

Project Catalyst

Grower story



Gary & Ian Considine, Bloomsbury - Age, no barrier to innovation

Mill Region: Proserpine

Property Size: 389ha + 770ha joint ownership

Area Under Cane: 233ha + 477ha joint ownership

Catchment: O'Connell River

Years Farming: 55 years (3rd generation)

Living and farming in areas of high rainfall poses many challenges for Queensland sugarcane growers, particularly those involved in Project Catalyst, who continually seek innovative solutions to improve water quality to the Great Barrier Reef.

Embracing change since the 90's when they transitioned from burning their cane to green harvesting, Gary and Ian Considine purchased their first GPS system in 2004. Joining forces with neighbouring farmers, Scott Simpson and Tony Jeppesen to form a co-operative group, they quickly realised the potential cost savings of shared equipment for planting and harvesting. The sharing of knowledge further reduced costs and formed the foundation for participation in Project Catalyst.

The Considine farming business on 389 hectares at Bloomsbury, has experienced many changes over the past 25 years. Both Gary and Ian agree the greatest change following green harvesting, was implementing controlled traffic, but the technology confounded them. "It's great when it works, but when you get out into the paddock and find there's something wrong, you can spend an hour trying to figure it out – when you could be getting work done," Gary laments.

Without the skills to fix gadgets on farm, Ian feels further tech adoption may be cost prohibitive. "A lot of this technology we use these days is quite expensive, not only to purchase, but to maintain. If it breaks



Shared harvesting equipment reduces costs

down, you either have to replace it or send it to someone else to fix." An electrician was called to analyse the problem and found the antenna was leaking power from the electrical cable. Whilst they're not racing out to buy a drone, they do see the benefits of utilising the data and overall advantages offered by modern advances in technology – if someone else is controlling it. Seventy-year old Gary is particularly reluctant, "I'd be worried about running into the next blue gum or something with it. The local Fire brigade use one and it's incredible what they can do with it."

When working with other growers it's important to consider broader adoption of management practices. This is where the group began, so networking with an increasing number of farmers interested in lifting productivity, whilst reducing costs associated with chemicals, nutrients and irrigation has resulted in a simpler way of crop farming.

Ian explains, "The system we prepare our ground with now, is entirely opposite of what we would've used before-hand. We haven't used a rotary hoe to prepare ground for planting for about ten years. That used to be part of our final preparation, to run over the paddock a number of times." Gary agrees, adding that it's made a huge difference to their soil health, "Soil types vary from light, white (bull dust) to black (glue-pot) – and regardless we go over that with one ripping and the disc – then plant it and the cane's growing really well."

Assisted with economic analysis of 'skip row' trials under Project Catalyst, they've been able to reduce their planting and harvesting time by half. Working with John Hughes (former Senior Agronomist with the Qld Department of Agriculture and Fisheries), Gary finds it difficult to convince himself that it would be beneficial across the entire farm. "Three rounds of economic studies proved viable

What it's about

Project Catalyst is a grower-led innovation project in sugar cane that was formed to explore and validate farm management practice change leading to improved water quality for the Great Barrier Reef. For more information on Project Catalyst please visit our website <https://www.projectcatalyst.net.au/> or phone Catchment Solutions on 07 4968 4216.



A co-operative approach to machinery, makes investment manageable

but so far we've only adopted the practice in our short rows, where there's the greatest benefit due to the number of turns. We'd have to commit to five years of analysis in other paddocks – it may not be as viable."

Regardless of trials, adoption of improved practices across the farm has simplified everything according to the brothers. "We're doing it a lot easier than we used to - If we were still farming the way we used to, I think we'd have gone under. We just don't spend the type of money we used to on machinery and fuel and time." Ian concurs, "At the moment it's pretty hard to make a profit out of cane. Between fertiliser, electricity (for irrigation) and fuel, those costs continue to rise, but the price of sugar doesn't."

Reducing costs is an imperative for all

agricultural success, so the initial Project Catalyst trial results from multi-species cover crops and reduced fertiliser application is appealing.

Attending the 2019 Forum in Cairns the brothers have been inspired by the multi-species approach to fallow. "The trials they're doing with a 'shotgun' mix of fallow cropping is interesting. We'd like to try a bit of that in November; we like to get a fallow cover crop in to preserve our soils, last year we didn't because it was too dry then it started raining and didn't stop."

With more than 1,250mm of average annual rainfall, water storage and capture has been critical to reduce runoff and reuse this precious commodity. "We've put in dams (260 megalitres and 180 megalitres) plus a sediment



Brothers Gary and Ian Considine

trap we recycle run off from." Reef legacy is important to the Considine brothers who "love fishing" and have proven the changes they've made improve the water quality in the O'Connell River; running through their property. Gary is proud of the changes that have resulted in the improvements witnessed over his lifetime.

"We used to burn it, hand cut it, plough it up and it all ended up in the river. The water running off this property is very clean, even after a flood the water cleans up within a couple of days."

"We've got fish swimming around in there with radio-transmitters, monitored by Reef Catchments Limited and they've commented how great the river is here." Ian said.

Whilst the co-op approach has allowed them to share the costs of harvesting and equipment, the business structure will prove difficult to disentangle when selling or retiring.

Something Gary has had to consider aged 70, "When you form these things, they seem like a good idea at the time, but when you get a bit older you think 'geez' I'm getting on, I might have to retire one day."

Neither brother believes their children will return to the farm, but the hope is that existing partnerships will ensure their reef legacy continues.



Water quality improvement monitored by local NRM



<https://www.projectcatalyst.net.au/>