



# CONTROLLED TRAFFIC HELPING IMPROVE SOIL HEALTH

(This page) The Bonso family's new planter and modified tractor.  
(Over page) MSF Sugar Senior Agronomist, Michael Porta, and Steven Bonso checking over the crop earlier this year.

**It was after a trip to Maryborough that Far North Queensland farmers Steven and Leo Bonso saw the potential of adopting controlled traffic at their farm.**

The Babinda father and son were visiting Tony Chapman's farm, where Tony had been practicing controlled traffic for about 20 years.

"When we poked a stick into the bed, it sunk straight down into the soil, and we saw that there was something in it for us," Steven Bonso explained.

The Bonso family grow cane on about 1,150 hectares near Babinda and after that visit they set about learning more about improved farming systems, especially with local support from the MSF Sugar agronomy team. They soon decided to widen their rows from 1.65 metres to 1.8 metres.

They started with a trial block about four years ago, and after seeing no difference in yield since then, they've committed to the change across their farms starting in 2018.

Steven said their investments included a dual-row planter bought from the Burdekin, and getting a new fertiliser box built that is adjustable and could accommodate both the 1.65m rows and the 1.8m rows as they transition.

They do their own harvesting, with the harvester already set up with a long elevator, so the main investment entailed installing GPS.

Their main tractor was modified to a 3.45m spacing and Steven said this width was the limit so that they could float it on a truck when moving between farms. It originally had dual wheels on the back, but they moved to singles and also made their own spacers for the front.

"The whole reason we went this way is to save time," he explains.

Time is precious for Steven. There's not just the farm to run, but also the harvesting business, and a freight business that hauls liquid fertiliser and also cane for parts of the region where there is no rail network. He is also a Director of the local CANEGROWERS and of Innisfail Babinda Cane Productivity Services Limited.

"The window of opportunity with farming can be minimal in the Wet Tropics," he said. "We need to go when we can. With the new planter we can cover a lot of country in a day so long as we keep the cane up to it."

This work has been assisted and accelerated in recent years through

the Bonso family's participation in Project Uplift, which is an initiative of MSF Sugar and supported by the Australian Government Reef Trust program to achieve a range of water quality outcomes for the Great Barrier Reef through reductions in sediment, nutrients and pesticides entering the reef catchments.

Through Uplift, they are undertaking drainage and levelling work, looking at a block when it reaches the end of the crop cycle.

"We've got three main soil types – a brown clay, a grey clay, and granite at the top end of the farm," Steven said. "We've had problems where the granite and clay meet, so we've improved the sub-surface drainage, and made the drains deeper and wider. We've turned the place into something that wouldn't grow cane in a wetter environment, to something where we generally get above mill average each year."

They have also taken the first steps for adopting a legume fallow. In recent years they worked with Derek Sparkes from the Queensland Department of Agriculture and Fisheries on testing a range of legume crops.

"I was all set to do it this year, but the weather was a disaster and we had well over two metres of rain for the summer, so it didn't happen," he said.

"This year I will have my own planter, so by the time the season finishes the legumes will be going in straight behind the harvester."

In the past, they have gone for a sprayed-out fallow as they haven't wanted to disturb the soil and risk erosion. They've also been concerned about growing legumes in the wet conditions, but after working with DAF, MSF Sugar, and observing other farmers, they decided it would work and was worth a go. Steven said the best option appeared to be Meringa cowpea, but they also were taking a keen interest in mixed species fallows that are the subject of research trials and are already being grown on some farms in the region.

Steven sees it all as part of the farming system to improve soil health and he continues to be involved in industry activities and events looking to improve soil condition.

He uses liquid fertiliser and said it was easier and quicker than fertiliser out of the bag. "It has been a lot of outlay, but it has been worth it with the area we are covering."

"We have definitely gone into improved farming systems in a bigger way since we became involved with Project Uplift. We have scale, but everything still has a cost attached to it, and with sugar prices being low, we need every bit of extra help we can get. It has enabled us to do all these things." ■



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