



# BMP adoption: Saving time, increasing efficiency

**The adoption of BMP has helped Walter Giordani lift his productivity above the zone average, something that he says is especially critical when sugar prices are depressed.**

**Walter Giordani has always had a strong connection to sugarcane growing and milling in the Herbert.**

His father had grown tobacco in the region and worked in a local mill, and Walter also did his electrician's apprenticeship at one of the mills.

So when the opportunity arose in 2009 to purchase a cane farm about 20km south of Ingham, he jumped at the opportunity to get a foothold into cane growing.

The journey since then has involved a series of on-farm practice changes and accreditation to the Smartcane Best Management Practice (BMP) program.

When he bought the farm, its cane yield was about 12 tonnes of cane per hectare (TCH) below the productivity zone. He has now shifted this to greater than 20 TCH above the productivity zone average in recent years.

"When we first brought the farm, it was fairly run-down, so I was very keen from the start to get as much agronomic

assistance as I could from the likes of Herbert Cane Productivity Services Limited and (SRA-predecessor) BSES," he said. "I attended many functions and had a keen interest in all the new technology coming out, always with the goal of increasing production."

Major areas of improvement included laser levelling, regular soil testing, legume fallow cropping, GPS guidance and mound planting, minimum tillage and wider row spacings to 1.8 metres.

"I have an off-farm job, so I was also looking to introduce things to make farming easier. My time is critical."

Through achieving substantial gains in the early years, he was encouraged to purchase another farm in 2013 where he is also implementing BMP.

Much of this work has been the subject of an SRA-funded project where the Queensland Department of Agriculture and Fisheries (DAF) analysed the economic impact of Smartcane BMP adoption across six different farms in the Herbert and Wet Tropics.

According to DAF economist, Caleb Connolly, the economic analysis identified cost savings from lower fuel and chemical use, reduced labour requirements and less repairs and maintenance.

"These cost savings were balanced against some additional costs from laser levelling, applying lime as a soil ameliorant and planting legumes as well as higher depreciation costs from new machinery purchases," Mr Connolly explained.

"Overall, the analysis showed the adoption of various BMP and improved practices has been worthwhile for Walter.

"Our analysis examined a yield improvement of 27 percent based on the farm's yield improvement in comparison to the productivity zone average. Even if the improvement had been only 11 percent, the investments made by Walter in laser levelling, GPS guidance, a stool splitter, bed renovator, legume planter, widening machinery and modifying a tractor for hi-rise spraying would have been profitable."



"The analysis indicated an improvement in annual farm operating return of \$429/ hectare, or about \$38,000 per year in total, after making the practice changes."

The accompanying environmental assessment by senior lifecycles scientist, Margeurite Renouf, indicates that the changes on Walter's farm have resulted in less fertiliser application and a reduction in the potential for water quality impacts from nutrient loss.

"There has also been the added bonus of reduced fossil fuel use and greenhouse gas emissions per tonne of cane."

Since the case study, Walter continues to introduce innovations. He has started EM mapping at the farm and also brought his own mud spreader, which has been adapted to variable rate control and also used to apply gypsum.

He added that with the recent sugar price in the dumps, it was critical to maintain productivity.

"The price has forced us to put some plans on hold, but at the same time we aren't cutting back on inputs that would impact our viability. In my view there would be nothing worse than low sugar price and a low crop at the same time."

Growers are encouraged to consider their own circumstances and seek independent advice before making changes. ■

**DAF's Farm Economic Analysis Tool (FEAT) is available to help growers consider the economics of their farming business. To access FEAT and explanatory resources, visit [www.daf.qld.gov.au/plants/field-crops-and-pastures/sugar/farm-economic-analysis-tool](http://www.daf.qld.gov.au/plants/field-crops-and-pastures/sugar/farm-economic-analysis-tool).**

**The six project case studies can be downloaded from [www.publications.qld.gov.au/dataset/best-management-practices-for-sugarcane](http://www.publications.qld.gov.au/dataset/best-management-practices-for-sugarcane).**

**SRA acknowledges the funding contribution from DAF Queensland towards this research activity.**

**"The analysis indicated an improvement in annual farm operating return of \$429/ha, or about \$38,000 total."**

*(Over page) Walter Giordani has successfully implemented Smartcane BMP at his Herbert district properties. (Above) Investing in equipment that delivers efficiency is critical for Walter, who also works off-farm.*