



# Practical demonstration helps guide harvest efficiency

## Participation in 2017 harvesting demonstration trials has shown Lorens Riera opportunities for improvement for harvesting efficiency.

Lorens Riera felt that he was in the box seat to capitalise on any positive changes that he could make to improve harvest efficiency.

Farming at Innisfail, Lorens cuts his own cane plus a small contract, which all together is between 23,000 and 26,000 tonnes.

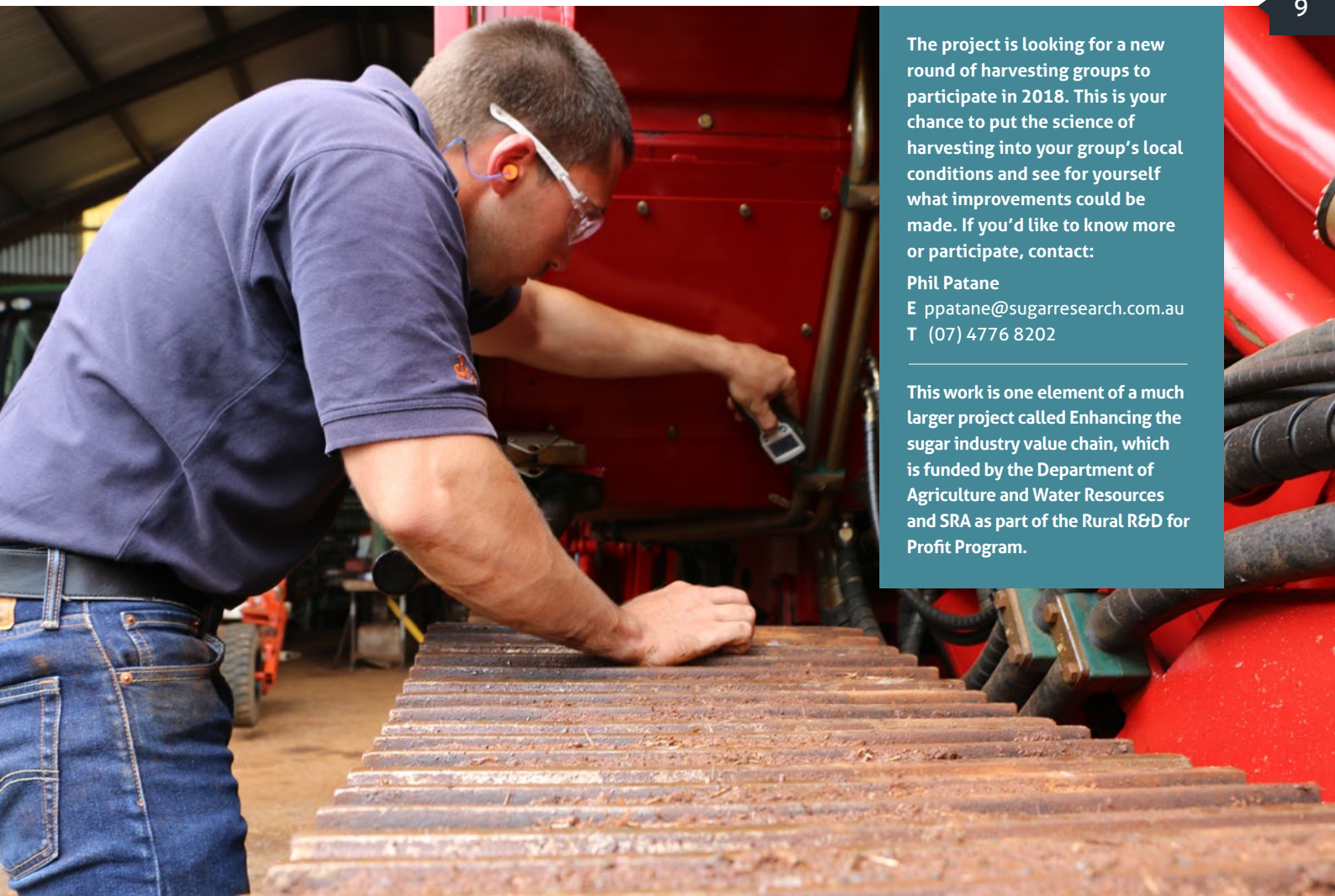
"Cutting our own cane, we knew that we would see the benefits straight away," he said. "In that situation, we already felt our practices were where we want them to be, but we also wanted to benchmark ourselves and find out what improvements could be made."

In 2017, Lorens and his team participated in SRA's in-field demonstration trials, in an erect crop of Q200(b) harvested in mid-August. This was then followed with a meeting in November with SRA to talk about specific steps to make improvements.

Lorens's trial had four treatments:

TREATMENTS	FAN SPEED (RPM)	GROUND SPEED (KM/HR)	SECONDARY
Low	600	3	Off
Recommended	700	4.5	On
Nominal (Conventional practice)	850	6	On
Aggressive	950	6	On

"The results have shown us that there are benefits to slowing down a bit," Lorens said. "We are able to make that change easily because we cut our own cane."



The project is looking for a new round of harvesting groups to participate in 2018. This is your chance to put the science of harvesting into your group's local conditions and see for yourself what improvements could be made. If you'd like to know more or participate, contact:

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This work is one element of a much larger project called Enhancing the sugar industry value chain, which is funded by the Department of Agriculture and Water Resources and SRA as part of the Rural R&D for Profit Program.

This table provides a snapshot of the results:

	CANE YIELD (TONNE/HA)	CCS (%)	SUGAR PRODUCTION (TONNE/HA)	BINS PER HECTARE	GROWER REVENUE PER HECTARE (AFTER MILL DEDUCTIONS)	CONTRACTOR REVENUE PER HECTARE
Low	82.8	15.4	14.6	12.3	\$4178	\$687
Recommended	85.4	15.4	15	13	\$4293	\$706
Nominal (Conventional practice)	81	15.4	14.6	12.4	\$4168	\$685
Aggressive	77.1	15.4	13.5	11.3	\$3857	\$634

The figures are based on the results of the trial and an economic analysis from the Queensland Department of Agriculture and Fisheries. The trial also assessed a range of other data such as extraneous matter, harvester economic, bin weights and value, and billet quality.

In addition to the trial, Lorens has also had his Case 8800 optimised with the help of the harvesting team at SRA. This has ensured the rollers are all running together at an optimum tip speed, which also helps

put appropriate tension on the cane bundle for a decent cut that doesn't grip or grab.

Lorens said these gains were in the order of just a few percent, meaning they were not really observable, and he therefore relied heavily on SRA trials for this information.

"As a grower, we may not be able to see a one percent difference, but we also know that it adds up to a significant impact on my bottom line across the year." ■

**"Cutting our own cane, we knew that we would see the benefits straight away,"**



**Australian Government**  
Department of Agriculture  
and Water Resources

(Above) Innisfail grower Lorens Riera and Adoption Officer Phil Patane talk harvesting efficiency.  
(Over Page) Adoption Officer, Phil Patane, measuring Lorens's Case 8800 for optimisation.