



Sugar

Research Team

Saniya Tauseef | Senior Manager Research
Mohammad Abdul Rehman Khan | Supervising Senior
Haris Azeem | Associate Research Analyst

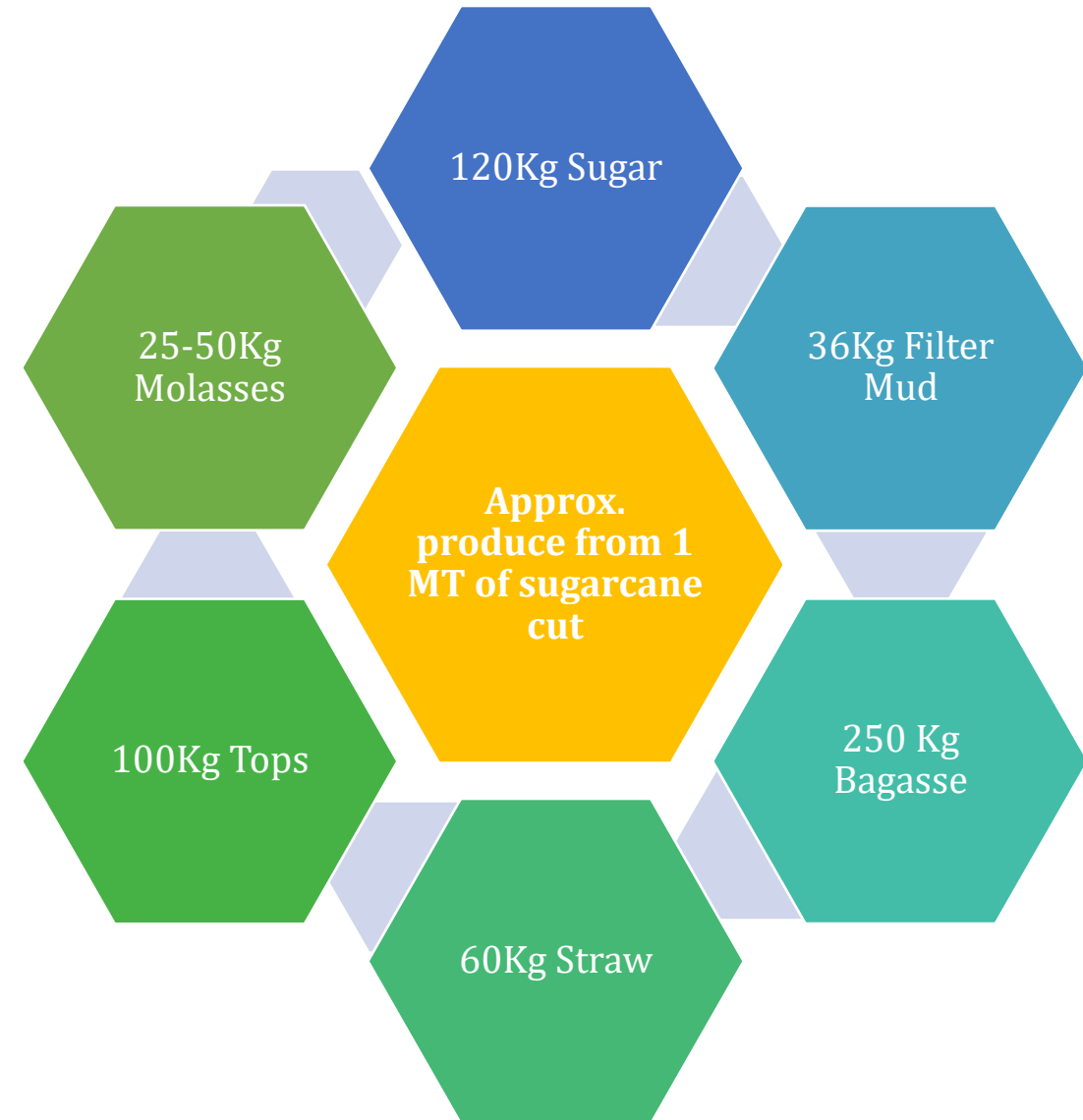


Contents	Page.	Contents	Page.
Introduction	1	Demand & Supply	14
Global		Local Prices	15
Overview	3	Business Risk Margins	16
Production	3	Financial Risk	17
Consumption	5	Ethanol	21
Trade	6	Production Cycle	23
Prices	7	Duty Structure	24
Local		Porters 5 Forces Model	25
Sector Snapshot	9	SWOT Analysis	26
Sugarcane Overview	10	Regulatory Framework	27
Sugarcane Cost of Production	11	Rating Curve	28
Sugarcane Province wise Distribution	12	Outlook	29
Sugarcane Prices	13	Bibliography	30

Sugar

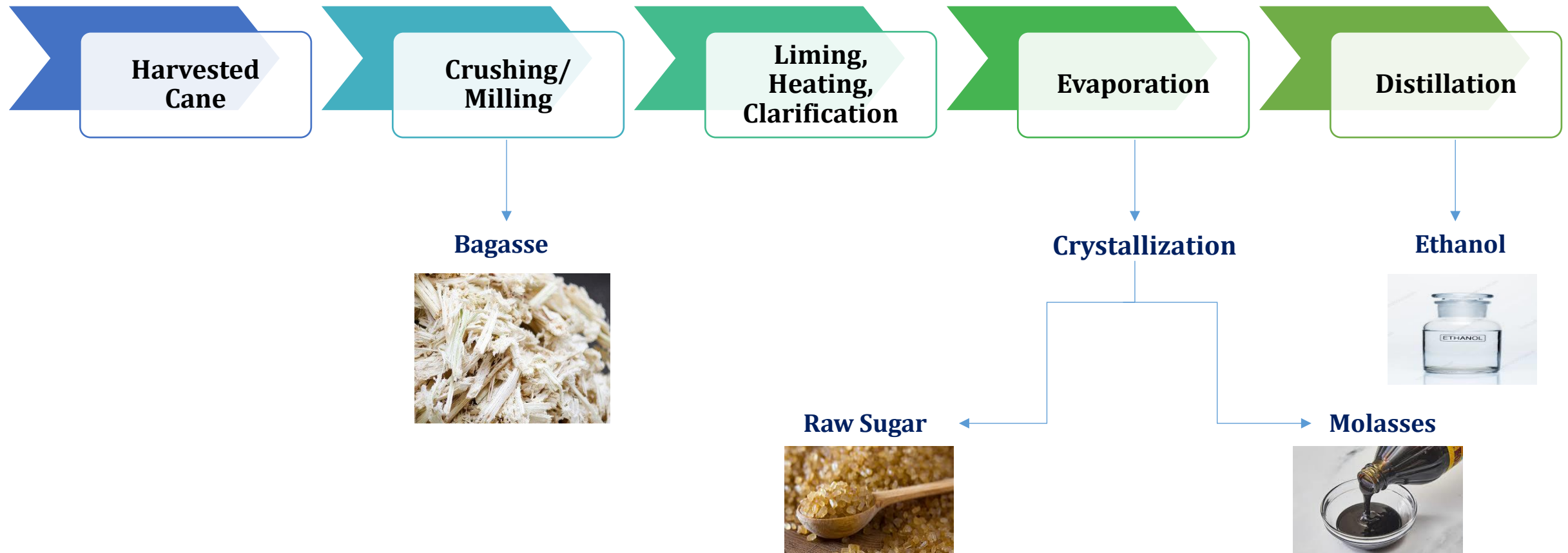
Introduction

- Sugar is produced through a refining process that removes impurities and other substances from sugarcane or sugar beet to form a sweet crystalline food supplement.
- The by-product of this procedure is the formation of white refined sugar, which is commonly used in households and food manufacturing. It is highly soluble and widely used as a sweetener in cooking, baking, and beverages.
- There are several stages of this procedure: cane offloading, cane preparation, juice extraction, juice clarification, evaporation, sugar crystallization, centrifugal separation, steam generation and renewable power generation.
- The important byproducts of sugar are molasses - a thick syrup left after crystallization used for ethanol production, and bagasse which is used as a biofuel or in the production of paper and building materials.
- Sugarcane is mainly cultivated in tropical regions and provides nearly ~85% of sugar produced in MY25 worldwide (other ~15% being produced by sugar beets).
- Around ~75% of the sugar produced globally is consumed in the food and beverages production and households while the rest is utilized in biofuel production.
- Sugarcane cultivation and processing currently provides employment for over ~100mln people across the world in MY25.



Sugar

Production Process



Sugar

Global | Overview

- During MY24, global sugar production was recorded at ~175.7mln MT compared to ~179.2mln MT in MY23 (down ~2.0% YoY), as the total production of India, Thailand & Pakistan dropped by ~20.3%, ~20.4% and ~4.4% YoY respectively. . Consumption also declined by ~0.2% YoY to ~176.1mln MT (MY23: ~ 176.5mln MT).
- Global sugar production had recorded a negative CAGR of ~0.9% during MY20-24, while consumption increased at a CAGR of ~1.0%.
- During MY24, sugar imports clocked in at ~59.9mln MT (YoY increase of ~2.0%) while exports were similar to imports as they also stood at ~59.9mln MT, showing a YoY decline of ~3.4%.
- In MY24, sugar closing stock declined to ~45.1mln MT (MY23: ~46.2mln MT) on the back of lower production levels during the year.
- Global sugar production is expected to rise in MY25 to ~180.8mln MT, while consumption is set to decline slightly to ~175.4mln MT, because even though harvests increased but health-conscious consumers cut back is leading to lower demand, while economic slowdowns weaken food and beverage purchases.
- In line with this, global sugar exports are forecasted to rise by ~13.5% YoY during MY25, with Brazil maintaining its position as the top sugar exporter, while China & Indonesia being the largest importers.

Disclaimer: The difference in sugar imports and exports reflects the varying marketing years across countries, reporting timelines, and the frequency of USDA publications.

Global Sugar Overview (mln MT)						
Particulars	MY20	MY21	MY22	MY23	MY24	MY25*
Opening Stock	53.2	47.8	50.3	47.6	46.2	45.1
Production	166.5	180.3	180.7	179.2	175.7	180.8
Imports	54	58.2	56.2	58.7	59.9	56.6
Total Supply	273.7	286.2	287.2	285.5	281.8	282.5
Exports	53.4	64.1	65.1	62	59.9	68.0
Consumption	171.4	171.1	173.5	176.5	176.1	175.4
Total Demand	224.8	235.2	238.6	238.5	236	243.4
Closing Stock	47.8	50.3	47.6	46.2	45.1	38.3

Sugar

Global | Production

- In MY24, Asia accounted for ~32.9% of the global sugar production at ~60.2mln MT (MY23: ~38.4% share; ~69.2mln MT), while South America was the second-largest producer with ~25.1% share (or ~46.0mln MT) (MY23: ~23.9% share; ~43.1mln MT).
- India remains the largest sugar producer in Asia, with a ~49.0% share in regional production (~29.5mln MT), whereas Brazil (largest producer of sugar globally) formed ~89.2% share (~41.0mln MT) in South America.
- When comparing globally, both countries represented ~16.1% & ~22.4% of the overall sugar production during MY24 (MY23: ~20.5%, ~21.1%, respectively). During MY24, the share of Brazil increased by ~6.1% YoY, while India's share declined by ~21.5% YoY.
- India & Brazil collectively accounted for ~38.5% of global sugar production in MY24 (MY23: ~41.6%).
- During MY25, global sugar production is expected to increase to ~180.8mln MT (up ~2.9% YoY), due to increased production in Brazil, China, Thailand and the EU. Factors such as favorable weather conditions, increased sugarcane cultivation area & improved crop yields in these countries, will be the main drivers to the expected production growth.
- Pakistan's share in the global sugar production was down to ~3.6% (MY23: ~3.8%), down by ~5.3% YoY. For MY25, this is forecasted to further decline to ~3.2%.

Global Sugar Production (%)						
Period	MY20	MY21	MY22	MY23	MY24	MY25*
Asia						
India	17.4%	18.7%	21.5%	20.5%	16.1%	15.3%
China	6.2%	5.9%	6.0%	5.0%	5.4%	6.0%
Thailand	5.0%	4.2%	6.3%	6.2%	4.8%	5.5%
Pakistan	3.2%	3.3%	4.3%	3.8%	3.6%	3.2%
Other Asia	3.2%	2.8%	3.2%	2.9%	2.9%	3.1%
Total Asia	35.0%	35.0%	41.4%	38.4%	32.9%	33.0%
South America						
Brazil	18.2%	23.3%	21.8%	21.1%	22.4%	23.9%
Other South America	3.1%	2.9%	3.2%	2.8%	2.7%	2.9%
Total South America	21.3%	26.2%	25.0%	23.9%	25.1%	26.8%
North America	7.8%	8.0%	8.7%	7.7%	7.3%	7.4%
Central America	2.2%	1.9%	2.0%	1.9%	1.9%	1.8%
Europe	11.2%	9.2%	10.4%	8.8%	10.1%	10.6%
Russia	4.7%	3.1%	3.9%	3.4%	3.6%	3.5%
Oceania	2.6%	2.4%	2.7%	2.4%	2.2%	2.1%
Other Regions	15.3%	14.0%	15.7%	15.1%	12.9%	13.4%
Total World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: *MY25 figure are provisional.

Source: USDA

Global | Consumption

- The top five sugar-consuming countries (as mentioned in the table) accounted for ~46.8% of global consumption during MY24 (MY23: ~47.0%), while also registering a YoY decrease of ~0.4%.
- India remained the largest sugar-consuming country with ~17.2% share in MY24 (MY23: ~17.0%). Although the share decreased, but its consumption increased by ~1.0% YoY to record at ~30.3mln MT (MY23: ~30.0mln MT), on the back The increase was supported by extreme summer heat, which boosted demand for beverages and confectionery, as well as heightened consumption during the general elections. India has witnessed sugar consumption growth at a CAGR of ~1.8% during MY20-24. During MY24, India’s sugar consumption per capita stood at ~20.9 Kg/Capita.
- Following India, the EU, China, and the USA account for the next largest shares of global sugar consumption, recording at ~9.3%, ~8.8% and ~6.5% respectively. Despite being the largest producer of sugar, Brazil ranks fifth in terms of sugar consumption. During MY24, Brazil’s sugar consumption was down ~7.4% YoY.
- For MY25, global sugar consumption is forecast to decrease by ~0.4% YoY, with India maintaining its spot as the largest sugar-consuming country, but with decreased sugar consumption (down ~2.6% YoY).

Top 5 Sugar-consuming Countries (mln MT)						
Countries	MY20	MY21	MY22	MY23	MY24	MY25*
India	27.0	28.0	29.0	30.0	30.3	29.5
EU	17.0	16.7	17.0	16.5	16.4	16.4
China	15.4	15.5	14.8	15.5	15.5	15.7
USA	11.1	11.0	11.3	11.5	11.4	11.0
Brazil	10.7	10.2	9.5	9.5	8.8	9.0
Sub-total	81.2	81.4	81.6	83.0	82.4	81.6
Others	90.2	89.7	91.9	93.5	93.7	93.8
Global Consumption	171.4	171.1	173.5	176.5	176.1	175.4

*Note: *MY25 figure are provisional*

Sugar

Global | Trade

- Brazil was the largest sugar exporting country with a share of ~54.3% in MY24 (MY23: ~45.5%). Thailand overtakes India as the second largest exporter of sugar, recording a share of ~7.7% during the same period (MY23: ~11.1%).
- Global sugar exports are expected to grow by ~13.5% YoY in MY25 as sugar production in Brazil & Thailand is forecasted to increase by ~6.6% & ~14.0% YoY respectively.
- Meanwhile, sugar exports for India are expected to decline by ~44.5% YoY in MY25, as production declined in India due to lower sugarcane yields and diversion toward ethanol production. (similar to Brazil).
- China & Indonesia were the largest importers of sugar in MY24, possessing equal shares in global imports at ~8.4%, with China showing a YoY increase of ~31.6%, while Indonesian imports declined by ~13.8% YoY.
- Global sugar imports are forecasted to decline by ~5.5% YoY in MY25, with US imports down ~22.9% YoY, the EU by ~4.8% YoY and India by ~33.3% YoY. This is owed to improved domestic production in key importing countries (the EU, China & Thailand) and higher inventories.

Global Sugar Exports (mln MT)						
Countries	MY20	MY21	MY22	MY23	MY24	MY25*
Brazil	19.3	32.2	26.6	28.2	32.5	34.9
Thailand	6.7	3.7	7.0	6.9	4.6	10.0
India	5.8	8.4	11.9	8.3	4.0	3.5
Australia	3.6	3.4	3.1	3.0	3.1	2.7
EU	1.5	1.3	1.2	0.9	2.1	2.1
Guatemala	1.9	1.4	1.7	1.4	1.2	1.3
Mexico	1.3	1.2	1.8	1.1	0.6	0.8
Others	13.3	12.5	11.8	12.2	11.8	12.7
Total	53.4	64.1	65.1	62.0	59.9	68.0

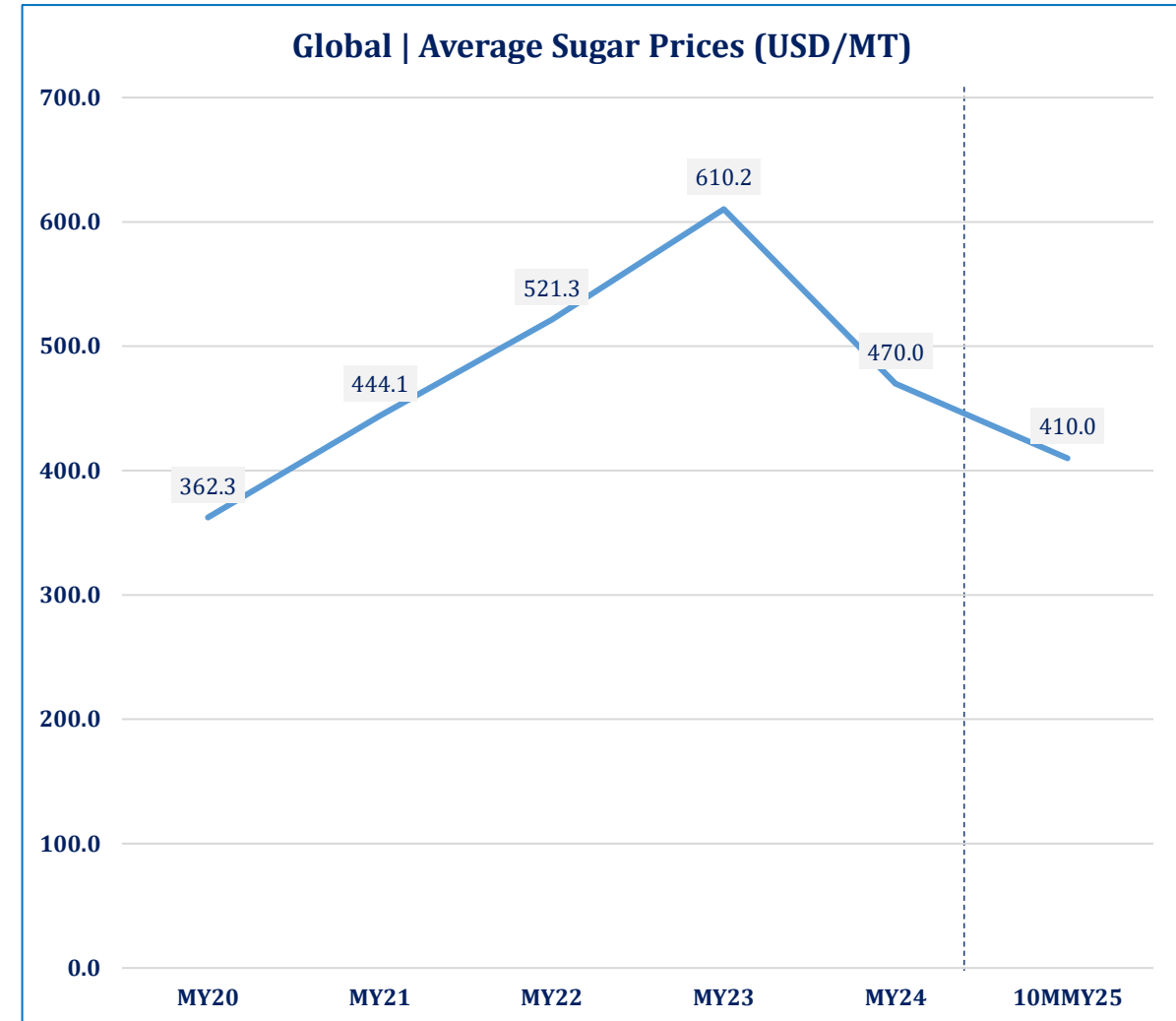
Global Sugar Imports (mln MT)						
Countries	MY20	MY21	MY22	MY23	MY24	MY25*
China	3.8	6.4	5.0	3.8	5.0	5.2
Indonesia	4.8	6.1	5.5	5.8	5.0	5.2
United States	3.8	3.0	3.3	3.3	3.5	2.7
EU	2.2	1.8	2.0	3.1	2.1	2.0
India	0.9	1.3	0.3	1.4	3.6	2.4
Malaysia	2.0	2.1	2.0	2.1	1.8	2.2
Bangladesh	2.4	2.4	2.8	2.1	2.0	1.8
Others	34.1	35.1	35.3	37.1	36.9	35.1
Total	54.0	58.2	56.2	58.7	59.9	56.6

*Note: *MY25 figures are provisional*

Sugar

Global | Prices

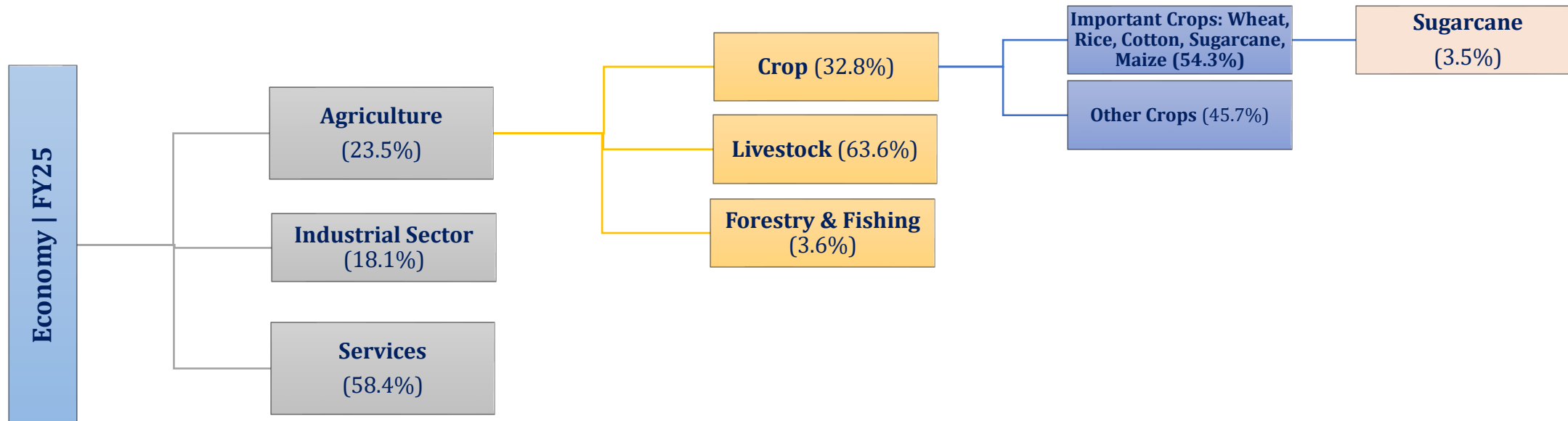
- Historically, global sugar prices have seen an increasing trend from MY20-MY23. However, the trend was reversed in MY24, as global average sugar prices dropped to USD~470.0/MT from USD~610.2/MT in MY23, a YoY decrease of ~23.0%. Meanwhile in 10MMY25, prices have further softened to USD~410.0/MT, down ~12.8% YoY.
- The decrease in MY24 was mainly caused by Brazil's influence in the global sugar market as world's top sugar exporter (~54.3% share), with record output of ~41.0mln MT (~7.8% YoY increase) combined with a ~15.2% surge in exports drove prices down, with average export rates of the country falling from USD~506.0/MT in MY23 to USD~457.0/MT in MY24.
- On the demand side, sluggish consumption growth in the EU & some parts of Asia, mainly due to weaker economic activity, health-driven sugar taxes and substitution with alternatives, reduced the buying momentum. At the same time, improved global logistics and lower freight costs removed the supply-chain bottlenecks that had previously inflated costs.
- During MY25, global consumption is expected to decline further by ~0.4% YoY, while sugar production is expected to increase by ~2.9 YoY (on the back of higher production by top producers like Brazil), further increasing global supply. Therefore, prices are forecasted to maintain a downward trajectory due to rising global inventories and exportable surpluses.



Sugar

Agriculture | Overview

- In FY25, Pakistan's nominal GDP stood at PKR~114.7trn (FY24: PKR~105.7trn), with a real GDP growth of ~2.7% YoY, slightly surpassing IMF's projection of ~2.6%. This indicates a moderate improvement in the overall economy of the country. The Industrial sector in FY25 held ~18.1% share in the GDP while the Services sector held the highest share in the economy, at ~58.4%.
- The Agriculture sector of Pakistan's share dropped from ~24.0% in FY24 to ~23.5% in FY25. The sector's overall growth remained very low, recording at ~0.6% (FY24: ~6.4%), wherein the important crops segment contracted by ~13.5% YoY in FY25 (FY24: ~17.1% YoY growth), as the production volumes of major crops (Wheat, Rice, Cotton, Sugarcane, and Maize) depleted due to climate stress, high input costs, poor policy support and reduced profitability for farmers..
- During FY25, the "Important crops" contributed ~17.8% (FY24:~20.7%) to the agriculture sector and ~4.2% to the country's GDP while other crops accounted for ~13.9% (FY24:~13.5) in the total agriculture sector and ~3.3% in the GDP. Sugarcane production was down ~3.9% YoY in FY25 to ~84.2mln MT, with an overall share of ~3.5% in the agriculture sector.



Sugar

Local | Snapshot

- As one of Pakistan’s leading agricultural and cash crops, sugarcane contributed ~3.5% to the overall agriculture sector, with ~0.8% share in the country’s GDP during MY24 (MY23: ~0.9%).
- Total sugar production clocked in at ~6.8mln MT during MY24, an increase of ~1.3% from MY23. Meanwhile, sugar imports remained almost minimal in MY24, as domestic supplies were sufficient to meet local demand. During the year, less than ~0.01 million MT was allowed for export. In MY25, sugar production is estimated to decline by ~7.4% YoY whereas exports have so far recorded around ~0.8mln MT.
- During MY24, sugar consumption clocked in at ~6.4mln MT, a decline of ~6.7% YoY (MY23: ~6.0mln MT). During MY20-24, consumption increased at a CAGR of ~3.8%. Pakistan’s per capita consumption of sugar stood at ~27.0 kg during MY24 (MY23: ~27.9 kg). For MY25, sugar consumption is estimated to increase by ~3.1%.
- During the ongoing MY25, sugarcane production is expected to close around~84.2mln MT (~3.9% decline), mainly due to adverse climatic conditions (scant rainfall and intense temperatures). During this period, the sugarcane cultivation area has remained the same, while the yield declined to ~71.8 MT/HA.

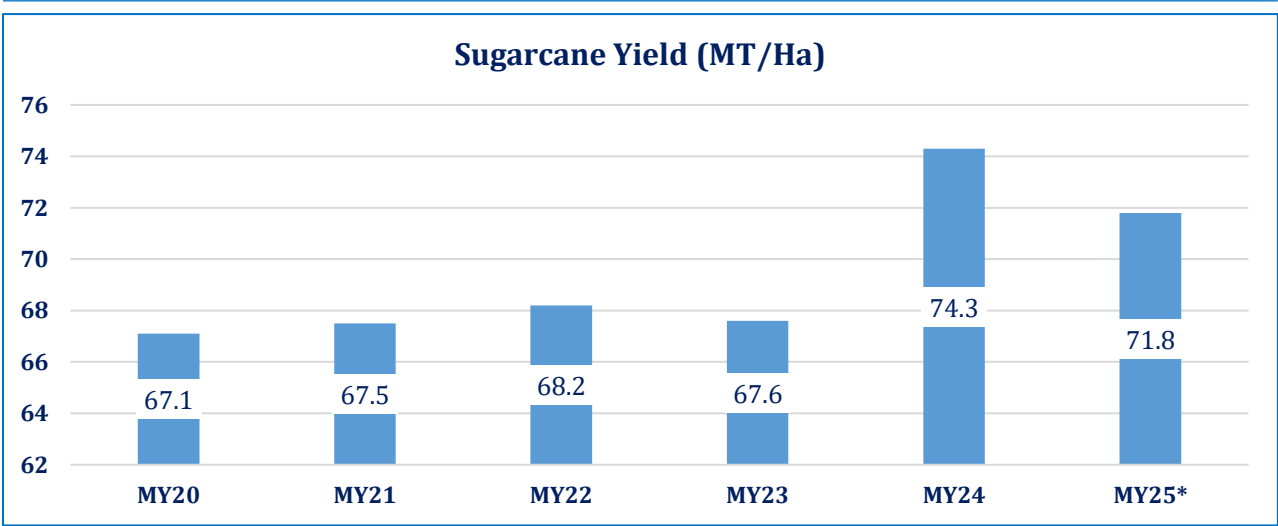
Particulars	MY20	MY21	MY22	MY23	MY24	MY25*
Sugarcane						
Contribution to Nominal GDP	0.6%	0.7%	0.8%	0.9%	0.8%	0.8%
Value Added to Agriculture	2.9%	3.4%	3.7%	3.7%	3.5%	3.5%
Area Cultivation (mln Ha)	1.0	1.2	1.3	1.3	1.2	1.2
Production (mln MT)	67.1	81.0	88.7	88.0	87.6	84.2
Yield (MT/Ha)	67.1	67.5	68.2	67.6	74.3	71.8
Sugar						
Production (mln MT)	4.9	5.6	7.9	6.7	6.8	6.3
Total Imports (mln MT)	0.0	0.3	0.3	0.0	0.0	0.0
Consumption (mln MT)	5.5	5.5	5.9	6.1	6.4	6.6
Total Exports (mln MT)	0.0	0.0	0.2	0.2	0.0	0.8
Market Structure	Competitive					
Association	Pakistan Sugar Mills Association					

*Note: *MY25 figures are provisional.
MY=FY*

Sugarcane | Overview

- The sugarcane production for MY24 decreased from ~88.0mln MT to ~87.6mln MT due to reduced area cultivation in period recording at ~1.2mln Ha (down ~0.4% YoY).
- Sugarcane yield increased ~9.9% YoY to ~74.3MT/Ha in MY24 (MY23: ~67.6MT/Ha). This came on despite lower production due to an effective combination of supportive agricultural policies by the taken by the GoP.
- During MY25, sugarcane farmers received fairly good minimum prices at an average of PKR~408.3/40Kg across all three major provinces (Punjab, Sindh & KPK).
- Sugarcane production is expected to drop by ~3.9% YoY in MY25, recording at ~84.2mln MT mainly due to adverse climatic conditions (below-average precipitation and elevated temperatures). Yield is also expected to decline by ~3.4% YoY to ~71.8MT/Ha (~3.4% YoY), despite cultivation area set to expand by 1.1% increase over the previous year.

Local Sugarcane Dynamics						
Particulars	MY20	MY21	MY22	MY23	MY24	MY25*
Cultivation Area (mln Ha)	1.0	1.2	1.3	p	1.2	1.2
Production (mln MT)	67.1	81	88.7	87.9	87.6	84.2
Yield (MT/Ha)	67.1	67.5	68.2	67.6	74.3	71.8



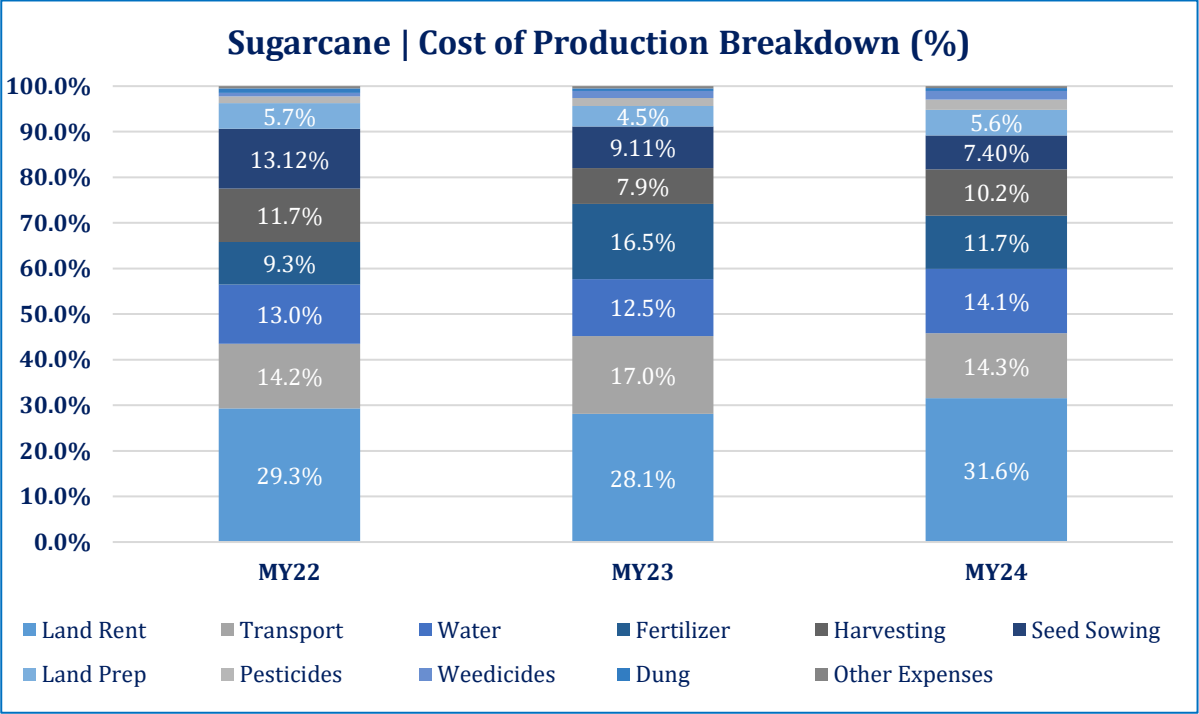
*Note: *MY25 figures are provisional*

Sugar

Sugarcane | Cost of Production

- During MY24, sugarcane’s average cost of production increased to PKR~547,688.9/Ha (MY23: PKR~350,977.8/Ha), showing a YoY increase of ~56.0%, mainly due to a surge in inflationary pressure.
- The cost of fertilizers clocked in at PKR~63,866.7/Ha during MY24 (MY23: PKR~57,804.9/Ha), a YoY increase of ~10.5% YoY, while the cost of transport increased to PKR~78,074.1/Ha, up ~30.7% YoY.
- In MY24, the expenses associated with water, harvesting, transport and land rent registered YoY increases of approximately ~75.5%, ~101.7%, ~30.7% and ~75.0%, respectively.

Sugarcane Average Cost of Production (PKR/Ha)			
Operations/Inputs	MY22	MY23	MY24
Land Rent	98,765.4	98,765.4	172,839.5
Transport	47,654.3	59,733.3	78,074.1
Water	43,829.6	44,004.9	77,266.7
Fertilizers	31,234.6	57,804.9	63,866.7
Harvesting	39,449.4	27,696.3	55,866.7
Seed Sowing	44,185.2	31,970.4	40,540.7
Land Prep	19,054.3	15,733.3	30,777.8
Pesticides	4,896.3	6,204.9	12,163.0
Weedicides	2,723.5	5,335.8	10,604.9
Cost of Dung	3,197.5	2,029.6	3,417.3
Other Expenses	1,661.7	1,698.8	2,271.6
TOTAL	336,651.9	350,977.8	547,688.9



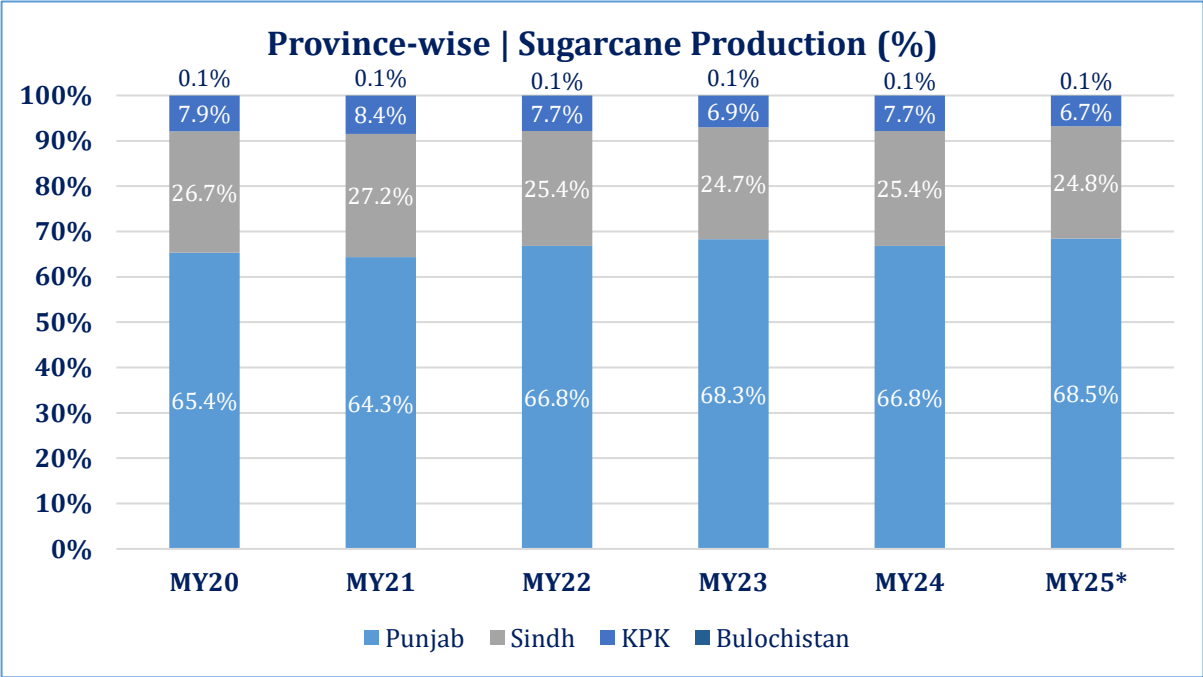
Note: *1 acre = 0.405 hectare

Sugar

Sugarcane | Province-wise Distribution

- Pakistan cultivates sugar crops in two distinct planting seasons: the spring season (February–March) and the autumn season (September–November). As a tropical crop, its cultivation is concentrated primarily in Punjab, Sindh and Khyber Pakhtunkhwa (KPK).
- Overall, the area under cultivation decreased by ~10.5% during MY24. The area cultivated in Punjab declined to ~0.8mln Ha (MY23: ~0.9mln Ha) mainly due to delayed/underpayment by mills, pricing uncertainties and farmers shifting to other crops (Wheat, Rice & Cotton). While in Sindh the area cultivated remained the same at ~0.3mln Ha.
- In MY24, Punjab remained the leading producer of sugarcane, accounting for ~66.8% of national output (~52.5mln MT), Sindh contributed ~25.4% (~20.0mln MT), while Khyber Pakhtunkhwa share was at ~7.7% (~6.09mln MT). In MY25, Punjab’s share is expected to increase to ~68.5%, while Sindh and Khyber Pakhtunkhwa’s shares to drop to ~24.8% & ~6.7%, respectively.

Sugarcane Planting Time		
Province	Spring Crop	Autumn Crop
Punjab	15th Feb to 3rd week of Mar	Sep
Sindh	1st Feb to 15th Mar	Sep-Oct
KPK	15th Feb-3rd week of Mar	Sep



Sugar Mills Overview (MY24)		
Province	No. of Sugar Mills	Operational (%)
Punjab	46	91%
Sindh	38	87%
KPK	06	86%
Total	90	89%

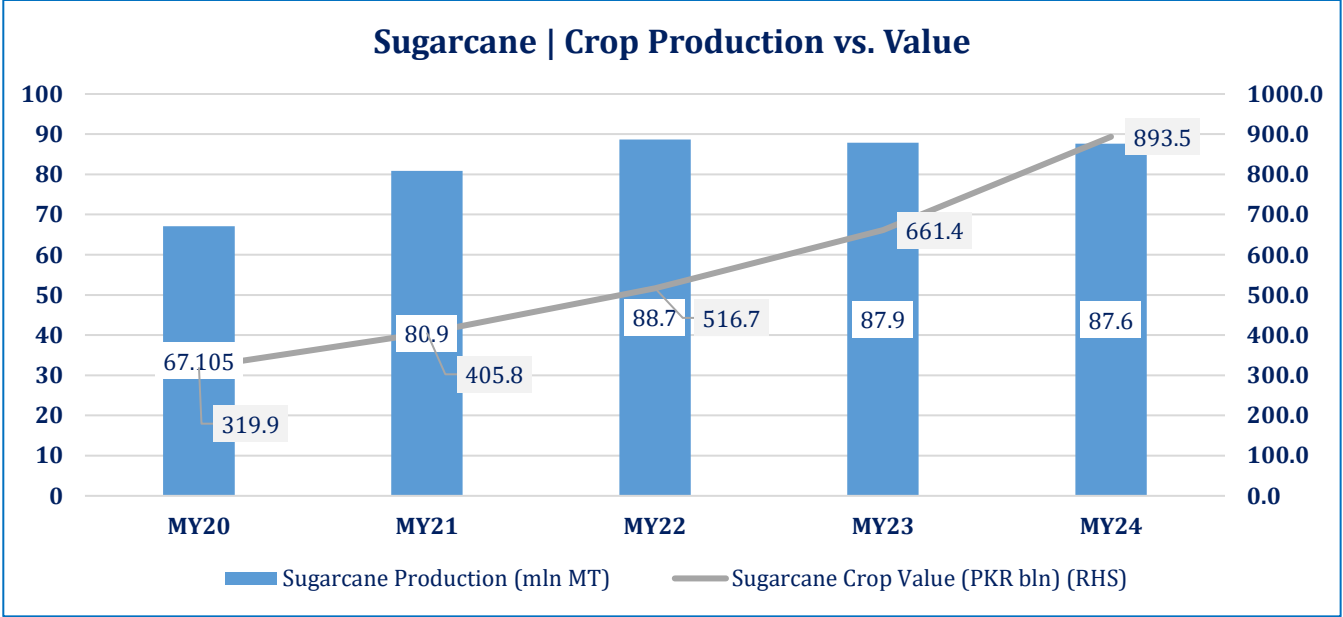
*Note: *MY25 figures are provisional*

Sugar

Local | Sugarcane Prices

- An upward trend was seen in the value of sugarcane. Overall, sugarcane crop value increased at a CAGR of ~22.8% during MY20-24.
- Despite less cultivation area and production levels in MY24, crop value increased to PKR~893.5bln, up ~35.1% YoY. This was majorly due to a ~9.9% YoY higher yield during this period. Moreover, the plants’ resilience and good support prices for sugarcane encouraged farmers to sustain cultivation and secure returns despite elevated production costs.
- Sugarcane support prices are set by the respective provincial governments, after considering the cost of production to farmers. In MY25, Punjab and Khyber Pakhtunkhwa fixed the rate at PKR~400/40kg, reflecting a ~33.3% YoY increase, while Sindh set a slightly higher rate of PKR~425/40kg, marking a ~40.7% YoY rise.
- These adjustments were largely driven by escalating input costs during MY24, stemming from elevated inflationary pressures in the start of MY24. The MSP’s remained similar for the three provinces in MY25, but may increase following rising farmer demands, expected higher input costs and government pressure to ensure adequate sugarcane supply amid concerns of lower production and potential domestic shortages.
- ~23.5%* of the market share is associated with an average annual sugar recovery rate of around 9.6% from sugarcane, which is broadly consistent with domestic industry standards.

Sugarcane Minimum Prices (at factory gate) - PKR/40Kg					
Province	MY21	MY22	MY23	MY24	MY25**
Punjab	200	225	300	400	400
Sindh	202	250	302	425	425
KPK	200	225	300	400	400
Average	200	233	301	408	408



Sugar

Local | Demand and Supply

- MY24 recorded an opening sugar stock of ~0.9mln MT (MY23: ~2.1mln MT), showing a YoY decline of ~57.1%. Lower production and higher domestic demand in MY23, reduced the carryover stock available for MY24.
- Sugar production increased at a CAGR of ~6.1% during MY20-24. Production during MY24 clocked at ~6.8mln MT (MY23: ~6.7mln MT), up ~1.3% YoY, while consumption also increased to ~6.4mln MT from ~6.1mln MT in MY23 (YoY increase of ~4.9%).
- During MY25, the production of sugar declined to ~6.3mln MT (MY24: ~6.8mln MT), a YoY decrease of ~7.4% . In the same year, Government of Pakistan exported ~0.8mln MT of sugar which created a severe shortage in supply in the country leading to inflated prices (mentioned later).
- This shortage has led to the government looking for imports from other countries such as Azerbaijan through a government-to-government arrangement, while also floating international tenders to attract competitive bids from global suppliers in order to stabilize domestic prices and ensure sufficient availability in the local market. These efforts are however hampered by the IMF's strict conditionalities on external borrowing and subsidies.

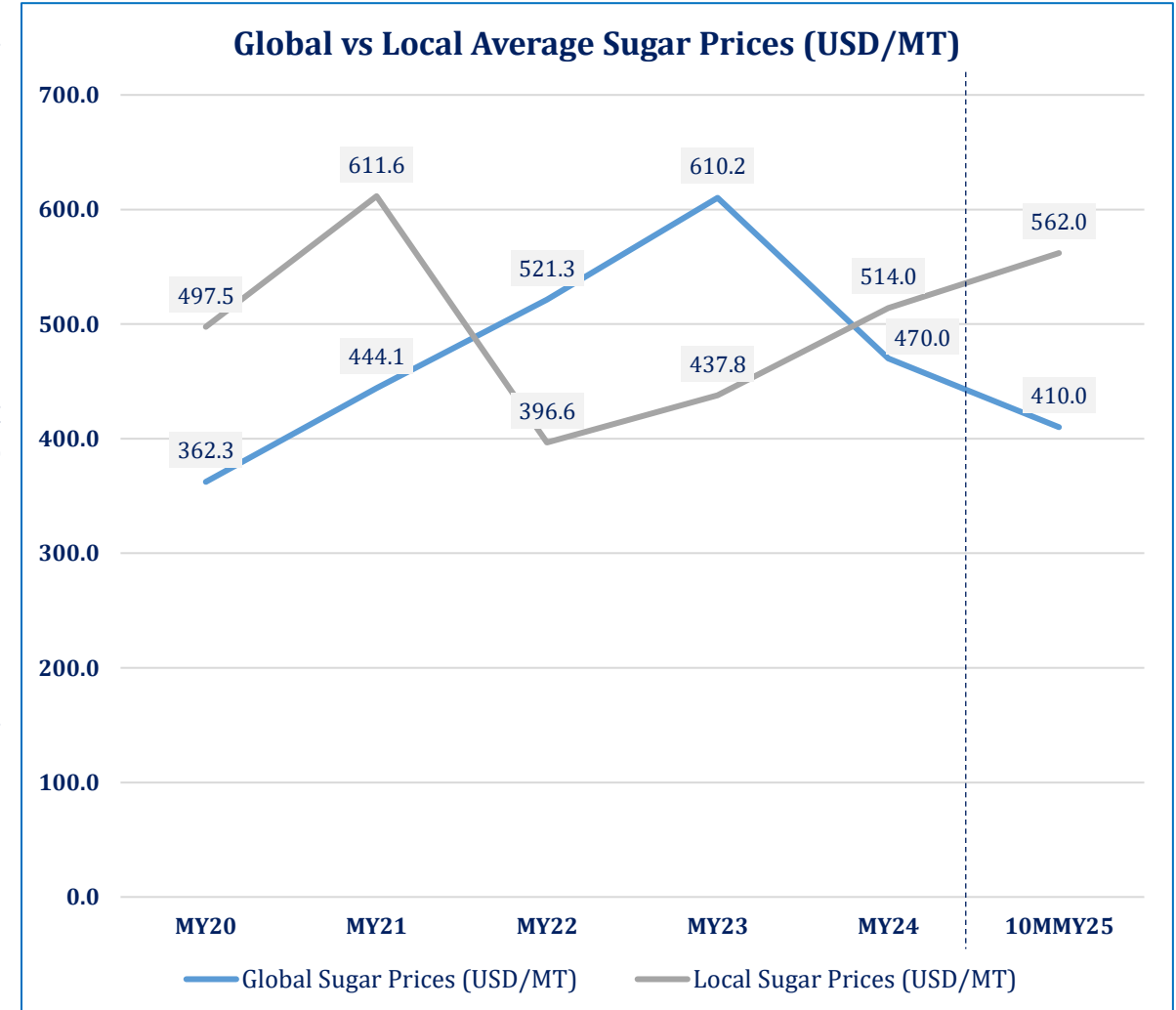
Sugar Production and Consumption (mln MT)						
Particulars	MY20	MY21	MY22	MY23	MY24	MY25*
Opening Stock	1.8	0.8	1.5	2.1	0.9	1.3
Production	4.9	5.7	7.9	6.7	6.8	6.3
Imports	0	0.2	0.3	0	0	0
Total Supply	6.7	6.7	9.7	8.8	7.7	7.6
Exports	0.2	0	0	0.3	0	0.8
Consumption	5.5	5.5	5.9	6.1	6.4	6.6
*Stock Adjustment	-0.2	0.3	-1.7	-1.5	0	0
Closing Stock	0.8	1.5	2.1	0.9	1.3	0.2
Consumption Per Capita (Kg)	25.0	24.6	26.2	26.2	26.7	27.4

Note: *Stock Adjustment reflects the difference between Closing and Opening stock reported by the PSMA, mainly during MY22 and MY23.

Sugar

Local | Prices

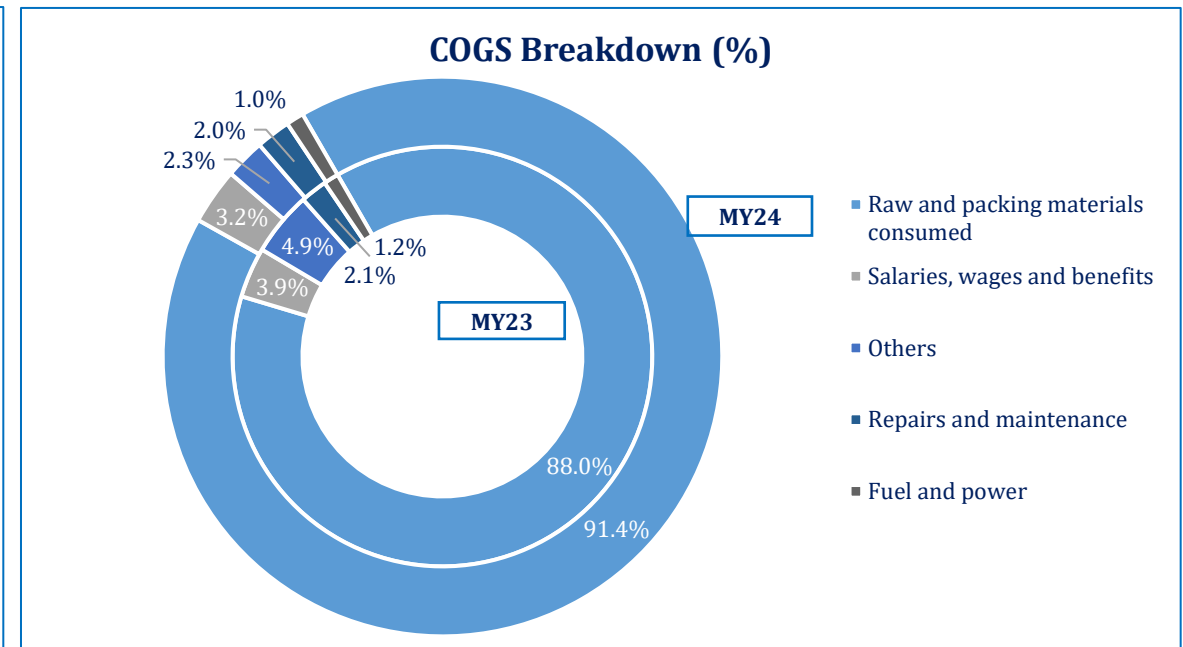
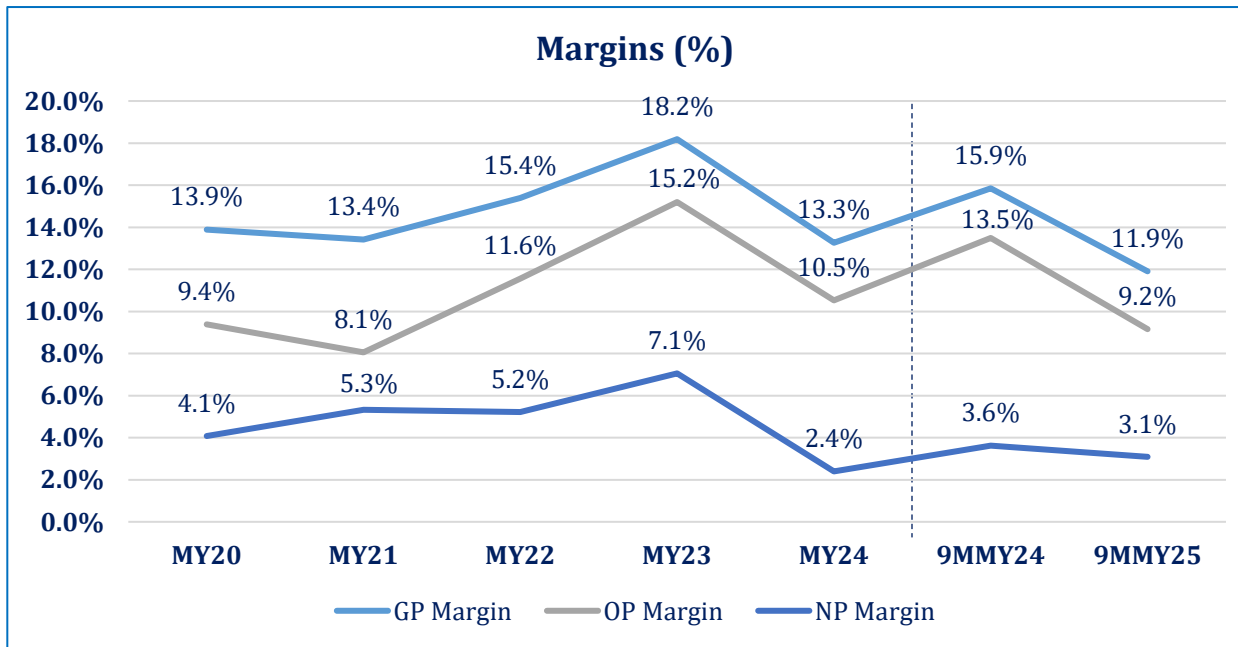
- Local prices for sugar have fluctuated over the years, mainly reflecting changes in domestic production, support prices and import policies. Prices have seen an upward trend after a sharp decline seen in MY22. In MY24, the local sugar prices recorded at USD~514.0/MT (MY23: USD~437.8/MT), a YoY increase of ~17.4%.
- Global and domestic prices have shown a contrasting trend in MY24, as the global prices declined starkly in MY24 (YoY decline of ~23.0%), while domestic prices increased. This came on the back of a slight increase in production (~1.3% YoY), while consumption for sugar increased by ~4.1% YoY leading to higher demand pressures. This was further exacerbated by hoarding and market mismanagement in the country.
- In 10MMY25, the same opposite relationship was seen between global and domestic prices, with global prices further (~12.8% YoY) declining while local prices saw even higher increase recording at USD~562.0/MT. This was mainly attributed to lower production, higher demand and a policy decision by the GoP on exporting ~0.8mln MT of sugar in the same year. This led to a shortage in the country which hiked up the prices in MY25.



Sugar

Business Risk | Margins

- During MY24, the sector's margins saw a downward trend. Gross margins decreased to ~13.3% (MY23: ~18.2%), showing a YoY decline of ~26.9%. This came on the backdrop of a ~31.9% YoY increase in cost of goods sold, despite a ~23.4% increase in sales revenue. Operating margins also declined in the period to ~10.5% from ~15.2% in MY23 (YoY decline of ~30.9%).
- Moreover, the net margins declined to ~2.4%, on the back of ~47.6% higher finance costs in the period. A similar downward trend was seen in 9MMY25 (compared to 9MMY24), as gross, operating & net margins for the sector decreased to ~11.9%, ~9.2% & ~3.1% respectively. Margins are largely affected by the escalating raw material costs and declining sugarcane yields.
- The sector relies heavily on raw materials as it comprised ~91.4% of total costs in MY24 (MY23: ~88.0%), mainly due to higher sugarcane prices in MY24. This is followed by Salaries, wages, and benefits at ~3.2% (MY23: ~3.9%).

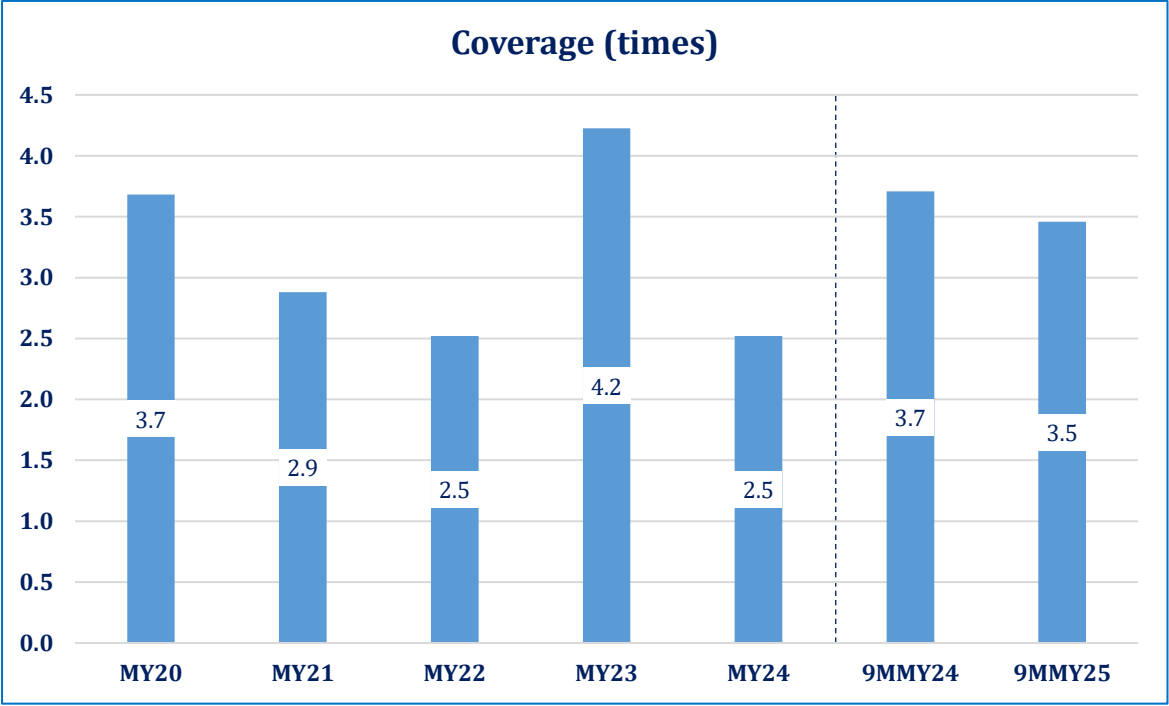
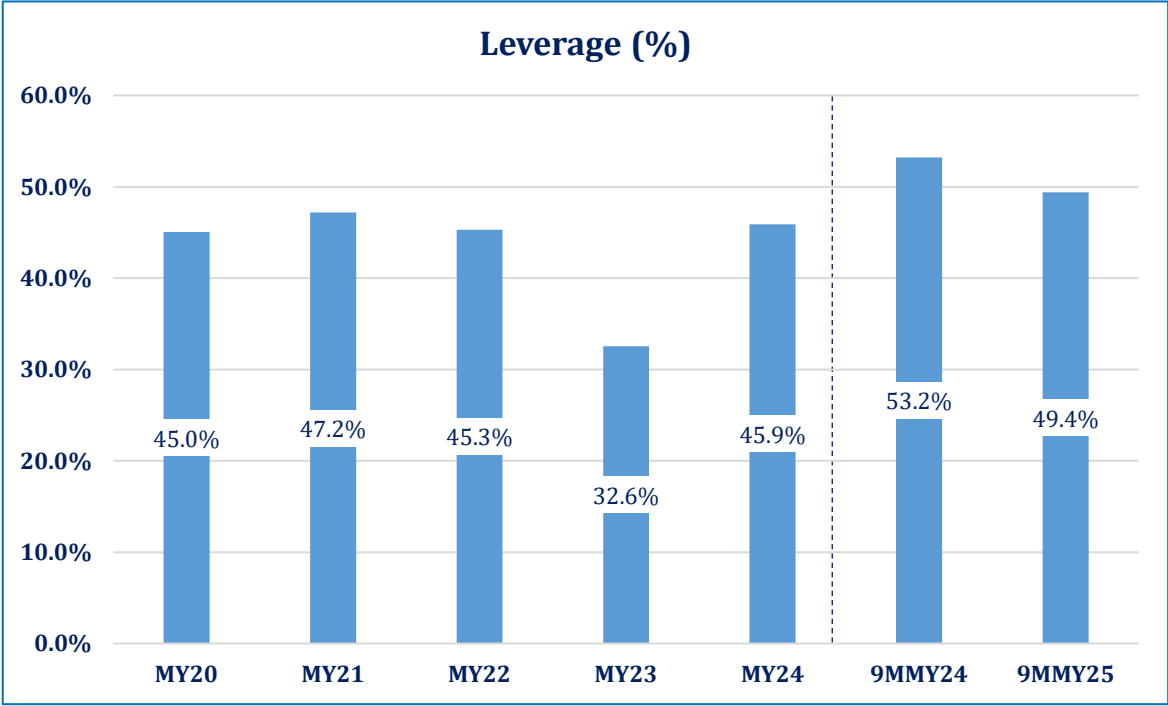


Note: Data is reflective of ~24 PACRA-rated/ Listed sector players in FY24, while margins are revenue-weighted.

Sugar

Financial Risk | Leverage and Coverage

- In MY24, the sector’s average leverage increased to ~45.9%, as total borrowings increased by ~63.7% YoY, increasing exposure to high interest rates and reducing flexibility for additional borrowing. During 9MMY25, leverage for the sugar sector recorded at ~49.4% (9MMY24: ~53.2%).
- Coverage declined sharply during MY24 to ~2.5x, due to a major increase in average finance costs by ~47.6% YoY, which reduced the sector’s ability to service debt. The operating profit for MY24 also declined by ~14.6% YoY. In 9MMY25, interest coverage recorded at ~3.5x (9MMY24: ~3.7x).

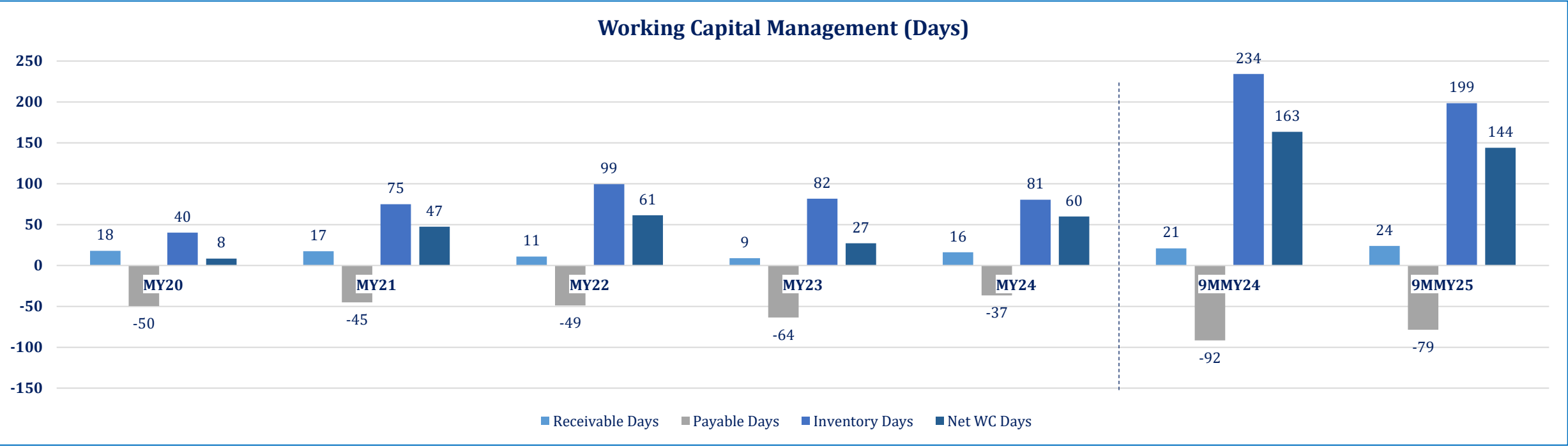


Note: Data is reflective of ~22 PACRA-rated/Listed sector players in FY24, while margins are revenue-weighted.

Sugar

Financial Risk | Working Capital Management

- Inventory levels of sugar mills are at peak during the crushing season, i.e., Dec-Feb and Apr-May. In MY24, the average working capital days of the sector increased to ~60 days (MY23: ~27 days). During 9MMY25, average working capital days recorded at ~144 days (9MMY24: ~163 days).
- During MY24, average inventory days marginally decreased to ~81 days (MY23: ~82 days) whereas average receivable days increased to ~16 days (MY23: ~9 days). Meanwhile, average payable days decreased to ~37 days (MY23: ~64 days).
- For 9MMY25, the average inventory days increased to ~234 days (9MMY24: ~199 days) whereas average receivable days increased to ~24 days (9MMY24: ~21 days) and average payable days decreased to ~79 days (9MMY24: ~92 days).

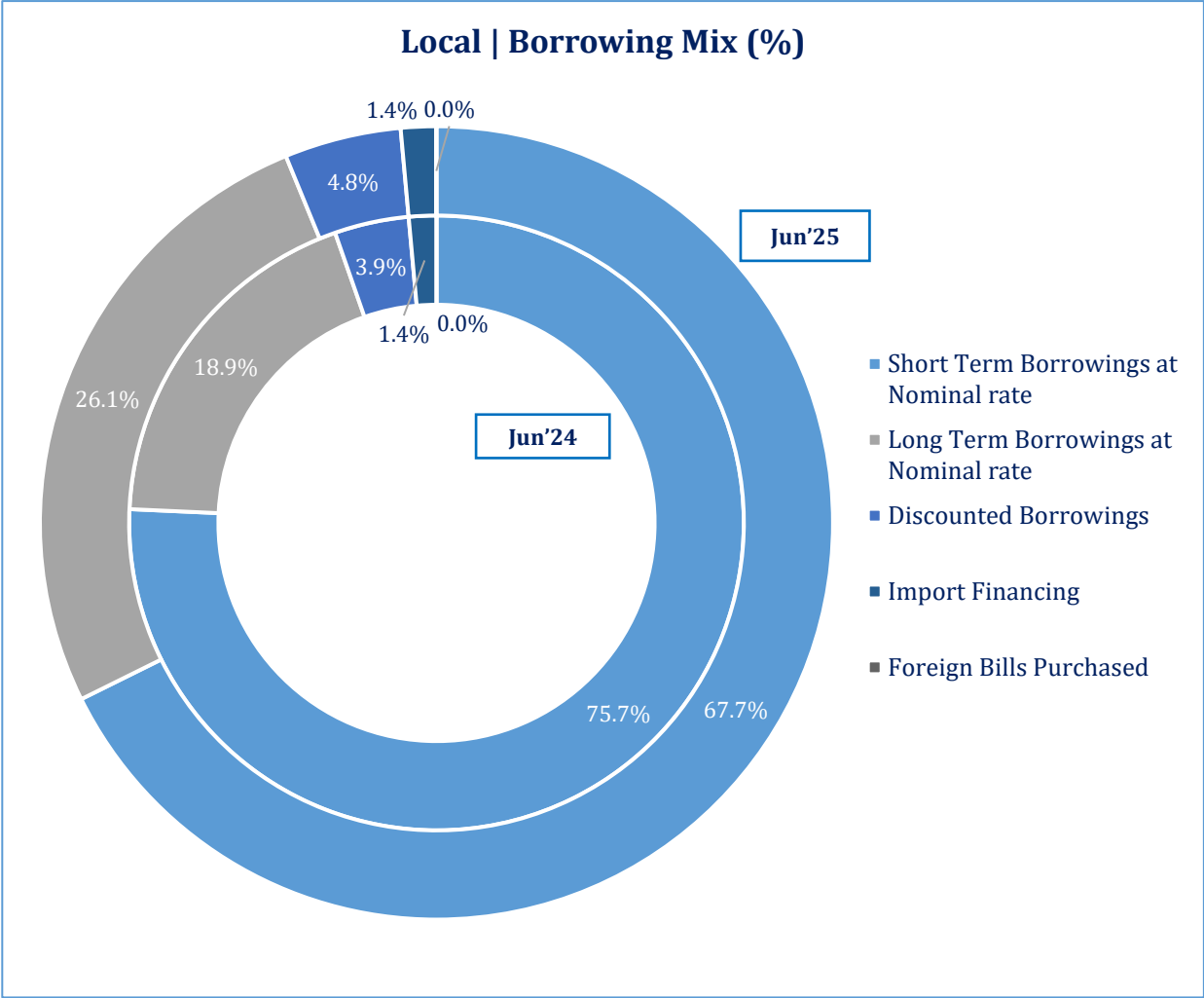


Note: Data is reflective of ~22 PACRA-rated/Listed sector players in FY24, while margins are revenue-weighted.

Sugar

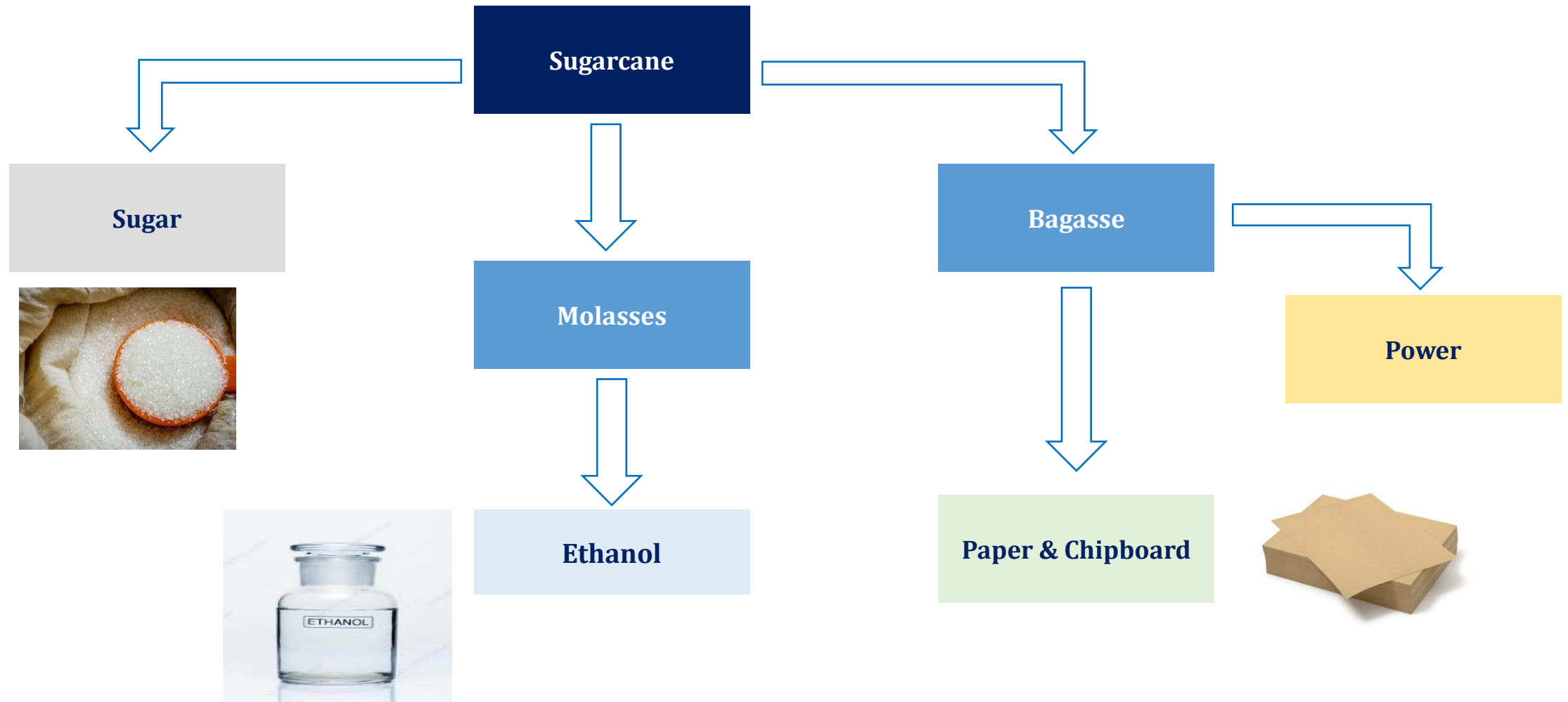
Financial Risk | Borrowing Mix

- As of End-Jun'25, the sector's overall borrowings stood at PKR~439.2bln, down ~9.6% YoY (End-Jun'24: PKR~485.6bln).
- The sector's borrowing share in the total private sector credit amounted to ~5.1% (End-Jun'24: ~6.4%).
- The overall infection ratio of the corporate sector clocked in at ~7.1% as at End-Mar'25. The Sugar sector's infection ratio stood at ~9.6% (End-Mar'24: ~9.2%), exhibiting more credit risk as compared to SPLY.
- Short-term borrowings (STBs) at nominal rate stood at PKR~297.2bln, down ~19.2% YoY, and held the largest share in the sector's borrowing mix at ~67.7% (End-Jun'24: ~75.7%).
- Long-term borrowings (LTBs) at nominal rate stood at PKR~114.7bln, up ~24.8% YoY and held a share of ~26.1% in overall borrowings (End-Jun'24: ~18.9%).
- Discounted borrowing (LTFF & EFS) stood at PKR~20.9bln (End-Jun'24: ~18.9bln), up ~10.2% YoY and held a share of ~4.8% in the overall borrowing mix.
- Meanwhile, import financing stood at PKR~6.3bln (End-Jun'24: PKR~7.0bln), down ~10.6% YoY as of End-Jun'25, and held ~1.4% share in the total borrowing mix during the period.



Sugar

By-Products | Process Flow

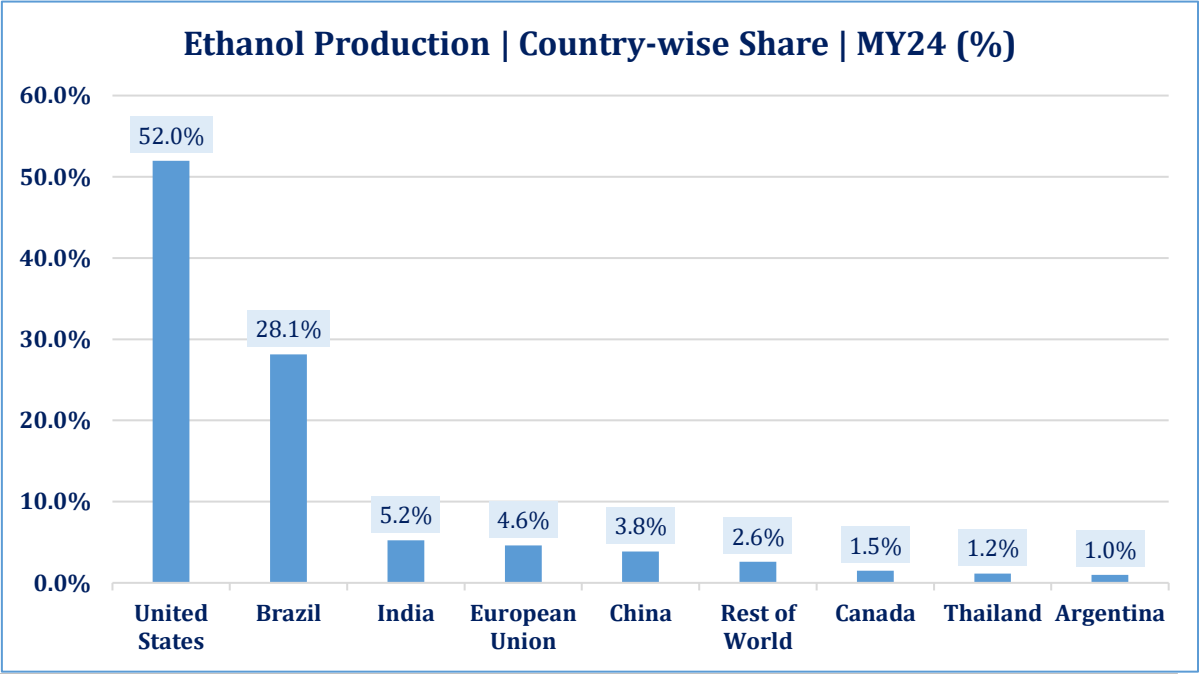


Sugar

Ethanol | Global Overview

- Ethanol is mainly derived from sugarcane and is used as a biofuel. During MY24, global Ethanol production clocked in at ~118.0bln liters (MY23: ~111.3bln liters), recording a YoY increase of ~6.0%. The USA & Brazil together produced ~80.1% of the total global ethanol during MY24 (SPLY: ~ 80.7%).
- During MY24, the USA ethanol exports increased to ~7.2bln liters from ~5.4bln liters in MY23 (YoY increase of ~33.3), while in value terms, the USA ethanol exports clocked in at USD~4.3bln (MY24: USD~3.8bln). Canada (~35%), the UK (~13%), the EU (~10%) & India (~10%) were the top destinations for USA ethanol export destinations.

Global Ethanol Production (bln ltr)					
Countries	MY20	MY21	MY22	MY23	MY24
USA	52.6	56.7	58.0	59.0	61.3
Brazil	30.6	27.6	27.9	31.2	33.2
India	2.0	3.3	4.6	5.0	6.2
European Union	5.0	5.3	5.5	5.4	5.4
China	3.6	3.4	3.5	3.6	4.5
Rest of World	2.3	2.6	2.7	2.9	3.1
Canada	1.6	1.6	1.7	1.7	1.8
Thailand	1.5	1.3	1.4	1.4	1.4
Argentina	0.8	1.0	1.2	1.1	1.2
Total	100.0	102.8	106.5	111.3	118.0

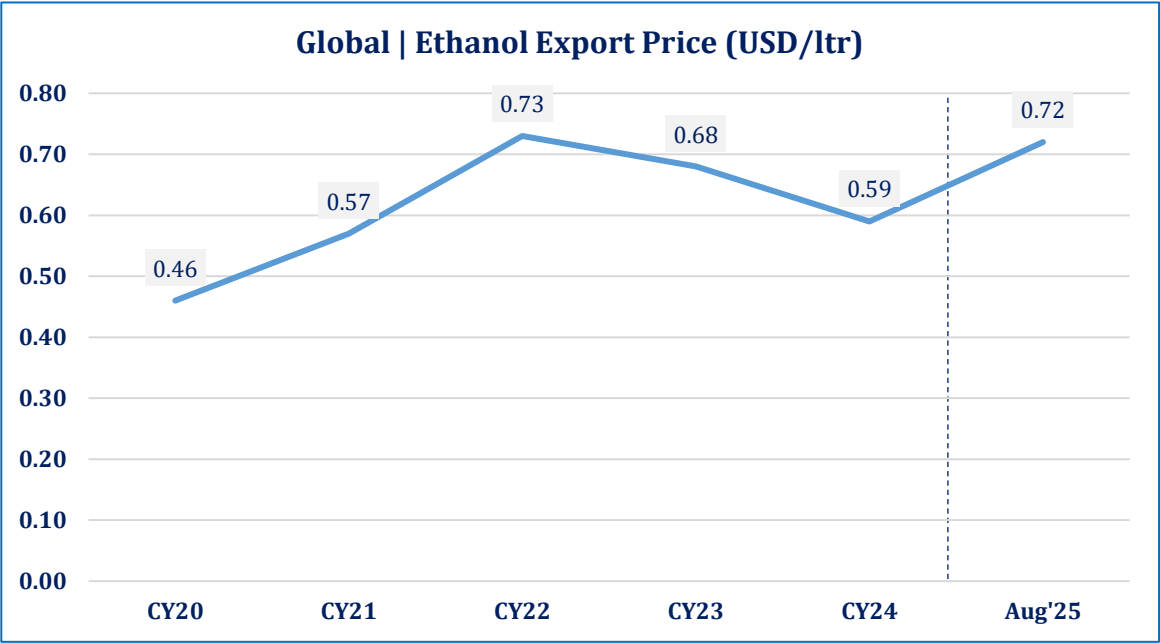
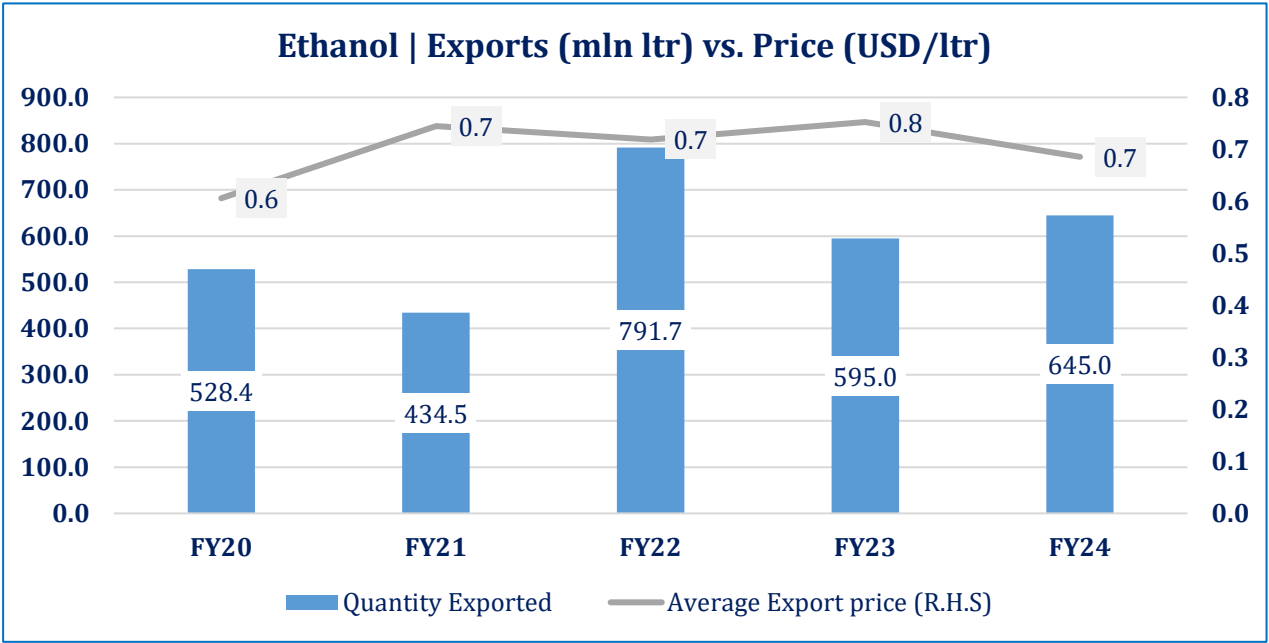


*Note: *1 Gallon=3.78 Liters*

Sugar

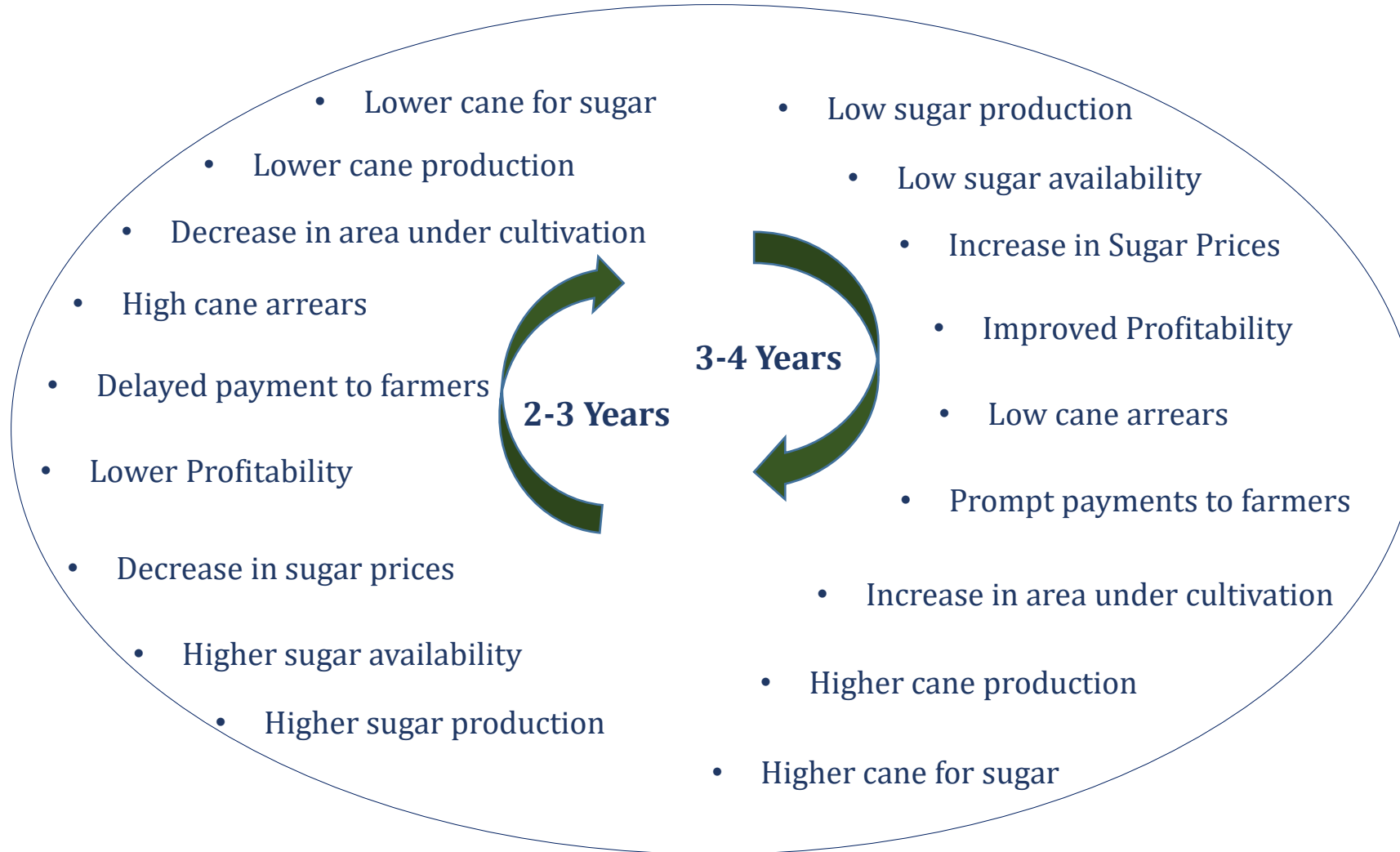
Ethanol | Local

- Ethanol production in Pakistan (derived primarily from molasses) is directly linked to sugarcane yields and remains highly sensitive to rupee fluctuations, as around ~90% of the output is exported.
- The average global price of ethanol was recorded at USD~0.59/liter in CY24, showing a YoY decline of ~13.2%. However, in Pakistan, ethanol export prices have consistently remained above the international average, primarily due to fluctuations in the rupee. During FY24, Pakistan's ethanol exports rose by approximately ~8.4% YoY, reaching around ~645.0 million liters (FY23: ~595.0 million liters). Global ethanol prices show an increase in Aug'25, to record at USD~0.72/ltr, mainly due to by strong demand and higher feedstock costs.
- Pakistan's total ethanol production capacity for MY24 recorded at ~622,222.2 MT, with major players such as Unicol ltd. (~56,000 MT), Noon Sugar Mills ltd. (~35,587.5 MT) and Habib Sugar Mills ltd. (~34,000.0 MT) amounting to ~9.0%, ~ 5.7% & ~5.5% of the total capacity, respectively.



Sugar

Production Cycle

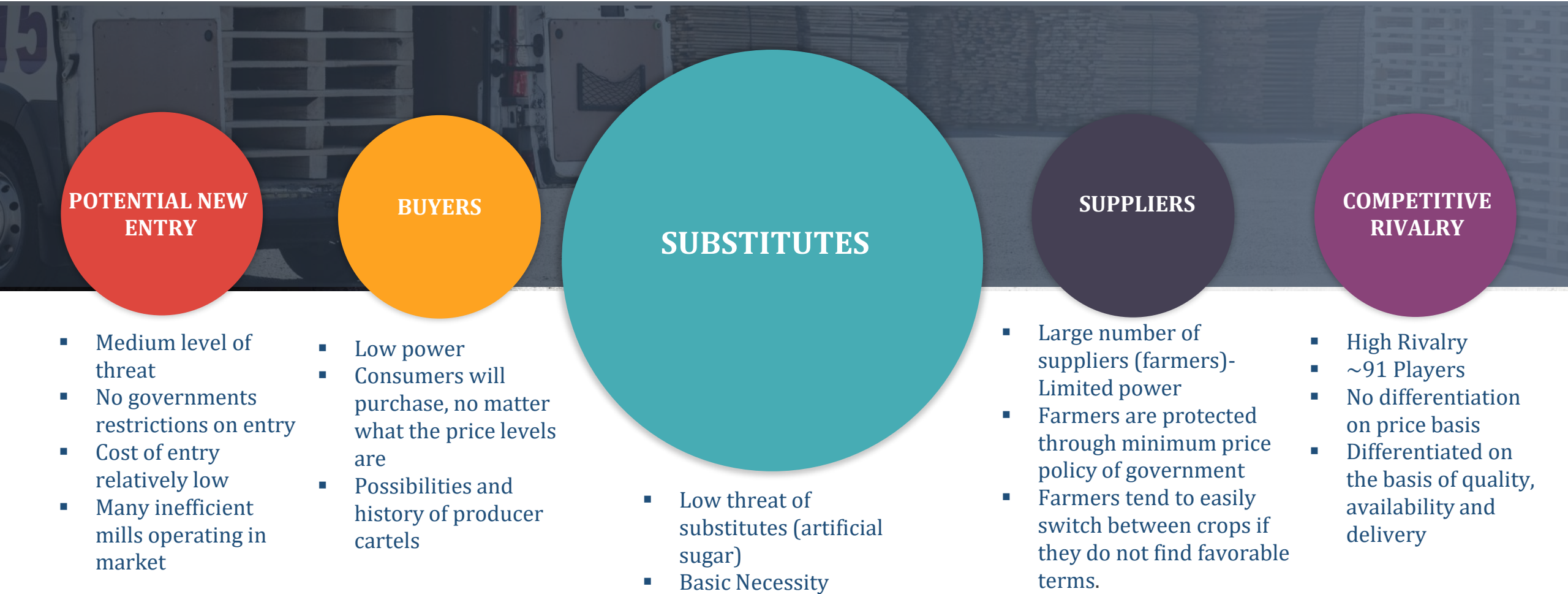


- Farmers in Pakistan enjoy limited power. Their cash cycle is mainly influenced by large sugar mills.
- Even in the current scenario of price spurs and high profitability margins, many farmers are paid much less than the minimum price levels set by the government.
- Payments of farmers are long deferred by some of the strong sugar mills.

Duty Structure

HS Code	Description	Custom Duty		Additional Custom Duty	Income Tax		Sales Tax	
		FY25	FY26	FY26	FY25	FY26	FY25	FY26
1701.9910	White Crystalline Sugar	20%	20%	4%	12%	12%	18%	18%
1703.1000	Cane Molasses	3%	0%	0%	12%	12%	18%	18%
1703.9000	Other Molasses	3%	0%	0%	12%	12%	18%	18%
2207.1000	Ethyl Alcohol	90%	90%	6%	12%	12%	18%	18%
2207.2000	Ethyl Alcohol	50%	50%	6%	12%	12%	18%	18%

Porters 5 Forces Model



Sugar

SWOT Analysis

- Availability of land and raw material
- Low cost skilled and unskilled labor
- Suitable weather for crop yield
- Large domestic market with increasing demand
- Influence on government policies
- Simple to operate plants
- High crushing capacity

- Growing population and food consumption
- Export market potential due to produced surpluses.
- High potential to increase yield and recovery ratios.
- Potential use of by-products in power generation and as feed stock for industries



- Lack of proper knowledge and training to farmers
- Water management problems and small holding of land by farmers
- Lack of proper recycling systems
- Low Yield and recovery ratios and varying cost of sugarcane to mills
- Inefficient plants running
- Export Restrictions

- Excessive regulation and control by government
- Vulnerable to political interest, Hoarding by millers
- Unhealthy competition and cartels
- Changing climate patterns
- Shortage of irrigation water and pesticides.
- Varying quality of seeds and cane

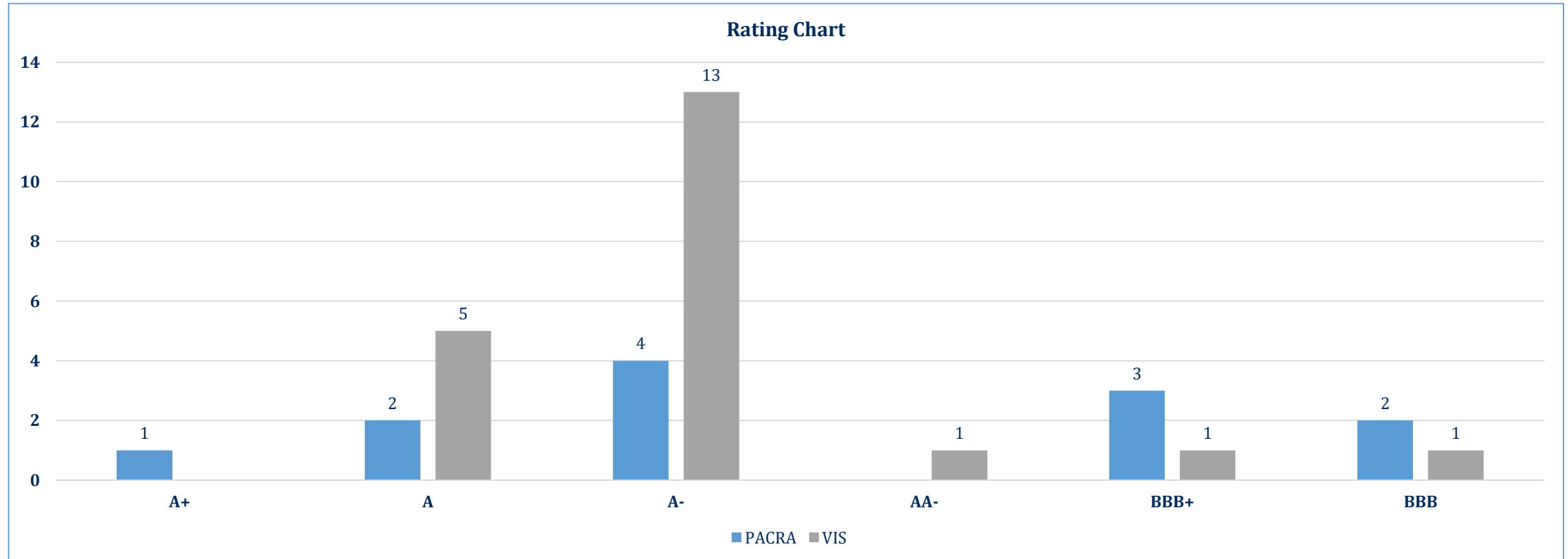
Regulatory Framework

- Sugar Act 1934 – Price regulation of sugarcane
- Sugar Factory Control Act 1950- regulation of sugarcane supply and price to factories.
- Punjab Sugarcane Control Order 1972- regulating and prohibiting the movement, transport, supply, distribution, and use or consumption of sugarcane and trade and commerce therein.
- Punjab Foodstuff Act 1958- continuance of powers to control the supply, distribution, and movement of, and trade and commerce in, foodstuffs in Punjab.
- Sindh Foodstuff (Control) Act 1958 – an enactment made in the public interest to provide for the continuance of powers to control the supply, distribution, and movement of, and trade and commerce in, foodstuffs in Sindh.
- Price Control and Prevention of Profiteering and Hoarding Act 1977 – an enactment to provide for price control and prevention of profiteering and hoarding.
- Punjab Registration of Godowns Act 2014 – an enactment to register godowns, provide for a comprehensive system regarding stable supply and availability of essential articles, and deal with ancillary matters.
- Competition commission control over non-competitive strategies of the producers.
- Competition Act 2010 that regardless of whether the sugar industry is heavily regulated by the provincial governments, it is still susceptible to being monitored by the CCP. Not only can the sugar mills and other private parties be looked at by the CCP, but governmental bodies, such as the Sugarcane Control Board, can also be monitored.

Sugar

Rating Curve

PACRA rates 12 entities in sugar sector. Rating bandwidth for sector is A+ to BBB.



Outlook: Watch

- Pakistan's GDP (nominal) stood at PKR~114.7trn in FY25, growing in real terms, by ~2.7% YoY (FY24: ~2.5% growth). The services sector held the highest share (~58.4%), followed by the agriculture and industrial sector at ~23.5% & ~18.1% respectively.
- The sugarcane production is at a declining trend as it declined further in MY25 to record at ~84.2mln MT (MY24: ~87.6mln MT). Sugarcane's average cost of production increased to PKR~547,688.9/Ha (MY23: PKR~350,977.8/Ha), mainly on the back of high inflationary pressure in the country. In MY24, the support prices were set at PKR~425/40kg (Sindh) & PKR~400/40kg (Punjab & Khyber Pakhtunkhwa) and may rise in MY25 amid rising farmer demands, expected higher input costs, and government pressure.
- The average annual sugar recovery rate from sugarcane in MY24 stands at ~9.6%, which aligns with domestic industry benchmarks.
- Total sugar production clocked in at ~6.8mln MT during MY24, recording a slight increase of ~1.3% YoY. The story completely changed in MY25, where although production levels decreased by ~7.7% YoY, the GoP allowed for a ~0.8mln MT export which led to an assumed nationwide sugar shortfall, leading to tighter domestic supply, rising retail prices, and increased pressure on both consumers and farmers. This came on the back of rising demand as consumption of sugar increased by ~4.1% YoY in the period. This has also led the GoP to opt for imports from foreign countries to stabilize domestic supply in the country, setting an import quota of ~0.5mln MT.
- In 9MMY25, the gross, operating and net margins declined to ~11.9% , ~9.2% & ~3.1% respectively. This was similar to what was seen during MY24, where the sector's gross revenue increased by ~23.4% YoY (MY23: ~33.4% YoY) while COGS rose by ~31.9% YoY, resulting in average gross margins to clock in at ~13.3% during MY24 (MY23: ~18.2%). Moreover, operating profit also decreased in the period to ~10.5% from ~15.2% in MY23 (YoY decline of ~30.9%), while net margins registered a ~66.2% YoY decline to record at ~2.4% (MY23: ~7.1%). This decline was on the back of ~47.6% higher finance costs during MY24.
- With the GoP looking to stabilize the sugar market through imports, the sector continues to face pressure from lower production & inflated prices. There are also restrictions from the IMF barring Pakistan from granting tax-free/duty-free sugar imports, rejecting the government's 'food emergency' justification, and warning that such waivers violate the bailout conditions. High sugarcane costs and declining margins further constrain profitability. Policy volatility and structural inefficiencies in the country have historically led to supply-demand imbalances in the sugar sector, underscoring the need for close monitoring ahead.

Bibliography

- Pakistan Bureau of Statistics (PBS)
- State Bank of Pakistan (SBP)
- Pakistan Stock Exchange (PSX)
- Pakistan Economic Survey 2023-24 (PES)
- Pakistan Sugar Mills Association (PSMA)
- Ministry of National Food Security & Research (MNFSR)
- Agricultural Market Information System (AMIS)
- Renewable Fuels Association (RFA)
- International Sugar Organization (ISO)
- Organization for Economic Co-operation and Development (OECD)
- United States Department of Agriculture (USDA)
- Food and Agriculture Organization (FAO)
- PACRA In-house Database

Research Team	Saniya Tauseef Senior Manager saniya.tauseef@pacra.com	Mohammad Abdul Rehman Khan Supervising Senior Abdulrehman.khan@pacra.com	Haris Azeem Associate Research Analyst haris.azeem@pacra.com
Contact Number: +92 42 35869504			

DISCLAIMER

PACRA has used due care in the preparation of this document. Our information has been obtained from sources we consider to be reliable, but its accuracy or completeness is not guaranteed. The information in this document may be copied or otherwise reproduced, in whole or in part, provided the source is duly acknowledged. The presentation should not be relied upon as professional advice.