

# FORWARD-THINKING APPROACH LEVERAGES ON-FARM EFFICIENCY

By Carly Lubicz, NQ Dry Tropics

The improvements Burdekin Delta cane grower Mark Castelanelli is making to the family's 400-plus hectare farm in the name of increasing productivity are as constant as they are varied.

By drawing on the knowledge and science available and using grants to add further weight to his on-farm investments, the second-generation farmer is embracing practice change as a way to boost business efficiency while reducing environmental impacts.

Born and bred in the Burdekin, Mark went straight from school to working on the family's 77 hectare Maidavale farm.

By the time he had taken over full-time management of the property in 1985 from father Joe, the farm was 157 hectares – it now sits at 415 hectares, with average farm production increasing annually.

Mark now runs the enterprise with his 32-year-old son Andrew (who also operates and manages their harvesting operation) and a single worker, so they rely heavily on finding efficiencies to keep the business as productive as possible.

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"You can either stagnate, or move with the times," says 62-year-old Mark.

He recycles 80% of the farm's runoff to irrigate 84 hectares, and has started electromagnetic (EM) mapping of the farm to identify areas of high salinity for variable rate gypsum application.

Mark's spray and fertiliser equipment are fitted with GPS guidance and rate controllers for accurate product application and record keeping, and his future plans include adopting automation within his irrigation management.

Mark has also put his nutrient application under the microscope for the past two years, taking part in the NQ Dry Tropics Sugar Innovations Programme - Enhanced Efficiency Fertiliser trial with the aim of reducing nitrogen inputs, while maintaining production.


Results from the 2015 harvest season showed no difference in productivity, the outcome giving Mark the confidence to reduce his nitrogen application over the entire farm.

"I'm averaging about 200-210kg N/ha across the farm, and aiming for an average reduction of 20kg per hectare," Mark says.

"Some of the applications I'll be doing this year will be down to 160kg N/ha, but only on specific blocks.

"My nitrogen application will be driven by my cane varieties and crop class, which is better practice than applying the same amount across the whole crop and then losing it to drainage."

Mark's approach has been assisted by the support of the Reef Trust Tender – Burdekin, a project that was launched



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last year by the Australian Government and delivered through not-for-profit NRM organisation NQ Dry Tropics.

The 2015 innovative Reef Trust Tender gave Burdekin growers the chance to access funding of up to \$500,000 to help improve nitrogen and irrigation management practices.

"I was mindful that I wanted to reduce my nitrogen application, but the tender made it more attractive as a business decision and it has given us the ability to make positive changes," says Mark.

"We are spending the money on a real problem block, making six blocks into one, taking advantage of slopes and making drills longer; which is all about optimising our farm and making it more efficient – this money gives us the potential to make this change.

"We have already invested a lot of effort into improving irrigation and enhancing our farm layout over the past few years."



He says weed management and irrigation are critical and fertiliser is an important part of the mix.

"I've got confidence in the choices that we've made in terms of our cane and reducing nitrogen," he says.

"I'd encourage other farmers to look at it and I think the tender provides a great opportunity."

The Australian Government has committed to delivering a further competitive tender under the next phase of Reef Trust investment.

For more information about this project see [www.nqdrytropics.com.au/reef-trust-tender/](http://www.nqdrytropics.com.au/reef-trust-tender/) ■

*Pictured above: Mark Castelanelli and NQ Dry Tropics Project Officer Luke Malan.*

## Herbert River community mourns loss of much-loved local figure

The sugar industry, particularly in the Herbert River district, lost someone very special with the untimely passing of 55-year-old Steven Chiesa on 22 September.

As a cane farmer, laser and harvester contactor, family man, sports enthusiast and community leader, Steve's life touched many people in many walks of life.

Steve and his family operated ASM earthmoving, a Herbert River-based company which grew out of the cane farming enterprise and became innovators in laser levelling operations in both the Herbert and North Queensland from the late 1980's.

He also ran a successful harvesting contract business and developed several cane farms with a passion and drive unparalleled in any industry.

Apart from his involvement in the sugar industry, Steve was a massive sports enthusiast. After a lengthy time playing both cricket and rugby league, he moved into club administration and coaching.

His time as President of the Herbert River Rugby League club yielded the club's first ever premiership in the Townsville and District competition in 2006, which gave the local community a great sense of joy and achievement.

Steve's enthusiasm was infectious and he was inspiring to those around him as he led by example in everything he did, whether it was driving a harvester, developing farms, running a sports club or bringing up his family. Steve gave his very best every time.

Steve is survived by his parents Bino and Ines, his brother Mark and sister Louise, his wife Jo-Ann, four sons Gregg, Sean, Kyle and Brad and granddaughters Alexa and Evie.

Steve's funeral at St Patrick's was one of the largest ever held in Ingham, such is the love and respect in which he and his family are held throughout the community. ■

*By CANEGROWERS Herbert River*



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