INDEPENDENT CONSUMER AND COMPETITION COMMISSION

2023 SUGAR INDUSTRY PRICING REVIEW

FINAL REPORT

30th October 2023

Enquiries

Inquiries regarding this review should be directed to **Mr. Jack Timi**, Executive Manager - Prices and Productivity Division or **Mr. Mathew Pikuel**, Principal Analyst (Goods) on telephone 312 4600 or via email on jtimi@iccc.gov.pg or mpikuel@iccc.gov.pg respectively. Copies of the Final Report can also be obtained from the ICCC's website on www.iccc.gov.pg.

Submissions received by the ICCC as part of this review are available for public inspection unless the ICCC, based on a request from the relevant stakeholder, considers that all or part of the submission should remain confidential. However, in accordance with the provisions of the ICCC Act, the ICCC has undertaken this review process as transparently as possible and to this end, submissions are available for public inspection unless there are exceptional commercial-in-confidence reasons as to why submissions should be held in confidence.

About the ICCC

The Independent Consumer & Competition Commission (the ICCC) is a statutory body established under the provisions of the *Independent Consumer and Competition Commission Act 2002* (the ICCC Act) to promote competition and fair trading, regulate prices of certain declared goods and services, and to protect consumers' interests, and other related purposes.

The ICCC is empowered under the ICCC Act to have one full time Commissioner and two part time Commissioners which forms the ICCC Board. At the time of compiling this Report, the Board comprised of;

Mr. Paulus Ain	**- Commissioner & CEO**
Mr. Edward Willett	**- Associate Commissioner (Non-Resident)**
Vacant	**- Associate Commissioner (Resident)**

FOREWORD

Sugar is a basic necessity in most households throughout PNG. It is also a key ingredient used in the food and beverage manufacturing industries. The pricing of products manufactured for household consumption are also driven by the cost of sugar. On this basis, it is very important for the ICCC to continue to have some regulatory oversight over the sugar industry until such a time when the sugar industry is competitive and regulation is no longer necessary.

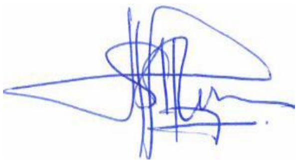
Ramu Agri Industries Limited (RAIL) continues to be the dominant player, especially in the retail end of the market because of the strong preference by consumers for their products. Ramu Sugar is the preferred brand due to its distinct taste and the strong brand loyalty by Papua New Guineans. Over the years, a number of new brands have successfully entered the market due to the Government's on-going tariff reduction program. Some market participants have also struggled to compete and have exited the market over the last five years.

In 2018 the ICCC undertook a comprehensive pricing review of the sugar industry and determined the current regulatory arrangement for sugar. Since the current regulatory arrangement is set to expire on 31st December 2023, the ICCC has undertaken a review to determine whether or not there is a need to continue with the same form of regulation over the industry going forward.

The ICCC has delivered a public and transparent process in establishing the appropriate form of regulation for the sugar industry. Hence, as part of the final process, the ICCC releases this Final Report to all the Stakeholders, sugar industry participants and the general public.

As such, the ICCC has determined the appropriate regulatory oversight for the next regulatory period, commencing 1st January 2024.

Whilst comments and submissions have been sought from relevant stakeholders, the Final Report remains the property of the ICCC.



MR. PAULUS AIN
Commissioner & Chief Executive Officer
Independent Consumer & Competition Commission

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ABBREVIATIONS AND GLOSSARY

CLT	Clover International (PNG) Ltd
GDP	Gross Domestic Product
FAO	Food and Agriculture Organisation
GFI	Goodman Fielders Internationals (PNG) Limited
ICCC	Independent Consumer & Competition Commission
ICCC Act	Independent Consumer & Competition Commission Act 2002
ICE	Intercontinental Exchange
INA	Institute of National Affairs
IPA	Investment Promotion Authority
MSG	Melanesian Spearhead Group
NZ	New Zealand
NZD	New Zealand Dollar
NZS	New Zealand Statistics
PNG	Papua New Guinea
PGK	Papua New Guinea Kina
PR Act	Prices Regulation Act Chapter 320 (Amended)
RAIL	Ramu Agri-Industries Limited
USD	United States Dollar

1. EXECUTIVE SUMMARY

The ICCC has undertaken its review of the sugar prices in PNG and has identified the relevant markets for sugar. These markets are the national wholesale and retail markets. Based on this review, the ICCC has made the following conclusions.

Findings on Competition

The ICCC has identified that while the national wholesale market and retail market are competitive, Ramu Agri Industries Limited is still the dominant player and price leader within the retail market in PNG.

Findings on Pricing

Despite these external pressures on international commodity prices, the ICCC noted that over the last five years, the domestic prices for sugar were relatively consistent with the international benchmark prices. This indicates that sugar prices in PNG are competitive.

Continue Regulation

While the sugar market is fairly competitive, and given RAIL's dominant position at the retail level, it is necessary to continue price monitoring of sugar over the next regulatory period to ensure the interests of consumers are protected. Therefore, the ICCC has determined to continue its price monitoring arrangement as follows;

- Monitor the ex-factory gate prices (inclusive of all discounts) of the 10kg bale of 1kg packages of the Ramu Mill White Sugar supplied by RAIL, which includes all the costs RAIL incurs up to the point when Ramu sugar product is transferred to its buyers; and
- Monitor the retail prices of 1kg Ramu Mill White sugar packages supplied by RAIL in retail stores across PNG.

The ICCC has also determined to continue using the New Zealand Statistics' (NZS) retail prices index for 1.5kg white sugar (SAP0125) and the ICE 11 prices (futures contract prices), as published by the Food and Agriculture Organisation (FAO), as the international benchmark prices.

The price monitoring arrangements will enable the ICCC to compare the ex-factory gate prices against the retail prices to be aware of the relative changes in prices over the next regulatory period. It will further enable the ICCC to observe how developments in the international sugar market are affecting domestic sugar prices.

2. BACKGROUND AND CONTEXT

Sugar is an international traded commodity. In 2021 the global consumption of sugar was 168.5 million tonnes. The major sugar-producing countries, which account for nearly 70 percent of global sugar production are; Brazil, India, the European Union, China, the United States of America (USA), Thailand, Russia, Mexico, Pakistan and Australia[1]. Despite being a producer of sugar itself, PNG also imports sugar to supplement the volumes produced locally by RAIL for the domestic sugar market.

This document represents the ICCC's key findings and final determinations on the current state of the sugar market in PNG. The ICCC has sought submissions from various industry stakeholders as part of the review process. These submissions have been considered in producing this final report.

2.1 The Previous Review of the Sugar Industry

In 2018, the ICCC undertook a comprehensive pricing review of the sugar industry, under the provisions of Section 25A (6) of the PR Act, to determine whether prices regulation of sugar was still necessary given the changes in industry circumstances. Issues considered related to the manufacture, supply and import of sugar and other sugar-based products, wholesaling and distribution of these products and the retailing activities of the industry.

The main finding of the review was that there was a case for regulation to continue in some form. Based on the findings of the review, the ICCC, under the provisions of Section 25C (3) of the PR Act, monitors the ex-factory-gate prices of certain Ramu sugar products. As part of this process, RAIL has been providing its ex-factory gate prices, inclusive of relevant transport costs and net of all discounts, for refined milled white sugar to the ICCC. This price monitoring arrangement commenced on 1st January 2019 and will cease on 31st December 2023.

2.2 Legislative Requirements

Given the impending expiry of the current regulatory arrangements for the sugar industry, the ICCC has undertaken this review to review and decide whether or not some form of regulation is still necessary going forward.

The current regulatory arrangements applying to Ramu sugar products are governed under Sections 10 and 32A of the PR Act. Under Section 10 of the PR Act, the Government, through the Minister for Treasury, had declared that it is necessary that sugar be prices-regulated until such time that there is a public disbenefit from regulation.

Section 32A of the PR Act provides the ICCC with powers to monitor the ex-factory gate prices of the declared sugar products.

The provisions of Section 25A (6) of the PR Act provides for the ICCC to initiate a review on its own accord when it considers appropriate. Section 25B outlines the process by which a review of a Pricing Order can be undertaken including:

- the timelines for such reviews to be undertaken;
- the requirement to publish details of its decision; and

[1] https://www.isosugar.org/sugarsector/sugar

- the form of decision that can be made as a consequence of such review.

Furthermore, Section 25C (3) of the PR Act specifies that as a result of a review, the ICCC may decide to:

- continue to operate the existing prices monitoring arrangements in their present form;
- vary the existing prices monitoring arrangements; or
- terminate the present price monitoring arrangements.

The PR Act also provides the ICCC with some degree of flexibility in undertaking reviews. Under a price-monitoring arrangement, if it is evident that price movements were not reflective of appropriate competitive market benchmarks, the ICCC may recommend to the Minister for Treasury that the relevant goods or services be re-declared for full price control.

The ICCC, in undertaking this review in accordance with the above provisions of the PR Act, will have regard to the confidentiality and public disclosure provisions of the ICCC Act on information received from submissions and the current and prospective state of the sugar industry in PNG.

2.3 Review Process

This review was initiated under the provisions of Section 25A (6) of PR Act. The review process followed by the ICCC to facilitate public comments is set out on Table 1 below.

Table 1: Review Deliverable Timetable

ACTION	DATE
Release of a Public Notice/Issues Paper and invitation for submissions to be made	20th January 2023
Close of Submissions on Issues Paper	03rd March 2023
Release of the Draft Report and the invitation of comments and submissions	30th August 2023
Close of submissions on the Draft Report.	31st September 2023
Release of the Final Report and Final Determination	30th October 2023

This Final Report is a public document and can be obtained from the ICCC's office or through the ICCC's website at www.iccc.gov.pg. The ICCC also acknowledges stakeholders who have participated in this review process in response to the Issues Paper that was released on 25th January 2023. These organisations are listed in Appendix 2.

3. THE SUGAR INDUSTRY IN PNG

Sugar has been commercially produced by RAIL in Ramu, Madang Province for past the four decades. In PNG, sugar is mostly used as a sweetener in hot beverages like coffee and tea, and also in the manufacturing of food products, beverages and confectionaries.

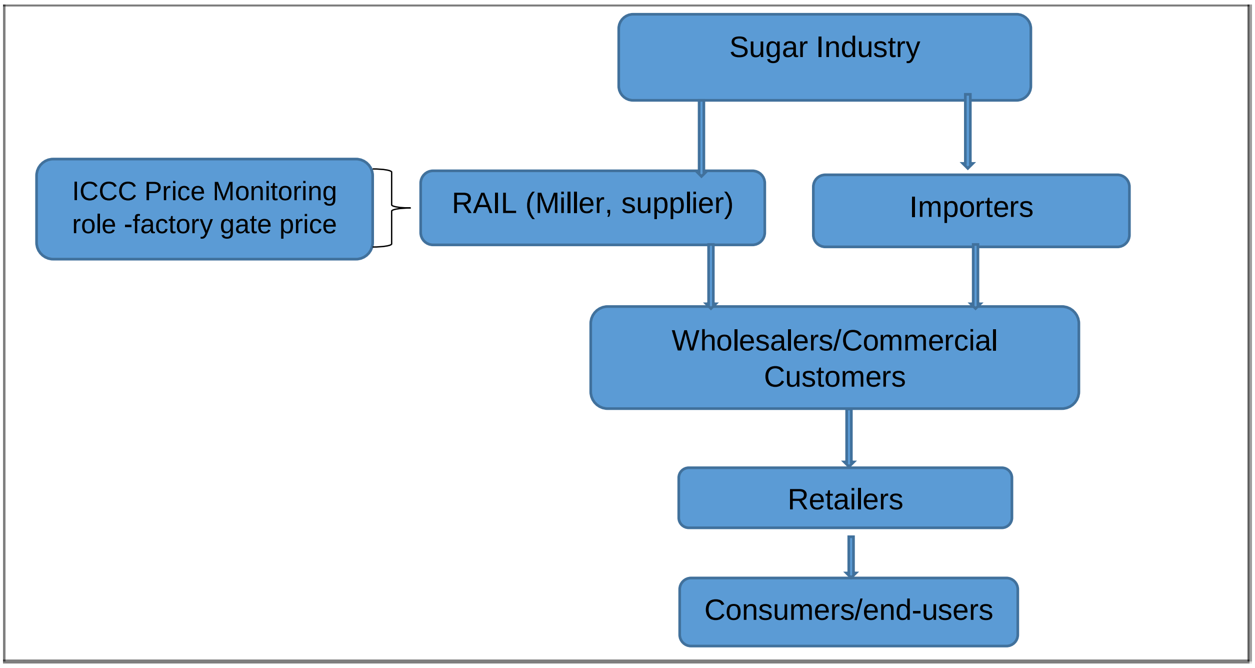
This Chapter describes the ICCC's view of the sugar market and provides context for the consideration of what regulatory regime should be adopted following the expiry of the current regulatory arrangements. In doing so, the ICCC has sought to identify the current state of the market in terms of:

- the market structure (supply and demand);
- the major market participants;
- their relative market shares; and
- the wholesale and retail element of the market.

3.1 Basic Market Structure

Each year, between 60,000 and 70,000 tonnes of sugar are consumed in the country. This comprises of locally milled sugar by RAIL, imports by RAIL and other players in the industry.

Figure 1: Basic Market Structure in the PNG Sugar Market, 2023



The market structure is shown in **Figure 1** and consists of:

- RAIL - grows, mills and distributes Ramu sugar throughout the country;
- Major Importers – commercial customers including RAIL who import packaged and/or bulk sugar;
- Wholesalers and commercial customers - supplied by RAIL and other importers;
- Retailers – supplied by wholesalers and commercial customers; and
- Consumers or end users – consumers of sugar and sugar products.

3.2 Major Market Participants

3.2.1 Ramu Agri-Industries Limited

The sugar industry in PNG continues to be dominated by Ramu Agri-Industries Limited **(RAIL).** RAIL, the producer of Ramu sugar products, is part of New Britain Palm Oil Limited **(NBPOL)**, the largest palm oil producer in PNG.

RAIL is currently the only miller of sugar in the country. RAIL manufactures and packages all its Ramu sugar products at its factory in Ramu, Madang Province. RAIL also began importing substantial quantities of sugar from Thailand in 2016. Most of the imported sugar is transported from Lae to Ramu where it is blended with locally produced sugar and repackaged for the domestic market.

Ramu sugar is often distributed directly by RAIL from Ramu to the Highlands Region and to its Lae warehouse to supply customers in Lae or for shipment to customers throughout PNG. RAIL also contracts wholesalers to transport its products with the exception of National Capital District **(NCD).** In NCD RAIL supplies its customers directly and applies an additional charge for this service. In some instances, the products are transported from the Ramu factory directly by certain wholesalers. In some coastal towns, customers of RAIL take control of the product at the port where it is landed. In the Highlands Region, buyers take control of the majority of orders at depots in Mt Hagen, Kainantu, Goroka and Kundiawa.

RAIL sets a uniform 'base price' for Ramu sugar throughout the country. RAIL advised that the base price comprises the cost of production at the Ramu factory plus the average transport costs plus a profit margin. The transport costs are averaged across the whole country and cover the costs of transporting the product (1) from the factory to the Highlands; (2) from the factory to the warehouse in Lae; and (3) from the warehouse in Lae to other locations, as described above. In the past, the 'base price' was described as an 'ex-warehouse' price as opposed to an 'ex-factory' price (i.e. an 'ex-factory' price would not normally include transport and storage costs).

The 'base price' is a uniform or 'postage stamp' price that all buyers across the country pay at designated transfer points. RAIL has advised the ICCC that there is no difference between the 'base price' and the ex-factory price, which it supplies to the ICCC as the factory gate prices for price monitoring purposes. Both price descriptions represent the uniform or 'postage stamp' price that all buyers across the country pay at designated transfer points. Generally, the rationale for applying a uniform price is to ensure that demand does not decrease by distance. While this may not be cost reflective, it is usually a reaction to actual or protentional competition in the market. The ICCC further noted that the 'base price' is then discounted to wholesale and commercial customers based on volume purchased. Customers that purchase a minimum of 100 tonnes per month receive a 15 percent discount while others are offered discounts of up to 10 percent, depending on volume purchased. Customers purchasing larger packages may also receive discounts, reflecting lower packaging costs. The ICCC noted that RAIL changed its discount structure in 2015 and this arrangement is still in place. Discounts are subject to change at any time depending on changes in circumstances.

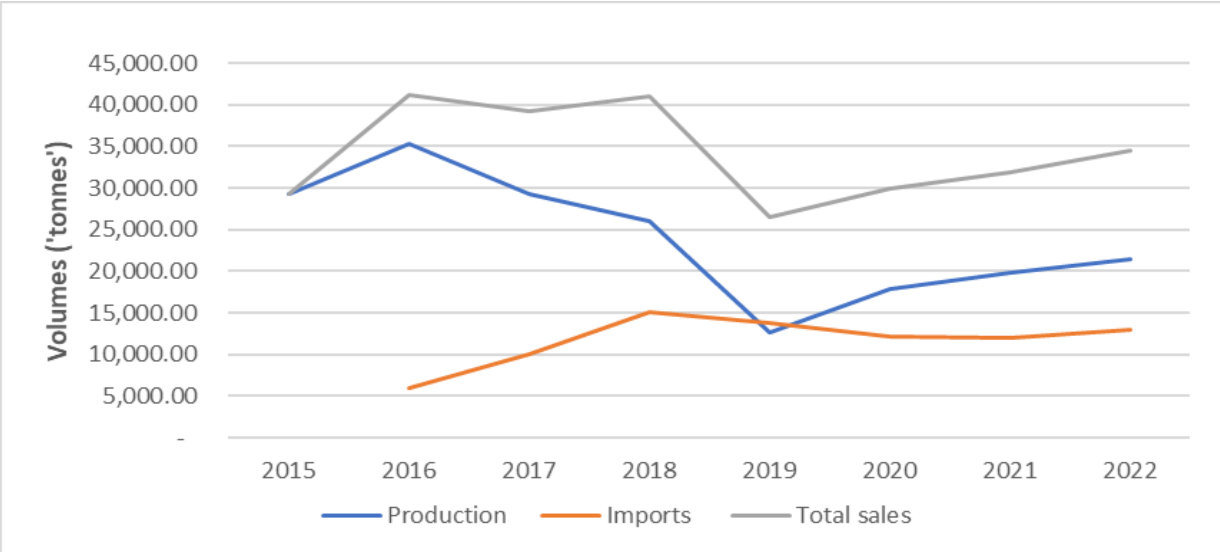
In the last review, the ICCC noted that freight is usually met by RAIL through a national pricing system offered by RAIL. Under this system, the freight costs to the various locations excluding Daru, are paid for by RAIL hence, these costs are also reflected in the base prices. RAIL has indicated that this arrangement is still in place therefore, sugar prices are about the same in these locations throughout the country. Though coastal shipping costs are met by RAIL, land transport is independent of the operation of RAIL and importers.

Furthermore, the distribution of sugar throughout the country sometimes experiences delays and can be attributed to truck or ship break downs; bad road and weather conditions; limited ships being available; and port congestion. The transportation of sugar can also be affected by looting. Because of these factors, consumers sometimes ultimately pay high prices during periods when supply is affected.

Figure 2 shows the total sales verses local production[2] and total imports[3] of sugar by RAIL from 2015 to 2022. Despite the notable decrease in production since 2015, it began to recover in 2019. The continuous growth in production since 2019 is attributed to strategies employed by RAIL to manage pest and diseases, and to reduce fires in its cane fields. On the other hand, its sugar import volumes began to decrease since 2018 but has remained relatively stable since 2020. The reduction in imports is attributed to the upturn in domestic production.

Figure 2 also shows that sales of Ramu sugar was relatively stagnant between 2016 and 2018 before falling significantly in 2018. In 2019 sales began to recover and has continued to increase over the past three years. Overall, sales in the current regulatory period is still lower than in the last regulatory period. This is attributed to RAIL losing some of its major commercial customers and wholesalers, who now import directly from overseas.

Figure 2: RAIL total local production, Imports and Sales for Ramu sugar – 2015 to 2022



Source: RAIL, PNG Customs.

3.2.2 Importers

High import barriers have provided considerable protection of local production of sugar since Ramu Sugar started operations in the 1970s. Imports were banned until 1996 when they were allowed to enter but under a high tariff.[4]

As shown on Table 2, in 2006 the import tariff was reduced from 82 percent to 70 percent and remained unchanged until 2010 when it was further reduced to 40 percent.

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[2] RAIL's submission to the Public Notice, 2023 Sugar Industry Pricing Review.
[3] PNG Customs submission to Public Notice, 2023 Sugar Industry Pricing Review.
[4] Ibid, p. 28.

In accordance with the Government's tariff reduction program, the current tariff of 30 percent was set by the Government in 2015. Although there were plans to reduce the tariff further in 2018, it has remained the same since 2015.

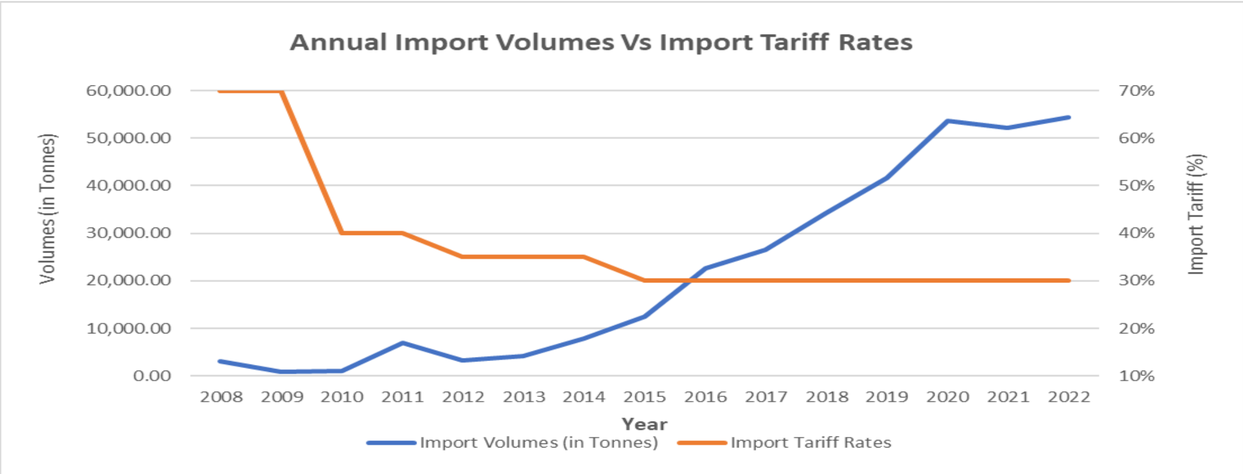
Table 2: Sugar import tariff reduction since 2006

2006-2009	2010-2011	2012-2014	2015-2018	2019 – current
70%	40%	35%	30%	30%

Source: ICCC (2007), Sundry Declared Goods Pricing Review, Final Report, 16 August, Papua New Guinea. Import and Exports Custom Tariff (2012 edition). Customs Tariff (2018 Budget) (Amendment) Bill 2017.

Following the reduction in tariffs, sugar imports began to increase since 2011, as shown on Figure 3. The steep reduction in the tariff since 2009 has resulted in a substantial increase in imports. Although the import tariff has remained the same since 2015, imports have continued to increase steadily during the same period.

Figure 3: The growth in imports verses the import tariff reduction



Source: PNG Customs Services and Table 1.

Inquiries undertaken for this review have confirmed that the increase in imports in recent years are mostly driven by the manufacturing requirements of certain large food and beverage manufacturing companies. These customers require a higher grade of white refined sugar, which RAIL does not supply to the domestic market.

Furthermore, we have noted that apart from some of the large supermarkets in Port Moresby and Lae, there are very few imported brands sold in retail stores throughout the country.

In the 2018 review, Homestate, which supplied the Star sugar brand, was the only major competitor of RAIL at the retail level. However, in this review we have noted that the Star sugar brand has exited the market due to inconsistencies of supply, as advised by Homestate. On the other hand, brands such as Mama's sugar, King Sugar and Mitro Phol are also still in the market, but found only in some centres. We have also noted that the following suppliers have entered the market recently and all of them currently import from Thailand, and distribute their products from Lae and Port Moresby:

- Goodman Fielders International (GFI) - supplying Flame sugar,
- Clover International Ltd (Clover) - supplying Gudpela sugar, and
- Globe Manufacturing Ltd (Globe) - supplying No.1 sugar brands.

Whilst the prices for all these competing brands are competitive, the geographical market and the number of shops in which they are sold are very limited. This could be attributed to the distribution costs involved in supplying sugar throughout the country and also the strong preference for Ramu sugar in PNG.

3.3 Wholesale sector

The wholesale sector refers to various functions in the supply of products and services from the production stage to the retail stage. This includes the storage and transport of local and imported goods and the provision of logistical services. The point of transfer of control from RAIL to wholesalers varies across PNG. Some examples of businesses involved in some aspect of the wholesale sector and their wholesale and retail activities are listed below:

- RAIL – Warehousing in Lae, logistics, organisation of transport contractors and imports but no direct involvement in transport.
- Patrick's Transport Ltd – Wholesale storage and transport in the National Capital District, Central and Western Provinces.
- Cholai Trading – Wholesaler in the National Capital District.
- Desh Besh (Gordons) – Wholesaler and retailer in the National Capital District.
- KR Trading – Wholesaler in the National Capital District.
- Rimbunan Hijau (RH) – Wholesaler and retailer in the National Capital District.
- Stop and Shop (SNS) – Retailer in the National Capital District.
- Seeto Kui – Wholesaler and retailer in Port Moresby and Lae.
- Tropicana Ltd - Wholesaler and retailer in Kokopo/Rabaul.
- John & J Seeto Ltd – Wholesaler and retailer in Kokopo/Rabaul and Kimbe.
- Andersons Foodland – Retailer in Kokopo, Lae and Madang.
- Bintagor Ltd – Wholesaler and retailer in Goroka.
- Freedom Apex Trading Ltd – Wholesaler and retailer in Mt. Hagen.

These wholesalers supply a wide range of household goods including sugar to retailers. Some of these wholesalers also import their own sugar brands and typically either distribute directly to commercial customers or to retail outlets.

3.4 Retail Sector

The retail sector comprises a formal sector and an informal sector. The formal retail sector includes large chain retailers, small supermarkets and trade stores that are formally registered with the Investment Promotion Authority (IPA). The informal sector in PNG is large and refers to the thousands of stores and market stands operating in urban and rural areas of PNG that are not registered with IPA.

In its 2009 review of the wholesale and retail sectors, the ICCC found that the level of wholesale and retail competition in PNG is bi-polar, with highly competitive markets in urban centres, and limited competition in remote rural areas. The ICCC found that higher margins earned in rural areas are largely attributed to higher business costs, as opposed to abuses of monopoly power. The ICCC also noted business registration requirements and costs restricted entry to the formal sector and contributed to a lack of compliance with many regulations, however, the informal sector imposed an important competitive threat to the formal sector[5]. Based on recent reviews of the flour and rice markets and inquires for this review, these observations about the retail sector are still valid. The retail sector is also generally independent of the wholesale sector, including importing activities, although some large retailers do import their own sugar brands.

Flame sugar and Gudpela sugar brands are now the main rivals of Ramu sugar at the retail level. The prices of these two brands are competitive hence, their respective market shares may continue to grow if they continue to persevere in the market. Apart from Port Moresby and Lae, these two brands are now sold in some other centres as well.

Seeto Kui is a major wholesaler and retailer that owns the King Sugar brand. King Sugar is packaged locally by RAIL and sold through Seeto Kui's distribution networks throughout PNG. King Sugar does not appear to have a significant market share.

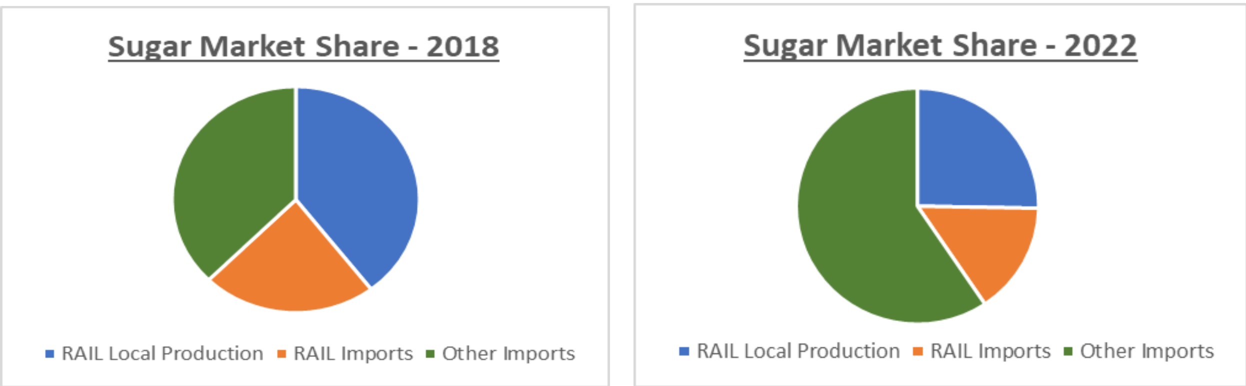
3.5 Market Share of the Sugar Industry in PNG

In reviewing the current state of the market for natural sugar in PNG, we have also reviewed the current market share of participants in the industry at both the national wholesale level as well as the retail level.

3.5.1 Market Share at the National Wholesale Level

The exact figures on market share in the PNG sugar market are commercial-in-confidence. However, submissions and information received by the ICCC indicate that the market share in the sugar market has changed since the 2018 Review. This is illustrated on Figure 4.

Figure 4: Market share estimates for the PNG sugar market between 2018 and 2022



Over the last five years, the ICCC's estimates indicate that the market share for RAIL has declined. Furthermore, imports appear to have increased significantly over the same period. In 2018, the market share of imports was estimated to be 35 to 38 percent of the total market. As of 2022, the market share for imports has increased significantly to about 58 to 62 percent of the total market.

The ICCC's assessment of the available market share data suggests that the total consumption of sugar in 2022 was around 60,000 to 70,000 tonnes. This is higher than our estimate in 2018 of 50,000 to 60,000 tonnes. Furthermore, this indicates that the total market has grown by about 16 percent to 20 percent since 2018.

On a per capita basis, these figures give a per capita consumption of sugar of around 7.17kg per person per year for PNG, an increase of 16.58 percent since 2018.

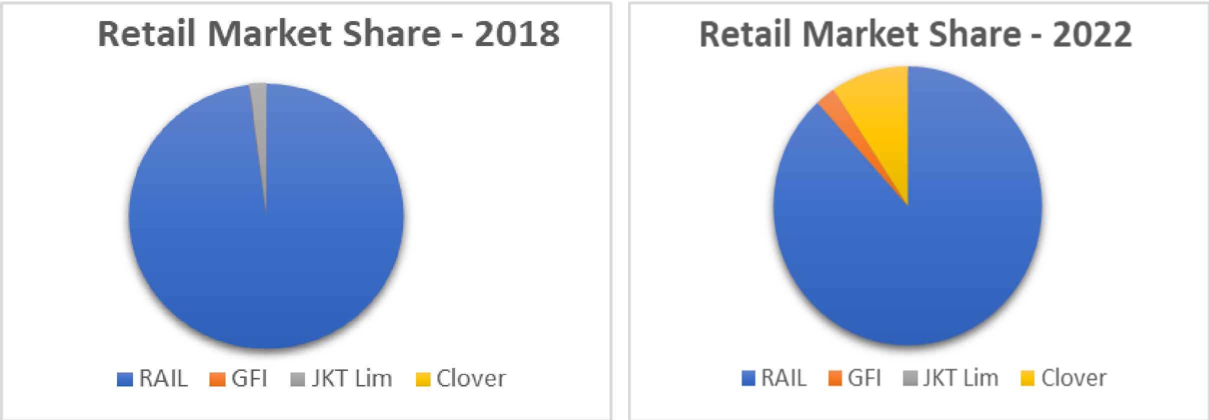
[5] ICCC (2009), Final Report PNG Wholesale and Retail Industry Review, p. 27.

However, this is low on a worldwide scale. For example, consumption in Australia is around 32kg[6] per capita in 2022 compared to 48kg in 2018[7]. The high per capita sugar consumption in Australia could be attributed to the level of income and availability of processed foods in Australia compared to PNG.

3.5.2 Market Share at the Retail Level

In addition to the market share at the national wholesale level, the ICCC has undertaken a further assessment of the market share of competitors at the retail end. Based on the Customs data and submissions received so far, RAIL is still the dominant player and price leader at the retail level, as shown on Figure 5.

Figure 5. Market share estimates for retail market between 2018 and 2022.



However, whilst RAIL is still the dominant supplier of sugar in the country at the retail end, Figure 5 also shows that since 2018 it has lost about 10 to 15 percent its share of the retail market.

Conclusion

Despite losing market share, RAIL is still the dominant player at the retail level.

[6] https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Sugar%20Annual_Canberra_Australia_AS2023-0007.pdf

[7] https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Sugar%20Annual_Canberra_Australia_4-5-2018.pdf

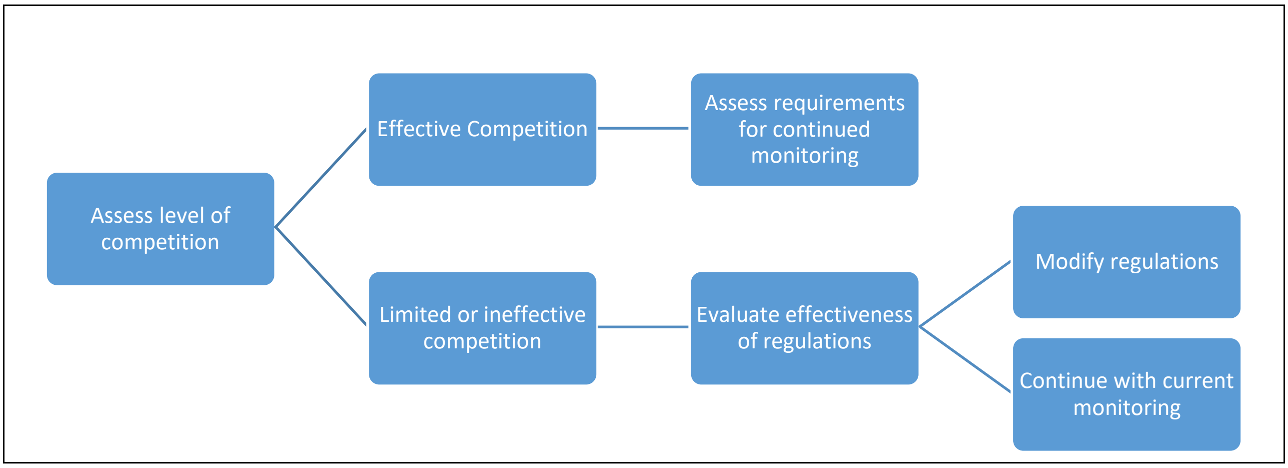
4. FRAMEWORK FOR ASSESSMENT OF COMPETITION AND REGULATION

4.1 Introduction

This chapter outlines the analytical framework the ICCC has adopted in assessing the state of the PNG sugar market as part of this review process.

The steps in this process are shown in **Figure 6** below.

Figure 6: ICCC's Considerations and Appropriate Steps



In order to make an informed decision, the ICCC must assess the current level of competition in the sugar market in PNG. If there is effective competition in the market then the ICCC should remove or modify the existing regulations. However, if competition is limited or ineffective, then the ICCC must consider what can be done to protect the interests of consumers.

4.2 Market definition

In assessing competition, the starting point is to define the relevant market or markets where there is relatively close competition or business rivalry. The concept of substitution of products and services is also the central aspect when defining relevant markets for competition purposes.

The term "market" is defined in Section 45 (2) of the ICCC Act as follows:

> *"is a reference to a market in the whole of Papua New Guinea for goods or services as well as other goods and services that, as a matter of fact and commercial common sense, are substitutable for them, including imports."*

In defining markets in the context of competition issues, a purposive approach is applied, i.e. the purpose of market definition is to identify the relevant characteristics of a market in which market power is likely to have been exercised. A market is typically defined in terms of its product, geographic, functional and temporal dimensions. In defining a market, the aim is to determine whether customers can readily substitute products, or suppliers can readily switch their facilities between the supply of alternative products. [8]In summary the four market dimensions are discussed by the Malaysian Communications and Multimedia Commission (2014) as follows:

[8] https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Market-definition-analysis-110714.pdf

1) The product dimension refers to all products or services which can be substituted by the consumers based on their characteristics, their prices and intended use[9]. The purpose of defining the relevant product market is to determine which collection of products and services fall within the same market in order to determine. To be considered in the same market products or services must be substitutable.

2) The geographic dimension refers to whether the product or service supplied in one geographic region is substitutable for a product or service supplied in another geographic region. The purpose of defining this dimension is to determine the collection of geographic areas that are like to fall within one market. The analysis will also identify whether the market is national in scope or whether there are state-based or other geographic markets.

3) The functional dimension refers to the level of the supply chain at which products or services are supplied, such as in the wholesale or retail levels of the supply chain. The key in defining this dimension is whether the behaviour of firms operating at one functional level of the market is constrained by the substitution between products or geographic sources of supply at another functional level. [10]

4) The temporal dimension refers to the to time characteristics of the market such as cyclical patterns of demand or innovation. For example, if there are peak and off-peak times for a service it may be necessary to consider whether services supplied in peak times are in a separate market to services supplied during off peak. Furthermore, if customers can defer the purchase of an existing product because a new product may be introduced in the future, it will be necessary to consider whether the new product and existing product form part of the same market. In determining the time dimension, the key issue for consideration is whether it is possible for customers or suppliers to substitute between different time periods. According to the Australian Competition and Consumer Commission[11], the analysis of the time dimension typically occurs as part of the product dimension of the market.

Once the market has been defined, the nature and extent of competition in that market can be assessed and determined.

4.3 Rationale for competition as the basis for assessment

The primary objectives of the ICCC are specified in section 5 of the Independent Consumer and Competition Commission Act 2002 (ICCC Act) and in section 21(2A) of the Price Regulation Act (PR Act). They are:

- To enhance the welfare of the people of Papua New Guinea through the promotion of competition, fair trading and the protection of consumers' interests;
- To promote economic efficiency in industry structure, investment and conduct; and
- To protect the long-term interests of the people of Papua New Guinea with regard to the price, quality and reliability of significant goods and services.

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[9] European Commission, Notice on the Definition of the Relevant Market for the Purposes of Community Competition Law, Official Journal of the European Community [1997] C 372/5 paragraph 7.
[10] Australian Competition and Consumer Commission v Metcash Trading Limited [2011] FCAFC 151 at [252].
[11] For example, see the Australian Competition and Consumer Commission, Merger Guidelines (November 2008) paragraph 4.8 <http://www.accc.gov.au/system/files/Merger%20guidelines.pdf>; see also Office of Fair Trading, 'Market definition: understanding competition law' Competition law Guideline (2004) paragraph 5.3

Section 5 of the ICCC Act also notes that, in seeking to achieve its primary objectives, the ICCC shall have regard to the facilitating objectives to:

- Promote and protect the bona fide interests of consumers with regard to the price, quality and reliability of goods and services;
- Ensure that users and consumers (including low-income or vulnerable consumers) benefit from competition and efficiency;
- Facilitate effective competition and promote competitive market conduct;
- Prevent the misuse of market power;
- Promote and encourage the efficient operation of industries and efficient investment in industries;
- Ensure that regulatory decision making has regard to any applicable health, safety, environmental and social legislation; and
- Promote and encourage fair trading practices and a fair market.

The ICCC's regulatory function is market-oriented. The ICCC's regulation would only be necessary where there is a market failure, in the context of no or limited competition. Hence, the common theme of the ICCC's primary and facilitating objectives is competition. Competition in the provision of a product exists where there is competitive rivalry (or potential rivalry) between two or more businesses seeking to secure the business of a customer. In order to obtain the business of any individual customer, the businesses are under pressure to offer the most attractive product in terms of price and quality and to continually seek new and improved ways of providing products and services.

Competition drives companies to continually seek new and improved ways of providing products and services. Competition can be thought of as delivering more efficient production outcomes in three ways:

- To produce goods and services at least cost (productive efficiency);
- To allocate labour and material inputs to the production of goods and services and to produce a level and mix of products that are most valued relative to cost (allocative efficiency); and
- To seek new and improved ways of serving customers (dynamic efficiency).

However, competition is not an end in itself. Rather, competition as the result of the market process, is the most effective mechanism by which customers receive products suited to their needs that reflect the efficient costs of production and a normal commercial profit margin.

Based on the primary objectives and facilitating objectives of the ICCC Act and the principles discussed above, it is the ICCC's view that competition in the provision of a good, such as sugar, is the most effective way to protect the long-term interests of consumers and deliver efficient prices to customers. It is for this reason that the ICCC considers the state of competition in the various market dimensions of the PNG sugar industry as the most important issue when assessing whether to continue, alter or cease the existing pricing monitoring arrangements.

4.4 What is a competitive market?

The definition of a perfectly competitive market described in textbooks exists rarely, if at all, in the real world. As such, it is necessary for the ICCC to adopt a real-world definition that can be applied usefully.

The approach often adopted is to consider whether a market is ‘effectively competitive’. Where a market is ‘effectively competitive’ (also referred to as ‘workably competitive’):

- There is sufficient rivalry between businesses to ensure that they strive to deliver the goods and services consumers demand at least cost;
- Resources move relatively freely between and within markets in response to consumer demand and price signals;
- Consumers will have access to a reasonable degree of information to allow them to make choices and participate in the market;
- Businesses may have a degree of market power over price associated with product differentiation or innovation, but that market power will not be substantial or sustainable and will be subject to competitive erosion over time;
- At any particular point in time, resources may not be employed in their most valuable use, prices may deviate from costs and technologies can deviate from the most efficient ones available, however, over time, effective competition will drive the market towards efficient outcomes; and
- Businesses will continually strive for competitive advantage against actual and potential rivals and seek out new profit opportunities to deliver the goods and services consumers want, and so the market may always appear to be in a state of disequilibrium and change.

Summing up the critical characteristics of effective competition are that no one seller or group of sellers acting in concert has substantial and sustained influence over prices and barriers to entry do not preclude competitive outcomes.

In addition, the dynamic nature of markets over time demands that a forward-looking approach to the state of a market be adopted. Clearly, regard must be given to evidence of what has actually been happening in a market, but the most important question is: what is likely to happen going forward? With the absence of precedent decisions under Papua New Guinea law in relation to the ICCC Act, the ICCC has been guided in its analysis by the forward- looking approach of the High Court and Federal Court of Australia and the Australian Competition Tribunal. These entities identified the benefits of analysing competition using a forward-looking approach:

> *In our judgment, given the policy objectives of the legislation [the Trade Practices Act], it serves no useful purpose to focus attention upon a short-run, transitory situation... This does not mean we seek to prophecy the shape of the future – to speculate upon how community tastes, or institutions, or technology might change. Rather, we ask of the evidence what is likely to happen to patterns of consumption and production were existing suppliers to raise price or, more generally, offer a poorer deal. For the market is a field of actual or potential rivalry between firms*[12].

The ICCC, in its assessment of the PNG sugar market or markets, will be guided by the definition of an effectively competitive market while noting that markets change and evolve over time and that a forward-looking approach is appropriate. Maturing markets can be characterised as progressing towards a more competitive state, as shown in **Figure 7**.

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[12] National Competition Policy Review Report, The Hilmer Repot, 23 August 1993, page xxxiii.

Figure 7: The continuum of competition

In assessing competition, the ICCC first defines the relevant markets, which involves consideration of various aspects of substitution and then assesses the nature and extent of competition within the relevant markets using the following assessment criteria:

- barriers to entry for new participants;
- competition between existing market participants;
- countervailing market power; and
- the exercise of choice by customers.

5. ICCC'S ASSESSMENT OF COMPETITION

5.1 Substitutes for Sugar

This chapter discusses the ICCC's assessment of the availability of substitutes within the market dimensions specified in Chapter 4.

Generally, using the definition for a market in which sugar suppliers operate for the purpose of this competition analysis, sugar is the product dimension of the market. The sugar product market encompasses all those products which are regarded as interchangeable or substitutable on the basis of product characteristics, prices and intended use. These are products that could readily be put on the market by other suppliers without significant switching cost or by potential competitors at reasonable cost and within a reasonable time frame. From a temporal perspective it is also not possible to defer consumption of sugar in anticipation of another sweetener coming into the market in the future, nor is the demand for sugar cyclical in PNG. Overall, there are very few substitutes to natural sugar. These substitutes provide sweetness but with less calorific content. Some sugar substitutes are natural and some are synthetic. Those that are not natural are generally called artificial sweeteners. While sweeteners and other carbohydrates can be substitutes for natural sugar, they are not effective substitutes in terms of providing an effective competitive price constraint for natural sugar because of its limited availability, its expensive, its use in manufacturing is limited, and there is very limited demand for low calorie food products in PNG.

In regard to the geographic dimension of the market, there is a national wholesale market for natural sugar where there is scope of substitution to take place. However, within the various retail markets in the respective provinces, there is limited scope for customer to exercise choice due to the costs involved in trying to exercise that choice.

In the functional dimension of the market, there is no evidence to suggest that the behaviour of RAIL (or another supplier in the market) within a functional level is constrained by substitution of products or geographical sources of supply at another functional level.

Conclusion

The ICCC is of the view that in the relevant markets for sugar there are no effective or direct substitutes.

5.2 Barriers to entry (and exit) for new participants

For the past four decades since the establishment of RAIL, no other player has entered the milling sector of the PNG sugar industry to compete against RAIL. This indicates that there could be some prevailing barriers to entry in the milling sector of the market.

The Institute of National Affairs (INA), in its submission to this review, advised that apart from land, the high costs of processing facilities would probably also discourage other investors, and unless serious natural agricultural constrains can be overcome in other extensive flatlands areas like the Sepik plains or Western Province.[13]

[13] INA submission to the Public Notice, 2023 Sugar Industry Pricing Review

Patrick's Transport Ltd **(Patrick's)** further stated in its submission that the cost of doing business in PNG is significantly high and challenging and despite the import duty, it is still cheaper to import sugar than producing locally".[14]

It was also noted from the 2018 review that the substantial capital costs involved and difficulties in acquiring land are significant barriers to entry for businesses that wish to grow, mill and produce sugar within PNG. The capital costs are sunk in the sense that once investments are made, the capital cannot be redeployed elsewhere. Another barrier to entry is that the market is not large enough to support a second local producer of sugar at competitive prices such that a second sugar producer will find it attractive to enter the market. As a result of these factors, potential entrants face substantial costs compared RAIL. These views are still relevant today.

In the 2018 review, the ICCC also noted that the import tariff and foreign exchange restrictions by the Bank of PNG were also additional barriers to entry. The foreign exchange restrictions made it difficult to sought foreign exchange to consistently buy imports. This scenario is still the same today, as noted from submissions and discussions with stakeholders of the industry.

In its submission to this review, Coca Cola EuroPacifc Partners (Coca Cola) also stated that its main barriers to importing sugar is the lack of forex readily available in PNG and the high import duties on sugar[15].

Other importers, including RAIL and GFI, also raised similar concerns regarding these artificial barriers to entry.

Conclusion

The ICCC considers that the high cost of entry into the sugar milling industry in PNG has a significant impact on the level of competition in the sugar market. The existing artificial barriers also affects the level of competition in the sugar market.

5.3 Import Competition

Imports can exert significant competitive pressure on the sugar market in PNG as potential sugar product suppliers can avoid the cost of building and operating a mill in the country. The option to import has low barriers to entry in terms of set-up costs; provides a wide variety of supply options to industry players; gives access to various sugar-based products that may not be currently available locally; has much lower risk than investing in a mill; and allows the importer to easily change quantities as market demand fluctuates. In its submission, RAIL advised that the decrease in import tariffs has increased competition in the market. RAIL also observes that it is competing against imports from countries where the production is subsidised and unaffected by failing infrastructure[16].

On the other hand, some importers have indicated that the tariff imposed on sugar is restricting the importation of sugar and protecting RAIL. A wholesaler also stated that the imported brands have given the opportunity for consumers to exercise their choice between Ramu sugar and other cheaper imported brands.

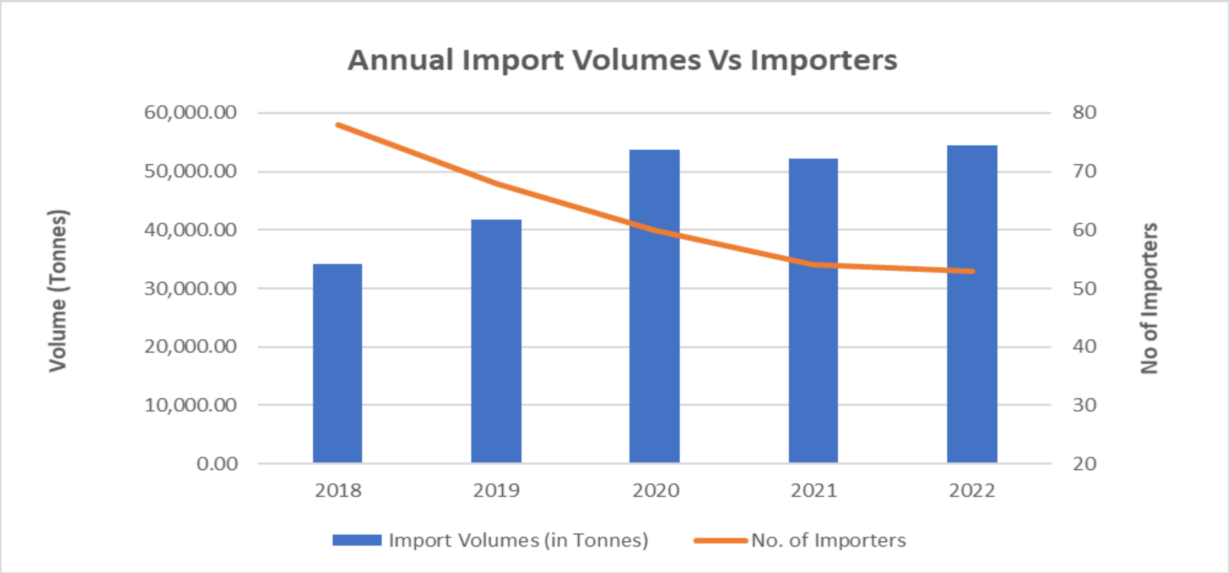
[14] Patrick's submission to the Public Notice, 2023 Sugar Industry Pricing Review
[15] Coca Cola EuroPacifc Partners' submission to the Public Notice, 2023 Sugar Industry Pricing Review
[16] RAIL's submission to the Public Notice, 2023 Sugar Industry Pricing Review

Furthermore, certain manufacturers advised that the locally produced sugar does not meet the sugar requirements for the manufacture of soft drinks, hence they have to import sugar that meet their manufacturing requirements.

5.3.1 Analysis of Customs' Import Data

Figure 8 shows that at the current 30% import tariff level, imports have continued to increase since 2018. The import data from PNG Customs Services (PNG Customs) also shows that sugar is imported mostly from Thailand, Australia, Malaysia, China, Singapore, India and Philippines. Over the last five years, imports have increased by almost 70 percent even though the number of importers has declined.

Figure 8: Import volumes since 2018



Source: PNG Customs

The inverse relationship between the import volumes and the number of importers is driven by the increase in imports by major importers and smaller importers exiting the market or choosing to source sugar from the major importers instead of importing.

5.3.2 Conclusion on Import Competition

Based on the Customs data and submissions from stakeholders, evidence shows that imports continue to enhance competition within the sugar market.

Conclusion

The ICCC concludes that importers are still providing both actual competition and also the threat of increased competition to RAIL.

5.4 Competition between existing market participants

The major market participants in the sugar market are RAIL and other major importers such as food and beverage manufacturing companies as well as those that import their own brands to for the retail market.

In the last review, we noted that competition between RAIL and imports was very limited, reflecting:

- The impact of the import tariff,
- The foreign exchange restrictions, and
- The strong local preferences for Ramu sugar.

While these are still ongoing concerns, based on the evidence of changing market shares, the ICCC is of the view that there is competition between existing market participants at the national wholesale level. The growth in sugar imports since 2018 despite same import tariff shows that it is viable for large customers to switch suppliers or even import their own sugar brands for the local market.

On the other hand, despite the increase in imports, most imported brands continue to struggle to penetrate the retail market due to consumers' strong preference for Ramu Sugar. In fact, whilst some brands have entered the market, some brands have also exited the market over the last five years.

Apart from Ramu Sugar, other brands that are currently available in the retail market include; Flame Sugar, Gudpela Sugar, No.1 Sugar, Black and Gold, CSR Sugar, Mitr Phol, King Sugar and Sada Sugar. Some of the brands that have exited the market include Star sugar, Lam sugar, and K Best sugar. Furthermore, some of these brands are only found in Port Moresby, Lae, Madang, Kimbe, Goroka and Kokopo. This is due to the significant costs associated with expanding to new locations.

Conclusion

The ICCC is of the view that the market at the national wholesale level is competitive as noted from the significant change in the market shares since 2018. However, at the retail level, RAIL continues to be the dominant player and the price leader.

5.5 Countervailing market power

Countervailing market power exists where a customer is able to exert some influence over a supplier to cause the supplier to amend its supply arrangement or vary the prices of its good, thereby succumbing to the demands of the customer, usually because the customer can credibly threaten to underwrite a new source of supply. Countervailing market power is therefore, most likely to exist for large customers where the loss of business suffered by the supplier is more significant if the customer rejects the offered terms.

In the sugar market, customers with potential countervailing market power include; bakeries, beverages and food manufacturers. Some wholesalers and retailers are also large customers who have the ability to import directly from sugar producers in other countries to limit the market of RAIL.

It is also possible that some commercial customers may require specific inputs for their products and may not be able to switch between various suppliers.

There is a case for product differentiation here, compared to homogenous sugar products and this may be outside the contextual definition of competition as generally perceived throughout this analysis.

Based on the evidence available, commercial customers hold a relatively significant degree of countervailing market power that keeps a check on the prices being charged by RAIL. However, whilst large customers may possess a degree of countervailing market power, it is unlikely that smaller customers such as households are able to exert any influence on the prices of sugar at the retail end. However, despite smaller households being unable to enter into negotiations directly with the suppliers, they still benefit from the countervailing market power exercised by large commercial customers at the national wholesale level.

Conclusion

The ICCC's current view is that there is a degree of countervailing market power for larger customers. Smaller customers have no direct countervailing market power; however, they benefit from the countervailing power exercised by large customers at the national wholesale level.

5.6 Exercise of choice by customers

The exercise of choice by customers can place a significant competitive constraint on RAIL. The exercise of choice also demonstrates the willingness to alter purchasing behaviour and switch from one brand to another.

In this review, Patrick's, one of the biggest wholesalers in the country, advised that it has increased its supply of a certain imported sugar brand and reduced the supply from RAIL due to cheaper prices offered by the importer.

On the other hand, some manufacturers now either buy from importers or import directly from overseas suppliers due to higher prices offered by RAIL or due to specific sugar requirements for their products.

Conclusion

Consumers in PNG do have the opportunity to exercise market choice and switch between sugar brands. This consumer choice is often exercised by large customers however, at the retail level, consumers still have a strong preference for Ramu sugar as reflected by RAIL's dominance of the retail market.

6. PRICES MONITORING ASSESSMENT

6.1 Sugar Trading in the International Market

Sugar is an internationally traded commodity that is predominantly traded in US dollars (USD). Most of the sugar that is traded is derived from sugarcane. Sugarcane is milled to produce raw sugar which is then refined to yield white sugar.

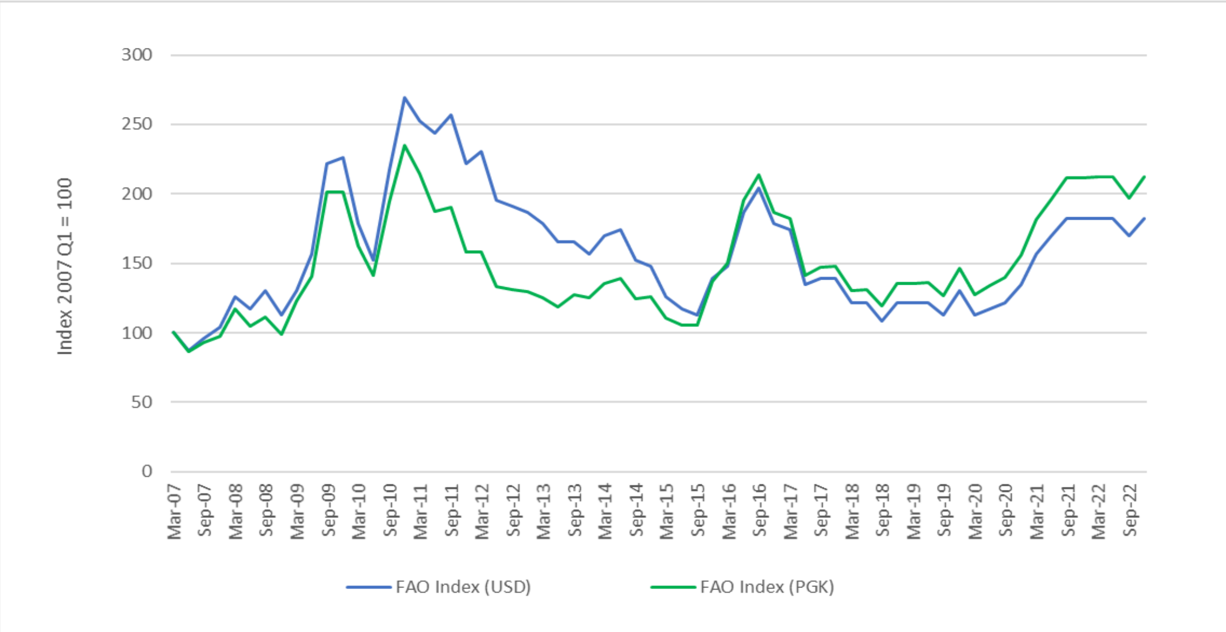
The international standard for the trading of raw sugar is the Intercontinental Exchange 11 Contract (ICE 11). The ICE 11 is the world benchmark contract price for raw sugar trading.

The contract prices are the physical delivery of raw cane sugar, free-on-board the receiver's vessel to a port within the country of origin of the sugar.

Some of the sugar traded in PNG are imported from overseas markets, therefore the ICCC has considered using the FAO prices for sugar as the appropriate international benchmark price for its price monitoring of sugar in PNG.

In this review, the ICCC has noted that the FAO benchmark prices of sugar (ICE 11) have been increasing since 2018, with steep increases from 2021, as shown on **Figure 9** below.

Figure 9. International Sugar Prices (PGK Per Tonne) from 2007 to 2022.



Source: https://www.fao.org/giews/food-prices/international-prices/en

The changes in international sugar prices does have an impact on the prices of sugar traded in the PNG market.

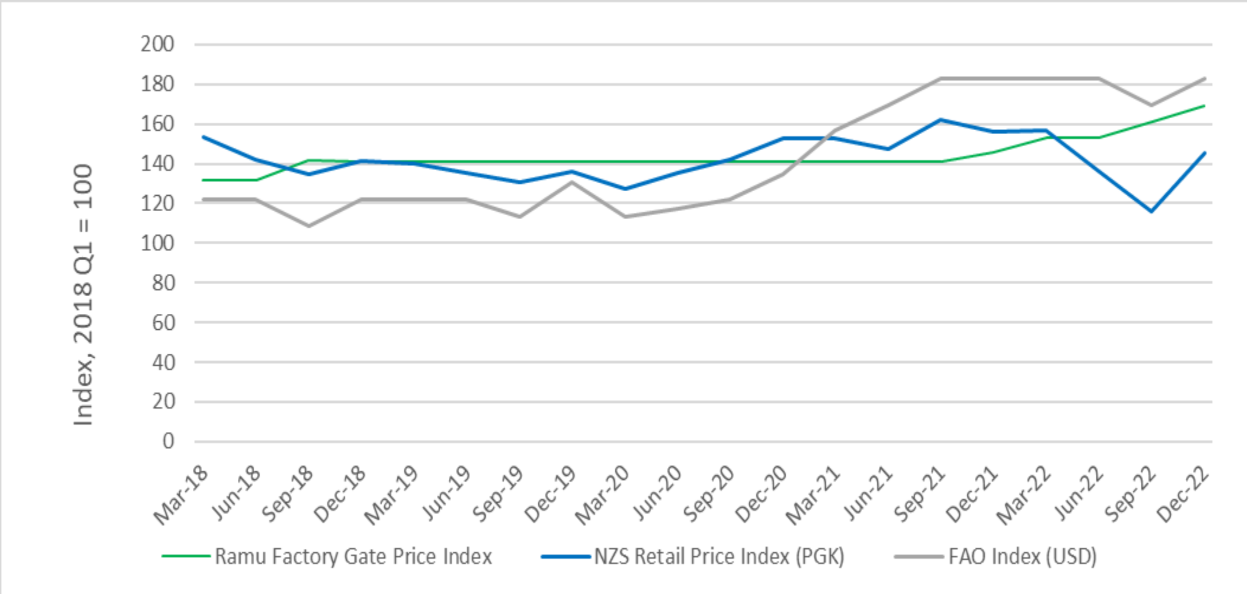
6.2 Monitoring of Factory-Gate Prices

In the 2018 review, the ICCC decided to continue price monitoring and decided to use the FAO sugar prices index and the New Zealand Statistics[17] **(NZS)** retail prices index for the 1.5 kg white sugar as the appropriate benchmark prices for monitoring the factory gate prices of Ramu sugar[18].

[17] https://infoshare.stats.govt.nz/

The retail prices for sugar that are published by NZS are actually the lowest retail prices in New Zealand, and are not New Zealand's factory-gate prices. Based on these price-monitoring arrangements, the consolidated result is shown in **Figure 10**.

Figure 10: Consolidated Prices Monitoring Results for sugar from 2018 to 2022



Source: ICCC Price monitoring template

The consolidated prices monitoring results indicate that domestic sugar prices were stable from 2018 to 2021 despite increases in global prices since 2020. The increase in the FGPs from 2021 to 2022 are attributed to the covid-19 pandemic and other in country costs. In 2022 prices continued to increase mainly due to the Russia-Ukraine conflict, which disrupted global supplies.

The divergence in the NZS retail prices index in 2022 against the FAO prices and the FGPs are driven by issues specific to New Zealand and not the international market for sugar. This is because the FGPs for Ramu sugar were relatively consistent with the FAO prices index.

Overall, the ICCC notes that the domestic sugar prices were generally consistent with the international benchmark prices, especially the FAO prices index, over the last five years.

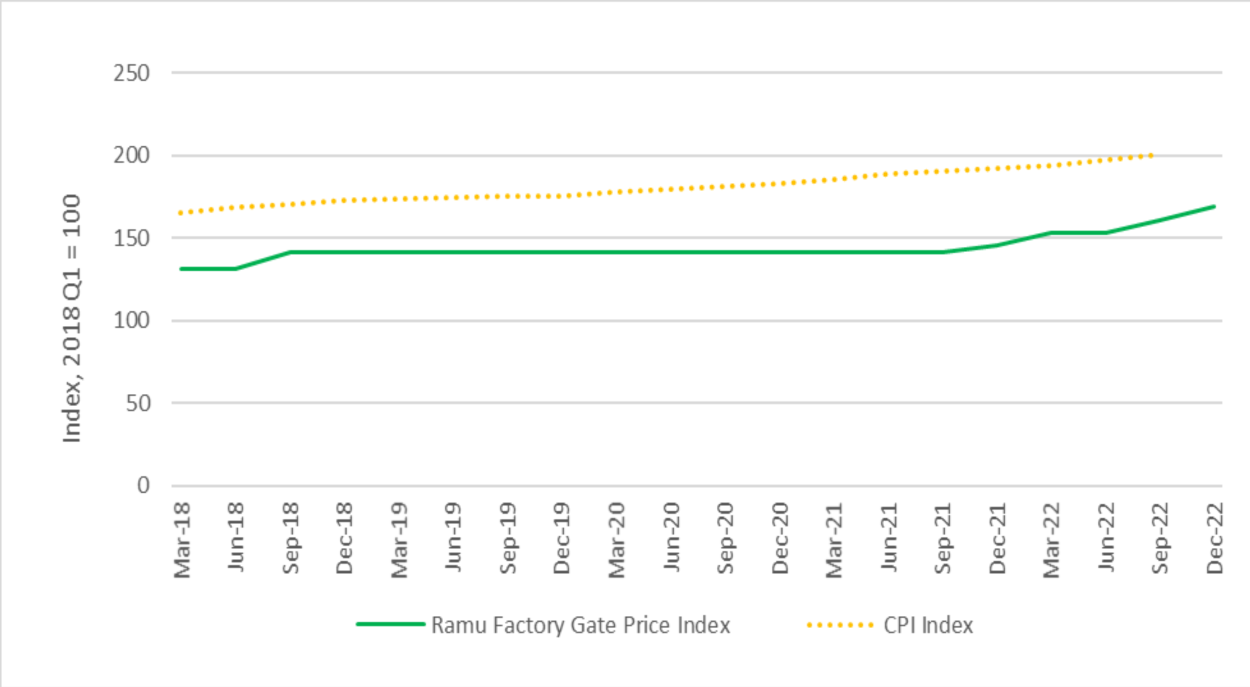
Conclusion

Based on the consolidated price monitoring results for 2018 to 2022, the ICCC concludes that sugar prices in the country is competitive.

6.3 Sugar Prices Compared to Consumer Prices Index

The change in the headline inflation index versus the sugar prices index is set out in Figure 11.

Figure 11: Sugar Prices Index Versus PNG Headline CPI



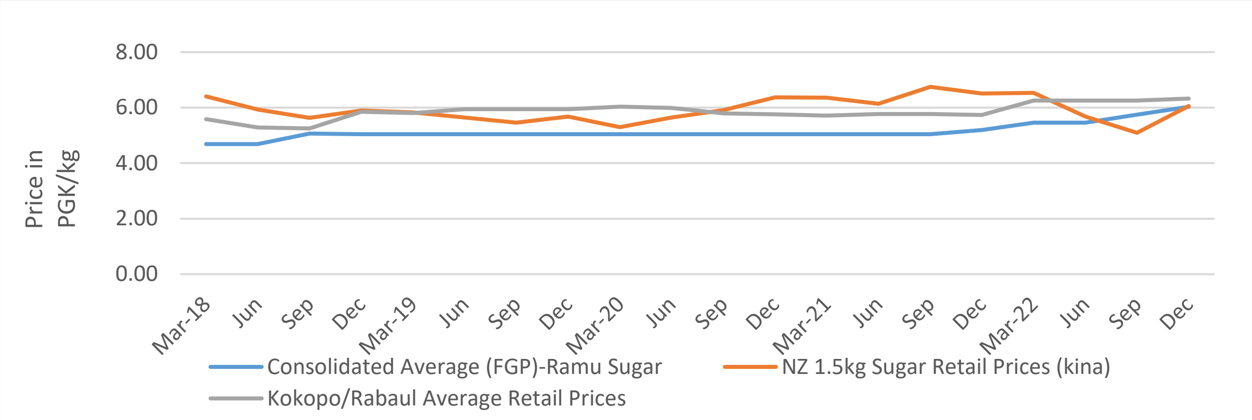
Despite the continuous increase in the headline inflation index since 2018, sugar prices have remained relatively stable before subsequently increasing slightly over the last two years. This shows that the increase in the headline inflation index was mostly driven by price increases for other goods within the basket of goods used to measure inflation in the country. This could also indicate that sugar production, supply and pricing in the country are efficient and competitive.

6.4 Retail Prices

Besides monitoring the factory-gate prices, the ICCC also collects the wholesale and retail prices for Ramu sugar in Port Moresby, Lae, Mt. Hagen and Rabaul/Kokopo. For this analysis, the ICCC has used the prices data for Rabaul/Kokopo because the data set is complete.

In order to compare retail prices against the factory-gate prices, we have calculated the average prices for Ramu sugar's 1kg package and compared them with the average FGPs for the same 1kg package. Where there are missing data, the ICCC has inferred average retail prices based on the available prices. The retail prices are also compared with the NZS retail prices index (in PGK) to review the prices trend at the retail level.

Figure 12: Average Factory Gate Prices for RAIL Verses Average Retail Prices for Kokopo/Rabaul Verses NZ Retail Prices.



Source: ICCC Price monitoring template

Since 2018, the domestic sugar prices at both the factory gate and retail levels were relatively consistent, as shown in Figure 12. The NZS retail prices index was also relatively consistent during the first three years before diverging over the last two years due to factors that may be specific to New Zealand.

Conclusion

This observation reaffirms the ICCC view that retail market in the country is competitive.

7. DOMESTIC ROAD AND SEA FREIGHT

The domestic road and sea transport play a key role in the economic and social development of the country. It facilitates the movement of goods and services in the country from the points of production to points of sales, and sugar is no exception. The freight costs involved also have significant impacts on the retail prices of sugar. Therefore, it is important that the level of competition in the transport sector is considered in this review.

During the Flour Industry and Rice Industry Pricing Reviews undertaken in 2022, the ICCC concluded that competition in the coastal shipping market was likely to be limited. There are only two companies offering services on most routes, and one of these companies owns shares in the other hence, the market was considered less contestable. On the other end, the road transport market was competitive due to low barriers to entry. However, the high freight costs were driven by poor road conditions and law and order issues rather than by competition.

In this Report, the ICCC has used the same framework that was used in the 2022 Flour and Rice Industry Pricing Reviews to assess the competitive nature of the sea and road freight market in the country.

7.1 Analysis of Coastal Shipping

The coastal shipping services have a significant impact on the final prices of goods and services since most of the goods are transported through coastal shipping services. It is the ICCC's view that the competitive nature of the freight market in the country has gone through some significant changes. For example, in the shipping industry, Steamships Trading Company (STC) has a controlling interest in Consort Express Lines. As both companies operate similar services directly or indirectly via subsidiary companies, this is likely to have had an impact on competition in markets in the shipping industry. As per the previous reviews and studies conducted, the ICCC notes that status quo remains in the shipping market.

GFI advised in this review that the coastal shipping services in PNG has improved but it is still a big challenge getting products around the country[19]. Service levels are not great and capacity has been limited. GFI further stated that other shipping operators should be encouraged to enter the coastal shipping market. RAIL further indicated that there is monopoly at certain ports and certain issues such as ship delays, unavailability of containers and handling and freight costs are so high. It appears that there is some competition on the Port Moresby to Lae route. However, for other sea routes there are only two operators.

The ICCC is not in a better position to conclude that coastal shipping industry in PNG is competitive. The ICCC is of the view that competition in coastal shipping is likely to be limited. This is because there are only two companies offering this service on most routes and one of these companies owns shares in the other, hence the market appears to be a monopoly.

The ICCC is generally concerned about this finding. Therefore, the ICCC is conducting another review into the Coastal Shipping Industry in PNG this year to see if this finding is still relevant. This review will also identify issues that can be addressed to encourage competition in the market and also potentially bring down the cost of sea freight in the country.

[19] GFI submission to the Public Notice, 2023 Sugar Industry Pricing Review.

7.2 Analysis of Road Transport

Road transport plays a crucial role in bringing the supply of goods and services to the remote areas of the country. GFI stated in its submission to this review that road transport is a concern particularly the road connecting the Highlands from Lae. The security risks, high repair and maintenance, and high turn-around times for return trips are driving the high costs for logistics. Furthermore, RAIL also indicated that poor road infrastructures are inflating the freight cost. None of the submissions received has explicitly mentioned anything about competition in in transport industry. However, from our own internal market study conducted into the Trucking Market [20]in PNG, the ICCC has noted that transportation of general cargoes such as sugar is competitive. This view is supported by the findings in the recent reviews conducted in 2022. The ICCC has also noted that there are more players in the road transport industry than in the coastal shipping industry. However, as mentioned above, the road freight costs for the Highlands region of the country are quite high. These high transport costs are attributed to the deteriorating road conditions of the Highlands Highway and security issues along the highway. The ICCC does not have any information to assess whether or not road freight prices are costs reflective. However, it is reasonable to expect road freight to be relatively competitive on most routes because of low entry barriers.

Conclusion

The ICCC's conclusions are as follows:

- Effective competition is unlikely on most coastal shipping routes; and
- Low barriers to entry for road transport services indicates that there is competition in road routes.

[20] 2016 Trucking Market Study

8.0 ONGOING REGULATION

The ICCC must decide what form of regulation is required in the sugar market or whether or not regulatory intervention is required at all. The ICCC has the following choices:

- Continue to operate prices monitoring arrangements in their present form;
- Vary the existing regulatory arrangements;
    - This may mean changing the current monitoring arrangements or
    - Introducing some form of prices control; or
- Terminate the existing prices monitoring arrangements.

8.1 Form of Regulation

In response to the Issues Paper, a number of stakeholders indicated their views on the current price monitoring arrangement enforced by the ICCC.

In its submission GFI[21] indicated that the current prices-monitoring arrangement has been effective, while markets are competitive and prices are sensitive.

RAIL advised in its submission that it does not have any issues with the current prices-monitoring arrangement and has pledged to fully support the work of the ICCC.[22]

Despite the ICCC's conclusion that the sugar market is fairly competitive, there is still a need to continue monitoring RAIL's the ex-factory gate prices against retail prices. This is because RAIL is the only manufacturer and the price leader in the sugar industry, especially at the retail level.

Given RAIL's position in the market, price monitoring will enable the ICCC to continue to have visibility over the market to ensure there is a level playing field for suppliers at the retail end of the market. This will in turn benefit consumers in the long run in terms of choice, quality and affordability.

Therefore, over the next regulatory period, the ICCC will continue to monitor the ex-factory gate prices for Ramu sugar against the international benchmark prices. The ICCC will also continue to use the FAO prices for ICE 11(futures contract prices) and the NZS retail prices index for the 1.5kg white sugar as the appropriate international benchmark prices.

Over the next five years, the ICCC will only monitor the ex-factory gate prices of Ramu Mill White Sugar in 1kg packages because it is the best proxy for all sugar packages and sizes. The ICCC's decision is due to improved competition in the domestic sugar market. Furthermore, the 1kg package is considered to be more relevant for comparison with the NZS retail prices index for 1.5kg white sugar.

[21] GFI submission on the Public Notice, 2022 Sugar Industry Pricing Review.
[22] RAIL submission on the Public Notice, 2022 Sugar Industry Pricing Review.

9. FINAL DETERMINATIONS

The ICCC is undertaking this review under Section 32A of the PR Act. Under the provision of Section 25C (3) of the PR Act, the ICCC makes the following Final Determinations:

- RAIL is expected to continue providing the ex-factory gate prices (inclusive of all discounts) for the 10kg bale for the 1kg packages of Ramu Mill White Sugar only, over the next five years.

- The ICCC will continue monitoring the retail prices for the 1kg Ramu Mill White sugar in retail stores across PNG.

- The declaration of prices and prices monitoring arrangements will apply for a five-year period, commencing 1st January 2024 and will expire on 31st December 2028.

- The form of prices regulation to be applied will be:

    - Prices-monitoring of the ex-factory prices (inclusive of all discounts) of RAIL's 10kg bale for 1kg packages Ramu Mill White sugar packages, under the provisions of Section 32A of the Act.

    - RAIL will continue to provide the ICCC with quarterly factory gate prices updates.

    - The ICCC will then compare the price changes to the 1.5kg white sugar (SAP0125) package, as published by the NZS, and the FAO prices for ICE 11.

    - In the event that there is a deviation between the movements of benchmark prices against the factory-gate prices, the ICCC will require RAIL to provide information on the reasons for the divergence. Such information should include the impact of the following costs and activities on the overall prices of sugar in PNG:

        - landing costs;
        - labour costs;
        - source of supply;
        - packaging costs;
        - energy costs;
        - advertising and marketing costs; and
        - other direct costs.

The deviation between the prices for RAIL and the benchmark prices will be measured as the percentage change for the corresponding quarters. Where this change is deemed to be significant, the ICCC will request the information outlined above.

APPENDIX 1 – SECTION 21 (2A) PR ACT

When making an order under subsection (1) of the PR Act, the ICCC shall have regard to:

A. the need to protect consumers and users of the declared goods or services from misuse of market power in terms of prices, pricing policies (including policies relating the level or structure of prices) and the standard of the declared goods or services;

B. the cost of making, producing or supplying the declared goods or services;

C. the desirability of encouraging greater efficiency in relation to making, producing or supplying the declared goods or services;

D. the need to ensure an appropriate rate of return on any investment in relation to the declared goods or services;

E. the borrowing, capital and cash flow requirements of persons making, producing or supplying the declared goods or services;

F. considerations of demand management and least- cost planning;

G. existing standards of quality, reliability and safety of the declared goods or services, and the desirability of encouraging improvements in those standards;

H. the effect of any proposed order on general prices inflation over the medium term;

I. the economic and social impact of any proposed order; and

J. any other matters the ICCC considers relevant.

APPENDIX 2 – LIST OF SUBMISSIONS

Submissions on the Public Notice (Issues Paper) and Final Report were received from the following stakeholders:

- Clover International (PNG) Ltd
- Coca Cola EuroPartners Ltd
- GFI
- HomeState Co-operation Limited
- Institute of National Affairs
- JKT Lim Ltd
- Paradise Company Ltd
- Patricks Trading Ltd
- PNG Customs
- RAIL
- RH Trading Limited
- Seeto Kui Limited