GIPPSLAND FORESTRY HUB: MID-ROTATION MANAGEMENT FOR SMALL-SCALE PLANTATIONS

Purpose

The report examines barriers and opportunities for implementing effective mid- rotation management (particularly thinning) in small-scale plantations. It focuses on improving long-term plantation value, forest health, and regional economic outcomes, with a case emphasis on Gippsland conditions.

Key Findings

1	**Mid-Rotation Thinning Is Critical but Under-Adopted** Thinning is essential to improve tree growth, wood quality, forest resilience, and final harvest value. However, many small-scale growers do not undertake thinning due to high upfront costs, limited contractor availability, and poor access to markets for small-diameter logs.
2	**Financial Barriers Are the Primary Constraint** Commercial thinning is often uneconomic for small plantations, while non- commercial thinning still imposes costs without immediate returns. The absence of targeted financial support discourages early intervention, leading to higher long-term management and harvesting costs.
3	**Machinery and Contractor Capacity Are Mismatched to Small Plantations** Standard harvesting systems are often unsuitable for small, fragmented plantations and difficult terrain. There is a lack of locally available, purpose-built or small-scale thinning equipment and a shortage of trained contractors capable of operating safely and efficiently in these conditions.

Key Findings

4	**Markets for Small-Diameter Logs Are Limited but Emerging** Current demand for thinning products is fragmented and inconsistent. Viable opportunities exist in firewood, vineyard posts, poles, roundwood, and emerging bioenergy or veneer markets, but these require coordination, scale, and market development support.
5	**Non-Commercial Thinning Remains Necessary in Many Situations** Where markets are absent, low-cost non-commercial thinning is still vital to maintain plantation health and future value. Clear guidance and support are needed to help growers choose appropriate methods and timing.
6	**Lack of Coordination Reduces Viability** Dispersed ownership, small plantation sizes, and uncoordinated harvesting schedules reduce economies of scale. Better aggregation of growers and resources would significantly improve access to contractors, markets, and infrastructure.

Strategic Implications

- Targeted thinning subsidies would unlock management activity and deliver public benefits (fire risk reduction, carbon outcomes, regional jobs).
- Trials and demonstrations of suitable machinery could build contractor confidence and local capability.
- Active development of small-log markets is essential to improve thinning economics.
- Guidelines and support for non-commercial thinning are needed where markets cannot be established.
- Regional coordination (e.g. via a forestry hub) is critical to aggregate supply, align stakeholders, and influence policy.

Conclusion

Without intervention, many small-scale plantations will fail to reach their potential value. Strategic support for mid-rotation management—combining financial incentives, market development, appropriate technology, and regional coordination—offers strong economic, environmental, and social returns.