm forestry also serve as a saving bank and support rural livelihoods, and sawmilling and marketing activities by smallholders encourage replanting by value-adding to standing trees, vitalizing local economy with their timber as an input for manufacturing and other activities. The current state of rural sawmilling has therefore attracted both environmental and economic attention. In Tanzania, farmers build the so-called "gereji" (garage) which has a pit on the ground for sawmilling with a large saw manually operated by two workers on top and beneath of the log: this small-scale low-cost pit sawing has been common for many years. This method realizes smaller loss with the narrower kerf of the saw, but its labor productivity is low, and it is not suitable for sawmilling of small-diameter and/or crooked logs, thus with a low log recovery rate. In contrast, chain sawing has a broader kerf with low timber recovery rate, but it does not discriminate log shape, including those with small diameter, and realizes a higher log recovery and portability, thus replacing pit sawing. This presentation reports different types of rural small-scale sawmilling in Mount Meru areas, northern Tanzania, and examines the hypothesis that increasing timber demand and diminishing mature trees have left only small-diameter trees in farms, and that spread of chain sawing has enabled felling and utilization of these trees, shortened replanting cycle, and thus encouraged multiplication of small-diameter trees.

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