

# Irrigation Pricing Review

## Issues Submission Paper – Queensland Competition Authority

### Invicta Cane Growers Organisation Ltd

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# 1 Executive Summary

Invicta Cane Growers Organisation Ltd (ICGO) has significant concerns over the impact on cane growers in the Burdekin Haughton region as a result of the potential price increase by SunWater. ICGO has undertaken a detailed process to investigate the capacity of Invicta Mill suppliers to absorb increases in costs, specifically irrigation water costs.

This submission will provide evidence based on cane growers cost of doing business in this region. The sample selection of growers across all types of irrigation, soil types and location delivers to the Queensland Competition Authority (QCA) a realistic snapshot of operations and how any adjustment to pricing without thorough consultation can have devastating effect on individuals and industry in this region.

Through this evidence we can deliver to the QCA the required data and analysis necessary to understand how increases in pricing for water supply impacts on local growers. With reference to previous submissions in this process ICGO offers a unique perspective through our engagement with a variety of enterprises to deliver a detailed synopsis at a local level.

ICGO is an impartial and independent organisation committed to representing growers that deliver sugar cane to the Invicta Mill. The integrity of this submission and underpinning analysis is vital to ensuring a realistic regional snapshot. The Burdekin Haughton region is one of the largest consumers of water for irrigation purposes in Queensland. In the 2018 season the Invicta Mill crushed 3.1m tonnes of cane. The average yield of per hectare is 115 tonnes with an average water usage of 8 – 10ML per hectare. Growers that supplied the Invicta Mill conservatively use 215,652ML of water per annum. This places growers in this region as a major customer for SunWater. The sugarcane industry is subject to constant global fluctuations in the price of sugar and requires a stable foundation in various costs to maintain long-term sustainable operations. Cane growers have no capacity to pass on fluctuations in pricing to customers or other stakeholders.

ICGO, as a representative of all growers seeks to create a fair and favourable operational platform where growers can successfully participate within industry in a sustainable manner. All growers surveyed will be adversely affected by increases in water supply pricing. Historically a number of irrigation supply arrangements have been in effect in the Burdekin Haughton region. This analysis will clearly demonstrate that regardless of the current pricing arrangement and supply of water based on geographic location all farmers experience a similar challenge and difficulty in maintaining profitable and sustainable enterprises.

The current agreement and pricing structure for the Giru Benefited Area (GBA) has been in place for more than 30 years and was established during the initial negotiations for the scheme. A major change to water pricing in the GBA as highlighted through SunWater submissions and based on the Kavanagh Report will result in unfavourable costs for doing business and have the potential to adversely impact on individuals and the industry as a whole. ICGO also note through other submissions that other areas will also be impacted by a significant increase in water prices.

The following submission provides the data necessary for the QCA to understand the impacts of a pricing increase of water on industry. This also discusses many of the challenges that face growers and analyses the options available including alternative crops. Participants in this voluntary analysis have indicated significant benefit in analysing

the cost of doing business. At no stage has any organisation or Government entity engaged individual farmers in a comprehensive cost of doing business review. This process has been valuable in illustrating to farmers the potential impacts that can make a difference on operations, business sustainability and profitability.

ICGO recognises and references a number of key documents and submissions already made to the QCA. This includes the submission put forward by SunWater and recent submissions from the local area including the BRIA submission to the QCA. Through a review of this documentation ICGO seeks to address a number of issues especially in relation to the different approaches for irrigation pricing throughout the region. As an independent and impartial organisation that represents growers supplying sugar to the Invicta Mill, ICGO seeks to ensure that all growers have an opportunity to participate in industry and maintain sustainable business processes. Our recommendation is that the QCA and SunWater maintain current pricing arrangements and amounts. Noted within the Appendix A of the SunWater submission is a clear indication to the QCA that customers require more efficient services from SunWater without incurring additional costs.

ICGO notes that in the referral letter from the Minister to the QCA that various sets of prices be put forward based on the inclusion or exclusion of previously excluded costs. For example the Dam Improvement Program Costs. ICGO agrees with other submissions that customers should be extensively consulted by the QCA on the impacts of recovering infrastructure costs. There is a clear statement from irrigation customer representatives that the QCA should be fully considering the potential impacts on the pricing approach for apportioning this expenditure. ICGO believes that one component of the potential implication on customers is shown through the evidence put forward in this analysis. As stated in the referral letter this is the first approach by Government to the QCA to conduct this type of review since this scheme was implemented, a timeframe of more than 30 years. ICGO as a peak body advocates for growers in this region and has shown the direct impact of pricing changes through practical evidence.

In the delivery of this submission ICGO recognises that through previous documentation delivered to the QCA sufficient background is provided in relation to how irrigation is allocated in this and other regions. ICGO puts forward this submission as a reflection of the current, critical issues that impact on growers within this organisation. This delivers a real, practical and evidence-based review of sustainable cane growing practices in this region based on fluctuations in irrigation pricing.

ICGO put forward a recommendation to the QCA that no changes be implemented for the price of water and irrigation in this region. Cane farmers face significant pressures at an environmental, business and geographic level. Any increase in pricing will have a negative impact on business sustainability and long-term industry prospects. The supply of sugar is the largest agricultural industry in this region and a significant contributor at a state and Federal level to the economy. ICGO seeks a fair and equitable process through which feedback and evidence can be provided on any fluctuations in fixed costs.



## **2 Cost Analysis**

### **2.1 Purpose**

*To investigate the capacity of Invicta Mill suppliers to absorb increases in costs, specifically irrigation*

### **2.2 Methodology**

Invicta Cane Growers Organisation Ltd (ICGO) approached a number of cane growers from a variety of locations throughout the Burdekin Haughton region. From this process 12 growers volunteered to participate in the analysis based on the opportunity to maintain confidentiality of commercial in confidence financial information. The 12 participant growers had an aggregate tonnage of 260,000 tonne of cane produced representing approximately 8% of the annual Invicta Mill crush. The average tonnage produced per grower was 21,650 t. This number of participants represents 16% of the membership for ICGO.

ICGO is confident this survey sample reflects an appropriate, representative selection of growers throughout the region. The production of 260,000 t of cane is a significant amount.

### **2.3 Financial Data**

Confidential data utilised as part of this analysis was gained from profit and loss statements as prepared for the year ending 2018 by accounting firms on behalf of each enterprise. Further information was gathered directly from growers around crop inputs. Additional information was sourced from the growers' production statements provided by Wilmar. Incorporated within this financial analysis are the following parameters:

- Expenditure and income data was analysed on a dollars per tonne produced basis
- Breakeven cost versus income was identified on the cost of production and income based on \$380 per tonne of sugar and each individual farms' relative CCS
- Nominal value for salaries and wages was allocated based on \$70,000 per owner unit of labour and \$60,000 per unit of employee labour
- No allocation was made to principal debt reduction, capital expenditure and taxation including GST
- Nominal value of debt per enterprise was based on \$50 per tonne, interest only at a rate of 6% per annum

The above statistical parameters were derived based on an aggregate between all 12 samples. This places the financial analysis on a production and income basis for sugarcane sold on the world market. Further analysis has been provided in relation to the fluctuation of this sugar price and potential vulnerabilities for sugar cane growers.

### **2.4 Geographic Locations**

For the purposes of this analysis the region has been separated into two distinct areas. Growers located within the Giru Benefited Area and the growers located outside of this area however within the Burdekin Haughton region. All growers selected are members of ICGO and supply sugar to the Invicta Mill. Participation in this analysis was voluntary.

The Giru Benefited Area (GBA) has received alternative pricing structures from SunWater for more than 30 years, an agreement established at the introduction of this scheme. This pricing structure is based on the method in which irrigation and water is supplied to this region. Growers in the GBA predominantly source their water through pumping while the other growers utilise a mix of channel, open water and underground sources. ICGO through this analysis found no financial benefit as a result of the pricing structure for the GBA and further found that discrepancies in profit and sustainability was more related to relative CCS units.

## **2.5 Relative CCS Units**

CCS is a significant contributor to the determination of sugar cane price. A relative CCS was calculated at 14.8 units as provided by Wilmar relating to the Invicta Mill. This is consistent with the general accepted CCS units by the industry across the region of 14.9. Each grower participating in the analysis had a varied CCS with GBA growers on average experiencing 1.2 relative CCS units lower than other suppliers. This equates to an approximate lower cane price of \$4.10 per tonne at \$380 per tonne market price which was the current price when this analysis began.

## **2.6 Tom Mullins Consulting**

The financial data analysis was completed by Tom Mullins Consulting. Tom Mullins is an independent analyst who has been engaged in various roles and self-employment in the Burdekin region since 1994. For over 20 years Tom was employed as a farm financial counsellor with the Queensland Department of Agriculture. Tom adds to this five years' experience as an agricultural business development officer ensuring an in-depth knowledge and understanding of the financial, operational and personal factors that impact on farming and agricultural in the Burdekin Haughton region.

## **2.7 Integrity Statement**

ICGO engaged Tom Mullins Consulting as an independent entity to conduct a detailed and thorough analysis on the cost of doing business for sugarcane producers in this region. All data has been provided in full by Tom Mullins Consulting with no interference on results or outcomes. ICGO makes a guarantee that these results are based on the financial information provided by each volunteer. Tom Mullins Consulting maintains a full set of confidential data available for review if requested. All volunteers participated in this analysis based on anonymity and the protection of commercial in confidence information.

### 3 Results

Invicta Cane Growers Organisation Ltd (ICGO) provides as part of this analysis the following results. This provides an analysis and summary of outcomes for three major areas:

- Aggregate; all participant growers
- Giru Benefited Area (GBA) growers
- Other growers outside of the GBA

A number of components have been provided in relation to this analysis for each areas. This includes:

- **Summary:** An overall summary from each area is provided that analyses the profitability of production. In addition irrigation water costs are averaged for each of the three sections.
- **Sensitivity Analysis:** A sensitivity analysis is conducted for each of the three areas that provides an overall forecast on profitability and break even dollars per tonne for each section.

This data provides to the QCA an in-depth analysis on the impact of any price change at a practical, local level. In response to the draft paper put forward by SunWater the purpose of this submission is to provide evidence on how changes to pricing structures or amounts will directly impact on the cost of doing business for cane growers in the Burdekin Haughton region. The following data and results directly correlates this decision-making with the long-term viability and profitability of farmers in this region.

*“This data provides to the QCA an in-depth analysis on the impact of any price change at a practical, local level.”*

### 3.1 Summary

This overall summary provides an analysis of the financial viability and profitability of growers in this region based on current pricing. The data developed as part of this process is utilised as a baseline to further assess and analyse sensitivity to pricing fluctuations in irrigation.

3.1.1 Aggregate: All participant Growers		\$/T
<b>Breakeven point:</b>		\$40.51
<b>Income:</b>		\$37.79
<b>Return:</b>		(\$2.72)
		(Deficit per tonne produced)

Figures based on sugar price of \$380 per tonne at an average 14.8 CCS units / 12 grower participants

Irrigation water cost averaged at \$4.71 per tonne or 12% of the total cost. When electricity (pumping) is included the irrigation cost is calculated at \$7.38 or 18% of total costs and 20% of income.

3.1.2 Giru Benefited Area (GBA) growers		\$/T
<b>Breakeven point:</b>		\$39.88
<b>Income:</b>		\$35.74
<b>Return:</b>		(\$4.14)
		(Deficit per tonne produced)

Figures based on sugar price of \$380 per tonne at an average 14.2 CCS units / 6 grower participants

Irrigation water cost averaged at \$3.25 per tonne or 8% of the total cost. When electricity (pumping) is included the irrigation cost is calculated at \$6.13 or 15% of total costs and 17% of income.

3.1.3 Aggregate: Other Growers		\$/T
<b>Breakeven point:</b>		\$41.17
<b>Income:</b>		\$39.84
<b>Return:</b>		(\$1.33)
		(Deficit per tonne produced)

Figures based on sugar price of \$380 per tonne at an average 15.4 CCS units / 6 grower participants

Irrigation water cost averaged at \$6.17 per tonne or 15% of the total cost. When electricity (pumping) is included the irrigation cost is calculated at \$8.63 or 21% of total costs and 22% of income.

### 3.2 Analysis

ICGO has identified through this analysis that irrigation is a significant cost factor in the viability of cane growers in this region. The majority of growers sampled are required to pump water to irrigate crops. This adds increased costs associated with electricity combined with the cost of water.

Costing supports that growers that are able to utilise gravity fed irrigation systems do not return a deficit per tonne produced. The impact of electricity and additional pumping on the supply of water is a significant issue related to the cost of doing business.

GBA growers experience a 1.2 CCS units less in all cane supplied than other non GBA Invicta Mill suppliers. This results in an approximate lower cane price of \$4.10 per tonne produced.



## 4 Sensitivity Analysis

A sensitivity analysis was carried out on the cost structure for all participant growers supplying to the Invicta Mill. The variable used in this analysis was the price of irrigation. The tables provided below demonstrate a movement in breakeven price, along with a surplus or deficit.

For each representation a breakeven analysis is provided on the required cost of sugar on the world market to offset the increase in water pricing. All analysis is exclusive of marketing costs associated with the sale of sugar.

**TABLE. Sensitivity analysis based on water price for Aggregate of Growers. Expressed in \$/Tonne.**

% Increase in water price	10%	20%	50%	100%
<b>Total Costs (\$/T)</b>	\$40.98	\$41.45	\$42.88	\$45.22
<b>Surplus/Deficit (\$/T)</b>	-\$3.19	-\$3.66	-\$5.08	-\$7.43
<b>Break Even (\$/T)</b>	\$40.98	\$41.45	\$42.88	\$45.22
<b>Break Even (\$/T sugar)</b>	\$415	\$420	\$430	\$458

**TABLE. Sensitivity analysis based on water price for GBA growers. Expressed in \$/Tonne.**

% Increase in water price	10%	20%	50%	100%
<b>Total Costs (\$/T)</b>	\$40.20	\$40.52	\$41.50	\$43.12
<b>Surplus/Deficit (\$/T)</b>	-\$4.45	-\$4.78	-\$5.75	-\$7.38
<b>Break Even (\$/T)</b>	\$40.20	\$40.52	\$41.50	\$43.12
<b>Break Even (\$/T sugar)</b>	\$431	\$436	\$446	\$462

**TABLE. Sensitivity analysis based on water price for “Other” growers. Expressed in \$/Tonne.**

% Increase in water price	10%	20%	50%	100%
<b>Total Costs (\$/T)</b>	\$41.79	\$42.40	\$44.26	\$47.34
<b>Surplus/Deficit (\$/T)</b>	-\$1.95	-\$2.56	-\$4.41	-\$7.50
<b>Break Even (\$/T)</b>	\$41.79	\$42.40	\$44.26	\$47.34
<b>Break Even (\$/T sugar)</b>	\$402	\$408	\$425	\$455

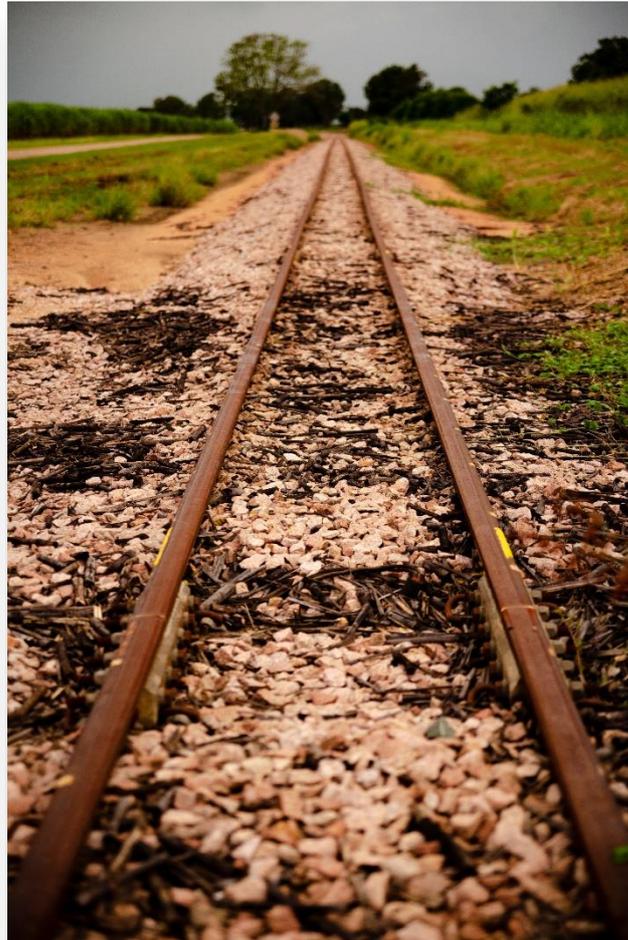
### 4.1 Analysis

ICGO holds significant concerns over the viability of cane farmers in this region based on the data provided. Achieving a surplus or deficit does not depend on the method of irrigation.

The ICGO is concerned that the use of CPI to increase water pricing on an annual basis will still result in major increases over time. Without comparable increases in the world

sugar price the cost of doing business continues to rise. Any increase in pricing then results in a base amount from which CPI is added.

This analysis indicates that growers outside of the Giru Benefited Area have an increased capability to absorb fluctuations in pricing based on a lower deficit. A lower CCS in the GBA region impacts on sustainability. If pricing in the GBA was to increase from \$35 to \$66 per ML as recommended by SunWater there will be a significant impact on the cost of doing business and the viability of long-term, sustainable farming and enterprises.



## 5 Alternative Crops / Income

Evidence suggests that cane growers are attempting to diversify and grow alternative crops. This relates to rice, tree crops, soy bean, vegetables and other related crops. A lack of infrastructure to manage the processing of alternative crops in this region has an impact on using this strategy as a viable alternative to sugarcane production. The main agricultural crop in the Burdekin Haughton region has been sugar cane for a significant period of time. Infrastructure exists through transport networks, local mills and export facilities to manage production efficiently at a local level.

Alternative crops in this region require transportation to southern regions for processing. This adds significant cost to production. The majority of ground crops such as sorghum, corn and soya bean are destined for low return stockfeed based on the cost of transport to southern areas where the infrastructure exists to manage high-value grain. Other factors such as soil conditions and environmental issues including cyclones and adverse weather events impact on the viability of crops. Not all areas within the Burdekin Haughton region are suitable for growing of alternative crops.

ICGO does not view the strategy of utilising alternative crops as a viable, long-term solution to growers unable to maintain sustainable sugar cane production.

Additional evidence suggests that income for growers is supplemented through a number of other sources. Growers and family members are often forced to undertake paid work and employment to supplement income and maintain livelihood. Evidence amongst participant growers indicates that additional income is required to ensure a quality lifestyle.



## 6 Summary

ICGO has clearly demonstrated through this analysis the current, local cost of doing business for sugar cane growers supplying to the Invicta Mill. This provides the QCA a realistic scenario based on actual financial performance of cane farms for any adjustments in pricing to water and / or irrigation. The options put forward by SunWater to increase water pricing will result in unstable financial conditions for growers in this region. The data supplied indicates that farmers are currently struggling to break even.

The data supplied by participating growers at present prices indicates there is extremely limited capacity to sustain increases in irrigation costs. Compounding this result is that this analysis on the cost of production includes no allocation to capital replacement or improvement, principal debt reduction or taxation commitments. These components have an additional impact on cash flow and sustainability.

Alternative crops face significant challenges due to unfavourable conditions, oversupply in the current market, distance to market or processing facilities and lack of existing infrastructure. A significant lack of suitable, environmentally adapted varieties also limits this as a viable option. There is no clear alternative crop to sugar cane growing in this region.

The Burdekin Haughton region is the major customer for SunWater in the supply of water for irrigation. Any change to pricing has a direct impact on growers and their long-term viability, correlating to a significant shift in the customer base for SunWater.

*“Any major increases in pricing will result in the loss of farms, livelihood and a significant industry impact.”*

As a result of the statistical information provided within this submission ICGO make the following recommendations:

1. All irrigation pricing including the varied structures from different regions such as Giru Benefited Area (GBA) remain the same
2. GBA to maintain their current entitlement to utilise the natural yield from the Haughton River as established at the beginning of the current scheme
3. All stakeholders in the Burdekin Haughton region be consulted before the final submission of pricing options is provided to the Queensland Government
4. CPI and other pricing factors such as dam safety are carefully considered in response to the statistics provided and moderated accordingly
5. Dam safety is an internal infrastructure issue for SunWater and costs should not be passed on to the customer

The current pricing structure is functional for this region based on the individual characteristics of each geographic area, irrigation method and soil type. ICGO has clearly shown sensitivity to price and a detailed financial analysis for each area based on a sufficient sample of tonnes of sugar cane produced. Should SunWater attempt to recover the costs associated with infrastructure upgrades and provide a dividend to Government it will be at the cost of local growers.

The lack of financial sustainability within this industry at a local level is a concern. Any major increases in pricing will result in the loss of farms, livelihood and a significant industry impact. ICGO has ongoing and justified concerns for this region based on the data supplied in this analysis.