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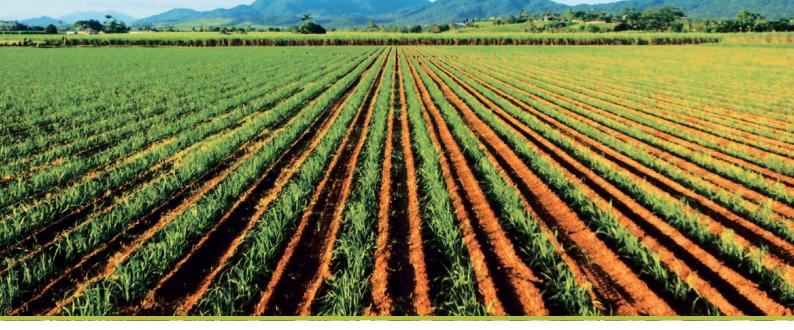


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Growers share similar challenges globally

By Paul Schembri, Chairman CANEGROWERS

The Australian sugar industry is inextricably linked to the global sugar industry. We export 80% of our sugar and almost all our production is linked to the global price. So, understanding what is happening around the world and how seismic political events such as Brexit and Donald Trump's US presidency may impact on Australia is critical to the future of our industry.

I am writing this column while in London at the start of a busy week of key sugar industry meetings and discussions.

The first stop on my itinerary is the World Association of Beet and Cane Growers (WABCG) board meeting, where I will represent the Australian industry.

With 33 member countries, WABCG is an effective forum for five million cane and beet producers from across the globe.

Remarkably, whilst those industries operate in countries with diverse government policy, ranging from high levels of protectionism to no government support, there is a remarkable sameness in the universal challenges that cane growers and beet growers face.

We all face the threat of the sugar nutrition debate, increased environmental scrutiny and the need to capture more commercial value from our primary products.

While in London, I will join other Australian delegates the 25th International Sugar Organisation (ISO) Silver Jubilee Seminar.

The ISO is a highly effective organisation, bringing together all layers of the global sugar industry into a single forum.

I have been invited to speak about CANEGROWERS Smartcane BMP program, which has attracted a lot of global interest for its proactive approach to environmental management.

We will also spend time speaking to Australian Government officials about the push to include sugar in any potential Australia/European Union Free Trade Agreement.

This agreement is a long way off but experience has taught us to commence

discussions early and be ambitious for greater access to Europe.

QSL Board

Queensland Sugar Limited (QSL) moves into a new era with an expanded Board charged with shaping the organisation's future.

The decision to reinstate grower and miller positions on the Board will add value to QSL.

Given that the sugar marketing landscape will be highly competitive in the future, it makes good sense to have industry directors to ensure QSL remains competitive and responsive to growers and milling companies.

I am privileged to have been elected to the QSL Board and I congratulate David Lando and Steve Kirby who were also elected to grower director positions.

I am looking forward to working with David and Steve and the other QSL Board members in the challenging times ahead.



"We all face the threat of the sugar nutrition debate, increased environmental scrutiny and the need to capture more commercial value from our primary products."

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NEWS IN BRIEF

Mill fire another blow for Rocky Point growers

An uncertain future lies ahead for Rocky Point growers. A fire at the problem-plagued local mill has abruptly ended this year's crush.

Already months behind schedule, due to ongoing issues with the co-generation plant that supplies its power, the Rocky Point Mill had been operational for just four weeks when the blaze broke out around 1am on Tuesday 29 November.

While staff escaped unharmed, the flames that consumed the mill's control room destroyed any hope of a successful season for Queensland's most southern cane growers.

"It's just devastating," CANEGROWERS Rocky Point Director **Tony Huth said**.

"This situation will financially cripple everybody and make life very, very difficult"

"We've just put \$1.2m into the co-gen to get it up and running, now this has come along and basically kicked us while we're down," Tony said.

With the mill out of action since January, growers trucked 20,000 tonnes of standover cane across the border to NSW's Condong Mill for crushing during September and October.

When the Rocky Point Mill finally came online on 31 October, growers had hoped to get the remainder of their estimated 320,000 tonne crop off, even if it meant crushing well into the New Year.

But those hopes have gone up in smoke.

"We believe the mill has insurance in place to cover this type of event, so if that comes through then they can hopefully get it repaired," Tony said.

"But if it's going to take three months, which is what's being predicted at the minute, that's too late for this season. "We had intended to crush through until the end of January, but that's all history now unless we can set something up with NSW.

"We tried to get an arrangement in place with Condong before this fire, but it just got too difficult to organise the logistics, so NSW said they couldn't do it. Whether this fire changes that decision, we'll have to wait and see."

In all, Rocky Point growers got less than a third of their crop off before the fire closed down operations.

That leaves a lot of cane in the paddock and if a deal can't be struck with Condong Mill, Tony is not sure there will be much standover cane to cut by the time the mill is back up and running.

"If we can't send cane to NSW, it's going to make it a very tough six or eight months for growers here," he said

"It's not a good standover crop at this point. We haven't had any of the storms that everybody else has been getting. It's very dry and drought-stressed cane does not make good standover.

"So the best thing that could happen to us now would be a huge downpour of rain to put some life back into it and then a wet summer. Then it might make reasonable standover. But if we have a dry summer we could lose a lot of it."

"As it is, this situation will financially cripple everybody and make life very, very difficult, but there's also the potential that will send some growers under," said Tony.

Sunshine Sugar's CEO **Chris Connors** has indicated the miller would be willing to extend a helping hand to Rocky Point growers in their time of need, on the condition that certain contractual obligations can be met.

AWARD FOR BURDEKIN FERTILISER TRIAL

Sugar Research Australia (SRA) is congratulating the growers involved in the RP20 nitrogen trials in the Burdekin, after the project won the top prize at the Queensland Premier's Awards for Excellence.

RP20 is focussed on proving the science behind the industry's standard for nutrient management, SIX EASY STEPS™, within Burdekin soils and conditions.

Growers involved in the project are receiving practical information about the economics of applying nitrogen according to the guidelines, allowing them to grow a crop that strikes the right balance between yield, CCS and input costs.

Eric Barbagallo, a grower who has been involved in the trials since 2011, said the RP20 project was a win-win.



"I now use 15 tonne less fertiliser a year because of the trials, with no loss of crop, tonnage or sugar," he said.

SRA Executive Manager, Technology, Dr Peter Allsopp said that the 23 growers who have collaborated in the project with former SRA Researcher Julian Connellan, the Queensland Department of Environment and Heritage Protection (EHP), the Department of Agriculture and Fisheries and the Department of Science, Information Technology and Innovation should be congratulated for their work.

"SRA's work on this is continuing under the new project RP161 funded by EHP and led by Farmacist, to further the achievements that have already been made," he said.■

Year of the rat - native pests costing growers millions

An explosion in Queensland's rat population is costing cane growers tens of millions of dollars as harvesting crews race to get crops off before they disappear.

Herbert Cane Productivity Services Ltd Manager Lawrence Di Bella, who is working closely with CANEGROWERS on the frontline of its fight against rats.

He says the ravenous rodents will cost the industry in excess of \$20m through lost cane and reduced CCS this year.

Driving the population boom is successive mild wet seasons, coupled with the proliferation of sweeter cane varieties such as Q208.

"It's a very real and serious situation for many growers at present," said Lawrence, who estimates the Ingham rat population to be in the hundreds of thousands.

"It's mainly the Q208 crops that are being effected, but other varieties such as Q250 and Q183 are also seeing rat problems.

"The damage is significant, in fact, we're probably looking at double the area we had last year, and when you consider we lost 35,000 tonnes of cane to rats last year, you can see the scale of the problem.

"We're expecting around \$23m in damage through loss of yield and the impact on CCS, which can be quite high."

Two species of native rat are prevalent in Queensland's cane fields, the ground rat (Rattus sordidus) and the climbing rat (Melomys burtoni), which lives in the canopy of the crop.

"The main issue we've got is with the ground rat," said Lawrence. "When crops sprawl to lodge, what we see is the ground rat then has the ability to climb a bit further up the stalk and take a good bite out of the base. "The stalk falls over and subsequently the rat eats a large amount of the stalk.

"The damage is quite extensive, to a point where we can see a field almost disappearing in front of our eyes.

"The crop is actually going from erect or sprawly to basically being flat on the ground or damaged."

"The damage is extensive ... fields are disappearing in front of our eyes"

Where rat-damaged cane can be harvested, the CCS is often reduced.

Elevated dextrin levels caused by bacteria and fungi entering the damaged stalk not only impacts the recoverability of sugar, but also the quality of the sugar crystals produced.

It's not just the sweetness of varieties like Q208 that attract the rats, the relatively open crop architecture also provides a perfect breeding ground for weeds, the rats' main source of food.

"The issue with Q208 is doesn't have a lot of trash or a lot of top, so weeds come through and it's those weeds that are actually the source of protein for the rats," said Lawrence. "They'll consume the weed seed and use the cane for a bit of fibre. Growers have done their best to manage the weeds when they could get machinery in there, but the issue is the crop has actually sprawled and lodged and the weeds have now come through."

CANEGROWERS is working closely with HCPSL to secure a permit for the use of strategic aerial baiting as part of an integrated pest management plan to deal with the industry's rat problem.

"We've been working closely with the Ratoff manufacturer Animal Control Technologies (ACT), consulting registrant DeGroot Technical Services, and the Herbert Cane Productivity Services to progress a permit for strategic baiting using Rattoff by either helicopter or UAV in the Herbert cane growing region," CANEGROWERS Environment and Sustainability manager Matt Kealley said.

"DeGroot Technical Services are handling the registration requirements of the Australian Pesticides and Veterinary Medicines Authority.

"ACT are supporting the application needs, while HCPSL is providing technical support," he said. "CANEGROWERS is coordinating the project and will ultimately be the permit holder on behalf of industry."

> Pictured: The climbing rat, Melomys burtoni, is an agile climber and builds nests in the cane foliage



CANEGROWERS Regional round-up

Mossman & Tableland

Mossman Mill tipped the last cane bin at 7.11am on Friday 18 November after 24 weeks crushing.

A total of 898,645 tonnes of cane was processed at Mossman Mill for a seasonal average of 11.56 CCS, a unit below the 2015 seasonal average.

Coastal supply was 710,010 tonnes of cane for an average of 11.03 CCS, while Tableland supply was 602,450 tonnes of cane for an average of 13.42 CCS.

Total tonnes for Mackay Sugar across both mills was 1,312,460 tonnes of cane.

Mossman CANEGROWERS AGM was held on Wednesday 23 November 2016.

Tableland Mill finished crushing on 22 November, completing the season in just over 26 weeks

Tableland CANEGROWERS members are reminded that the AGM / End of Season BBQ will be held on Thursday 15 December at 6.30pm at the Mareeba Soccer Club.

Tully

Just over 2,500,000 tonnes have now been harvested and crushed and the dry conditions are see0ing the seasonal average CCS holding at just over 12, with the estimate reducing as the cane dries out. There is still a lot of pressure on in-field and factory operations to make the best of every available day, so that the result is maximised.

Tully CANEGROWERS will hold their AGM on the 8 December. CANEGROWERS CEO Dan Galligan will be the guest speaker.

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Innisfail

Harvesting conditions continues to be excellent. A strong supply to the mill during the week ending 27 November saw just over 86,171 tonnes crushed, falling short of a weekly record by just a couple of hundred tonnes.

As at 8am, Friday 25 November, South Johnstone Mill had reached 82.3% of the current crush estimate of 1,753,354. CCS appeared to have begun falling, but to everyone's surprise has continue to hold around 11.10.

There is a lot of apprehension in the field and at the mill, with everyone hoping that all cane can be crushed before 25 December. On current estimates and crushing plan, without significant lost time to wet weather, the aim is to have harvesting completed by 21 December and crushing completed on 22 December.

The surprise announcement last week was the sudden departure of the mill manager Phil Miskin. Current factory production manager, Barry O'Brien, will take on day-today operational matters, reporting direct to MSF Sugar CEO Mike Barry.

Burdekin

As at the end of Week 25 (w/e 26 Nov) the Burdekin mills had crushed 7,466,000 tonnes, or approximately 85% of the forecast crop.

Without further rain, Invicta is likely to be the first mill to finish crushing in the Burdekin – shutting down about a week before Christmas. Pioneer and Kalamia should both finish just before Christmas and Inkerman should finish in the week after Christmas.

Weekly CCS levels are still above budget, with two mills recording above 15 for the last two weeks. 14.8 was the district average for week 25 with the season to date average at 13.93.

The best performing variety in week 25 was Q183 with 51% of supply and 14.86 CCS. There is still some small tonnage of Q247 that is registering over 16.

Herbert River

Harvesting conditions have been generally good for the past fortnight. However, the combination of a large derailment and mill issues resulted in lost time and a below target throughput for the week ending 26 November.

There was a concerning incident at Macknade Mill around midnight on Tuesday 22 November when a large piece of foreign matter somehow got through to cause considerable damage to the shredder, resulting in a 6-hour stoppage. The material was subsequently identified as a Willison coupling, such as used on bins in the mill rollingstock fleet. It is unknown how it got into a cane bin or who is responsible.

The crop estimate has been marginally upgraded to 4.7 million tonnes. The crushing profile forecast indicates



There was strong member turnout for the 2016 AGM held at CANEGROWERS Hall, Home Hill on Tuesday 22 November.

Chairman Phil Marano provided a full and frank overview of where things are at in regards to the 2017 CBL CSA negotiations, while Greg Beashel, CEO of QSL gave an up to the minute overview of the On-Supply Agreement (OSA) negotiations between QSL and Wilmar. Greg spoke in detail about the OSA term sheet that Wilmar released to the



the crop will be crushed by about 21 December, subject to weather, mill throughput holding to budget, and the accuracy of the estimate.

Negotiations with Wilmar have progressed slowly. The key issue remaining unresolved is a pathway for growers to price with QSL which, based on Wilmar's proposed new model, awaits completion of a workable on-supply agreement between Wilmar and QSL for GEI sugar. While there has been some welcome progress, there is still no complete agreement in place to allow growers to price with QSL. Formal notice to trigger arbitration has been served on Wilmar.

QSL Managing Director Greg Beashel will attend a grower meeting on 7 December.



public on 21 November, explaining that several points in the term sheet did not reflect the negotiations between QSL and Wilmar. QSL re-viewed these points and responded to Wilmar within 24 hours. QSL feels that the ball is now in Wilmar's court.

As guest speaker, Chairman of CANEGROWERS Queensland Paul Schembri provided the meeting with an entertaining and informative update on key industry activities.

Proserpine

Harvesting conditions in Proserpine have remained ideal over the last fortnight, with no rain interruptions.

Unfortunately, mill availability has been affected by a number of unplanned stoppages. A scheduled 24-hour maintenance stop also contributed to a lower than budgeted performance. As a result, just under 170,000 tonnes were crushed during the fortnight. CCS has hovered around the 13.00 units for the past few weeks and it is hoped this can be maintained while conditions persist. The 2016 crop has been officially increased again to 1.95 million tonnes. As at the end of the week (27/11) around 1.65 million tonnes (or 84.5%) of the crop had been crushed. Despite the increase, the mill still expects to complete crushing activities sometime during the week ending 24 December.

Mackay

Mackay Sugar's throughput at its three mills was 230,100 tonnes for the week ending 29 November. This brings the mill area to 78.3 per cent (4,659,267 tonnes) harvested of an 5,950,000 tonne estimate. Various issues hampered operations including cooling tower issues at Marian and repairs to the hot water tank at Racecourse Mill. PRS for the week was 13.35, with the season to date average at 12.98. The three mill totals for the week were: Farleigh 76,531 tonnes, Marian 90,549 tonnes, and Racecourse 63,020 tonnes.

Plane Creek

A total of 66,512 tonnes of cane was crushed last week (ending 26 Nov). The crop estimate has been revised again to 1.41 million tonnes, which now puts Plane Creek Mill at 81.6% through this year's crop. CCS for the week was 13.28 units, with the season to date at 12.98 units.

Bundaberg

Bundaberg Sugar mills processed 87,547 tonnes of cane during the week ending November 26, bringing the total for the season so far to 1,768,552 tonnes. A number of harvesting groups experienced lost time due to the rain event on Saturday.

Crushing at Millaquin Mill passed the one million tonnes mark on 27 November.

This is a milestone last achieved in 2006 and is a result of expanding cane area and improved yields.

The average CCS for the week was 14.36 units. Millaquin averaged 14.33 units and Bingera averaged 14.39. The season average increased to 14.10 units, the highest in Queensland.

The four major varieties supplied for week 24 were Q208A (27% supply – 15.29 CCS), Q242A (13% supply – 13.09 CCS), Q240A (12% supply – 14.67 CCS) and Q232A (10% supply – 13.19CCS).

The week's highest individual CCS result was from the Millaquin area, with 17.40 units for Q208A older ratoon. The variety with the highest average was Q208A at 15.29.

Crushing at Millaquin Mill has ended for the season, with the last bin tipped at 10.45pm on 28 November. Bingera should be finished around 6 December.



Continues page 8...

CANEGROWERS Regional round-up

lsis

At 12.47am on Sunday 27 November the 2016 crush was completed for the Isis growers. The season closed out with an impressive 1,353,415 tonnes of cane crushed, with a season average CCS of 14.09 units. The timing could not have been better, with storms and exceptional rainfall for the full day following close of crush.

In weeks 21, 22 and the few days into week 23 our growers continued to supply outstanding quality cane to the Isis Central Sugar Mill. In Week 21 a Redridge grower supplied 1st ratoon Q208 with a CCS of 17.19. In week 22 and in the final few shifts of week 23 a Cordalba grower achieved highest CCS two weeks running also on 1st ratoon Q208 with a CCS of 17.47 and 17.63 respectively.

We would like to recognise every one of our Isis growers for their outstanding efforts, high quality crop and their everinnovative approach to delivering excellence for our region. We also congratulate the Isis Central Sugar Mill for breaking historical production records, delivering exciting new technology and for their hard work securing long term supply to one of the few remaining 100% grower owned mills in Australia.

Maryborough

MSF's Maryborough mill completed crushing on Sunday 20 November. Total tonnes crushed reached 791,434.92, with the final CCS at 14.01

Parts of the district received much needed rainfall over the weekend, although falls are still patchy.

Jim Smith, the long standing cane auditor at Maryborough Mill retired on 25 November.

The CANEGROWERS Maryborough AGM was held on 30 November. As this was Trevor Turner's last function, bbq and drinks were held to celebrate his 22 years of service.

Cameron Waterson has commenced as the new manager at CANEGROWERS Maryborough, with Trevor now looking for some Hawaiian shirts to add to his collection while cruising.

Rocky Point

In the early hours of Tuesday 29 November, a fire broke out in the control room of the Rocky Point Mill. Initial indications are that the mill will not be able to recover this season.

As at Saturday 26 November, a total of 102,674 tonnes of cane have been crushed at a season average CCS of 13.75.

The mill and directors of CANEGROWERS Rocky Point are currently exploring their options. ■



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Super gets a bit more complicated as you get older and the questions you need to ask yourself get a little bit harder (and more emotional!)

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At 30, you may already have a family, or may be thinking about it. If you've taken time out for maternity leave, raising the kids or even gone back to work part time, your super will have taken a big hit. Check out the comparisons at www.industrysuperaustralia.com to find out just how big the gender gap in super is.

There are a number of things you can do to close this gap. Firstly, you can make additional contributions into your super account.

They can even be made before-tax and chances are you won't even notice it, but it will make a big difference to your balance when the time for retirement comes. You can find information about voluntary contributions through the grow your super section on our website – austsafe.com.au.

Your spouse can also help you save for retirement by making contributions on your behalf. If you're not earning an income, or if your salary is less than \$13,800, your spouse may also receive an 18% income tax rebate for contributions up to \$3,000 per year. To do this, complete the Spouse contribution form available at austsafe.com. au.

You should also have a think about your insurance needs. What will happen if you get sick or injured, or are unable to work? It's worthwhile knowing what you're entitlements are, and how to change them. As a rule, these should be re-evaluated every time you have a major life change.

You might also have some lost super you're entitled to! Finding lost super can also help boost your super savings even further. Simply visit www.austsafe.com.au/ findmysuper for more information and to find your lost super.

Another thing to think about when you're 30 is what is going to happen to your super when you die. We know it's not pleasant to consider, but the reality is, it's going to happen at some stage, so you might as well make your wishes known well beforehand.

Who will receive your superannuation, insurance benefits and any other entitlements are all things you need to think about – especially if you have kids! Make your wishes known by filling out a binding death benefit nomination. You can do this by filling out the Binding Death Benefit Nomination form, available at austsafe. com.au/forms

For more information, please visit **austsafe.com.au**



BURDEKIN BUGS ALERT

Burdekin cane growers with mungbeans in the ground should check for two pests, red-shouldered leaf beetles and bean fly, after the wetter than average spring boosted insect breeding.



The beetles, Monolepta, have already been reported at five times the acceptable crop threshold.

Queensland Department of Agriculture entomologist Liz Williams said Monolepta

shred leaves, eat flowers and make holes in pods which reduce bean quality.

"Larvae feed on grass and cane roots and then pupate underground, which is why invasions typically first appear around crops edges," Dr Williams said.

If Monolepta are only present at the edges of paddocks, growers are advised to treat a boom width into the crop to target the infestation and reduce beetle spread while minimising the impact on predatory insects.

"Prompt action is critical to minimise the risk of Monolepta releasing aggregating pheromones, which results in large, crop-wide infestations," she said.

DAF entomologist **Hugh Brier** is also urging growers to inspect crops for bean fly damage and consider a dimethoate treatment.

Adult bean fly are around 3mm long and black with clear wings. The legless larvae (maggots) are cream with dark mouthparts and cause damage by tunnelling through the plant's vascular tissue.

"Rates as low as 250 mL/ha have shown to give good bean fly control in recent DAF trials and have a much lower impact on beneficials than the full 800 mL/ha. A repeat spray may be required after 7-10 days if pupae are present at the time of spraying and adults then re-infest the crop," he said.

Growers can contact Dr Williams on 0476 850 415 Liz.williams@daf.qld.gov.au and Hugh Brier on 0428 188 069 Hugh.brier@daf.qld.gov.au ■

Monolepta feeding on leaves

Bean fly





Bean fly damage

Leading edge land levelling



Industry Spotlight



Burn Ashburner CANEGROWERS Manager - Industry

"Agriculture will be transformed with the introduction of these technologies."



TRANSFORMATIVE TECHNOLOGIES

what do they mean for the cane industry

Over the next five years, an estimated \$100 million will be invested in the sugar industry for extension and advisory programs.

Most of this will be aimed at increasing the adoption of well-established and researched principles, such as nutrient application using Six Easy Steps, reduced tillage and break crops to improve soil health, scheduling for the accurate application of irrigation, controlled traffic and harvesting BMP.

But should we be spending some of this money on developing and trialling new technologies?

I recently attended a meeting of the National Farmers' Federation Innovation Committee, where a presentation was given on transformative technologies.

This presentation, based on CSIRO research sponsored by the Rural Industries Research Development Corporation (RIRDC), described eight transformative technologies - sensors, artificial intelligence, gene-editing, nanomaterials, robots, synthetic biology, internet of things, and 3D printing.

These are technologies that most people in the ag industry know very little about.

So, what might the use of transformative technologies look like in the cane industry?

Imagine a range of sensors measuring crop or soil specific nutrient data on the go. This data is interpreted by an artificial intelligence, which in turn relays commands to a robotic tractor and variable rate applicator that applies fertiliser using nanomaterials that facilitate the release of nutrients based on crop demand. All of this is controlled through the internet of things.

The variety of cane you're growing may even be gene-edited for nitrogen use efficiency, with minimal loss to the environment. This dreaming can go on forever, but how far away are these technologies?

Well, not as far as you may think. In fact, individually most of these technologies are already being trialled, with commercialisation just 5-15 years away.

The RIRDC report suggests that agriculture will be transformed with the introduction of these technologies, with farms changing from broad scale to small scale operations.

Precision farming will not just be easier, it will be automated, reducing the need for low skilled labour, which could have potential social consequences.

This will present challenges for policy makers, who will also need to manage the public perception of this transformation, not to mention develop safety guidelines for the use of robots.

The question is, just how transformative will these technologies be for the sugar industry and cane growing in particular?

Will our competitors get an advantage if we are too slow to adopt new technologies or don't invest enough in them?

Is there a group of growers who will benefit more than others?

How much should we spend looking for the benefits of these technologies compared to say the \$100 million spent on adoption of what we already know?

Could synthetic biology combine the right elements to produce a chemical sugar with no farming required – the ultimate disruptive technology?

How far down this road do we want to go?

For those interested, the RIRDC report can be found on the website www.rirdc.gov.au ■



Queensland farmers can now deploy drones in battle to protect crops

Queensland farmers can now use drones to spray crops after the Palaszczuk Government amended legislation to embrace the latest technology.

Agriculture Minister Bill Byrne said the changes would give Queensland producers access to the most innovative aerial spraying technology available.

"The improvements to the legislation provide Queensland producers with cost effective options for crop protection," Minister Byrne said.

"This technology will be especially useful for chemical application in areas with limited access or difficult terrain.



"This includes cropping situations as well as spraying weeds or pests where conventional ground-based technology or aerial application is unsuitable for the situation."

CANEGROWERS Industry manager Burn Ashburner welcomed the legislative change, saying drones had the potential to help growers control weed vines in cane. "It's not something that's commercially available yet, but it could definitely be of benefit controlling vines in tall cane, when its not possible to get a tractor or conventional spray rig in without damaging the crop," he said.

"Any technology that makes it easier for growers to manage pests and disease is something we would support."

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Collaboration to IMPROVE HARVEST EFFICIENCY

A series of demonstration trials over recent seasons is providing the Australian sugarcane industry with vital information on harvest efficiency.



These trials are seeing SRA collaborate with harvesting groups, milling companies and growers to analyse different harvester configurations and aspects of efficient harvesting.

Within each region, each demonstration trial is formulated in direct response to local industry requirements for information and includes aspects such as ground speed, fan speed, pour rate, crop conditions and new technology such as EHS chopper drums.

SRA Adoption Officer **Phil Patane** (Ingham) and Technician **Luke Giddy** (Brandon) have been conducting the trials with the help of industry.

Phil said the results provided practical and useful information that could help improve harvest efficiency.

For example, a recent trial at Condong in NSW had a strong emphasis on providing the local industry with information around the reduced losses associated with EHS chopper drums. Other demonstration trials this season have looked at issues such as ground speed and fan speed.

One trial at Bundaberg showed a stark difference between a 700 rpm fan speed at 6.5km/hour compared to 850 rpm at 8km/hour.

The demonstrations are also looking at other important factors such as bin weight, the number of bins required, and the increased costs associated with factors such as the number of trips to the siding and the overall time to harvest.

"Having demonstration trials gives growers and millers an opportunity to come out and see how SRA conducts harvesting," Phil said.

"The harvester is very good at hiding the evidence of sugar loss, so there is a huge value in each region observing how we measure cane and sugar loss in the paddock."

Further information about these trials will be published in the next edition of

SRA's magazine, *CaneConnection*, and will also be the topic of discussion at workshops on harvest efficiency in 2017.

The magazine feature also looks closely at work occurring in the Isis region on improving harvest efficiency, while other local activities will be featured in future editions.

You can read more detail about this in the Summer edition of *CaneConnection*, available in mid-December.

If you are a sugarcane grower and do not currently receive *CaneConnection*, please contact Andrea Evers on (07) 3331 3308 or email aevers@sugarresearch.com.au.

Information on 2017 events will be available via the SRA enewsletter and the events section of the SRA website.

Photo: SRA Adoption Group Leader, James Ogden-Brown discusses harvest efficiency activity in the Southern Region with harvesting contractor Michael Russo and Isis Mill Chief Field Officer, Paul Nicol.

GIVE TO KIDS IN CARE THIS CHRISTMAS

CANEGROWERS Mackay will be providing some much-needed Christmas cheer to a special group of kids this festive season, by getting behind the GIVIT Kids in Care Christmas charity gift drive.

With more than 8,000 Queensland children currently living in care, charity organisation GIVIT has partnered with the Palaszczuk Government to coordinate the appeal.

It aims to see a present donated for every child and young person in care.

CANEGROWERS Mackay's Wood Street office is a collection point in Mackay for donations of toys that will brighten the lives of children living in out-of-home care this Christmas.

Chairman Kevin Borg, and CEO Kerry Latter said the organisation was happy to support the cause.

"This is a terrific cause that will hopefully bring a smile to the faces of lots of kids and young adults who need it most, particularly at this time of the year," Mr Borg said.

He said Road Boss Rally Cars was assisting with collecting and delivering donated items to various locations across Queensland.

Around 259 children living in care in Mackay won't be spending Christmas at home.

Mr Borg and Mr Latter recently accepted a donation of two toy tractors and a truck from Macdonald Murphy Machinery sales representative Alan Lollback.

For more information, contact Sonia Ball at CANEGROWERS Mackay on 0427 178 370.

GIVIT is a national not-for-profit organisation connecting those who have with those in need.

For more information visit www.givit.org.au



CANEGROWERS Mackay Chairman Kevin Borg and CEO Kerry Latter with Macdonald Murphy Machinery sales representative Alan Lollback (centre), who donated these gifts to the 'Kids in Care Christmas drive'.

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By Greg Beashel QSL Managing Director and CEO

"While revenue in the Shared Pool will continue to fluctuate until all of the sugar produced in the current season is sold and shipped to customers, it is currently estimated that the 2016 Shared Pool allocation for QSL's ICE 11 pools and individual forward pricing will be 14 cents per tonne IPS (\$0.14 per mt)."

Understanding the Shared Pool

With the harvest now finished or on the home straight throughout Queensland, increased attention is turning to the results of QSL's 2016-Season pools. A key component of this return is the Shared Pool element.

The Shared Pool is a mechanism by which all QSL pool participants share in the marketing premiums and costs of running the QSL pooling system.

While revenue in the Shared Pool will continue to fluctuate until all of the sugar produced in the current season is sold and shipped to customers, it is currently estimated that the 2016 Shared Pool allocation for QSL's ICE 11 pools and individual forward pricing will be 14 cents per tonne IPS (\$0.14 per mt).

Growers monitoring the 2016 Shared Pool results may have noticed an increase in some elements of the pool.

To understand these changes, it is important understand that the QSL Shared Pool contains two types of costs:

- Direct marketing costs: These are the costs directly associated with selling sugar and getting that sugar to the customer, such as freight. These costs move as the markets for freight and sugar move throughout the year. They also move with changes in the crop estimate.
- 2. Raw Sugar Supply Agreement (RSSA) costs: These are the costs incurred with running the pooling system, such as the cost of storage and handling at the bulk sugar terminals and interest costs associated with funding the Advances program. The major influence on some of these costs is the volume of sugar that will be marketed by QSL.

THE RESULTS SO FAR

The 2016 Season has seen finance costs rise since the start of the year, due primarily to delays in the expected shipping program to customers and the increased cost of futures margins associated with the higher sugar prices that have prevailed since the beginning of the year.

Some of the RSSA costs are fixed in nature (such as the cost of leasing the Bulk Sugar terminals from STL). And so with a slightly lower crop now forecast compared to the beginning of year, these have increased slightly on a dollar per metric ton basis, but the overall level of expenditure has not changed.

Going forward, the amount that QSL charges for marketing services will change as we implement Marketing Choice and offer an increased range of services.

There will be also be some one-off costs incurred this season, as some current QSL Members leave the pooling systems at the conclusion of 2016 Season. Most of these will be restructuring costs associated with preparation for the 2017 Season.

You can find more information about how the QSL Shared Pool works at our website: **www.qsl.com.au**

NOTE: This report contains information of a general or summary nature. While all care is taken in the preparation of this report, the reliability, accuracy or completeness of the information provided in the document is not guaranteed. Any update on marketing and pricing activity does not constitute financial product or investment advice. Past performance is not an indication of future performance, and this report should not be taken to include representations as to future matters. QSL does not accept any responsibility to any person for the decisions and actions taken by that person with respect to any of the information contained in this report.



QSL MARKETING CHOICE IS HERE.

MSF Sugar Growers wanting to nominate QSL as their GEI Sugar Marketer for the 2017 Season and beyond can now do so.

You have until **31 December 2016** to finalise QSL as your GEI Sugar Marketer of choice.

Growers wanting to participate in forward pricing are encouraged to contact QSL to discuss available products and deadlines.

Growers wanting to participate in the QSL Actively Managed Pool, QSL Harvest Pool and the QSL Guaranteed Floor Pool don't need to finalise their pool choices until February 2017. Remember, to access QSL products including the QSL Harvest Pool, you must nominate QSL as your GEI Sugar Marketer and complete your CSA, GPA and Pool Manager Nomination Form by **31 December, 2016**.

Contact your QSL representatives Daniel Messina p: 0429 660 238 e: daniel.messina@qsl.com.au or **Carla Keith** p: 0409 372 305 e: carla.keith@qsl.com.au for more information or to arrange an appointment.



FARMING within the LANDSCAF

With a lifetime of experience in cane farming and more than a decade in local government, Cairns cane grower Paul Gregory has developed a clear understanding of the social contract binding farmers as custodians of the land.

That's why he has become a vocal advocate for Smartcane BMP, the industry-driven best practice management scheme that is giving cane growers a unique opportunity to build community confidence in their industry.

Glancing westward across the Mulgrave Valley towards Gordonvale, the vista is striking. In the distance, beyond the Mulgrave Central Mill, a patchwork of cane fields gives way to the unmistakable peak of Walsh's Pyramid. Point your tractor to the east and you'll quickly stumble on a tranquil tropical beach at Bessie Point, where the mangrove estuaries of Trinity Inlet empty into the Coral Sea. From here it's a short blast north by tinnie across the inlet to the Port of Cairns where tourist boats ferry thousands of international visitors each day to dive and snorkel on the Great Barrier Reef.

Sandwiched between these World Heritage listed icons is the place



CANEGROWERS Cairns Director Paul Gregory calls home, a 240+ ha cane farm in the Packers Camp district fringing the wetlands of Trinity Inlet.

"It's a spectacular part of the country, we're pretty much in the geographical centre of the valley that runs back between Cairns and Gordonvale and surrounded by beautiful mountains and pretty stunning landscape," Paul told *Australian Canegrower* during a tour of the farm.

"I guess what we try to do is farm in that landscape and utilise the landscape both for enjoyment and also for opportunities on the farming side of it.

"Farming in a landscape is a phrase that one of my friends has coined, that's farming in a landscape instead of in spite of it, it's making the most of what your property provides you with."

In a region where two metres of annual rainfall is considered about average and where primary producers are under increasing pressure to take a leading role in protecting the Great Barrier Reef, farming in the landscape means working with the topography, hydrology and



surrounding ecosystem to minimise the loss of farm inputs into the Great Barrier Reef lagoon during rainfall events.

The challenge here is to get water off the blocks fast enough to avoid waterlogging while at the same time preventing sediment and nutrient leaving the farm.

To achieve that objective, the Gregorys are making best use of a combination of science, sensible farm management practices and a helping hand from Mother Nature.

"We're not irrigators, we're drainers," Paul explained.

"When you get average rainfall every year of 80 inches and some years much more than that in the growing period from Christmas through until the end of May,

"Farming in a landscape instead of in spite of it, is making the most of what your property provides you with." the more opportunity you give the cane to grow with soil that's not waterlogged, that's obviously very instrumental in your productivity.

"Obviously the runoff of the surface water is the first step in draining.

"You have to be very conscious of the nutrient load that's in that water that does run off."

The first task in managing runoff is to slow down the velocity at which water exits the rows, limiting its capacity to cause erosion and carry sediment loads.

In keeping with best practice benchmarks established through Smartcane BMP, the Gregorys are progressively laser levelling blocks and converting the farm to a GPSmapped controlled traffic system.

Laser levelling is allowing blocks to be reformed in a way that minimises waterlogging and allows water to be channelled away at low velocity.

At the same time inter-row spacings are being matched to machinery wheel spacings, reducing the risk of compaction and crop damage while providing a firmer, less erosion-prone path for machinery movements.

With the blocks GPS mapped, tillage can be limited to re-establishing the plant zones at the end of each five-year crop

Continues page 18 🕨



Pictured: (above) Cairns grower Paul Gregory takes his role as a custodian of the land very seriously; (top) harvesting underway at the Gregorys' Packers Camp farm; (page 16) Mulgrave Mill.



cycle, meaning there is zero tillage during most growing seasons and minimal threat of sediment loss.

It's a system Paul is confident will offer numerous benefits, not just in terms of limiting erosion but in boosting yield via better application and retention of nutrient and ameliorants.

"We've started a program where we're going to convert the whole farm to 1.85 metres, GPS controlled," he said.

"We'll end up with nice firm traffic ways and nice soft growing zones.

"This is not just about the control of sediment running off the paddocks, it's more specific placement of nutrients and the ability to use soil ameliorants that are delivered directly to the growing zone, not spread over the block."

For example, next year he'll be able to provide lime and mill mud to the growing beds with an autosteer truck, targeting the nutrients to the crop.

"The very small grades in these paddocks means there isn't a great opportunity for sediment run-off, so really it's about profitability, productivity and an eye to the future," Paul said.

The Australian Canegrower's tour included a close-up look at how natural processes are contributing to the management of onfarm nutrient and sediment. The steps outlined in the Smartcane BMP program are clearly being taken, such as ensuring adequate grass cover is maintained on headlands.

A standout feature of the farm is how riparian vegetation has been maintained.

"Riparian vegetation is very important," Paul said.

"It performs a couple of uses, it actually traps sediment before it runs into the stream, and attached to that sediment is usually the nutrients. The vegetation holds that sediment and uses the nutrient."

Similarly, natural wetlands and patches of rainforest that have been left standing and continue to thrive on the farm are helping filter nutrient as it leaves the blocks.

This includes areas of melaleuca swamp and mangrove saltpan covering more than 12 acres.

"The whole method of farming that I employ here is to try to keep the water as long as I can on my property before discharging into Mackeys Creek," Paul said.

"The way I can do that is to use the natural geography.

"I direct my drains, I direct my drills, I grass my headlands so that the water flow naturally makes its way to a natural

"The whole method of farming that I employ here is to try to keep the water as long as I can on my property before discharging into Mackeys Creek."



(trap), almost like a nutrient trap or sediment trap.

"Wherever I can on my property I've used that principle to contain the water on my property and also to filter the water as naturally as possible before it runs into the stream."

It is little surprise that Paul has already completed the drainage and irrigation module Smartcane BMP.

"We're not in it to lose money. You've got to be financially sustainable to be environmentally sustainable."

It's a process the former Cairns divisional councillor believes the industry needs to embrace.

At the same time, he is firmly of the view that most growers, most of the time, are working in a way that is consistent with the objectives set out under Smartcane BMP, and in time this will be reflected in the numbers of growers achieving accreditation for their on-farm practices.

"Most farmers do them (best management practices) and there will be a period of time where the documentation around the practices of those growers is collated and then there'll be a real groundswell of accreditation that takes place, that is a significant step," Paul said.

Paul sees the future as one where growers work in partnership with the community, government and other sectors of the industry, accepting a helping hand to achieve better outcomes.

It's also about recognising what could be described as a 'social contract' with the Australian community to protect the World Heritage assets on the doorstep of the region's farmers.

"All of us who own land and maintain a living from the land, there's no place like your own and it's the most important thing in your life, but there's another 23 million Australians out there and they have an emotional attachment with many things," he said.

"They all feel Australians own the Daintree and the Reef and that may be the case.

"The awareness of being part of maintaining those icons is something that weighs heavily on you as a landholder." ■



This on farm story has been brought to you by the Australian Government Reef Program



Clarence growers celebrate a bumper crop and successful crush in 2016

It has been bumper growing season for sugar cane in New South Wales, with Harwood's Sunshine Sugar Mill reporting positive results as crushing operations wound up in late November.

With just under 700,000 tonnes of cane cut from almost 5,000 hectares, average yield came in higher than expected at 140 tonnes per hectare.

This boost in yield, combined with the higher sugar prices, means cane growers in the Clarence have a lot to celebrate coming into Christmas this year, Sunshine Sugar Chief Executive Chris Connors said.

"Not only are the tonnes per hectare up on forecast, so too is the sugar content and the sugar price," Mr Connors said.

"It's not too often that you get the improved sugar price and production coinciding.

It was also a good year from the milling perspective with the factory recoveries at a very high level.

"I think we are now seeing the results of the SRA cane variety program kicking in, with some the new varieties delivering both high CCS and very good tonnes per hectare."

The 2017 season is looking even better for NSW growers with a well-established crop in the ground and the current sugar price projection climbing higher.

"Following another good season and a successful merger with Agribusiness giant, Manildra Group, the local sugar industry continues to prove itself as a significant contributor to the community and the economy of the area," Mr Connors said.

Pictured: Last cane truck for 2016 delivering to the Harwood Mill.



Secret ingredient: NSW cane juice behind Boutique rum

Growers attending the NSW Sugar Milling Co-operative's 38th Annual General Meeting on 25 November got a little taste of the latest product to come from their collaboration with boutique distillery Archie Rose.

On show was the newly released Virgin Cane Spirit.

The limited edition white rum is brewed using sugar cane grown locally at Condong in the Tweed Valley.

The cane is cut and pressed into fresh juice at Sunshine Sugar's Condong Mill within 12 hours of harvest.



Yeast is added immediately and the juice ferments as it is transported to the Archie Rose distillery in Sydney where it is distilled three times in copper pot stills.

"As Australia's only locally owned and locally grown sugar milling co-operative, we are uniquely positioned to work with innovative small businesses such as Archie Rose," Sunshine Sugar Chief Executive Chris Connors said.

"We both share a passion for what we do and are committed to crafting a product that is of the highest quality.

"I expect this will be the first of many of these projects aimed at diversifying our business."

The Archie Rose handcrafted white rum is inspired by traditional French Colonial agricole rhums: Virgin Cane Spirit. Rhum agricole is the French term for rum made from cane juice.

NOT JUST TICKING BOXES: Wheelers boost productivity while protecting the reef

Supplied by QRAA

Between them, Mark and Patsy Wheeler have been involved in agricultural industries, from sugar and cattle, to grain, sheep and small crops.

This diverse experience has provided them with a love of the land, keen problemsolving skills and a willingness to rise to any challenge.

"It's not about short term profits, it's about long term sustainability," Patsy says.

Now running a sugarcane and beef operation near Koumala, south of Mackay, the couple have been undertaking significant earthworks during one of the wettest harvest seasons in memory.

"We want to use less nitrogen, reduce environmental impact and see that improvement in our yield and profit."

Patsy says they intend to be assessed under the cane industry's best management practice program, Smartcane BMP.

"We're not just doing it to tick boxes we want to use less nitrogen, reduce environmental impact and see that improvement in our yield and profit," she says.

To help them in their endeavours, the Wheelers recently invested in a new sump system and a 30 tonne digger, with the help of a Sustainability Loan from QRAA and a Reef Catchment Grant.

"We put the sump in to recycle on-farm water and reduce sediment leaving the farm. Incidentally it has increased our on-farm water capacity – not that we've needed it so far!" Patsy says.

"Ironically, it helped us to drain and dry out the paddocks while controlling the run-off."



Photo: QRAA Board visit the Wheeler's farm at Koumala.

Meanwhile, the digger has allowed them to act quickly to create new access points, build haul roads and drainage channels, as well as allowing them to get cane out – leading the Wheelers to believe that it's already paid for itself.

"We'd all like to not need a loan, but it can be hard to get that step ahead without one - and if we hadn't had it this year, we wouldn't have been able to harvest certain paddocks when we did," Patsy says.

"The new machinery, with an experienced operator, means we can face the worst, which this year has been, and continue to improve and develop the land."

QRAA's Sustainability Loans provide Queensland primary producers with up to \$1.3 million for activities and projects that will boost the productivity and sustainability of their enterprise. Interest rates as low as 3.11% and repayment terms of up to 20 years are available.

The Wheelers had heard of QRAA before but hadn't considered a Sustainability Loan for their projects until reading about them in *Australian Canegrower* magazine. Now, they don't hesitate to recommend QRAA to others.

"The industry-specific loans really understand and work for our needs – from the tailored repayment schedules to the wonderful assistance from our local client liaison officer, **Peter Crowley**," Patsy says.

QRAA BOARD VISIT MACKAY REGION

The Wheelers' were one of six farm businesses visited by QRAA's board of directors during a recent visit to the region.

Accompanied by Peter Crowley and QRAA's Chief Executive Officer, the Board met with locals in and around Mackay including regional bankers, QRAA clients and industry representatives to discuss how changes to Sustainability Loans can benefit producers.

The Board regularly travels to Queensland's regional and rural communities to consult with locals and get a firsthand look at how QRAA's loans are assisting agricultural industry.

Producers interested in how a Sustainability Loan could help with their own endeavours, from expansion to diversification, can visit www.qraa.qld.gov.au or contact Peter Crowley on 0427 770 147.

Sustainability Loans are delivered by QRAA as part of the Queensland Government's Primary Industry Productivity Enhancement Scheme. ■

The fact about fructose

By the Australian Sugar Industry Alliance Nutrition Team

There are many misconceptions surrounding fructose. Much of the attention is negative with fructose often being labelled as a 'bad' sugar. The fact that the body breaks down fructose differently to glucose is often blamed, with critics linking fructose intake with weight gain and obesity. So what are the facts about fructose?

Where is fructose found?

Fructose is naturally found in fruit, fruit juice, vegetables, syrups (such as maple syrup) and honey. Sucrose or 'table sugar' is made of about 50% fructose and 50% glucose. Sucrose is often added to foods such as cakes, biscuits, chocolates and lollies and beverages such as soft drinks and sports drinks. As such, highly processed foods can also be a major dietary source of fructose.

Fructose is perhaps most well known in high fructose corn syrup used in US food manufacturing, but in Australia and New Zealand, locally grown cane sugar is the preferred sweetener.

So is it a problem? And how much is too much?

Based on the way the body processes different sugars, concerns have been raised about fructose. It has been suggested that high levels of fructose may have a harmful effect on the liver, causing high cholesterol, obesity and insulin sensitivity resulting in diabetes.

However, the research underlying this "toxicity" argument is based mainly on animal studies where unrealistically high doses of pure fructose have been used.

In the real world, this is not how fructose is consumed – in fact, if we were to try and replicate this research in humans, we would need to eat half of all our daily kilojoules as table sugar!

Based on 1995 National Nutrition Survey data, it is estimated 95% of Australian adults consumed less than 60 grams (14 teaspoons) of total fructose a day from all sources.

As total and added sugars intake declined between the 1995 and 2011 dietary surveys, it may be assumed that fructose consumption has declined also. Research has also shown that the intake of less than 100 grams/day of fructose does not influence body weight.

At current levels of consumption – fructose does not adversely affect health. What we do know is that eating too many kilojoules from whatever source – bread, apples, sweets, cheese or table sugar – will lead to weight gain over time, and this may negatively impact health. The quantity of everything we eat or drink is the key and moderation is always the best approach.



What's recommended?

There are currently no specific recommendations for fructose but there are for free and added sugars in general, with the World Health Organisation recommending we consume less than 12 teaspoons of free sugars per day.

Recent figures indicate that we are currently eating about 14 teaspoons and the main sources of in the Australian diet are coming from what should be occasional foods – i.e. soft drinks, sports drinks and pastries, biscuits, cakes and muffins.

So what about fruit?

Fruit contains naturally-occurring sugars including fructose and glucose along with lots of other important nutrients like fibre, vitamins and minerals. In fact, the fibre in fruit helps to fill us up, which prevents us from eating too much.

The last National Nutrition Survey revealed that Australians are not eating enough fruit with only 52% of

people meeting the recommendation of two serves per day. We only obtain a small amount of fructose from fruit and it's certainly not going to blow the fructose budget!

Dietitians recommend that rather than focusing on fructose from fruit, we aim to limit our intake of "junk" foods which are high in added sugar, saturated fat and salt and eat a well-balanced diet including a good variety of fruit, vegetables, whole grains, lean meats and dairy.

The short and the sweet of it...

You don't need to avoid sugars (including fructose) for good health. Stick to the Australian Dietary Guidelines and ensure you are having the recommended amounts of fresh fruit (2 serves/day) and vegetables (5 serves/day) whilst limiting your intake of highly processed foods and drinks.

References

ABS. National Nutrition Survey: Nutrient intakes and physical measurements, Australia 1995.

ABS. Australian Health Survey: Nutrition First Results – Food and Nutrients, 2011-12. May 2016.

ABS. Australian Health Survey: Consumption of Added Sugars, Australia 2011-12. April 2016.

Brand-Miller J, Barclay A. The Australian Paradox. Available at URL http:// theaustralianparadox.com.au/Fructose.php

Livesey G et al., Fructose consumption and consequences for glycation, plasma triacylglycerol, and body weight. Am J Clin Nutr. 2008 Nov;88(5):1419-37.

Ridoutt B, et al. Changes in food intake in Australia: comparing the 1995 and 2011 National Nutrition Survey results disaggregated into Basic Foods. Foods 2016;5(2):40.

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Mossman–Tully

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Rainfall Report





The industry super fund for rural and regional Australia.

Zero indicates either no rain or no report was sent. These rainfall figures are subject to verification and may be updated later. Weather forecasts, radar and satellite images and other information for the farming community can be accessed on www.bom.gov.au. Weather report provided by the Bureau of Meteorology's Commercial Weather Services Unit. International Acco 1800 1972 model, 8cyl petrol, Allison auto tipping hoist. Twin steer tandem drive. 17m body. In working condition. Not registered. No RWC. As is \$10,000 inc GST. Ph. 0414 604 974

Herbert River – Burdekin

Three row inter-row spray unit attached to 4WD tractor which also has three-point linkage. Width of tractor 39 inches. \$4,500. Ph. 4776 5114

Ford 8240. Good Condition, 4100hrs, 115HP, Tyres 23.1-34. \$25,000. Ph. 0402 902 887 Irremec ST7 Hard Hose irrigator, 350m hose, 55m boom. \$15,000.00 inc GST. Ph. 0418 186 511

10 tonne Newton Tipper connected to New Holland 8360 POA. Ph. 0419 188 185

Prime Mover 2670 1982 Model McGrath, 40ft Trailer, 1982 Commodore. Ph. 4776 6249

Tm190 super steer New Holland, duels 18.4x46 at 85%, 2500 hrs , linkage and pto has never been used, never hauled out, excellent cond. \$80000 inc Ono, Ph. 0407 635 018

2500 Cameco Full Track Harvester, C12 Cat engine, all piston and vane pumps, 4 blade chopper, two speed track drives, can cut two rows at a time up to 1.7m row spacing, plus extras. POA. Ph. 0417 710 544

Brand new never used LS Heavy Duty 4 pin final drive hub to suite Cameco harvesters. \$10k Ph. 0417 710 544

Howard Rotary Hoe 90" Heavy Duty with steel wheels. GC. \$6,500 Inc GST Negotiable. Ph. 0458 776 187

3000L Fire Fighting Cart. Galvanised tank Davey fire fighter Pump 6.5 HP Honda on an old single bin trailer with dual wheels. Good wheels. GC. \$6,000 INC GST Negotiable Ph. 0458 776 187

New Holland M100 1996 model 4007 hours. Tyres 60% Front 50% Rear. GC. \$24,000 INC GST Negotiable. Ph. 0458 776 187

Fiat 880. GC. 5000 plus hours. Motor just rebuilt \$10, 000 INC GST Negotiable. Howard 6 Foot Slasher. Reasonable Condition. \$2,000 INC GST Negotiable. Ph. 0458 776 187 24 Plate John Shearer Offset. Reasonable Condition. Front dishes 90% back dishes 50%. \$3,000 INC GST Negotiable. Ph. 0458 776 187

Back Blade \$500, Bag Lifter \$2,500, MIG 200 AMP Welder \$300, Single Row Billy Roller on 3 point linkage \$250. 200L Silvan Spray Tank with electric pump 14ltr/min on trailer or standalone \$300. Ph. 0458 776 187

Mackay – Proserpine

12T self-propelled 6x6 elev infielder VGC. 6t side/tipper on Leyland tandem GC. Don Mizzi 741 model on Fiat 750 special turbo plus MF102 half-tracks to suit. Mason 9550 4-row precision vacuum seed planter GC. 0438 606 578 (Mackay)

FOR HIRE: Drop-deck with ramps to move harvesters & tractors; 20 & 40ft container pins. Ph. Shane 0428 007 955 or Mick 0438 167 545

1997 Cameco 2500 harvester, full track, Cat 3306 engine completely overhauled at start of 2016 season, hydraulic pumps in good condition, 15'choppers with Westhill adjuster. Machine is in VGC. POA. Ph. (07) 4958 8264 after 7PM

FARM MACHINERY: FERTILISER BIN: 2-tonne trailing side-dresser for cane with 4 coulter assemblies, adjustable for 1.5 to 1.8m row spacings. VGC. \$9,900 incl gst or Open to Offers. Ph. 0409 221 601 (Koumala) New Holland 8360; 4700 hrs; \$30,000 + GST. Case 7000; air cab; ex cond. New 15" chopper drums, 20" grousers; ex cond. Hodge fertiliser bin. Ph. 0438 592 165

Bundaberg – Rocky Point

135 ML of water allocation from the Lower Mary Scheme. All offers considered. Ph. 4129 7259

Drop-deck, tautliner and flat top extendable for hire. 07 4159 8174 or 0417 004 717

Morooka MST1700, rubber track in field buggy with 6t high lift bin. Cummins motor, done 1900 hours. Great wet weather machine. \$45,000 inc GST ONO. Call Lester 0408 061 206

2x C670 Chamberlains. One with linkage, remotes and cabin. One with winch. \$4,500 + GST ONO. Ph. 0428 416 040

New South Wales

Harwood Mill area – 2006 Case 7700 full track Cane Harvester. Approx 13000 hours. Standard topper - \$120,000 plus GST negotiable. Ph. 0419 635 033 or 0408 660 110

Wanted

Seeking expressions of interest for cane to harvest for the 2017 season and beyond in the Farleigh and Marian mill areas. Ph. 0428 529 216

TRACTOR TYRES of all sizes. 0418 775 698 all hours.

Tip Truck, 7-9 Tonnes or similar. Ph. 0428 761 549

Cane to harvest in the 2017 season and beyond in Marian/Mirani district. Photo 0427 593 883

Deutz or similar Air Cooled Irrigation Booster Pump around 50HP set up on trailer. Ph. 07 4959 6197

Late model 6000 or early 7000 wheel harvester. Ph. 0438 592 165

Positions Vacant

OAKENDEN – Contractor wanted to harvest small cane farm. Flat farm, close cart. Ph. (07) 4958 5224 or 0428 575 787.

Property

INGHAM: Cane Farm for sale. Hawkins Creek. Total area 48.3ha. CPA 46.6ha. Shed, electricity & water. Genuine enquiries Ph. 0407 635 175.

WALKERSTON AREA: Cane farm for sale, fully irrigated, 42.5ha cane 3.6ha grazing Ph: 0418 185 663

OAKENDEN: Cane farm for sale. Irrigated, flat, no rocks, good soil, close siding for carting, close to town. Call (07) 4958 5224 or 0428 575 787.

WANTED TO LEASE: Cane farm in Bundaberg Area. Ph. 0429 026 690

WANTED TO LEASE: Cane farm Plane Creek mill area. Experienced farmer Ph. 0428 880 771

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Driven by growers. Used by growers. Owned by growers

In recent years how we farm has been dictated by others. As Australian farmers, we would much rather have a system which works for us. A system which is about improving our bottom line and one we can use to market our sugar to the world.

The Australian sugarcane industry has worked together and built just such a system. Smartcane BMP.

Smartcane BMP will help Australia maintain its competitive edge in the increasingly competitive world market. Being able to show we are productive and sustainable producers of quality sugar is becoming increasingly important to our customers, and the Smartcane BMP system is the way we are going to show just that.

Become part of the movement: Sign up to Smartcane BMP

Contact your local Smartcane BMP facilitator. Get recognised for what you are already doing.

