

SECTOR BRIEF

Sugar Sector



By Research and Publications Department, ICMA Pakistan

Historical Background:

At the time of independence, there were only two sugar factories in the country and to meet shortfall sugar was being imported from abroad. In 1961, the first sugar mill was established at Tando Muhammad Khan in Sindh Province. By 1980, there were 35 sugar mills in the country capable of providing one million tons of sugar. By 1990, ten more sugar mills were installed which raised the production capacity to two million tons. Population and per capita increase always kept the demand high and number of sugar mills increased to 89 in 2018.

Current Scenario:

Today there are 89 functional sugar mills in the country, out of which 44 are located in Punjab; 38 in Sindh and 7 in KPK provinces. The sugar industry provides direct and indirect employment to 75,000 people, including management experts, technologists, engineers, financial experts, skilled, semi-skilled and unskilled workers. Sugarcane cultivation provides partial and seasonal employment to around 3.9 million people which is approx. 12.14 percent of total agricultural labor force. The sugar industry contributes around Rs. 22 billion to the Government exchequer.

Sugarcane and its by-products:

Sugarcane is a major Kharif crop of Pakistan and primary contributor to sugar mills. Sugarcane cultivation starts from February and extends till April whereas harvesting is done between October-December. Among the provinces, Punjab accounts for 65 percent of sugarcane area; Sindh 25 percent, and KPK 10 percent. There is a small sugar beet industry in the higher elevations of KPK Province. If we compare globally, Pakistan stands as the world's 5th largest sugarcane grower. Brazil stands on top, followed by India, Thailand and China.

The by-products of sugarcane are utilized in many other industries for production of different products such as 'bagasse' is used in paper and chip board industry; 'press mud' is used as a rich source of organic fertilizer for crop production. Besides, 'molasses' and its by-product alcohol are widely used domestically in industries such as food, herbal medicine, paints and varnishes, cosmetics, paper glazing and leather polishing, livestock feed, industrial alcohol and tobacco blending.

Molasses are also being used in the production of sweetened products e.g. chocolates.

Sugarcane production:

The sugarcane production in Pakistan during 2017-18 stood at 83.3 million tons which shows an increase of 15.9 million tons from 2013-14. The area under cultivation also increased from 1.172 million hectares in 2013-14 to 1.341 million hectares in 2017-18. The sugarcane utilization by mills remained limited to 65.6 million tons in 2017-18.

Sugarcane Production [Last 5 years]

Year	Area Hectares	Production Tons	Yield Tons/Hectare
2017-18	1,340,926	83,289,340	62.11
2016-17	1,216,894	75,450,620	62.00
2015-16	1,130,820	65,450,704	57.88
2014-15	1,113,161	62,794,827	56.41
2013-14	1,171,687	67,427,975	57.55

Source: Pakistan Sugar Mills Association (PSMA) Annual Report 2018

Sugar production:

Sugar sector constitutes 4.2 per cent of manufacturing. The sugar production during 2017-18 stood at 6.576 million tons as compared to 7 million tons last year. With a carryover stock inventory of 1.974 million tons from the preceding year, the total availability of sugar was 8.591 million tons, including beet sugar of 40,922 tons. This quantity was almost surplus of 3.391 million tons after defraying domestic requirement of about 5.2 million tons.

Sugar Production [Last 5 years]

Year	Cane Crushing Tons	Sugar Production Tons	Recovery Ratio
2017-18	65,615,550	6,576,534	10.02
2016-17	70,989,946	7,005,678	9.87
2015-16	50,024,249	5,082,110	10.16
2014-15	50,795,218	5,139,566	10.12
2013-14	56,460,524	5,587,568	9.90

Source: Pakistan Sugar Mills Association (PSMA) Annual Report 2018

World Scenario:

Pakistan is 8th largest producer of sugar as well as 8th largest sugar consumer in the world. Similarly, Pakistan is also the 7th largest net exporter of sugar in the world.

The World Top 10 list indicates that Brazil is the largest sugar producer as well as sugar exporter whereas India is the largest sugar consumer in the world. The following table depicts the rankings of countries:

WORLD TOP 10 Sugar Producers, Consumers and Exporters (Figures in million metric tons, tel quel)			
Ranking	Largest Sugar Producers	Largest Sugar Consumers	Largest Sugar Net Exporters
1	Brazil (38.10)	India (24.52)	Brazil (28.70)
2	India (22.45)	EU-28 (18.00)	Thailand (6.94)
3	EU-28 (17.52)	China (16.09)	Australia (3.84)
4	Thailand (10.78)	Brazil (10.92)	Guatemala (1.84)
5	China (9.31)	USA (10.09)	Cuba (1.12)
6	USA (7.51)	Indonesia (6.75)	Mexico (1.04)
7	Russian Fed. (6.59)	Russian Fed (5.80)	Pakistan (0.62)
8	Pakistan (6.55)	Pakistan (5.07)	Ukraine (0.60)
9	Mexico (6.05)	Mexico (4.44)	eSwatini (0.51)
10	Australia (4.48)	Egypt (3.60)	Colombia (0.51)

The per capita consumption of refined sugar in Pakistan was estimated at 25.65 kg in FY 2017-18.

Exports of Sugar and Molasses:

Pakistan exports of sugar increased to 1.47 million tons valued at Rs. 56.38 million from 0.31 million tons valued at Rs. 16.87 million in 2016-17. Similarly, exports of molasses also showed increase from 0.17 million tons in 2017-18 from 0.10 million tons in 2016-17.

Exports of Sugar and Molasses from Pakistan (Last 5 years) (Quantity in Million Metric Ton: Value in Million Rupees)				
Year	Export of Sugar		Export of Molasses	
	Quantity	Value	Quantity	Value
2017-18	1.47	56.38	0.17	2.11
2016-17	0.31	16.87	0.10	1.22
2015-16	0.29	13.82	0.07	0.87
2014-15	0.71	32.69	0.08	1.01
2013-14	0.65	29.64	0.20	2.51

Source: Pakistan Sugar Mills Association (PSMA) Annual Report 2018

SWOT Analysis of Sugar Industry

STRENGTHS

- ◆ Second largest industry in Pakistan after textiles sector
- ◆ Ideal temperature for sugarcane cultivation.
- ◆ Multipurpose domestic uses of sugarcane by-products
- ◆ Earning foreign exchange through export of molasses
- ◆ A highly tax-compliant industry as sugarcane price is fixed by government

WEAKNESSES

- ◆ Low per hectare yield [44 tons] of sugarcane as against world average of 60 tons/hectare.
- ◆ Low Sucrose contents [10% to 11%] in sugarcane as against world average of 14% to 24%.
- ◆ Low production quality of sugarcane due to low level of sucrose contents.
- ◆ Lack of modern farming techniques, including mechanization as adopted in other countries.
- ◆ Farmers limited financial capability of investing in modern technology. Lack of high-yielding varieties of sugarcane
- ◆ Cartelization in industry due to political affiliations of millers
- ◆ A lower crushing capacity of small sugar millers

OPPORTUNITIES

- ◆ Setting up of new distilleries can increase ethanol production in Pakistan
- ◆ Rising cost of energy can lead to increased use of bio-fuel
- ◆ Increasing petrol prices offer chances of increase use of ethanol
- ◆ Sugar mills can utilize molasses to meet energy cost and generate power
- ◆ Growing population is an opportunity for development of sugar industry.

THREATS

- ◆ Water shortage is a threat as sugarcane production is mainly dependent upon water.
- ◆ High increase in support prices of sugarcane leading to closure of sugar mills due to losses
- ◆ Minimum Support Price is linked with weight and not quality, leading to low quality of sugarcane
- ◆ Decline in sugarcane cultivation area by 10% as farmers have moved towards other crops.
- ◆ Sugar mills operating at below 70% capacity leading to sugar crisis in the country'
- ◆ Increase in Gur manufacturing from raw cane especially in KPK leading to decline in sugar production