

A View of the ISIS Future

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I will be talking about my personal position in regards to control traffic farming and some of the benefits I believe the sugar industry can gain from a change to a system such as this. I must firstly begin by saying I am by no means an authority on control traffic, so this presentation represents my thoughts on this system only, and is not an attempt to convince people to employ control traffic to their own business, but merely an endeavour to give a growers perspective of this system.

WHERE HAVE WE HAVE COME FROM?

My three brothers and I farm about 750 hectares of cane in the Isis mill area which is in the Childers district. Childers is 320kms north of Brisbane, boasting a population of 5000 people within the shire. The Isis Central Sugar Mill has been crushing cane for over 100 years. From February first, 2005, the sugar industry was again deregulated to a point where a grower could choose to send his cane to a mill of his choice providing he had a contract with said mill. Since then, Isis has been actively seeking more cane supply and the mill has contracted over 115 new growers to supply cane, giving Isis an estimate of 1.2 million tonnes to crush this year. The Russo family grows about 60 thousand tonnes of cane per year. We also have a harvesting contract with other growers, cutting a total of 95 thousand tonnes per year.

Our farming system has seen on-going change over the years, from traditional burning of cane and full working of the ground in the ratoon cycle, originally, to a burning and minimum till operation. From there we progressed to cutting green while still employing ground engaging equipment, and presently our practice is simply to cut green and drop fertiliser directly on top of the stool. Weed control is maintained by chemical sprays.

Our traditional way of fallowing and preparing ground to plant started with raking the thrash and burning it, followed by several discing operations and at least 3 ripping operations with an 11 tyne grubber on a 240 horse power tractor. We then used a 3 ½ metre rotary hoe on a 210 hp tractor, lining out and planting at 1.68m, or 5 foot 6 centres with a conventional billet planter single row. Over the last 2 years we have grown soybeans in rotation as a fallow crop and recently have grown our first 20 hectares of peanuts. We have looked at water efficiency issues on our farming operations. Presently, we have a surface water allocation plus 4 dams & 2 turkey nests. About 5 years ago we purchased 2 low pressure booms, since that time we have now purchased 1 towable and 1 fixed centre-pivot irrigator. These pivots cover over 130 hectares in total.

Over the last few years we have looked to a large neighbouring grower with the view of establishing more economical solutions to daily practices by working together. Three years ago we looked at purchasing bulk fertiliser. The first year the fertiliser was stored quite crudely on a concrete pad and covered by a tarp. This venture proved quite successful, so the following year we built a proper facility consisting of a retractable roof and two separate bays holding forty tonne each. We are each saving around thirty dollars a tonne using this method.

As farmers involved in primary production and especially the sugar industry, I don't need to inform you of the problems we face at the moment. Poor prices, a high Aussie dollar, the lack of good recent seasons and sky-rocketing oil prices means our industry is heading for certain failure if we cannot stop the slide and try to turn the industry around. Personally I think that the sugar industry is in the doldrums and is in great need of a new outlook and way forward. We need to be able to grow sugar cane at 250 dollars a ton of sugar to be viable. We can not rely on governments to bail us out any longer.

WHERE DO WE GO FROM HERE?

About 4 months ago I was getting out of bed every morning wondering if there was ever going to be a future for the sugar industry & more importantly our own mill area. I am also a director on the board of Isis mill, and therefore notably concerned about the massive investment we as a mill are making into the future. I always reiterate to others that without critical mass of cane the mill has no future. We cannot have this critical mass unless the growers can grow cane for a profit even at low world prices. So what I am saying is that we have to change how we do things now, so that we will still be here into the future. This will require a whole systems approach. My belief is we need to have a system that can deliver better outcomes for the sugar industry. This system has to be robust enough to give the industry a leg up and move forward, and I envision that way forward through control traffic.

I have been attending B.S.E.S field days and various other workshops as well as sugar yield decline meetings, and the one take home message from all these discussions focuses on compaction and permanent beds. Until such time as we can match our equipment to our row spacing we will never get away from compaction. I believe the issue of row spacing in the sugar industry is the biggest hurdle we have to overcome. My own experience within our family partnership shows me that an entire day can be wasted sitting in the shed with my brothers, arguing about correct row spacing, and if we surveyed the entire sugar industry I am sure we would be unable to reach a consensus on what the best row width should be. Whereas, the focus should actually be on matching our row spacing with our existing equipment.

For example, if a farmer who is using 1.57 m or 5 feet 2 inches row spacings and producing 100 tonnes per hectare, was compared with another farmer using 1.68m or 5 feet 6 inches, who was also producing 100 tonnes per hectare, you would have to say that the grower on the wider rows would have to be more profitable, because he is producing the same amount of cane while utilising less rows and therefore decreasing compaction to his farm.

A NEW FARMING SYSTEM

I would now like to discuss the new farming system as I would like to see it implemented firstly on our property, then flowing through to the wider group of growers in our mill area once it proves successful at our farming level. This system would be a full control traffic system on 1.8 m permanent rows or beds.

In the first stage we would have two tractors set up to take a GPS 2cm accuracy system. These tractors will share the one screen, with the ability to be easily shifted from one tractor to the other.

Following either a soybean or peanut break crop, ground preparation for returning to a cane cycle would consist of a single spray of Round-up to clear any residual weeds then a running through with our modified stool worker-come-lining out implement. This would be succeeded by a billet planter on 1.8 m single row with a 14 inch wide drill to plant into. Any weed issues in the early stages of the plant crop will be treated with products like gramoxone. Cultivation and filling-in can be done by a simple modification to existing equipment. In around 2 years I am hoping to have GPS units fitted to our harvester and haul-out equipment.

In subsequent ratoon crops the only passes a tractor would make over the ground would be to run fertiliser on top of the stool. To my way of thinking, weed control would be easily accomplished using round-up through a hooded sprayer. This practice would continue through our entire farming area. At the end of the crop cycle grown under the control traffic programme, when considering break cropping, we would spray out the stool with round-up again, then plant soybeans straight into the trash on either side of the stool, using a JD Maxi merge double disc opener seed planter. This operation would also be done with a GPS fitted tractor. Returning to the cane cycle after the break crop would be a simple case of going back over our permanent beds with the stool worker implement.

I feel this system is readily available for growers to adapt into their own farms. I think the role of contractors will become increasingly more important in this system, by the fact that if a contractor has GPS fitted to his machinery it would render a lot of unwanted capital tied up in farmers sheds wasting away.

Our GPS supplier has only this year fitted a GPS system to our cane harvester as a trial for us, so we could see the guidance system in action, and although we have narrow rows and no cane planted to our new system, we are already able to see the advantages of using this system, making us very excited about the prospects of our business once the control traffic system is fully implemented. This year we have a lot of sprawled cane on our farms, making it extremely difficult to judge whether or not the harvester is in the correct position. By using the GPS, the harvester driver can now take a lot of the guess work out of the tangled mess and therefore reducing problems.

I mentioned earlier that we harvest about 35,000 tonne of cane from 5 other growers. If we as contractors could duplicate the same system to these growers the cost savings could have a multiplier effect, and a far quicker adoption of this farming practice would take place.

Contracting could also provide a fantastic way for smaller growers to be able to adopt control traffic on their own farms without incurring the major capital expense that would otherwise need to be undertaken to experience the same benefits of a large grower, hence increasing the profits while lowering the cost to implement the system, and allowing the smaller farmers to stay in the industry.

I read with interest the July issue of the Australian Canegrower magazine, who ran a story about Mr. Ken Blyth. Mr. Blyth was awarded an OAM in the Queen's birthday list for his service to the sugar industry. His job was to promote the adoption of mechanical cane harvesting into the industry.

I believe we are once again at a place where we need to take another great step forward just as our fore-fathers did before us, and control traffic is the road that I personally believe we should follow.

I would just like to finish by acknowledging the help of Paul Nicol in providing me with the photos for this presentation, and to thank C.T.F. for giving me the opportunity to share my thoughts with you all today.

The sugar industry has seen a lot of change over the years: some good, others not so good. I believe this new system of farming will be the catalyst to take the sugar industry to a higher level of productivity, therefore ensuring the sustainability and profitability of this important industry into the future. Thank You.