

“NOTES ON THE AUSTRALIAN SUGAR INDUSTRY”
—(Proprietary Sugar Millers’ Association Pty. Ltd.)

BEING SUMMARIES OF ANSWERS TO QUESTIONS ON NOTICE AND WITHOUT NOTICE
 GIVEN BY PANEL OF PROPRIETARY SUGAR MILLERS IN MELBOURNE AND SYDNEY
 ON 23rd AND 24th JULY, 1975

1. CONTENTS OF THE No. 1 POOL & EXCESS SUGAR
(OR No. 2 POOL)

For many years up to and including the 1974 season there was a consistency of approach in the way in which certain sugars were grouped into the two main sugar pools — No. 1 Pool (up-to-peak) sugar and “Excess” or sugar produced in excess of mill peaks. Previously No. 1 Pool included all sales of sugar within Australia, all “special arrangement” sugars such as sales under the Commonwealth Sugar Agreement and sales under U.S. quota arrangements, and sufficient export sugar to make up the total of No. 1 Pool total of sugar produced up-to-peak. The export sugar thus included in the No. 1 Pool was at an average price for all sugar exported apart from “special arrangement” sugar.

The “Excess” or No. 2 Pool sugar price was the average price for all sugar exported from the season apart from special arrangement sugar.

As from 1975 season there is an apparent change to the pooling arrangements. The apparent change has been brought about because there are no “special arrangement” sugars, i.e. no C.S.A. quotas and U.S.A. quotas, and because the Sugar Board has accepted the commercial contracts recently negotiated as part of world price sales for pooling arrangements.

Consequently, No. 1 Pool will include all sugar sold in Australia and sufficient export sugar to make up the No. 1 Pool at the average price of all sugar exported.

This average price will be the same as the excess or No. 2 Pool price, viz. the average price received for all sugar exported.

In future then, unless world price returns fall so drastically that the returns for world price and contract sales fall below the low returns from home consumption sugar, it can be expected that the Excess or No. 2 Pool price will be above the No. 1 Pool price.

2. HOW TO CALCULATE RETURNS TO THE INDUSTRY

Analysts have a real problem estimating the expected return for sugar in any one season (and so does the industry). Normally the Sugar Board issues a forecast in March each year, some 3 - 4 months before the final price is declared.

In order to estimate the No. 1 and Excess prices, you need to know:

- total production for Queensland,
- total peaks for Queensland, and
- likely shortfalls below peak production in individual mill areas as such shortfalls are not redistributed.

Returns from domestic sales are known approximately and could be no more than \$130 a tonne (raw) in 1975.

The prices for contract sales of about 1.2 million p.a. have never been announced officially, although there was considerable publicity given to a price when the Japan contract was agreed on in December, 1974. The contracts were all negotiated during a period of high world prices.

The remaining raw sugar, about one million tonnes, is sold and priced over at least a twelve month period at prices which could be said to approximate the London Daily Price over a similar twelve month period from roughly June to June. The L.D.P. is a c.i.f. price, so adjustments have to be made for Australia’s payment of freight, insurance, brokerage, storage and other Sugar Board costs, to obtain a return to the industry. As a rough indication, sugar sold at an L.D.P. of £150 a ton would return in excess of \$A200 a tonne to the Pools.

Extraordinary items sometimes upset the best of calculations. For example, in 1963 and 1964 the Sugar Board retained \$12 million from the proceeds of all sugar sold in Australia and overseas, to build new bulk storage terminals. In 1974 the Sugar Board retained \$50 million from the proceeds of all export sugar to build new bulk storage terminals and to develop ports.

Forecasting the sugar pool prices can be an extremely hazardous occupation because of the unknowns and the variability of the world price for one third of Australia’s production.

3. SHARING INDUSTRY PROCEEDS

The formal sharing of the proceeds of sugar monies paid to the industry by the Sugar Board after deduction of all marketing expenses, is determined by the Central Sugar Cane Prices Board.

This determination by the Central Board is with the long-standing consent of the industry for, in fact, the price to be paid for sugar cane of different qualities is to be determined by each Local Cane Prices Board for each milling area annually. In effect, this has not happened for 50 years or so. With minor exceptions, over that period there has been a State-wide price for cane, i.e. cane of a certain specified quality is worth the same in each mill area.

The price of cane may be varied on appeal from a Local Board to the Central Board. What in fact happens though is that the growers’ organisation and the millers’ organisations agree to a stability in cane price for the next season or agree that there may be an argument before the Central Board. The last such argument was in 1973.

The price to be paid for cane is based on a formula that has been modified only slightly over the years, the last time being in 1949.

The price for cane varies according to the value of sugar and the measured commercial cane sugar (c.c.s.) (sweetness) of the cane. There is an incentive in the formula for the grower to improve the sweetness of his cane. There is also an incentive in the formula for the miller to increase the recovery of sugar from the cane. Having paid for the sugar in the cane the more the miller extracts, the greater the value to him. These two incentives help to explain why Australia’s production of sugar per hectare and the recovery figures in Australian milling are so high.

The formula for the division of sugar monies rests on three basic principles:

1. the growers and millers shall each be allowed their costs of production and manufacture;
 2. any industry surplus above costs at 12.c.c.s. and 90 co-efficient, shall be divided between the parties in the ratio of their employed assets;
- and
3. all benefit from c.c.s. over 12 goes to the grower, and all benefit from co-efficient of work over 90 is reserved for the miller.

As could be expected much of the argument between grower and miller depends upon what are accepted as costs and what are accepted as assets on a like for like basis.

Over the last three seasons the sugar mills have received approximately 35% of the total proceeds to the raw sugar industry.

Associated with the price of cane is the question of its value in milling. In order to maintain this value in terms of freshness and cleanliness, for example, the mill may impose certain deductions on the cane. These deductions are of a minor nature and represent the exception rather than the rule. However, they are a source of friction between growers and millers.

4. PAPER PULP FROM BAGASSE.*

The manufacture of paper pulp from bagasse is technically feasible and there are such factories in many cane producing countries of the world. The system has been under investigation in Australia for many years, but no investment decisions have been made. A final decision will depend on the economics of the project, which in turn must take account of:

- the capital costs (in excess of \$70 million),
- the costs, availability & reliability of alternate fuels, e.g. coal or oil,
- social changes,
- costs of mill boiler alterations, and
- availability of water.

* Bagasse is a finely prepared fibrous material which remains after cane has been crushed to extract sugar juices. This bagasse is the material used in mills' boilers as fuel to supply the mills' power needs.

5. IRRIGATION

The extent of irrigation development in the sugar industry in Queensland has been quite spectacular. Over the 12 years to 1973 the area of sugar cane under irrigation more than doubled from 27,000 hectares to 71,000 hectares.

Of the total area irrigated about two thirds draw its supplies from underground water. This form of irrigation is practiced in the Burdekin, Bundaberg and Mackay regions. About a quarter of the area irrigated draws water from rivers or streams and this method is common in Mackay, Bundaberg and the Burdekin. Also in the Burdekin about 3,000 hectares are irrigated from irrigation channels, and a small amount of area in Maryborough and Bundaberg is irrigated from farm dams.

About one quarter of Queensland's farm areas are irrigated.

Of course there are different systems used including the furrow method, spray systems and more recently, experiments with trickle irrigation.

The development of further irrigation works in Queensland is proceeding and the Government is committed to projects in excess of \$90 million. These projects are in Giru, Eton and Bundaberg.

Two weirs are planned for the Houghton River at Giru to improve the level of water supply in most years, but no increased area will be supplied with water. These weirs are planned for the 1975/76 financial year.

The Eton scheme, when approved, will serve 8,700 hectares of assigned land in four mill areas at Mackay, at an estimated cost of \$21.8 million. This scheme is dependent upon the construction of the Kinchant Dam, the completion of which may take many years. The proposed channel system will be capable of supplying an additional 1,600 hectares of new or increased assignment.

The Bundaberg Irrigation scheme, which is expected to cost more than \$90 million, includes the construction of the Monduran Dam and four weirs on the Kolan and Burnett Rivers plus irrigation systems to supply about 40,000 hectares of assigned land. The scheme does not provide water for new or increased assignments, but, like the other irrigation schemes, it will provide greater stability and increased production from existing assigned areas.

There are other possible further irrigation projects for sugar areas in Queensland. These include:

- a possible major dam on the Houghton Riber upstream from Giru,
- the Uraimah Dam project which could provide water for up to 12,000 hectares of land considered suitable for growing cane in the Burdekin district.
- possible additional storage at Bundaberg with the Kalliwa Dam on the Burnett River, and
- investigations into tidal barrages on the Mary River and Tinana Creek to irrigate about 3,000 hectares of land in the Maryborough district.

It could take many years for these latter projects to come to fruition.

6. ORD RIVER

On 3.1.75, Sir Charles Court and Hon. J. Bjelke-Petersen discussed the Ord River project in Brisbane. Hon. V. B. Sullivan, Hon. R. E. Camm, Mr. L. Harris and Mr. W. A. Bennett were also present. Both Premiers agreed that a detailed study of all aspects of the proposed industry would need to be carried out to determine the viability of a sugar industry on the Ord River. The Queensland Government agreed to co-operate fully in facilitating the study.

Both Premiers saw the desirability of any development of sugar on the Ord River being undertaken within the context of the present marketing and production control arrangements relating to the Queensland and N.S.W. industries.

The W.A. Premier advised the Commonwealth Government of the progress made at the 3.1.75 talks.

On 14.1.75 the Queensland Minister for Primary Industries and the Sugar Board met with industry Associations to discuss co-operation with the Ord investigations.

The industry associations agreed to co-operate in a feasibility study with the W.A. study and a small Queensland team was established under the Director-General of D.P.I., including Q.C.G.C., the Bureau and CSR Limited. Subsequently, the costs of a 1964 survey of a proposed Ord River sugar scheme were up-dated.

On 19th June, an agricultural team from Queensland visited the Ord. It consisted of:

- The Bureau — Director, Agronomist, Economist,
- Q.C.G.C. — Economic Adviser, Cane-grower,
- CSR Limited — P. E. Robinson,
- D.P.I. — E. O. Burns.

This study team has reported to the Queensland Government.

In a press statement on his return the Director of the Bureau said that the Ord scheme had tremendous potential for primary production export, not only sugar. But under rising inflation and the considerable capital investment required for port development, transport, roads and other facilities, it might not prove to be an economic proposition. In addition there would be the establishment costs of a sugar mill and cane farms. (Recent cost estimates for a sugar mill and infrastructure were around \$100 million according to sugar industry officials).

7. FUTURE EXPANSION

Future expansion of the Australian sugar industry is possible and probable.

There is a firm belief that world consumption of sugar will continue to grow with population increases and rising standards of living. Much of the increased demand will be met from production within the consuming countries but much will need to come from increased exports and Australia is well placed.

The Australian sugar industry takes a long term view and in the past has expanded only to meet the needs of a specific market, tied in some way to a contract, e.g. early 1950's B.C.S.A.; early 1960's Japan and U.S.A.; early 1970's various long term contracts. It is doubtful that all elements in the industry would agree to an expansion that was based solely on the variable world market. So while there is an outlet for additional Australian production, expansion will most likely only take place under some form of contract or outlet arrangement.

Expansion is costly. Land has to be cleared and prepared, new tractors and harvesters are required, transport facilities have to be increased and mills' crushing capacities need to be expanded. At the present time the industry is engaged in an expenditure programme exceeding \$200 million to take account of the current increase in productive capacity (13%) and to modernise for the future.

There is no serious consideration given to new mills or mill areas in Queensland while there is capacity for expansion in the existing industry. Expansion by way of new mills is much more expensive than expansion of existing areas and mills where the infra-structure is already established.

However, the present inflationary trends are drastically increasing the costs of expanding productive capacity within Australia. Consequently, the return needed to justify future increased capacity will need to be higher than that necessary to sustain existing capacity.

At present the Australian sugar industry has the capacity to produce 3.0 million tonnes of raw sugar in an average season. If past trends continue then the production from existing areas will rise at the rate of 1.75 tonnes of sugar, per hectare, each decade — a modest expansion in itself. This improvement in yields has been brought about by increased irrigation, new varieties, good husbandry, etc. Thus within 10 years the existing sugar areas assigned could produce 3.5 million tonnes of sugar annually.

In addition, it is considered that there are areas, within economic transport distance of existing mills, sufficient to produce a further 1.5 million tonnes of raw sugar. There is a potential to produce about 5.0 million tonnes of raw sugar from existing mill areas. The major constraints to achieving this potential will be economic and financial, rather than technical and agricultural.

8. CAPITAL COSTS

The sugar industry is capital intensive. Farmers run their 100 acre farms with little permanent labour outside the family, but with extensive use of heavy and light tractors, a wide range of ploughs, discs and harrows and specialised equipment for planting and fertilising, for spraying and breaking wind-rows prior to burning. Mechanical cane harvesters and ancillary equipment now cost in excess of \$70,000.

Sugar mills are massive factories with their own railway systems, houses, laboratories and engineering shops apart from the essential crushing and manufacturing equipment and boilers. Estimates vary, but it would not be possible to build a large sugar factory in Queensland for less than \$60 million.

The industry has an investment in ports and bulk terminals which will shortly exceed \$100 million at historical values.

The cost of capital equipment is a very worrying factor for sugar mills. Nearly all equipment is "one off", i.e. it is subject to a special order from a foundry or similar establishment. Its components are essentially steel, labour and skill together with transport to the site. Consequently, you won't be amazed to know that the average cost of major components used in sugar mills rose by more than 30% last year.

Associated with the rise in replacement capital costs and costs for new equipment, is the concern at current methods of depreciation based on historical costs. This matter is being carefully examined by personnel within the industry.

9. LABOUR COSTS

All wage employees in the Queensland sugar industry are covered by the Sugar Industry Award — State. This Award is reviewed annually by the Queensland Industrial Commission, and employees also receive increases in the Basic Wage based on movements in the C.P.I. (Queensland has never moved away from wage indexation).

Over the last eight years general mill workers have had their wages increased on 21 different occasions. In 1973 award wages rose by 21% and in 1974 by 30%. However, the rises are really more than 57% in the two years because of an extra week's annual leave, granting of 17½% holiday loading, payroll tax increase to 5%, 25% increase in Workers' Compensation and many rises in margins and benefits.

The Sugar Industry Award has just been reviewed and a further increase of \$22 a week has been granted to base workers and \$27 a week to tradesmen. Award wage increases this year have totalled 23%.

Conscious of this rising wage trend the sugar mills have consistently up-graded the quality of the permanent staff, reduced dependence upon seasonal workers and introduced a wide variety of capital-intensive, labour saving improvements and automation. As a consequence, over the last decade actual employment has been substantially reduced while total production has risen by 50%.

10. FURTHER LONG TERM CONTRACTS

This comment on future long-term contracts is based on a broad industry view and not on knowledge of any current sugar marketing negotiations.

It is important to note that the current contracts with Japan, South Korea, Malaysia and Singapore do contain some provision for growth and extension and for additional quantities to be supplied. Recently, while industry representatives were on a good-will mission overseas interest was expressed in certain of these countries at obtaining more raw sugar from Australia.

There have been discussions between the marketing agents and the China National Cereals, Oils and Foodstuffs Import and Export Corporation, and between representatives of the Australian and Chinese Governments concerning the long-term supply of Australian raws to China. One of the major problems has been that China sugar imports have traditionally been in bags and Australia exports in bulk. Various Chinese teams have come to Australia to examine our facilities and we have sent technical experts to China. Recently, the Sugar Board sold the Townsville Sugar Bagging Station to China and an Australian technical team helped to re-erect it at Whampoa. Talks on long term sugar sales are continuing.

Many Middle-East countries have expressed interest in Australian sugar and especially Iran. These outlets are being looked at.

The U.S. Sugar Quota arrangements could be revived at some future date and Australia would hope for a reasonable quota. Australian sugar is still being supplied to the U.S.A. on a world price basis.

Canada is also a very good market for Australian sugar but at the world price.

Within this context it is appropriate to mention the I.S.A. There is no effective International Agreement at present, but the I.S.O. is examining ways of bringing a new Agreement into being.

11. WORLD CONSUMPTION DECLINE 1974/75

There are now statistical estimates available to indicate the degree of the decline in world consumption last year caused by the high world prices for sugar and the lack of availability in some countries.

F. O. Licht have estimated that consumption fell in 1974/75 from 80.63 million tonnes to 79.18 million, a decline of 1.45 million tonnes. But this situation is much worse when contrasted with the rise of 2.6 million tonnes in 1973/74 and 1.9 million tonnes in 1972/73.

The French based commodity traders Sucre and Denree comment that the high world prices affected demand in most African and several Asian countries. In Canada the decline in deliveries to the local market is estimated at 10%. In Japan the decline in consumption is expected to be in the region of 10 to 15%. In the E.E.C. the fall in deliveries is about 500,000 tonnes. In the U.S.A. there may be a decline of 15%.

It is too early to say when consumption will increase back to its normal trend level of 2-3% annual growth.

After 1963 high world prices, world consumption declined for one year but recovered rapidly to a normal trend line. However, the 1963 price rise was sharp and short-lived. The recent high world prices have been for a much longer period and prices are still high, historically. It will be some time before we know clearly if world consumption has fully recovered.

12. WORLD PRODUCTION/CONSUMPTION

Each year the world produces and consumes approximately 80 million tonnes of sugar. Most of it is consumed in the country of origin. The largest producers of sugar in the world are U.S.S.R., E.E.C., Brazil, Cuba, U.S.A., India, Australia and Mexico. About 24 million tonnes of sugar enter into world trade, i.e. about 30% of total production. Much of the sugar is exported under special arrangements and trade agreements and does not enter into world free trade. The world residual or free sugar market probably includes only about 12% of total world production. This basically explains why small shifts in world production can have such a significant effect on world prices through over or under supply to the world market.

The world consumption patterns for sugar are extremely healthy. Over the last two decades there has been a consistent growth pattern. For example, over the last 20 years world consumption of sugar has doubled from 40 million to 80 million tonnes and over the last decade it has risen by a third from 60 million to 80 million tonnes. Only twice in 20 years has world consumption fallen – in 1963 when the world price was very high and in 1974 when the price was extremely high. There is no fundamental reason to assume that the annual growth pattern of 2-3 million tonnes will not continue as the world population grows and as living standards improve in much of the world.

On the other hand production does fluctuate as crops are affected by drought, virus, frosts and floods and as individuals make decisions to produce more or less cane depending upon the price/demand spiral.

13. CANE Vs. BEET COSTS

Traditionally it has been true that sugar was produced from cane at less cost than from sugar beet. However, the two costs fell more into line during the late 1960's with wage inflation in L.D.C. On the other hand in recent years manufacturers of beet sugar would have been affected by high European inflation and oil prices.

While no true comparisons are available, it seems that the cost of sugar from beets is higher when account is taken of the guaranteed prices paid by the E.E.C. to beet producers.

While beet by-products are very useful and profitable in a mixed agriculture, costs of beet transport are high. Because of rotation practices, a far greater total area is needed to produce the same amount of beet sugar as compared with cane sugar which is a monoculture.

The comparison is not highly relevant to Australia. Relatively little beet sugar is exported and Australia's competitors to major markets are other cane sugar producers such as Cuba, Brazil, South Africa and Taiwan.

14. PROSPECTS FOR INCREASED WORLD PRODUCTION 1975/76

In 1974/75 F. O. Licht estimated that world production of sugar fell by about 1 million tonnes to 79.3 million tonnes. The reasons for the decline in production were almost wholly because of failing sugar beet crops in Europe with poor germinations, lack of rain and a virus yellow disease. There were also production shortfalls in many parts of the Caribbean because of drought.

Interestingly, the production decline in 1974 caused the world price to rise and this in turn had an adverse effect on world consumption such that world consumption in 1974/75 actually fell below production and the consequent world stock position improved slightly.

Early this year it was thought that world production in 1975/76 would expand considerably. F. O. Licht estimated that the area under sugar beet in Europe could rise by 350,000 hectares which, with a return to normal yields, could increase sugar production in Europe by 4 or 5 million tonnes. Production from increased beet plantings in the U.S., and greater production in Australia and South Africa could have added a further 1 million tonnes to world production.

Now it is most unlikely that these early estimates will be achieved. There has been a very dry spell in much of Europe and especially Russia and production expectations have declined significantly. Floods have damaged beet crops in North Dakota and Minnesota in the U.S., and in the Danube area of Europe.

In addition, there are reports of drought in many Caribbean countries and this will reduce exports from Brazil and the Dominican Republic.

It does now seem that the increase in world production in 1975/76, if it does eventuate, will be much less than earlier anticipated.

15. INTERNATIONAL SUGAR AGREEMENT

To control fluctuations and to stabilise prices there have been many attempts to regulate exports under various International Sugar Agreements. The most successful of these was the 1968 I.S.A., which was introduced during a period of depressed world prices from 1965 to 1967. This Agreement remained in force for 5 years to the benefit of exporters initially and later importers as world prices rose. However, mainly because of disagreement on price levels for a new I.S.A. there was no renewal after 1973.

The earliest date for an effective I.S.A. would be January, 1977.