STEEPLAND HARVESTING PGP PROGRAMME Summary Report For Second Quarter 2014-15

This programme will realise substantial productivity gains for forestry through developing innovative harvesting technologies on steep country. Direct economic benefits of over \$100 million by 2020 are envisaged, as well as enhanced worker safety. The main achievements in this programme during the period 1 October to 31 December 2014 have been the extension to the forest industry of the commercial outputs of the programme through the NZ Journal of Forestry, in which three papers on the PGP Harvesting programme were published in the November 2014 issue.

At the 2014 NZFOA Forest Grower's Conference in October the developer of the HarvestNav software application, Dr Hamish Marshall, was awarded the 2014 Research Award for Innovation that Adds Value to the Sector. This award recognises the work that Dr Marshall has done over the last three years in developing and commercialising the HarvestNav on-board machine navigation application.

Outputs of the PGP programme to date were presented as posters at the PGP Expo in November, and also at the forest industry launch of the Independent Forestry Safety Review report in Rotorua in October. These products have been recognised by NZ Forest Owners Association as contributing to improved worker safety by controlling hazards to manual workers on the ground. A paper on the safety benefits of the PGP Harvesting programme was also published in the November 2014 issue of the NZ Tree Grower magazine.

Further development of the teleoperated felling machine continued during the quarter to incorporate video and audio feedback (Stage 2) and then full teleoperation (beyond line-of-sight) of the feller buncher (Stage 3). In the Innovative Yarding System project, the alpha prototype mobile tail hold carriage was completed. These two major projects in the Programme will provide forest owners and contractors with solutions to improve productivity and reduce the exposure of workers to hazards on steep terrain.