Outcome Logic for Steepland Harvesting PGP Programme 2010 – 2016

Long term outcomes

2025 -

A safe, internationally competitive forestry sector using leading edge technologies, delivering higher economic returns for New Zealand

Medium term outcomes

2019 - 2024

- New Zealand forest industry using improved steepland harvesting products and processes
- Higher productivity and profitability in New Zealand steepland harvesting
- Safer New Zealand steepland harvesting operations
- Growth in the forest harvesting machinery manufacturing sector in New Zealand

Short term outcomes

2013 - 2018

Early uptake of new steepland harvesting technologies by forest companies and contractors

- Commercialisation of new products and processes that improve the productivity and reduce the cost of steepland harvesting
- Commercialisation of new products and processes that reduce dangerous manual labour roles in steepland harvesting
- New opportunities for New Zealand made forest harvesting machinery in domestic and export markets

If PGP Steepland Harvesting programme activities are successful …

Activities & outputs

2010 – 2016

New product and process prototypes with proven productivity, cost and safety benefits for steep terrain timber felling, breaking out and extraction

- Mechanisation on steep terrain to make tree felling safer and more productive
- Increasing the productivity of cable extraction of felled trees from steep slopes
- Development of operational efficiencies to drive productivity gains across the sector
- International monitoring of technology and benchmarking to improve New Zealand operations

Enablers & inputs

- Co funding by government and industry of commercial research and development of steepland harvesting
- Collaboration between New Zealand forest industry, researchers and engineers to develop new harvesting technologies
- Future Forest Research R&D framework links industry stakeholders
- Technological developments in other industries and overseas

Problems & opportunities

- Low productivity and high harvesting costs impact on profitability and reduce international competitiveness of the New Zealand forestry sector
- Forestry sector faces challenges from increasing harvesting of steep terrain forests using dated technology
- Health and safety, skills, and high workload issues impact on sector attractiveness efficiency and growth

Additional benefits
for the sector and New Zealand

- Incentivises future marginal land afforestation
- Increased economic opportunities for rural communities in regions with significant steepland forestry
- Reduced environmental footprint of steep land harvesting operations
- New Zealand's reputation as a world leader in sustainable forest harvesting practices is enhanced
- Increased capability in forest harvesting research and engineering creates opportunities for innovation in other parts of the forestry supply chain and in other sectors

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