

A GROUP OF GROWERS AND MILLERS FROM THE HERBERT HAS RECENTLY TRAVELLED TO ROCKY POINT NEAR THE GOLD COAST AND CHILDERS IN THE SOUTHERN REGION TO DISCUSS HARVESTING EFFICIENCY AND OPTIMISATION.

Thanks to an initiative by Sugar Research Australia (SRA) and Wilmar Sugar, the trip saw millers, growers and harvesting contractors in these southern parts of the industry discover how they are adopting practices that are helping them to optimise harvesting efficiency.

The trip was jointly funded through an SRA Travel and Learning Award and Wilmar Sugar.

SRA Adoption Officer for Harvesting, Phil Patane, said that the trip was a chance to visit during the harvest season, which put everything into context for making harvest best practice work.

- "Through research and demonstration trials, we know that there is potential to improve harvesting efficiency and therefore put more revenue into the value chain," Mr Patane said.
- "From trial results in 2017, it was identified that the industry could potentially obtain a 5.5 percent increase in harvested tonnes with no cane land increase and a \$74 million increase in shared industry revenue if operating at harvesting best practice recommendations.
- "However, we also know that optimising harvesting is complex and a range of factors have to be considered. This is why it is so valuable for the group from the

Herbert to engage with their peers in the southern region.

- "We are all operating in one Australian industry, but also across a vast geographic distance, so this trip was a rare and valuable opportunity for the millers and growers from the Herbert.
- "This was a chance for them to ask questions and consider how their own operation compares."

Ingham grower Paul Marbelli said he had not had the chance to visit the Rocky Point and Childers regions before, so this was a unique opportunity.



"The trip has been interesting to see how other districts are doing things," Mr Marbelli said. "We can't compare everything between regions, as there are unique conditions down here, but it has been interesting to learn how these farmers and contractors are dealing with their situations."

This work adds to existing industry engagement on harvesting efficiency through a project through the Rural R&D for Profit program funded by the Australian Government Department of Agriculture and Water Resources, SRA, and the Queensland Government.

"Through research and demonstration trials, we know that there is potential to improve harvesting efficiency and therefore put more revenue into the value chain." PHIL PATANE







OBSERVATIONS FROM THE FIELD

Childers grower and harvesting contractor Michael Russo harvests 105,000 tonnes of cane using best practice strategies.

"Some of the main changes have been slowing our ground speed down, changing the parameters on our primary extractor fan and slowing the fan down to suit different field conditions," Michael said.

"This has resulted in much better quality of cane supply going to the mill. For the grower it represents more profit because there's less wastage in the field."

Mr Russo said the changes had resulted in better yields, higher CCS and better ratoonability.

Paul Nicol is the Chief Field Officer with the Isis Central Sugar Mill and he said that with the district continuing to face pressure from horticultural crops, the mill wanted to ensure "every stick of cane possible was finding its way into the factory". They also needed to improve ratoon life from two or three ratoons, to at least four, not just for profitability, but also to improve cane supply.

The journey began in 2015 when they manually dissected an average cane bin, and found about 14 percent extraneous matter.

That led to the development of the "clean team" and widespread collaboration to improve harvesting efficiency across the district. This has seen a range of education programs, collaborations with growers, and even initiatives such as subsidising the cost of purchasing aftermarket chopper drums.

Rocky Point grower and harvester, Josh Keith, has done a trial with SRA in 2018 and said he was looking forward to the results to help validate a number of improvements that they had already made.

"We know that there is a line between efficiency and profit, and we need the data from the trials to determine where that line is," Josh said. "There is always a trade-off between hours in the paddock and return from your crop from the mill, and this will tell us where that line is.

"I hope that the data will validate what we are doing, and also serve as a guide for the harvester driver, so that we can know what parameters he should follow with factors such as fan speed and ground speed."

He said with the industry facing uncertainty around the price of sugar and input costs such as fertiliser, he saw that the trials were a way of improving certainty around at least one part of the business.



Herbert grower-contractor

Darren Reinaudo said growers need hard data from local field trials to determine whether there were financial benefits to changing harvest practices.

"We need to measure the difference between the existing harvesting practices and the recommended best harvesting practices to understand whether the benefits in one area outweigh the costs in another," Mr Reinaudo said.

"We've participated in a trial with SRA and we're looking forward to working through the economic analysis from that trial (conducted by DAF Queensland)."

Mr Reinaudo said economics had been a core driver of current farming and harvesting practices.

"If SRA's data demonstrates that there's a better way, it's important we all work together to improve our situation."

Another Herbert grower and contractor, Charles Girgenti, said he was keen to participate in a SRA harvesting trial in order to get some solid data about the potential gains.

"Based on what we learned on the trip, the biggest benefits to growers are better CCS levels and reduced harvesting losses.

"If I can send more tonnes of cane to the mill and get improved CCS, that's a big win." ■ (Over top left) SRA Agricultural Engineer Joe Bonassi, Herbert Regional Operations Manager Adam Douglas, Herbert grower Sam Patane and Rocky Point grower Josh Keith at Mr Keith's farm.

(Over middle left) Rocky Point grower Josh Keith with Rocky Point Productivity Officer Victor Schwenke and Herbert SRA Regional Coordinator Caroline Coppo.

(Over bottom left) Childers grower Jack Russo with Isis Productivity Board member and grower Mark Weiss and Herbert grower Darren Reinaudo.

(Over right) Josh Keith and Darren Reinaudo discuss billet length and quality.

(Top left) Michael Russo (right) talks harvesting optimisation with Herbert growers and millers.

(Top right) Herbert growers Paul Marbelli (left) and Charles Girgenti (centre) spoke with Rocky Point harvesting contractor Nick Skopp about how he had adjusted his harvesting practices to reduce cane losses in the field.

(Bottom left) Rocky Point grower Josh Keith with Herbert grower Charles Girgenti, SRA Harvesting Best Practice Project Leader Phil Patane, Victoria Mill Production Superintendent Luis Rodriguez and Herbert grower Clay Romano.

(Bottom right) Michael Russo (Dicanna Harvesting) and Paul Nicol (Chief Field Officer, Isis Mill) check out just how good base-cutter blades are for cutting cane, after bolting them to the handle of a cane knife.