### **QUARTERLY PROGRESS SUMMARY: APR – JUN 2017**

## STEEPLAND HARVESTING PROGRAMME

The Steepland Harvesting Programme outlines a pathway for the New Zealand forest industry to develop innovative harvesting technologies for steep country forests that will reduce costs and make harvesting jobs safer for workers. In its seventh and final year, the programme has been focussing on strengthening the commercialisation of outputs. The programme ended on 30 June 2017.

# Summary of progress during this quarter

The main achievements in this programme during the period 1 April to 30 June 2017 have been:

- Completion of technical development of the Teleoperation Control System for the mobile tail hold machine, and commercial launch of the product (marketed as the Cab Assist Backline);
- New model CutoverCam was launched to the market at HarvestTECH17 Conference in Rotorua and has featured at three successful field demonstrations;
- The Awdon Skyshifter twin winch tail hold carriage has been successfully demonstrated in operation in the field:
- Completion of the Commercialisation team's work to provide support for the technology developers and commercial partners in each project;
- Completion of three field demonstrations of outputs of the PGP Steepland Harvesting Programme in April, June and August, 2017.

# Key highlights and achievements

The Steep Land Harvesting programme, supported by innovative engineering firms and contractors throughout New Zealand, has catalysed the expansion of mechanisation in the New Zealand forest industry, to the extent that mechanised tree felling now comprises 50% of all harvesting operations, up from only 23% of all operations in 2009. The programme has developed a new generation of harvesting technologies, including the ClimbMAX harvester, the Alpine grapple carriage, the HarvestNav machine navigation system, the CutoverCam hauler vision system, the first teleoperation control system for a John Deere 909 feller buncher and a mobile tail hold machine, and the prototype Awdon Skyshifter twin winch tail hold carriage.

Sector wide benefits arising from the programme and related outputs to date total \$127 million from operational cost savings and machinery and equipment sales. The business plan envisaged cumulative net economic benefits of \$260 million to 2016/17, as well as enhanced worker safety. Annual serious harm incident rates have reduced by half over the past two years, from 160 incidents in 2013, to 107 in 2014 and then to 79 in 2015. Approximately 170 workers have been removed from hazardous roles of felling and breaking out. These innovations are providing forest owners and contractors with solutions to improve productivity and reduce the exposure of workers to hazards on steep terrain.

#### Investment

Investment period	Industry contribution	MPI contribution	Total investment
During this Quarter	\$0.205m	\$0.137m	\$0.342m
Programme To Date	\$3.799m	\$3.610m	\$7.409m