

EFFICIENT HARVESTING

- *The Key to Quality and Earnings*

After growing a crop of sugar cane for about 12 months with the required inputs and practices, the next important activity is harvesting. The time to harvest however, is at maturity when growth slows down and sucrose is at its highest. This is usually enhanced by a period of ideal ripening conditions such as, absence of rainfall or irrigation, sunny days and cool nights.

The rest depends on the efficiency of the harvesting to keep sucrose loss to a minimum. Efficiency in harvesting entails burning a manageable block of cane, keeping lapse time between burning and cutting within 12 hrs, cutting all the cane within 24 hrs after burn and ensuring that the required quantity is delivered to the factory within 48 hrs of "kill".

Burning however, is not a must, in fact, reaping green cane can cut losses associated with burning to zero. The better quality will be more than adequate to cover costs associated with green cane reaping.

Sucrose loss begins at burning and any delay during the reaping can be costly. Some losses reported during harvesting have been significant enough to wipe out that margin of profit that many growers would otherwise realize.



Melvin Salmon, St. Elizabeth shows off a job well done

The illicit burning of cane is destructive. This often stretches resources to manage the problem, leads to stale cane, lower sucrose recovery and even to total loss of income if cane is lost.

Volume of cane delivered to a factory does not guarantee tonnes of sugar on which payment is made. The highest percentage of sucrose is found in the mature and millable portion of the stalk. Cane tops, suckers, trash, etc (extraneous matter) which often form part of a load, only contribute to the weight while quality is depressed considerably.

The tolerable level for extraneous matter (XM) including tops, suckers and leaves expected in a load of cane is 4%. Very often XM in excess of 20% including non-sugar material such as trash, grass, wood, stones, soil and pieces of metal have been found with canes delivered to the factory. Cane of low sucrose and high XM affects sucrose recovery and often results in the inadequacy of the 1st payment to cover the cost of harvesting. **Remember cane of high sucrose with little or no XM and delivered fresh at the factory is best for everyone every time.**

The Price of Sugar 2005/2006

A price of \$27000 per tonne sugar has been announced for the 2005/2006 sugar crop. Of this, 70% or \$18900/t will be paid as first advance payment when cane is delivered and sugar recovered at the factory. The remaining 30% will be paid at second and final payments respectively after the crop ends.

What is Standard Cane?

Every year a Standard Cane quality is determined for the crop by using the last 5 year running average JRCS for the industry. This sets the basis for sharing the price of sugar between the supplier and the factory. The standard cane for 2006 is 10.1511 JRCS.

At standard cane quality and standard Factory Recovery Index (FRI) the grower gets approximately 62% of the sugar proceeds and the factory gets 38%. The percentage however, varies depending on the canes delivered and actual FRI achieved by the factory.

How is the Sugar in Cane Shared?

The price per tonne of cane is calculated using the Factory Avg JRCS, the supplier's Relative Factor (RF) Sugar price (SP), Factory Fraction (FF) of 3.8574 and the standard Factory Recoverable Index (FRI) of 0.91% + By-products. The Formula = Price/Tonne Cane = SP x FRI/100 [(Factory Avg

JRCS x RF) - FF] + Molasses Price/t cane .
 Example: At Standard Cane quality and Relative Factor 1.0, the price per tonne cane (CP) is as Follows:-
 $CP = 27000 \times .0091 [(10.1511 \times 1.0) - 3.8574] = \$1546.36/t.$

At the end of the crop the price of molasses per tonne cane is determined and is added to the cane price.

What is the Factory Fraction?

The portion of earnings that the factory gets for processing cane to sugar is referred to as the Factory Fraction (FF). This is determined by law to be 38% of the standard Cane. Based on the standard cane of 10.1511 JRCS the factory Fraction for 2006 is 3.8574 JRCS.

What is the Relative Factor?

The Core Sampling Method determines the quality of cane delivered by all suppliers. This is compared with the quality of canes supplied by each grower each week to determine a Relative Factor. The purpose of the Relative Factor is to remove any unfair advantage that some growers will seek by withholding cane deliveries at the beginning or ending of crop due to low quality.

This means that at a Relative Factor of 1.0 the supplier's cane is equal to the average quality of all the canes supplied. A Relative Factor above 1.0 (example 1.1) indicates a quality better than the average canes supplied and a Relative Factor below 1.0 (eg. 0.9) indicates a quality below the average.

How is the Relative Factor Determined?

Example 1 Avg. JRCS = 10
 Supplier JRCS = 9
 Relative Factor = $9/10 = 0.9$

Example 2 Avg. JRCS = 10
 Supplier JRCS = 10

Example 3 Relative Factor = $10/10 = 1.0$
 Avg. JRCS = 10
 Supplier JRCS = 11
 Relative Factor = $11/10 = 1.1$

How is the Farmer Paid?

The price declared for sugar is shared between factory and grower based on examples in *Fig. 1*. The higher the JRCS the greater the share to the grower.

For each week, cane payment is calculated using the todote All Supplier's JRCS and the weekly Relative Factor of the individual supplier. If the average JRCS is similar to the

Fact. Avg. JRCS	Supplier's JRCS	Relative Factor	Price/tonne	\$/tonne 1st Payment
10.1511	13	1.2806	2246.46	1572.35
10.1511	12	1.1821	2000.64	1400.38
10.1511	11	1.0836	1754.94	1228.46
10.1511	9	0.8866	1263.54	884.48
10.1511	8	0.7881	1017.84	712.49
10.1511	7	0.6896	772.14	540.5

standard cane, price will vary based on relative factor as in *Table 1*.

How to Get the Best Price for Cane?

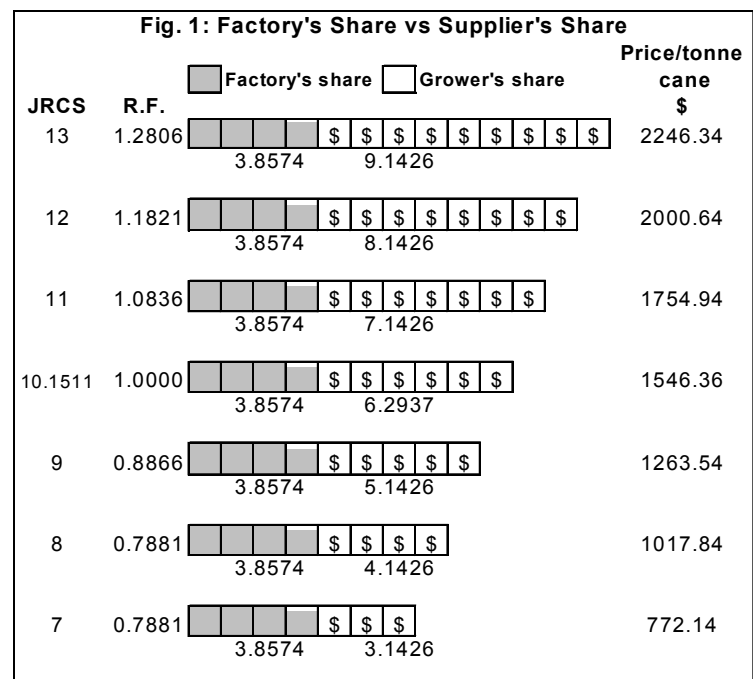
- Plant high sucrose varieties.
- Apply the correct fertilizer blends that produce good growth and encourages ripening at maturity.
- Do field tests for maturity and reap only mature canes.
- At harvesting **aim to surpass the standard**, reduce as much as possible the levels of trash, suckers, tops and other extraneous matter that affect quality.
- Deliver cane within 48 hours of "kill".
- Improve your payment with quality and never rely on increased sugar prices to improve your earnings.

A Smaller Cake to Share

Meeting the challenges in cane growing: calls for higher cane yields and an efficient management to reduce the cost of production.

Meeting the challenges in cane harvesting: calls for volume of work, reliable equipment, improved efficiency, rate containment and ultimately rate reduction.

The announced price cut for sugar sold to Europe calls for greater collaboration and partnership among all stakeholders.



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