ANNUAL REPORT
2003

PAKISTAN SUGAR MILLS ASSOCIATION
SINDH ZONE

PAKISTAN SUGAR MILLS ASSOCIATION
SINDH ZONE

ZONAL COMMITTEE
YEAR 2003-2004

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DISTRICTWISE SUGAR MILLS IN SINDH

District & No.	Sugar mills	Location
Badin	**5 Mills**	
1.	Army Welfare Sugar Mills	Badin
2.	Bawany Sugar Mills Limited	Talhar
3.	Fauji Sugar Mills	Khoski
4.	Pangrio Sugar Mills Limited	Deh. Rajuari-2
5.	Mirza Sugar Mills Limied	Deh. Charo Tappo
Dadu	**1 Mills**	
6.	Dadu Sugar Mills *	Piarogoth
Hyderabad	**8 Mills**	
7.	Ansari Sugar Mills Limited	Matli
8.	Bachani Sugar Mills Limited **	Tando Allahyar
9.	Faran Sugar Mills Limited	Sheikh Bhirkio
10.	Fauji Sugar Mills	Tando Mohammad Khan
11.	Matiari Sugar Mills Limited	Matiari
12.	Mehran Sugar Mills Limited	Tando Allahyar
13.	Seri Sugar Mills Limited	Deh. Norai Jagir, Seri
14.	Sindh Abadgar's Sugar Mills Limited	Deenpur
Khairpur	**2 Mills**	
15.	Khairpur Sugar Mills Limited	Naroo Dhoro
16.	Ranipur Sugar Mills Limited	Ranipur
Larkana	**1 Mills**	
17.	Naudero Sugar Mills Limited	Naudero
Mirpurkhas	**5 Mills**	
18.	Al-Abbas Sugar Mills Limited	Mirwah Gorchani
19.	Digri Sugar Mills Limited	Digri
20.	Mirpurkhas Sugar Mills Limited	Mirpurkhas
21.	Najma Sugar Mills Limited	Jhuddo
22.	Tharparkar Sugar Mills Limited *	Tharparkar
Nawabshah	**3 Mills**	
23.	Al-Noor Sugar Mills Limited	Moro
24.	Habib Sugar Mills Limited	Nawabshah
25.	Sakrand Sugar Mills Limited	Qazi Ahmed
Sanghar	**1 Mills**	
26.	Sanghar Sugar Mills Limited	Sindhri, Sanghar Road
Sukkur	**1 Mills**	
27.	Kiran Sugar Mills Limited*	Duber Road, Rohri
Thatta	**5 Mills**	
28.	Al-Asif Sugar Mills Limited	Garho
29.	Dewan Sugar Mills Limited	Budho Talpur
30.	Larr Sugar Mills Limited	Deh Kinjhir-Taluka Sujawal
31.	Shahmurad Sugar Mills Limited	Jhok Sharif
32.	Thatta Sugar Mills Limited*	Deh Bijora

* Non - Members, ** Non - Members, under installation

PAKISTAN SUGAR MILLS ASSOCIATION
SINDH ZONE

ANNUAL REPORT FOR THE YEAR ENDED
SEPTEMBER 30, 2003

Introduction

It gives me pleasure to inform that 28 out of 29 sugar mills in private sector were functional in Sindh province during the year ended September 30, 2003 and all but one of them responding to PSMA invitation joined the Association. This was enabling feature for consolidation and fortifying unity. This shall infuse vigour in pursuit of collective objectives, in order to get a meaningful turnaround from the perplexing perils. The unity has come through Sindh sugar industry's own initiative and that's indeed gratifying. The PSMA-SZ was asking for such flourish through statutory requirement in the past action on which remained in its dormant state. The membership strength of the Sindh zone sugar mills transformed to 27 sugar units and brought all the operational units on the PSMA-SZ roll.

It, however, is not so pleasant to present the annual report of the Pakistan Sugar Mills Association-Sindh Zone, for the year ended September 30, 2003, on behalf of its zonal committee and members. The year witnessed repetition of unprecedent difficult situation for the national sugar industry, particularly of Sindh, which suffered further losses. This time, the main stumbling block was persistently plummeting sugar prices emanating from overload of larger floating sugar stocks, aggravated by apathy of the federal government to attend to it actively and rescue the industry from sinking. The year under review fared again of adverse trend and result. It compelled for patience to bear additional strains. The members faced intriguing situation with extreme dismay but composure. Their consistent cooperation with understanding was source of support to tackle the odds which could be eased to a limited extent.

Three sugar mills of Sindh were non-operative and one mills was in installation phase. As and when the four units shall get on stream, we firmly believe they will instantly join their fraternity at the Association level. PSMA-SZ aim is that all the sugar mills of Sindh become and remain fully functional, efficient and profitable so that they contribute their best in increasing the gross domestic product and improve the lot of agro-economy of Sindh. Assistance needed from the PSMA-SZ in resumption of their economic role will be willingly extended.

Sugar industry is poised to play an enhanced role of being a catalyst in growth and development of the national economy. By virtue of its being wholly agro-based-cum-rural-orientation in totality, as each sugar mills is designated to remain in the deep rural landmass, it ensures economic impetus. Sugar industry is also bound to play a greater role in socio-economic upswing of the rural sector and contribute further in accelerating development of Pakistan. It holds immense potentials in this regard. Regrettably, these sterling features stay exploited but not to a full measure. Their fine flourish demands to preempt the industry from deterrants and stumbling blocks being unimaginately structured. Instead of piecemeal modalities, it is imperative to design a long-term policy and precise pursuit mechanism. This be drawn through continuous consultative process, engaging all the stakeholders. This will create equitable dispense balance to overcome throes in informed manner. This process will fortify sense of understanding, promote cooperation and make all the associated interests reap benefits in mutuality, which eventually is bound to benefit the society at large. Sugar industry vision has not been meticulously evolved with meaning and purpose, though it bears great significance.

Sugarcane crop situation

Rising trend in sugarcane crop shaped well during the review season, increasing it by 8.3(10.2)% to 52.050(48.042) mln tons. This shaped by 10% increase in area at 1,099(999) thousand hectares under the crop, contrasted by yield dropped to 47.33(48.07)%. A table below portrays sugarcane crcp position during the past seven years.

Area, production and yield of sugarcane

Year	Area 000 Hectare	% change	Production 000 Tons	% change	Yield Kgs /Hec	% change
1996-97	965	0.2	41,998	(7.1)	43.52	(7.4)
1997-98	1,056	9.4	53,104	26.4	50.29	15.5
1998-99	1,155	9.4	55,191	3.9	47.78	(5.0)
1999-20	1,010	(2.6)	46,333	(16.0)	45.87	(3.9)
2000-01	0.961	(4.9)	43,608	(5.9)	45.38	(1.1)
2001-02	0.999	4.0	48,042	10.2	48.07	5.9
2002-03	1,099	10.0	52,050	8.3	47.33	(1.5)

Source: Economic Survey 2002-2003

Sugarcane production was increased by area under the crop expanded by 10.0(4.0)%, while yield fell by insignificant 1.54%. The rising tide in area and production augurs well on the national scale, yet ought to bear similar high tide in yield element, which factor is more important to attend, as potential of improving yield is immense. It must not be ignored in building a momentum on sound stance.

Sugarcane area, production, yield
Season : 2002-2003 (2001-2002)

	Area Hectare	Production Tons	Yield H/T
Sindh	259,000 (240,693)	13,798,000 (11,416,330)	53.27 (47.43)
Growth %	7.35	20.86	12.31
Punjab	735,000 (657,000)	33,169,000 (31,803,000)	45.13 (48.40)
Growth %	11.87	4.30	(6.76)
NWFP	105,000 (101,000)	5,049,000 (4,787,000)	48.09 (47.30)
Growth %	3.96	5.47	1.67
Balochistan	700 (700)	34,000 (35,000)	48.57 (50.00)
Decline %	---	(2.86)	(2.86)
Pakistan	1,099,700 (999,393)	52,050,000 (48,041,330)	47.33 (48.07)
Growth %	10.00	8.34	(1.54)

Happy tidings in sugarcane production in the three sugarcane cultivating zones were achieved by a common factor, being extension in area. Yield presented fluctuating feature. Area under the crop on Pakistan scale increased by 10%, production by 8.34%, while yield by a token 1.54 percent.

In the Punjab zone, area surpassed by double digit @ 11.87%, to 735(657) thousand hectares but sugarcane production was higher by 4.30%, to 33.169(31.803) mln tons, due to ignoble 6.76% fall in yield, to 45.13(48.40) tons/hectare. This indicates quality of sugarcane not upgraded, which has been need of the hour. The Punjab zone holds potentials for a significant improvement of yield, when achieved it is bound to bring all round improvement and squarely benefit all stakeholders in sugar.

Recognized as the most suitable area for sugarcane cultivation, by its close proximity to Tropic of Cancer and Arabian Sea, Sindh improved its performance, all the three spheres showing upturn. The most impressive aspect of it was double-digit jump in yield, up by 12.31%, to 53.27(47.43) tons/hectare. This propelled sugarcane crop up by hefty 20.86%, to 13.798(11.416) mln tons. Area under the crop advanced by 7.35%, to 259(241) thousand hectares. The improvement was impressive despite drought impact was still on and persisted with lower intensity. Improved yield was a prominent and promising feature in raising greater optimism for all chips to brighten up on end of drought. Higher yields means higher returns for the sugarcane farmers and this is bound to augur well for other stakeholders as well. Sugarcane farmers benefit pinned in yield, their efforts shall firmly be directed on improving this key factor.

NWF province presented a good going at modest scale in all the three dimensions. Area under the crop extended by 3.96%, to 105(101) thousand hectares. Yield increased by a token of 1.67%, to 48.09(47.30) tons/hectare. Combined result of the twin factors was 5.47% increase to 5.049(4.787) mln tons in sugarcane production. The potential possessed by the zone needs better exploit to improve overall gains.

Keeping in view drought may persist in Pakistan, the planners exercised care in setting the sugarcane crop target for the 2002-2003 season, as can be gauged from the figures appearing in a table below and partly on next page.

Sugarcane target and achievement 2002-2003

	Actual 2001-02	Target 2002-03	Achievement 2002-03	Difference over 2001-02
a) Area Hectares				
Sindh	240,693	241,000	259,000	18,307
Punjab	657,000	650,000	735,000	78,000
NWF	101,000	100,000	105,000	4,000
Balochistan	700	700	700	----
Pakistan	999,393	991,700	1,099,700	100,307
b) Production tons				
Sindh	11,416,000	12,100,000	13,798,000	2,382,000
Punjab	31,803,000	28,900,000	33,169,000	1,366,000
NWF	4,787,000	4,600,000	5,049,000	262,000
Balochistan	35,000	35,000	34,000	(1,000)
Pakistan	48,041,000	45,635,000	52,050,000	4,009,000

	Actual 2001-02	Target 2002-03	Achievement 2002-03	Difference over2001-02
c) Yield ton/hectare				
Sindh	47.43	50.21	53.27	5.84
Punjab	48.40	44.46	45.13	(3.28)
NWF	47.30	46.00	48.09	0.69
Balochistan	50.00	50.00	48.57	(1.43)
Pakistan	48.07	46.02	47.33	(0.74)

During the review year, in sharp contrast of the previous year's trend, achievement in all the three zones and in all the three operational dimensions sharply surpassed the targets set. Area under the sugarcane crop in the country expanded to 1100 thousand hectares against target of 992 thousand hectares. Sugarcane production rose to 52.050 mln tons while target was 45.635 mln tons. Yield was higher at 47.33 tons/hectare against target of 46.02 tons/hectare.

Achievement being above the target this year and in arrears in the previous underscores the system of estimation being skewed and weak. Deviations need not be beyond the standard, admitted at five percent. Appropriate comparison in this background would have to have with actuals for the previous season. What was achieved in the latest 2002-2003 compared with those of the preceding season also gives similar reading as with the target vis-à-vis actual. This further establishes the point that system of estimation is rough and, as such, cannot be accepted as reliable. As a consequence, the sugar industry cannot plan its working properly and on sound track. Such an adhoc system, if not uncertain and unsecure, cannot give well measured and desired results. Sugar industry has, as such, fallen a prey to uncertain future and, Sindh with greater variations in actuals has fallen critical victim to defective projection mechanism. This system is simply outdated and obstinate giving unbearable jolts to the Sindh sugar industry.

Increase in actual area representing Pakistan by 100,307 hectares during 2002-03 season was predominant by 78,000 hectares expansion shaping in the Punjab. On similar basis, in case of sugarcane production it was an increase by 4.009 mln tons, contributed by 2.382 mln tons shaping in Sindh, 1.366 mln tons in the Punjab and 262 thousand tons in NWFP.

Sugar production scenario

Sugarcane production and supplies to sugar industry vis-à-vis sugarcane crushing capacity in each province determines price trend of sugarcane due to environment of marketing being without norm of area specifics despite characteristics of the commodity deserving such system to be sustained with vigour. Sugarcane market price predominantly determines sugar production cost.

In Sindh 28(27) sugar mills shared sugarcane supply increased to 12.416(10.163) mln tons, improving average availability to 443,421(376,393) tons, i.e. a raise by 17.8% per mills. Nonetheless, locations of sugar mills in Sindh being in close proximity compounded overlap, creating constraint on volume of sugarcane supplies needed. As a result, operating efficiency could not go beyond 52.75(43.18)%. This would not bring sugarcane price in rational sphere so as to infuse economy in the cost of sugar production. Sugar production in Sindh at 1,156,729(940,960) tons tonned up average per mills production to 41,312(34,850) tons, up 18.54%. Recovery better at 9.32(9.26)% could not improve the results materially. Share of Sindh in national sugar production improved a token, to 31.59(29.43) percent. Suffering of Sindh sugar mills emanating from quite an adverse trend in sugar prices also prevailed during the 2002-03 season.

Operational features
Zonal sugar production, season: 2002-2003 (2001-2002)

	No. of Operative mills	Sugarcane Crushed tons	Share %	Sugar Production tons	Share %	Recovery %
Sindh	28	12,415,761	29.62	1,156,729	31.59	9.32
	(27)	(10,162,607)	(27.68)	(940,960)	(29.39)	(9.26)
Growth %	3.70	22.17	7.00	22.93	7.49	0.65
Punjab	38	27,707,464	66.11	2,360,404	64.46	8.52
	(37)	(25,252,609)	(68.79)	(2,152,175)	(67.34)	(8.52)
Growth %	2.70	9.72	(3.79)	9.47	(4.28)	---
NWFP	05	1,787,810	4.27	144,917	3.96	8.11
	(05)	(1,293,422)	(3.53)	(104,610)	(3.28)	(8.09)
Growth %	---	38.22	20.96	38.53	20.73	0.25
Pakistan	71	41,911,035	100	3,662,050	100	8.74
	(69)	(36,708,638)	(100)	(3,197,745)	(100)	(8.71)
Growth %	2.90	14.17	----	14.52	---	0.34

The Punjab retained rising tempo, as guaged from sugarcane crop volume improved by 9.72%, to 27.707(25.253) mln tons. It was shared by 38(37) sugar mills, giving an average crushing rate of 729,144(682,503) tons, up by a modest 6.83%. Sugar production increased to 2.360(2.156) mln tons, meant 62,116(58,272) tons on average per mills, up 6.59%. Sugar recovery stayed put at 8.52% and checked more material improvement in overall performance. Share of the Punjab in aggregate national sugar production dropped by 2.88%, to 64.46(67.34)%. This was one small minus mark in otherwise steady rise in other spheres.

The number of operational sugar producing units in North West Frontier zone was constant at five. They shared sugarcane crop volume surged by a significant 38.22%, to 1.788(1.293) mln tons, giving an average crushing rate of 357,562(258,684) tons. It was a good omen in operational phase. Sugar production was up by 38.53%, to 144,917(104,611) tons which represented average production level lifted to 28,983(20,922) tons. Average recovery improved a token at 8.11(8.09)%. The share of it in total national sugar production, as usual, stayed insignificant at 3.96(3.28)%. Average per mills sugarcane crushing and sugar production trailed behind sugar mills of the Punjab and Sindh. Diversion of sugarcane in 'gur' making persisted, prompting the crushers to make the most on escaping sales tax net. This malaise continued to deny sugar industry segment of NWFP from a flourish matching with the potentials possessed. It checked efficiency, economies of scale and improved contribution to the provincial economy and gross domestic product of Pakistan.

Drag persist

Drag of surplus sugar stock floating around emanating from undue import of 627,992(487,248) tons of refined sugar in 2000-01(1999-2000) persisted and with increased sugar production at home during 2001-02-03 seasons, sugar price situation aggravated as its cascading trend continued for these years.

Sugar exports being subsidised by countries producing in excess of their domestic requirement, its sugar was dumped in Pakistan. This created a glut of sugar in the country. Over-supply of sugar in aggregate of 3.676 mln tons in 2000-01 against effective demand of 3.042 mln tons created financing difficulties and marginalized scope of earning by the national sugar industry. Unprecedentally high inventory of 633,870 tons at September 30, 2001 and of 637,149 at September 30, 2002 turned too problematic for the sugar industry to solve. Sindh sugar segment, being always a surplus sugar producing zone, had to suffer for want of outlet for disposal of extra. Entire national sugar industry was placed under severe financial stress.

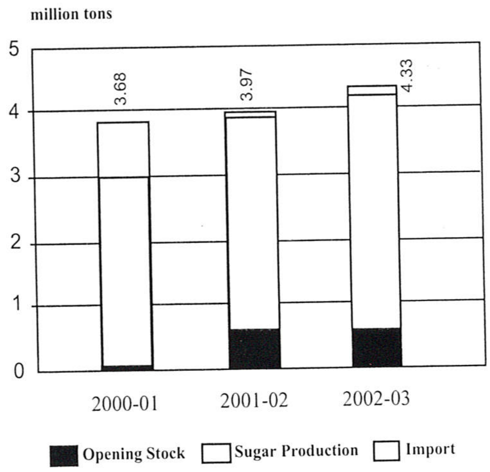
Sugar availability

Critical drought conditions persisting in the country were seen a bit reduced in sugarcane crop intensity during the review year on improvement in water supply. Indications were clear of better conditions for sugarcane crop and this eventually turned true in all the three zones, having increased crushing volume in each case. Sindh and NWF zones secured a double-digit growth in sugarcane crushing and sugar production. But it was the best of the sugarcane crushing and sugar production in the Punjab and not so for Sindh and NWFP. Potential possessed by latter was not exploited at their best. A record of sugar production at 3.686 mln tons shaped for the 2002-03 season, posed challenge to cross the set goal post in future.

Seasonal sugar availability

Sugar availability scenario 2002-03(2001-02) seasons

Season	2002-03	2001-02	2000-01
		(Volume in tons)	
Stock on October 1	637,149	633,870	27,274
Sugar production from:			
sugarcane	3,662,050	3,197,746	2,466,843
Beet	22,066	29,173	17,276
Raw	1,945	22,111	531,930
Total sugar prod.	3,686,061	3,249,030	3,016,049
Imports July to June	8,315	85,684	632,645
Total sugar available	4,331,525	3,968,584	3,675,968



Sugar available for the review season increased by 362,941 tons i.e. by hefty 9.15%. This is attributable to surge in sugar production, as all the three zones contributing towards admirable production record. Sugar lifting, inclusive 100 thousand tons by Trading Corporation of Pakistan for exports, too late in the end of season during November 2002-03 proved a bit better but not well in line with the production trend. As a result, besides longer duration of holding the stocks, impitching liquidity and incurring financing cost, the worst shaped by persistently plummeting prices of sugar. Before the TCP picked up a fraction, damage on price had been done.

Monthwise lifting of sugar
Season: 2002-03 (2001-02)

		Sindh	Punjab	NWFP	Pakistan
October	2002	74,108 (12,262)	134,067 ----	12,101 -----	220,276 (12,262)
November	" "	76,339 (28,613)	264,456 (113,669)	9,532 (5,500)	350,327 (147,782)
December	" "	73,756 (60,451)	150,057 (152,311)	7,267 (14,430)	231,080 (227,191)
January	2003	172,470 (91,110)	185,636 (203,551)	7,601 (9,207)	365,707 (303,868)
February	" "	136,202 (49,883)	132,126 (145,356)	6,704 (5,965)	275,032 (201,204)
March	" "	99,352 (36,115)	224,722 (220,868)	14,816 (14,697)	338,890 (271,680)
April	" "	102,097 (97,064)	143,317 (210,577)	7,412 (7,505)	252,826 (315,146)
May	" "	105,856 (37,189)	303,547 (218,812)	3,589 (5,789)	412,992 (210,802)
June	" "	108,150 (79,386)	187,978 (160,928)	4,406 (5,870)	300,534 (256,184)
July	" "	84,192 (92,770)	199,178 (169,684)	12,593 (14,729)	295,963 (277,183)
August	" "	91,921 (72,209)	155,978 (163,011)	19,559 (19,635)	267,458 (254,855)
September	" "	101,792 (54,808)	125,800 (152,854)	16,101 (8,627)	243,693 216,289
Total		1,226,236 (704,571)	2,206,889 (1,911,621)	121,681 (121,954)	3,554,806 (2,738,145)

Include carryover stock of 637,149 tons from 2001-02 season.

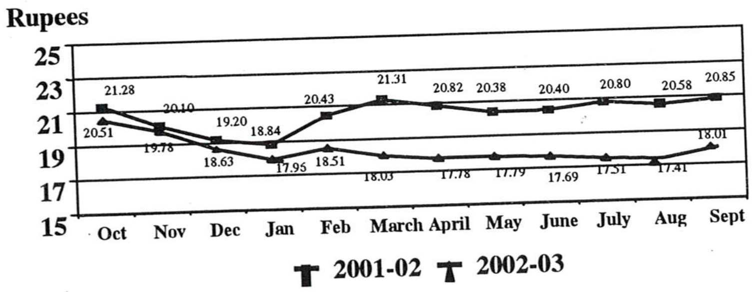
Lifting of sugar in Sindh was better, which can be attributable, by and large, to its desperate sales situation arising from tight financial position emanated by sizeable losses sustained by Sindh sugar mills in the preceding 2001-02 season. It was due to unsupportive policy pursuit of Sindh government. The beginning of crushing campaign was on tough note of funds shortage and to keep operations on, quick sales had to be resorted.

Desperate sales situation gripping the entire national sugar industry with extra pinch on Sindh segment was evident from the continuous decline in sugar prices. At no point in time, the fall could be checked, as sugar oversupply persisted with overkill. The wholesale sugar prices of the key Karachi market clearly portray distinctly unfavourable situation gripping the Sindh sugar industry and similarly its spillover impacting the entire national circuit.

Monthwise wholesale price trend per kg. of sugar

Month		Average wholesale price Rs./Kg.		
		2002-03 Rs.	2001-02 Rs.	Difference Rs.
October	2002	20.51	21.28	0.77
November	" "	19.78	20.10	0.32
December	" "	18.63	19.20	0.57
January	2003	17.96	18.84	0.88
February	" "	18.50	20.43	1.93
March	" "	18.03	21.31	3.28
April	" "	17.78	20.82	3.04
May	" "	17.79	20.38	2.59
June	" "	17.69	20.40	2.71
July	" "	17.51	20.80	3.29
August	" "	17.40	20.58	3.18
September	" "	18.01	20.85	3.32
Average	" "	18.29	20.42	2.17

Average wholesale per kilogram price of sugar
2002-03 and 2001-02



Sugar industry of Sindh had to suffer the most arising from surplus sugar afloat at national level, due to its being always in surplus. It could not have new markets while within sales got sealed. As during the review year, its sugar production increased by 22.93% or 215,966 tons, its negative impact turned worse, as a consequence of plummeting prices and longer hold of stocks. Assuming entire production of 1.157 mln tons to be cleared with an average price drop by Rs.2,117/ton to Rs.18,299/ton, loss of revenues for the review year amounted to Rs.2.449 billion. This was in addition to revenue loss of Rs.3.522 billion on production and sales of 940,960 tons in the preceding 2001-02 year, by drop of Rs.3,743/ton to Rs.20,416/ton in average wholesale price of sugar in Karachi market.

Policy paradoxes

Sugar industry, by deep hinterland location of the sugar mills, has been catalyst in transformation of rural landmass into attractive oasis with spread of infrastructure and facilities network. It improves surrounding areas into hub of economic activities. This key and completely agro-based industry has been ignored of its contribution to socio-economic developments as can be guaged from leaving it into lurch by policy makers.

Policy paradoxes dominating the sugar industry have become vivid by its one segment having impressive outcome while the other falling in deep distress. Such contrasting notes on bottomline cannot ensure sustainable performance. This odd has been emerging repetitively and imprudently being ignored so often. While visions contemplated for certain segments of the manufacturing sector, sugar industry has been put out of focus. Not just that, but its valid concerns, raised time and again at all the forums available, have been ignored and set on backburners.

A roaring reality of sugar foreign sales being subsidised by the countries with surplus production has been wholly ignored, as if it was a myth. Floating stocks for three years at a stretch is being overlooked. The Pakistan Sugar Mills Association, time and again, approached all the relevant ministries, being Food and Agriculture, Finance and Economics, Commerce, Industries and Production, with a request to allow and enable export of sugar so as to offload excess inventory. Its SOS were ignored, as usual. Even the proposal of self-supportive export of surplus was subjected to dilly-dallying designs and not consented in proper time sequence. The ordeal has been distressing and devastating.

Pertinent facts relevant to the national sugar industry brought to the notice of the authorities were given no consideration and as a result higher production got laced with higher losses. Some key aspects of it are recalled so that the authorities accept evolving of a sound strategy to steer sugar industry out of stress and give it even ground to perform at its best and transform potentials into achievements.

National sugar industry holds capacity of producing six million plus tons of sugar per season. Sugarcane crop size, with about one million hectares conventionally being brought under the crop, can be increased as much enabling utilisation of the sugarcane processing capacity possessed. How's that can be acknowledged from placing the sugar scene of Pakistan in spotlight of global panorama.

* Pakistan rank 4th among major sugarcane growing countries of the world, in terms of area, 15th by yield and 11th by recovery.
* With care in the crop cultivation, its harvest in volume will increase by higher yield factor and by timely processing sequence raise in recoveries can also be achieved. This shall bring higher sugar volume, infuse cost efficiencies, impart quality upswing and improve competitive thrust.
* Sugar import spurts can be eliminated and can be replaced by consistent sugar exports, offering flourishing future to the industry. It shall increase forex earnings, a move inevitable in balancing the external trade and improve the balance of payments.
* It shall open up vistas for modernisation, technological upswing, vertical integration and products diversification-cum-value additions.

These objectives can be served by evolving precise policy parameters, efficient implementation of the mechanism, followed by meaningful monitoring. In the event of domestic shortfall of sugar or sporting surplus, how to skillfully handle the situation is vital in the interest of sugarcane farmers, sugar industry, government and above all the nation. Absence of it has pushed the sugar economy in disruptive flux.

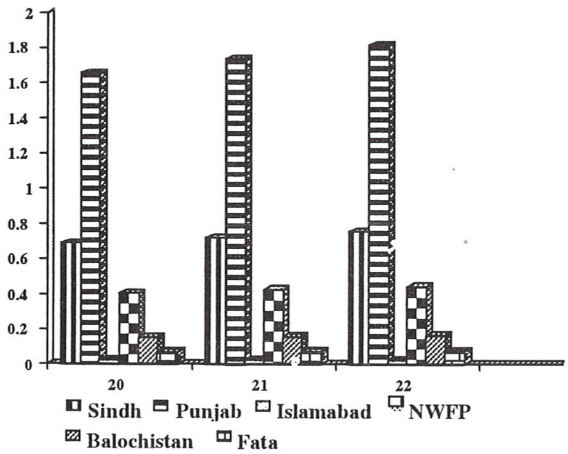
Shortfall in sugar production can be precisely known closer to sugarcane processing campaign's end, in fact sometime before it. Sugar import ought to be restrained during the processing period, that precise shortfall is assessed in consultation with the sugar industry, enabling identifiable volume and its time sequence for import. This is important as sugar exporters provide huge subsidy. This means obviously dumping by the major players. In this are found developed countries, as they can afford adopt both liberalism and liberty to resort to such practice which they resist and ask from developing countries to stop.

Sugar exports are invariably managed through subsidy. In order to enter export field, have a firm foothold and persistently put up perfect performance in its highly competitive sphere, prudent policy framework, extending support by structural network must be put in place. PSMA has always expressed its willingness to share experience and knowledge in this context with the authorities so as to devise a plan by consensus.

Enhanced interaction among Ministry of Agriculture, Ministry of Commerce, Ministry of Industries and Production, both at federal and provincial levels, with the Pakistan Sugar Mills Association can lead to institutionalise forward planning and informed decision–making for sugarcane and sugar production, their marketing and exportability, etc. An institutional structure for this purpose needs to be created and made livewire in making this key agro-based industry proactive engine of rural development-cum-national economic growth.

There was no scope left for import of sugar during the year as there existed 637,149 tons carryover stock at the season's start. This got augmented by national sugar production surged to 3.686(3.249) mln tons. As a result, aggregate availability jumped to 4.331(3.913) mln tons, against maximum national requirement of 3.28 million tons at the best per capita consumption of 22 kgs. For a population of 149.03 mln, national sugar consumption would vary by varying per capita consumption as reflected in the following table.

Province	Population in million	Sugar consumption (M.Ton) @ 20	21	22 Kgs
Sindh	34.240	0.685	0.719	0.753
Punjab	82.710	1.654	1.737	1.820
NWFP	20.170	0.403	0.424	0.444
Balochistan	7.450	0.149	0.156	0.164
Fata	3.420	0.068	0.072	0.075
Pakistan	149.030	2.981	3.130	3.279



Legend 1 cm = 200,000 tons

Aggregate availability of sugar at 4.331 mln tons markedly exceeded the domestic sugar requirement in the range of 2.98 mln to 3.28 mln tons, based on per capita consumptions at 20/21/22 kgs.

Sugar surplus scenario

(Tons)

Year	2002 – 03	2001 – 02	2000 – 01
Opening stock	637,147	633,870	27,274
Sugar production	3,662,050	3,197,745	2,466,788
Processed from Raw	1,945	22,111	531,930
Sugar from beet	22,066	29,172	17,276
Imports Oct. to Sept.	8,315	29,692	632,645
Available	4,331,525	3,912,590	3,675,913
Sugar lifting	3,472,422	3,275,441	3,042,043
Export TCP	100,000	----	----
Carryover stock	759,103	637,147	633,870

Sugar availability not simply persisted in excess but bounced to set a new record, due to consistently carryover of surplus for the past three years! Its impact in terms of steep fall in sugar prices and increased financial cost of carrying higher inventory for a longer period, pushed cost of sales up. Sugar industry, especially of Sindh being traditionally a surplus zone, got grinded by higher cost of production contrasted by lower sales prices!

Cost of sugar production represented a rising trend. Major critical component in it has been the price of sugarcane, compounded by effective high at 18% rate of sales tax. On these counts, the sugar industry had no control to contain, lest mend. Sugarcane price influence on the cost of sugar production and trend of wholesale price of the Sindh sugar industry vis-à-vis its adverse influence on economic viability can be guaged from the representative data of the past six years.

Sugarcane as component of sugar cost and sales

Year	per kg. Recovery %	Sugarcane support price per 40 kgs. Rs	Cost of cane per kg of sugar price Rs.	Average actual sugarcane price. Rs.	Cost of cane per kg of sugar Rs.	Wholesale sugar price Excl. sales tax Rs.	Sales tax Rs.	Including sales tax Rs.
1997-98	9.92	36.00	9.09	44	11.11	14.84	2.21	17.05
1998-99	8.96	36.00	10.05	40	11.17	15.73	2.25	17.98
1999-2000	9.18	36.00	9.80	50	13.62	17.87	3.14	20.59
2000-2001	9.22	43.00	11.68	60	16.30	20.48	3.68	24.16
2001-2002	9.27	43.00	11.56	49	13.38	17.44	3.15	20.59
Annual simple average	9.47	23.04	9.14	14.14	12.78	16.73	2.66	19.32
2002-2003 [Estimate]	9.32	43.00	10.14	43	11.74	15.51	2.79	18.30

Cost of sugar production per ton during the past five years, 1997-98 to 2002-2003, ranged from Rs.11,467 to Rs.20,332 i.e. an average of 12.88%. In the same period, cost of sugarcane fluctuated from Rs.9.09 to Rs.11.68, an average increase by 5.69%.

Cost of other components in sugar production could be contained by the sugar industry to a limited extent due to various factors, including inflationary trend in the national economy.

Average wholesale sugar prices excluding sales tax in the range of Rs.14,840 to Rs.20480 per ton. Howver, the price has steeply declining trend as can be evinced fro the given figures. Fall in prices escalated and in three years at a stretched dropped by Rs.4,970/ton to Rs.15,510/ton for 2002-03 from Rs.20,480/ton of 2000-01. Rising cost of production contrasted by plumating prices of sugar proved awefull, disastrous.

Sugar industry's distress, based on analysis, is attributable to high incidence of sugarcane price in cost of sugar production plus high incidence of sales tax, besides deterrant to proportionate compensatory increase in prices of sugar to absorb such spirals. As a result, sugar industry was caught in stormy waters, turned awaste!

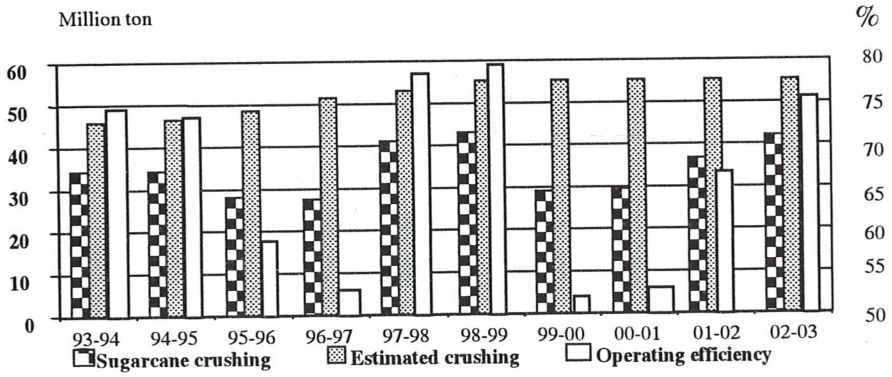
Sugar industry's sustainable economic performance depends on sugarcane price, its linking with sugar price and supportive mechanism to sustain fairly integrated functioning. Sugar price ought to reflect a proportionate increase in line with cost of production instead of suppressing it by excessive inventory afloat and hanging sword of imports at lower tariffs. If it is not to the government liking, sugarcane price be brought down proportionately enabling sugar industrial economies operate on equitable basis.

Potentials and its exploitation

Potential of national sugar industry is significant. Its optimum achievement needs fine tuning of the policy framework, with enabling supportive structure. Combining of the two is prerequisite for the efficient outcome. Its result would prove duly rewarding, by accelerating economic growth of Pakistan. High potential at hand and inconsistent trend in its achieving are fairly evident from the sugarcane processing capacity vis-à-vis actual utilisation and sugar production over the past decade. This gives an unsatisfactory reading.

Effective capacity & efficiency

Season	No. of units	Sugarcane crushing tons	Estimated crushing capacity	Operating efficiency%
1993-94	62	34,181,899	45,887,903	74.49
1994-95	66	34,193,290	46,524,601	73.50
1995-96	67	28,151,434	48,528,524	58.01
1996-97	70	27,352,918	51,405,597	53.21
1997-98	75	41,012,473	52,895,109	77.54
1998-99	76	42,994,911	55,157,140	77.95
2000-01	78	29,403,721	55,163,129	53.30
2001-02	78	36,708,638	55,163,129	66.55
2002-03	78	41,911,034	55,163,129	75.98



Legend: Actual & Estimated crushing 10 mln tons per cm

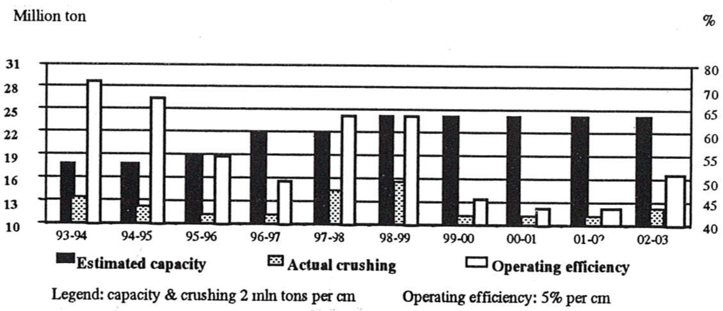
Operating efficiency: 5% per cm

Fluctuation in operating efficiency scale underscores casual treatment being meted out to the sugar sector. This tendency underscores need for attention so as to address intricacies and get solution online ensuring steady upswing performance.

The given figures represent an unstable trend and defy course to be of distinctly steady growth which is imperative for industrial segment to give positive results and an economic flourish. Situation in Sindh fared the worst, over the past three year, being of the lowest operating efficiency, as can be seen from the details on the next page.

Sindh sugar industry segment sequence

Season	Sugarcane crushing Tons	Estimated capacity Tons	Operating efficiency %
1993-94	13,031,888	18,310,500	71.17
1994-95	12,037,995	18,310,500	65.74
1995-96	10,341,335	19,030,500	54.34
1996-97	10,314,835	21,910,500	47.08
1997-98	13,853,313	21,910,500	63.23
1998-99	15,095,412	23,535,098	64.14
1999-20	10,856,757	23,535,098	46.13
2000-01	10,495,339	23,535,098	44.59
2001-02	10,162,607	23,535,098	43.18
2002-03	12,372,722	23,532,098	52.57



The potentials of Sindh sugar segment deserve exploitation at higher level to make valuable investments achieve economic rate of return and that this key industrial segment, with total focus on rural uplift, operates at a reasonable level, leaving no capacity idle.

The key issue in this context is to increase production of sugarcane, perceptibly by improving yield. Sugarcane cultivation demands intensive crop practice, which refers to achieve higher volume in the given area. It means improvement in yield. Potential of increasing sugarcane production through yield is significant. Achieving it shall induce improvement in operating efficiency of the sugar industry. The existing scope needs to be properly exploited on priority.

Inconsistency dominates sugarcane crop cultivation and sugar production. As a result, Pakistan faced contrasting trends, of short and excess sugar production during the past decade, arising from fluctuation in sugarcane production volume. Pakistan has been a notable but unpredictable player in the global sugar trade arena. Despite holding high potentials to produce more sugar in volume than its domestic requirement, it has been a net importer of sugar! Pakistan must create a predictable situation of surplus sugar so as to meet demand of regional countries. Attractive potentials exist in the adjacent countries of South, East and Central Asia, to which it has an easy access.

Sugar trade of Pakistan

Quantity in tons

Year	Imports	Exports
1993-94	47,669	121,565
1994-95	5,188	315,866
1995-96	3,480	- - -
1996-97	681,083	- - -
1997-98	109,393	457,471
1998-99	10,125	616,095
1999-20	66,627	- - -
2000-01	487,248	- - -
2001-02	85,684	8,000
2002-03	8,315	80,750

Steadily improving performance of the sugar industry in the country has not been noticeable. There have been unsavoury swings in sugar production. This odd squarely reflects complacence towards improving sugarcane quality and variety. As a result, yields and sugar recoveries have not desirably increased. Absence of efforts required in research and development have created a backlog, as its structure remains confined to the public sector. These are found prone to succumb to administrative twists, leaving no scope for R&D dynamism. Even simple function of timely care for inputs, which was a fine feature during the well-demarcated field areas, promoting support from specific sugar mills, being disrupted and absolutely done away during 1988 dismantled otherwise a vibrant structure.

Sugarcane demands continuous and consistent research pursuit so as to keep quality of the crop free from strain and stress. Ignoring its importance has inflicted substantial losses to (a) the farmers by lower yields, (b) the industry by reduced recoveries, (c) consumers by varying volume of sugar production and (d) the exchequer by inconsistency in revenue receipts.

Area under sugarcane crop, by and large, has hovered around one million hectares for a long time. Sugarcane production in this period fluctuated in the range of aggregate 38 million to 55 million tons! Obviously this can be referred to average yields not picking up. Yield fared mediocre between 44/hectare to 50/hectare.

Area, production, yield, and utilisation of sugarcane by sugar industry

Pakistan

Year	Area Hectare	Production Tons	Yield per Hectare	Utilisation % by sugar mills
1993-94	962,800	44,427,000	46.14	76.93
1994-95	1,009,000	47,168,444	46.75	75.49
1995-96	963,100	45,229,700	47.00	62.24
1996-97	964,511	41,998,409	43.54	64.65
1997-98	1,056,200	53,104,200	50.28	77.29
1998-99	1,155,100	55,191,100	47.78	77.90
1999-20	1,015,073	46,696,673	46.00	62.07
2000-01	961,542	43,608,169	47.60	66.69
2001-02	999,700	48,042,000	48.07	76.41
2002-03	1,099,700	52,050,000	47.33	80.52

Absence of a definite policy framework set disruptive trends in the industry. This is clearly gauged by: (a) effective sugar production capacity remaining markedly under utilised, (b) sugar production not on a steady upturn and (c) no built in safeguards to prevent disruptive impact on the national sugar economy in events of surplus or shortage.

For want of substantive sugar price policy, contrasted by protecting sugarcane by support price etc. kept the on-going malady compounding. The sugar industry has, in fact, been dealt with casually, by several of ministries at a time, each engaged on its piecemeal menu. As a result, a promising industry, (a) possessed with great potential to energise development of the rural sector, (b) capable to contribute sizeably towards socio-economic uplift and growth, and (c) poised to earn sizeable forex, by export of sugar and its allied products, remains stuck up to brave uncertain future and suffer in the tandem.

Sindh sugar industry

Sindh sugar industry, to sum up, has been gripped and grinded by complexity of problems, emanating from apathy and overlook by the Sindh government, found much fond of creating sugarcane price distortion, by its arbitrarily fixing sugarcane price at higher rate than advised by the federal government. This has been the root cause of the situation getting crisis-laden. Impasse structured in it on plea of "legality" has consequently inflicted huge losses to the Sindh sugar industry for the past two years at a stretch. It sounds ironical indeed that the most important and promising industry for the province, by particular reference to socio-economic development of its rural landmass, is being treated by contempt and neglect!

Three year monthwise wholesale sugar price per ton

Year:	2002-03	2001-02	2000-01
	Rs.	Rs.	Rs.
October	20,510	21,280	25,440
November	19,780	20,100	25,130
December	18,630	19,200	23,830
January	17,960	18,840	23,600
February	18,500	20,430	23,560
March	18,030	21,310	23,380
April	17,780	20,820	24,750
May	17,790	20,380	24,130
June	17,690	20,400	24,750
July	17,510	20,800	24,760
August	17,400	20,580	24,000
September	18,010	20,850	22,580
Total	219,590	244,990	289,910
Average	18,299	20,416	24,159

Sindh sugar industry has to suffer in all seasons, whether it is a surplus or shortfall in sugar production at national level. In case of excess production, Sindh faced the worst glut and consequent price fall, besides long holding time of inventories, as it has traditionally been a zone producing sugar above its consumption, thus earlier meeting shortage of sweetener in deficit zones. In the contrasting trend of shortage and imports to fill the gap, most of the imports get dumped into Karachi, a port city with a major market place for sugar. Sindh in the past, as such, depended on disposal of its surplus in the domestic deficit areas. The problem persisted as towards addressing this odd, neither the Sindh government nor the federal government ever paid heed, though their attention was drawn as many times about this ordeal. The customary neglect beleaguered Sindh sugar industry and weaved extreme perils for it during the past two years. Aware of devastation extending for 2002-03 season/year, as seen from 2001-02, Sindh sugar industry expressed its inability to begin the sugarcane crushing campaign for 2002-03. Its stand held reason and economic justification.

This compelling stand of Sindh sugar industry drew belated attention of the Sindh and federal governments. The PSMA-SZ was called for exchange of views on promise to find remedy for it. A number of meetings were held in this regard. The Sindh government held out firm promise to get the suitable package, designed by it, to be timely arranged and implemented, as prelude to commence sugarcane crushing season 2002-03.

(a) Concessional bridge financing of Rs.3.50 billion,
(b) export of 500 thousand tons surplus sugar from Sindh with cost-price differential compensation, likely from Rs.3.782 billion earned by federal government on import of 632,645 tons sugar in 2000-01 sugar season, drag of which led to the current complecations,
(c) exemption of sugar from sales tax or atleast reduction in it to 10%.

This promise was reiterated in several rounds of meetings held to rectify the odd situation. The PSMA-SZ placed its trust and confidence in the promises made, but alas, the later experience rendered it a dream, never translated into deed. PSMA-SZ made frequent and fervent calls, even its sending SOSs, which were all given, as usual, mere cold shoulder. Once the crushing season was on and even over, none of the promises were fulfilled and the package got virtually evaporated in thin air! It was mere 56,000 tons of sugar lifted from 28 sugar mills of Sindh out of 100,000 taken up by Trading Corporation of Pakistan (TCP) and 81,000 tons exported by end of 2002-03 season.

How more discriminatingly the Sindh government dealt with the sugar industry can be assessed, in short, by the following facts.

a) The federal government advised the provincial governments to announce sugarcane indicative price of Rs.42/40 kgs in Sindh and Rs.41/40 kgs. in the Punjab for 2001-02 and 2002-03 seasons. The Sindh government notified Rs.43/40 kgs. plus Quality Premium at paisa 50/40 kgs. per 0.1 incremental recovery above 8.7%. The Punjab government notified sugarcane support price at Rs.40/40 kgs. and Quality Premium was not notified. The Sindh government preferred creating an extremely odd situation which distorted cost of sugar production for the latest two years at a stretch. Since sugar has a free and, therefore, common market at national level sugar prices fared even. Since Sindh being a sugar surplus zone, its sugar sales and price positions were much adversely affected for distant sales

b) Sindh government by its notification of November 08, 2002 specified November 15, 2002 as commencement of the sugarcane crushing campaign. The mandatory one-month period to notify the season was overlooked. To be precise, there is no meaning and sense to follow the outdated Sugar Factories Control Act, 1950 in regulating, to be factual in capitulating the Sindh sugar industry. The days for which Oct-June was being deemed as the season for sugarcane crushing have long been over. Sindh sugar industry had on average operational range of 130 days for the past three year sequence. In no way, therefore, to specify commencement of sugarcane crushing season from October is justified. It shall be the right of the sugar industry to decide the season's start and end, by assessment of sugarcane crop size and relevant parameters. There is no point in isolation to decide this key issue by the government of Sindh.

c) The Sindh government notified sugarcane support price and laced it with Quality Premium on December 24, 2002, as a follow up to the commencement of the crushing campaign and made it effective to sugarcane crushed even before this date. In fact, this notification, if at all imperative, should have preceded the notification specifying commencement of sugarcane crushing date.

Sugarcane price notification following the specification of the sugarcane crushing season proverbially put the cart before the horse. This odd sequence, pursued deliberately, clearly underscores as a ploy employed by the Sindh government in pursuit of simply to get the sugarcane crushing campaign on by all means and subsequently ditch the sugar industry. Exactly this happened which testify the aim it held. This approach invariably caused perils and compounded woes of the Sindh sugar industry. It is in this context that Sindh sugar industry may not switch on the 2003-04 sugarcane crushing season in uncertain equation, as in the given situation it is certain to add to the losses incurred, which is absolutely unbearable and unaffordable.

Sindh sugar industry bears an unblemish record of its treating the sugarcane farmers liberally. No genuine sugarcane farmer would deny it. Sugarcane farmers and sugar industry, it is our strong belief, have identical interests to pursue, in which intervening conflict of interests cannot exist. Ignoring this can be mere propanganda ploy and for ulterior motives, in grinding own axe by a few. By and large, sugarcane farmers have understood this. The PSMA-SZ has been pleading to find a precise remedy to mutual problems by more interaction, forming unity with comprehension, so as turn the existing adverse trends favourable to both. This is need of the hour in order to prudently protect integrated economic interests.

A prime consideration for both sugarcane farmers and sugar industry is to achieve prices for both the products at cost plus. Insulating sugarcane in the chain is a recipe being half administered. It cannot deliver the goods. Either it is to be a free market for both sugarcane and sugar or the support price mechanism covers them both. This is a crucial issue to broach distinctly and decide instantly. Its solution does not seek a long run research and permutations to reach the finer point.

Nonetheless, the precise solution rests overwhelmingly with improving the quality and introduce new rich varieties of sugarcane crop. It is prerequisite to bring prosperity for both the stakeholders. Average yield of sugarcane per hectare in Pakistan hovering around 48 tons/hectare is the lowest in rating with other sugarcane cultivating countries in the world. This average can be doubled by suitable varietial development, which needs to be made a prime policy in pursuit for flourishing future. Sugarcane farmers economic interest needs to be confined with yield rather than 'quality premium' in sugar recovery. This proposition has justification as it will imbibe proactive spirit of evolving improved quality of sugarcane.

Likewise, sugar recovery in factory needs to be improved to 13/15 percent from its improvised average of 8/9 percent. Sugar factories shall gain by improvement in recovery, rather give it up entire gain plus of it to the sugarcane farmers, as is the practice, under compulsion of Sindh government notification in arbitrary manner. Let there be clear demarcation of gain by yield to be exclusive for sugarcane farmers and recovery gain to sugar mills. This will surely improve sugarcane quality and sugar mills technology. Their combination could herald happiness for both the segments.

These are the potentials, to be pursued in concert as conflict of interest cannot bring it. The bonds of bindings, broken by poor pursuit of de-zoning of 1988, needs to be rebuilt, if not on other extreme of zoning then by a balanced measure of some sound arrangement in between the two extremes. Modalities for it can be worked out by meticulous, meaningful and material consultations. Promoting dialogue to concentrate on this key issue, the PSMA-SZ invited the sugarcane farmers and is keeping its door wide open for discreet discussions. It is hoped that sugarcane farmers, our friends indeed, would pay heed to this PSMA-SZ clarion call, so as to bring prosperity in place of peril and flourish in place of frustration, both for the sugarcane farmers and the sugar industry. Let this realisation take us together on march of mutual gains.

The sugarcane farmers have persistently expressed their anxiety over rising trend in cost of inputs, utilities tariffs and services charges. Such an increase, however, is getting more than reflected in the cost of sugarcane production study being carried each year by the Agriculture Price Commission. Sugarcane price being notified by the provincial governments on advice of the federal government tends to be based on proposals of the APCom which takes care of the cost increases reflected in sugarcane price. No such safeguard mechanism exists for sugar! This leaves wide distortional gap in sugar production cost vis-à-vis sugar price, critically grinding the sugar industry.

It is evident that sugarcane price need not be the sole source to ensure sugarcane farmers cost plus revenues of their efforts and produce. Reliance made more on this formula, as has been the practice for too long a time to be affordable for its further stretch, it viciously compounded the problem. The solution will emerge by rationalising sugarcane vis-à-vis sugar price modalities. In fact, the latest two years trends explain having reached a dead-end in pursuit of this ill defined policy. It cannot be carried any further without further damage. The option, the most suitable in this regard, is that revenues and income be production related. The sugarcane farmers have to see their resources now to flow from increased production. This specifically refers to improving the sugarcane yield per hectare and fetch higher production volume to ensure and sustain more revenues and income. This shall serve interest of all the stakeholders, associated with sugar and will be in the interest of national economy. On achieving higher yield as well as sugar recovery, Pakistan can get a firm foothold in sugar exports field. Once this process is placed on sound track, it is bound to gather momentum and cultivate conditions conducive to get on with value-added and products diversification from by-products rolling out on sugarcane processing and sugar production. The scope for increase in sugarcane yield and sugar recovery is indeed immense. Its flourish demands concerted drives in coordinated approach of sugarcane farmers and sugar industry.

Sugar industry, a catalyst of rural development, has potential for a surge promising pleasant surprise, provided the planners get on in promoting coordination between the two major players in sugar processing, being the sugarcane farmers and the sugar industry. The government policy, currently over-regulating the sugar industry, needs to be dismantled and replaced by supportive setup. Alternatively the Government of Pakistan shall leave both the players free in evolving useful equation by interaction.

Problems of Sindh sugar industry

1) Cost of sugarcane production

The season 2002-03 was replay of previous year's trend relaxed a little for sugarcane farmers in terms of sugarcane area increased to 259(241) thousand hectares and sugarcane production higher at 13.798(11.416) mln tons. It was by yield higher at 53.27(47.43) tons per hectare, increasing revenues by 12.31% and profit even more. Obviously, it means the sugarcane farmers had higher revenues and returns. More sugarcane production both through expansion in area and more by improvement in yield must have made their kitty richer and rewarding. This pursuit, therefore, needs to be fortified so that reward is consolidated and advanced.

Sugarcane crop in Sindh

Season	Area in hectares	Production tons	Yield ton/hectare
1998-99	270,800	17,050,700	62.96
1999-00	230,561	14,290,793	61.98
2000-01	238,842	12,466,146	52.19
2001-02	240,693	11,416,330	47.43
2002-03	259,000	13,798,000	53.27

During the review year one sugar mills, earlier under installation phase, resumed operations for a short run, increasing effective sugarcane demand to an extent but coming at a time of higher crop size, supplies were not adversely affected. Sugarcane prices on average per 40 kgs. unit fared in a reasonal bound. But sugar price fall made a successive and deep dent to economic viability of Sindh sugar segment.

Reasonable sugarcane price was to an extent by improved availability of sugarcane volume and better system in marketing and supplies. These propped up some improvement in sugar recovery to 9.32%(9.26)%, injecting incremental sugar production. Sugar production in Sindh over the past three years can be seen from data in the following table.

Trend of sugar production in Sindh

Year	Sugarcane crushing tons	Sugar production tons	Recovery %
1999-20	10,856,757	996,317	9.18
2000-01	10,495,339	968,175	9.22
2001-02	10,162,606	940,959	9.26
2002-03	12,415,760	1,156,726	9.32

Sugarcane crushing improved by 2.253 mln tons, i.e. by 22.17%. Likewise sugar production was higher by 215 thousand tons, up 22.93%.This helped to retain sugarcane prices and have some salutary influence on cost of sugar production. In it, higher operational efficiency at 50.87(43.18)% also helped. But sugar sales prices slumped and the bottomline remain deteriorating as in the previous year for almost all the sugar mills of Sindh.

During the 2002-03 sugarcane crushing season, average sugarcane processing by sugar mills in Sindh rose by 17.80%, to 443,420(376,393) tons. Sugar production was up by 18.54%, to 41,311(34,850) tons. An increase in average recovery of the industry to 9.32(9.26)% was an icing. Favourable economy of scale was operative as evinced by higher operational efficiency.

Operating efficiency

Year	Sugarcane crushing tons	Estimated capacity tons	Operating efficiency %
1998-99	15,095,412	23,535,098	64.14
1999-20	10,856,757	23,535,098	46.13
2000-01	10,495,339	23,535,098	44.59
2001-02	10,162,606	23,535,098	43.18
2002-03	12,415,760	24,406,768	50.87

Operating efficiency of Sindh sugar industry for the past four years on average fared at 46.19%. This cannot be rated as reasonable and sufficient to set positive trend, to yield promising returns.

2) Further slump in sugar price
   Sugar prices plummeting persisted without pause. It was the second year in succession of such an adverse trend. It was due to higher inventories of 637,149(633,870) tons carried, plus sugar production surge in the country to 3.686(3.249) mln tons, making a tally of availability soaring to 4.332(3.913) mln tons. All the three zones rolled higher sugar production. Supplies at all stations were eased to increase. Sindh being always a surplus and this year with more production suffered sharp squeeze by reduced sales, larger inventory haul for a longer time and prices falling like proverbial ninepins. How the sugar prices fell further flat during the review year and before is distinct from data in the table below.

Monthwise wholesale sugar price per ton / Rs.

Month	2002-03(fall)	2001-02
October	20,510	21,280
November	19,780	20,100
December	18,630	19,200
January	17,960	18,840
February	18,500	20,430
March	18,030	21,310
April	17,780	20,820
May	17,790	20,380
June	17,690	20,400
July	17,510	20,800
August	17,400	20,580
September	18,010	20,850
Total	219,110	244,990
Average	18,299	20,416

(To arrive at ex-factory sugar price, deduct sales tax at 18% and transport plus trade channel charges of Rs.1.50 per kilogram).

Slashed sugar prices emanating from glut gave grave jolts to Sindh sugar industry which had to recur losses.

3)Typical issues of Sindh sugar industry

Sindh sugar industry inherited twin typical problems. Their genuine resolve, particularly by government of Sindh, is inevitable. Initiative be taken in evolving suitable mechanism for their redress.

Sindh has been the sugar surplus province. Sugar production in Sindh during the past 10-years has fared in the range of 941 thousand to 1.374 mln tons. Sugar consumption in Sindh in this period had been in the range of 527 thousand to 700 thousand tons, leaving a surplus of 400 thousand to 660 thousand tons a season. Until the Punjab was short of sugar production, Sindh held outlet for disposal of surplus.

Punjab became adequate in 1997-98-99 by sugar production exceeding two mln tons and setting a fresh record of 2.360 mln tons production in 2002-03. Its quantum jump made the Punjab also a sugar surplus area. Its estimated population of 82.710 mln could have sugar consumption of 1.654 mln to 1.820 mln tons based on per capita consumption at 20/22 kilogram. Hence Punjab had surplus of about 500,000 tons.

Sindh faced odd of surplus and no disposal avenue aggravated further. Production of 1.156 mln tons far exceeded sugar consumption in range of 685,000 to 753,000 tons for its population estimate of 34.240 mln, based on per capita sugar intake of 20/22 kilogram a year. Sindh held a floating surplus of about 500,000 tons and suffer a sharp price squeeze emanating from it.

As both the main zones had a sugar surplus each of about half a million, a tall aggregate of one mln tons, the lone way out was to export and save the 'sugronomics'. Several desperate calls made by PSMA and rounds of meetings could not melt the ice, leave a fraction of 100,000 tons lifting by the Trading Corporation of Pakistan (TCP) for exports, which could not cast positive influence on sugar price trend in domestic market.

An alternate to combat surplus or shortage of sugar, each country keeps certain volume of sugar as strategic stock, deemed essential for food items. Though sugar is a food item, it is strange that the Government of Pakistan never deemed to do so as desirable.

Strategic stock keeping tends to be inevitable in preserving food security, prevent imports in lean periods and save foreign exchange of unwise drain. It will be in concert to observe that recently the Food & Agriculture Organization (FAO) of the United Nation held a seminar in Pakistan on food security and underlined the need to keep strategic stocks of food items in Pakistan. With the World Trade Organisation (WTO) becoming active in promoting global trade with tariff reductions and quota elimination, it is imperative that agricultural sector of Pakistan is protected well, since on it depends our economy and social security. The Government of Pakistan should in quick thrust decide to create strategic stocks of essential commodities, inclusive of sugar, so as to achieve food security in the country.

The Sindh government, we plead, may approach the Government of Pakistan to create strategic stock of sugar in the range of 500 thousand to 800 thousand tons and adopt this as permanent policy feature.

4) Quality Premium
Government of Sindh, ignoring the advice of the federal government and pursuit of the Punjab government, has unduly persisted to notify payment of Quality Premium at paisa 50/40 kgs. per 0.1 increment sugar recovery over 8.7%. It was enhanced out of context in 1998-99 to paisa 50 per 40 kgs. of sugarcane. This payout is out of tune when assessed in context of sugarcane cost work out by Agriculture Price Commission (APCom). Its cost refers to good quality of sugarcane as APCom's input features clarify. Hence there had been no reason to specify premium and not at all to prescribe it arbitrarily in Sindh zone alone. Declaration of Quality Premium "unlawful and without legal authority" during 1995 by Lahore High Court shall hold good at the national level, rather placing Sindh in perilous position to bear the brunt in isolation. System of quality premium, in its present form fares far detached from its basic objective which was meant to achieve sustained improvement in yield and recovery. Keeping its benchmark constant for past several years has made the system faulty, defective and untenable. It has defied to be an instrument of quality improvement in sugarcane crop. Mechanism of quality premium is absolutely irrational. In the free market price of sugarcane, often quite higher than the support/indicative price, the QP bears no merit. Higher price of sugarcane had been absorbing more than QP if the sugarcane was made available at the prescribed support price. Sindh shall not solely bear the brunt of quality premium and in the process destroy its sugar industry, as it will eventually lead to destroy sugarcane farmers as sugarcane cannot be sent to far places or exported!

5) Sales tax on sugar
Sugar is an essential food item for all strata of society. But it has been arbitrarily subjected to rigours of taxation. Sales tax is charged at effective 18%. It makes big drain on essential food item and forms 16 percent of the cost of sugar sales. It brings high stress.

A lot of paper work, hustle and hardships, besides financial stress result out of ST layer. As no other food item is subject to such sales tax rigours why sugar?

Retail outlets and provision stores selling food items are not willing to keep sugar to sell with other items, as it would lend them to registration by tax department. Sales tax system is cumbersome. As such, sales tax incidence of 18% effectively falls on the industry to bear. Exemption of sugar from sales tax would be a wholesome relief for the consumers, the sugar industry and other industries consuming sugar in manufacture of value-added products. However, the Government of Pakistan will get Sales Tax on other products using sugar and it will never be a zero point game. By removing sales tax on sugar, core consumers, i.e. domestic segment utilising about 33% of total sugar consumption will benefit and sugar industry relieved of undue burden. On remaining 67% of commercial and industrial use of sugar ST will remain to yield adequately.

6) Discounted suitability
Sindh located in the equatorial range alongside the Arabian Sea makes it by climatical conditions as the most suitable for cultivation of high yield and rich sucrose content varieties and quality of sugarcane. Past performance record of Sindh in this regard bears eloquent testimony of achieving laudable results. In sharp contrast to it, recent past mid-term trend betrays its feat. The reason is fully known to the stakeholders and is better not to repeat. Of course, stretched drought damaged the sugarcane crop as other crops and gripped the entire agronomy of Sindh by a bitter backlash. Sugarcane crop was not exempt to bear its brunt. Some seriously impacted districts were declared as calamity areas by Sindh government. This tendency extended during the review year by floods! Sindh was the worst affected area by stretched drought. At end of south, Sindh, nevertheless, tends to be the ideal location for flourish of sugarcane crop but had to face the hardship. Part of the blame for its fate is to be shared by the stakeholders, being neglect in realising ground realities, besides the policy of Sindh government being absolutely imbalanced and thoroughly skewed.

Sugar industry of Sindh fell helpless prey to perils arising out of this sad saga. Losses suffered by the industry for the past two years in succession would need long time to recoup and have a financial turnaround. Restoring its sustainable performance in time to come and reenergizing the provincial socio-economy by its better debut, is the primary responsibility of Sindh and federal governments, as authority of designing policy and its execution is with them. They ought to extend meaningful support in rehabilitation of Sindh agronomy with particular reference to its agro-based segment, in which sugar industry has a place of priority.

7) Market Committee Fee
Fees being charged and coercively being demanded/collected by the market committee on sugar industry lacks logic and justification. It is simply extortion. Yet the malady persists. Numerous representations made against it, highlighting its being irrational, have been futile.The Sindh government indicated its being inapplicable. Similar is the stand of the sugarcane farmers organisations. All the stakeholders hold common view. But the Sindh government functionaries have yet to come out to end this malaise. Fee is subject to rendering services specified. MCs have no role, whatsoever, in marketing of sugarcane. Sugarcane supplies meant for sugar processing is managed directly between sugarcane farmers and sugar industry, without MCs role in it.

There is no cogent reason that MCs collect fees from sugar industry by arbitrarily notifying sugar factories in their areas of operations, though none of other functions prescribed in the Act are attended. None of these are required either by the sugarcane farmers or sugar mills. The bad practice persists to denude resources of the sugar industry. An ambiguity damaging sugar industry must be rectified without further delay. Its extended dismay must be dismantled forthwith. There is no reason, no justification to let the MCs hold sugar industry by ransom and get irrationally fat, frightening the agricultural and industrial subsectors of sugarcane and sugar respectively.

8) Road Cess and Surcharge
A positive headway seen in solving the issues of Road Cess and Surcharge on Road Cess awaits its finishing touch. The agreement of June 26, 1996 is under implementation. Sindh government cabinet decision of July 08, 2002 envisaging Road Cess to be paisa 50/40kgs, with equal contribution by the sugarcane farmers and sugar industry since 1995–96 season and Surcharge on Road Cess, if deducted by the sugar mills to be refunded to the sugarcane farmers is under implementation.

Solution to the problems

a) Revenues by yields
High cost of sugar production in Sindh is perceptibly due to high prices of sugarcane and vicissitudes of quality premium. Pursuit of this coercive system and benchmark kept constant since invoking support price mechanism has no locus standi as frequent enhancement in support price as well as 'premium' have rendered 'sugronomy' haywire. The system insulating sugarcane growers' stakes and putting sugar industry on altar of inequity has been of destructive influence. It has led to no interest in cultivating high yield-cum-sucrose varieties of sugarcane.This complacency has been proved detrimental to economic interests associated with sugar. The industry is bearing its brunt the most.

Average sugarcane yield of Sindh at 56 tons/hectare and average national sugar recovery at 9.19% for the past five year fall far short of sustainable economic outlook of the Sindh sugar industry.

b) Growth-led gains
Monetary gains of sugarcane crop need to be through enhancement in sugarcane yield. It is farmers' domain to excel and serve its own and national interests. Action on this front is not much visible. Sugarcane yield and sugar recovery of Pakistan have been a bane by their being lowest despite great scope to get dramatic growth on both fronts. Exploiting the scope at best shall be the bet correct and a rational approach to secure gains. Prescription to achieve it needs to be administered.

National sugarcane yield for the past one decade fared between of 43 to 48 tons per hectare. This sits at the lowest rung among the main sugarcane cultivating countries. Research people are positive on achieving average yield of 72 tons/hectare by supervised cultivation. Yield can be raised further to 90/110 tons per hectare by varietial development. These pursuits have remained unduly overlooked.

Potential to improve sugar recovery to 10/11% by rich varieties of sugarcane also exists. Higher yield and recovery on the given 1000 thousand hectares would impressively increase sugarcane and sugar production volume. Its extent and scope is illustrated in the table given below.

Potentials of 1000 thousand hectares under sugarcane crop

Yield t/h	Sugarcane crop Mln. tons	Sugarcane utilisation%	Sugarcane utilisation volume Mln. tons	Recovery %	Sugar production Mln. tons
50	50	67	34	9.0	3.06
55	55	69	38	9.3	3.53
60	60	71	43	9.5	4.08
65	65	73	47	9.7	4.55
70	70	76	52	9.9	5.14
75	75	77	58	10.1	5.85
80	80	79	63	10.3	6.48
85	85	81	69	10.5	7.24
90	90	83	75	10.7	8.02

Note: t/h stands for tons per hectare. Mln tons stands for million tons.

Imaginative plan for sugarcane production by supervised and well-managed cultivation culture is a challenge that must be resolutely responded. A mid-term plan to attain reasonably increased sugarcane yield be devised. This pursuit can break the bane of crutches of support price structure, in vogue for the past quite a long time. Syndrome of high cost of sugar production, a legacy of the existing structure, needs to be addressed by evolving a result-based strategy.

Paradox

The PSMA-SZ has often pointed out that the existing system in assessing sugarcane production cost is a fallacy, due to its not observing norms and applying appropriate inputs and services parameters. This malady tends to show high cost of sugarcane production. Sugar marketing set free to find price track during 1984 and yet to continue with specifying support/indicative price for sugarcane in isolation, has become untenable, having lost its economic justification.

No distinction between cost of production and cost of sales of sugar vis-à-vis price has been another slip. This has been cause of distortion, by denial of economic return to the sugar industry. This reflects tilt of government in favour of farmers alone. It is, in fact, sugar which be put in focus to arrive at economic price of sugarcane.

The case of cost-price disequilibrium has been often presented by the PSMA. The subject demands dispassionate analysis to bring an equitable mechanism. Sugar industry be supported to play its pivotal role in the national economy. Alternatively, a suitable mechanism be arranged for sugar price to find its level for survival of the industry segment.

Key elements

Absence of precise sugar price policy portrait, contrasted by secured sugarcane price in isolation, has been the cause of perplexed malady. A highly promising industry, (a) possessing power to energise rural Pakistan, (b) contribute substantially in socio-economic growth and cohesion and (c) able to earn handful of foreign exchange has been sunk by whirlwind of adverse factors.

The sugar industry's dilemma is

a) poor quality and lower volume of sugarcane,

b) under utilisation of industrial capacity,

c) maginalising the scope of economies of scale,

d) problems persisting in all 'seasons' by shortfall or surplus sugar production, and

e) dominant cost/price disequilibrium in domestic and export markets.

This laments absence of a precise policy format in managing the national sugar industry on lines to ensure a sustainable future and a flourish.

Structural mechanism for research

(a) Improving sugarcane supplies:
Importance of research and development in sugarcane crop and its multiple benefits have been trumpeted for a long time. It is high time to create committed structure and get it click to yield 72 tons/hectare and sugar recovery at 11%. This key work deserves to be taken up expeditiously.

Sugarcane production in the country and in Sindh during the past seven years denotes fluctuations, defeating designs in stability and sustainable growth. Measures have not given outcome matching with the potentials. Increasing yield consistently has been elusive in effect. Stakes of sugarcane farmers and sugar industry have remained, as a result, insecure.

(b) Research and development:
The PSMA-SZ have, time and again, proposed adoption of a precise system and structure of research and development which can benefit all the stakeholders.

i) Efficient institutional network for sugarcane research be set up in each division. Board of each such institute may be consisted of three representatives, one each of sugarcane growers organisation, PSMA-SZ and government functionary, each having inclination for sugarcane research and development.

ii) Research activity be funded from the cess money recovered on sugarcane processing. Additional fund may be allocated from sales tax on sugar. Fund for research from sugarcane cess be released to the relevant sugar research institutes providing them authority to formulate research budgets sanction, approval and pay for the services after verification.

iii) Coordination among SRIs be arranged to prevent overlapping of functions and to promote sharing of experiences and know-how by process of mutual consultations. Working by the SRIs in coordination with sugarcane growers and sugar mills in each province will break the grounds better and reap the results rapidly.

Sugarcane cess fund accounts of their past collection and the balances be shared with its contributing entities. Balances be handed over to the proposed SRIs on divisional and provincial levels for utilisation and a meticulous monitoring system be put at work.

It is imperative that strategy for disposal of the surplus is fine tuned at the earliest, as delay in it, assessed by global surplus scene, would fare exceptionally unfavourable. Dilly-dallying in it by the federal government, as seen during the past three years at a stretch, has excessively damaged the national sugar industry, particularly its Sindh segment. Persisting with similar outmoded policy outfit of dragging status quo is bound to shatter the sweetener counter, an engine of thrust in rural development. The Government of Pakistan must formulate a clear policy design in support of the sugar industry, enabling it play its legitimate role in perfect rhythm. It will serve the national socio-economic interests at their best and, as such, there shall not be any hesitance in adopting a right line of action in this context.

Sugar industry's potentials to flourish await a miticulous touch of informed decision making, in meaningful and bold manner, based on data made available. This has been lacking and consequent to it, sugar industry has suffered colossal losses. Not just retrieving it and rehabilitation but a perfect revival is its right which need to be conceded, protected and promoted by a candid forthright approach.

Pakistan sugar availability, lifting and stock

(Quantity in tons)

Sugar year: (Oct-Sept)	2003-04 estimate	2002-03	2001-02
Opening stock Oct. 01	759,103	637,149	633,870
Sugar production	3,936,000 / 3,752,000	3,686,061	3,249,028
Sugar imports	---- ----	8,315	29,692
Sugar availability	4,695,103 / 4,511,103	4,331,525	3,912,590
Sugar lifting	* 3,336,050 / 3,336,050	3,472,422	3,275,441
Avg. lifting per month	278,004	289,369	272,953
Aggregate sugar surplus	1,359,053 / 1,175,053		
Sugar exports/strategic stock	500,000	100,000	----
Stock/surplus at end sept.	859,053 / 675,053	759,103	637,149

* Based on population estimate at 152.75 mln x per capita sugar consumption @ 22 kgs.

Sindh zonal pursuits

Sindh zone gave a comprehensive presentation on the national sugar industry issues, with special reference of Sindh segment, alongwith proposals on their resolve to the Federal Minister of Industries & Production, Federal Minister of Finance, Chief Minister of Sindh and other ministries at federal and Sindh government levels. The presentations were appreciated and upheld as based on precise economic analysis. The problems of the industry have, however, persisted.

Sindh zone approached the State Bank of Pakistan for relaxation in applicability of Prudential Regulations on the sugar industry and in support several cogent economic reasons were given. Success to an extent was achieved in this regard.

Sindh zone acquired representation of the Pakistan Sugar Mills Association on the Federation of Pakistan Chamber of Commerce & Industry (FPCCI) and also nominated representatives on various subcommittees constituted by the FPCCI. This promoted interaction of the PSMA with the apex body and more to remain on track, it will serve the mutual interest of national industrial sector.

Sindh zone took interest by participating in a daylong seminar organised by the Institute of Business Management on sugar and other industries during April 2003, so as to project and promote the economic interests of our industry at this gathering of several segments.

Sindh zone attended and presented sugar industry scenario, explaining difficulties and remedial strategy needed in its sustainable performance with special reference of Sindh sugar industry, at the First National Convention of Sugar Workers' Federation held during May 2003. The participants could have by this a real insight to the problems.

Sindh zone actively coordinated with the Trading Corporation of Pakistan in its procurement of 100 thousand tons of sugar for exports.

Sindh zone requested the Department of Food & Agriculture, Government of Sindh, not to expedite formulation of its proposed 'Sugar Act 2003' in isolation and emphasised need and justification of such Act, if any, to be on common basis at the national level. The point, it is hoped, has been well taken.

Sindh zone kept deliberations on channels available with the sugarcane farmers and held meetings to evolve understanding on critical issues eclipsing future of the sugar industry, as it had direct bearing on sugarcane farmers. This pursuit will remain ongoing in serving mutual interest with understanding in an amicable environment.

In brief, at each occasion, PSMA-SZ vigorously pursued the cause of national sugar industry and of its zone.

Shunaid Qureshi
Chairman
PSMA - Sindh Zone

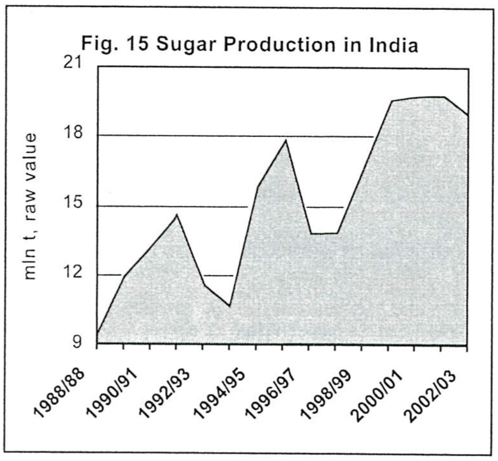


Fig. 15 Sugar Production in India

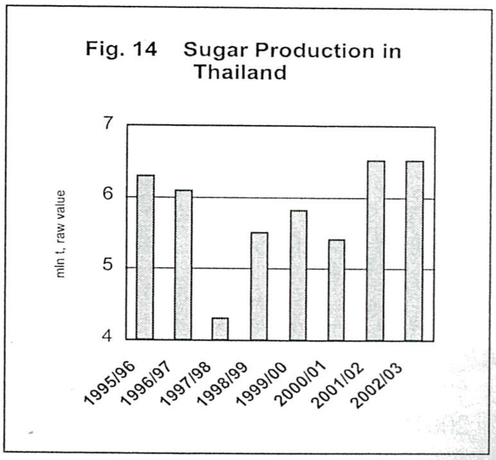


Fig. 14 Sugar Production in Thailand

CONSOLIDATED SUGAR PRODUCTION IN PAKISTAN (Tons)

Year	Sugarcane	Beet Sugar	Raw Sugar	Total
1993-94	2,900,524	21,934	—	2,922,458
1994-95	2,983,082	18,370	—	3,001,452
1995-96	2,449,598	20,436	—	2,470,034
1996-97	2,378,752	14,610	—	2,393,362
1997-98	3,548,960	6,267	—	3,555,227
1998-99	3,530,932	10,687	—	3,541,619
1999-20	2,414,746	14,618	—	2,429,364
2000-01	2,466,788	17,276	531,930	3,015,994
2001-02	3,197,745	29,172	22,111	3,249,028
2002-03	3,662,050	22,066	1,945	3,686,061

MOLASSES PRODUCTION IN PAKISTAN (Tons)

Year	Pakistan	Sindh	Punjab	NWFP
1993-94	1,694,852	676,790	972,827	45,235
1994-95	1,650,952	592,068	1,010,891	47,995
1995-96	1,361,471	503,692	821,298	36,481
1996-97	1,313,745	482,636	798,448	32,661
1997-98	1,995,788	701,810	1,237,940	56,038
1998-99	2,113,594	760,532	1,276,392	76,670
1999-20	1,397,377	534,003	800,636	62,838
2000-01	1,501,501	550,605	901,732	49,164
2001-02	1,822,961	522,938	1,244,906	75,117
2002-03	2,044,204	656,520	1,308,861	87,313

TEN-YEAR SUGARCANE CRUSHING, SUGAR PRODUCTION & RECOVERY %

PAKISTAN

Year	No. of Mills	Cane Crushing Tons	Sugar Production Tons	Recovery %
1993-94	63	34,181,899	2,900,524	8.48
1994-95	66	34,193,290	2,983,082	8.72
1995-96	67	28,151,434	2,449,598	8.70
1996-97	67	27,352,918	2,378,752	8.76
1997-98	71	41,062,473	3,548,960	8.64
1998-99	73	42,994,911	3,530,932	8.21
1999-20	67	28,982,711	2,414,746	8.33
2000-01	65	29,410,790	2,466,788 *	8.38
2001-02	68	36,708,638	3,197,745 **	8.71
2002-03	70	41,911,034	3,662,050 ***	8.74

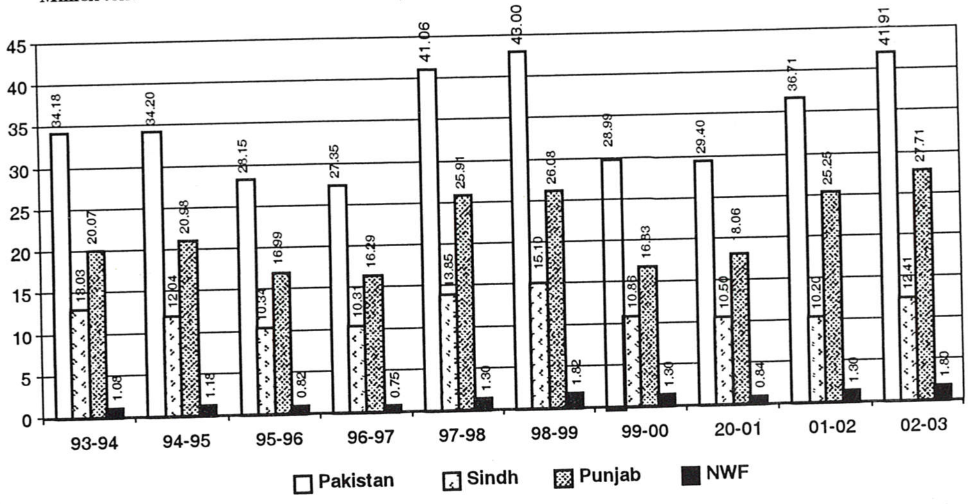
* Sugar production of 531,930 tons from raw processing of 570,703 tons not included.

** Sugar production of 22,111 tons from raw processsing of 23,760 tons not included.

*** Sugar production of 1,945 tons from raw processing of 2,287 tons not included.

SUGAR MILLS SCENARIO

Year	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03
Description										
Operative	63	66	67	67	71	73	67	65	69	71
Non-operative	3	1	3	7	2	2	8	10	6	5
Under Installation	—	—	—	1	3	3	3	3	3	2
Total	66	67	70	75	76	78	78	78	78	78



SINDH

Year	No. of Mills	Cane crushing Tons	Sugar production Tons	Recovery %
1993-94	24	13,031,888	1,172,508	9.00
1994-95	24	12,037,995	1,107,881	9.20
1995-96	24	10,341,335	1,008,127	9.75
1996-97	27	10,314,835	1,028,169	9.97
1997-98	28	13,853,313	1,374,485	9.92
1998-99	29	15,095,412	1,353,013	8.96
1999-20	25	10,856,757	996,317	9.18
2000-01	25	10,495,339	968,175 *	9.22
2001-02	27	10,162,607	940,959 **	9.26
2002-03	28	12,415,760	1,156,726 ***	9.32

* Sugar production of 258,547 tons from raw processing of 278,091 tons not included.

** Sugar production of 16,349 tons from raw processing of 17,608 tons not included.

*** Sugar production of 1,945 tons from raw processing of 2,287 tons not included.

Year / Description	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03
Operative	24	24	27	28	29	25	25	27	28
Non-operative	1	3	3	1	1	5	5	3	3
Under installation	—	4	1	2	2	2	2	2	1
Total	25	31	31	31	32	32	32	32	32

PUNJAB

Year	No. of Mills	Cane crushing Tons	Sugar production Tons	Recovery %
1993-94	33	20,066,265	1,634,154	8.14
1994-95	36	20,975,836	1,771,084	8.44
1995-96	37	16,992,633	1,375,789	8.10
1996-97	37	16,293,237	1,292,913	7.94
1997-98	39	25,905,541	2,065,886	7.97
1998-99	39	26,081,066	2,033,356	7.80
1999-20	37	16,829,610	1,315,637	7.82
2000-01	35	18,068,436	1,437,450 *	7.96
2001-02	37	25,252,609	2,152,175 **	8.52
2002-03	38	27,707,464	2,360,404	8.52

* Sugar production of 262,171 tons from raw processing of 280,726 tons not included.
** Sugar production of 3,878 tons from raw processing of 4,153 tons not included.

Year	1993-94	1994-95	1995-96	1996-97	1998-99	1999-2000	2000-01	2001-02	2002-03
Description									
Operative	33	36	37	37	39	37	35	37	38
Non-operative	—	—	—	1	—	2	4	2	1
Under installation	1	—	—	—	1	1	1	1	1
Total	34	36	37	38	40	40	40	40	40

NWFP

Year	No. of Mills	Cane crushing Tons	Sugar production Tons	Recovery %
1993-94	06	1,083,746	93,862	8.65
1994-95	06	1,181,751	104,117	8.81
1995-96	06	817,429	65,682	8.19
1996-97	05	744,846	57,670	7.74
1997-98	05	1,303,619	108,589	8.30
1998-99	05	1,818,433	144,481	7.95
1999-20	05	1,296,344	102,792	7.93
2000-01	05	847,015	61,163 *	7.22
2001-02	05	1,293,422	104,611 **	8.09
2002-03	05	1,787,810	144,917	8.11

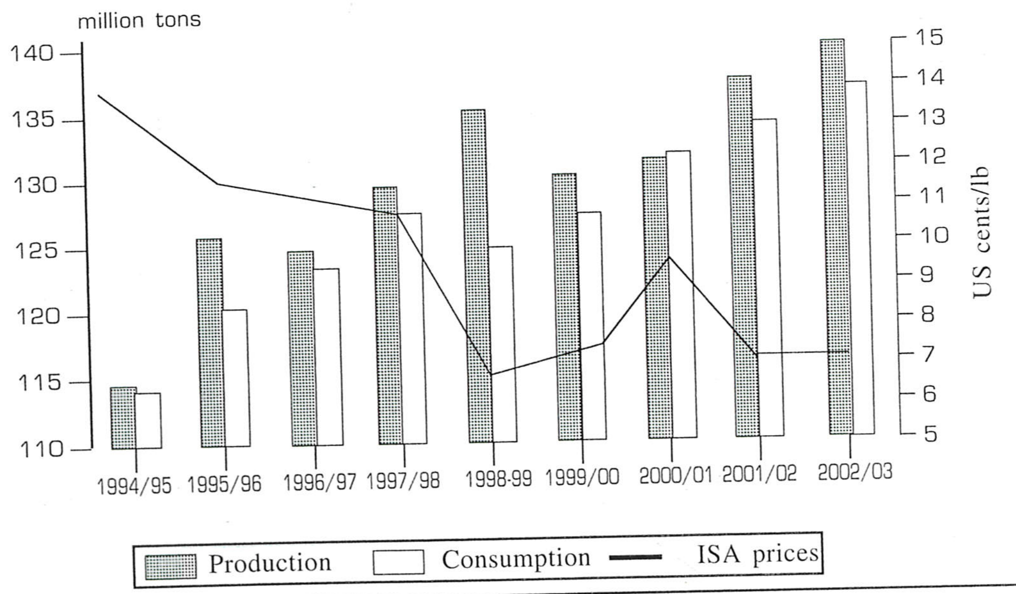
* Sugar production of 11,212 tons from raw processing of 11,886 tons not included.
** Sugar production of 1,885 tons from raw processing of 2,000 tons not included.
From 1995-96 onward 05 mills are operative and one mills is non-operative. Total 06 mills

BEET SUGAR PRODUCTION
BEET SLICED, SUGAR MADE & RECOVERY BY NWFP SUGAR MILLS

Year	No. of Mills	Beet sliced Tons	Sugar made Tons	Recovery %	Molasses made Tons
1993-94	04	242,482	21,933	9.05	9,392
1994-95	04	193,595	18,371	9.39	7,412
1995-96	04	211,670	20,436	9.65	7,738
1996-97	03	166,875	14,610	8.76	6,115
1997-98	02	81,794	6,267	7.66	3,127
1998-99	03	126,123	10,831	8.59	5,069
1999-20	03	187,478	14,618	7.80	7,750
2000-01	03	226,252	17,276	7.64	8,684
2001-02	03	316,041	29,173	9.23	13,378
2002-03	03	222,063	22,066	9.94	8,490

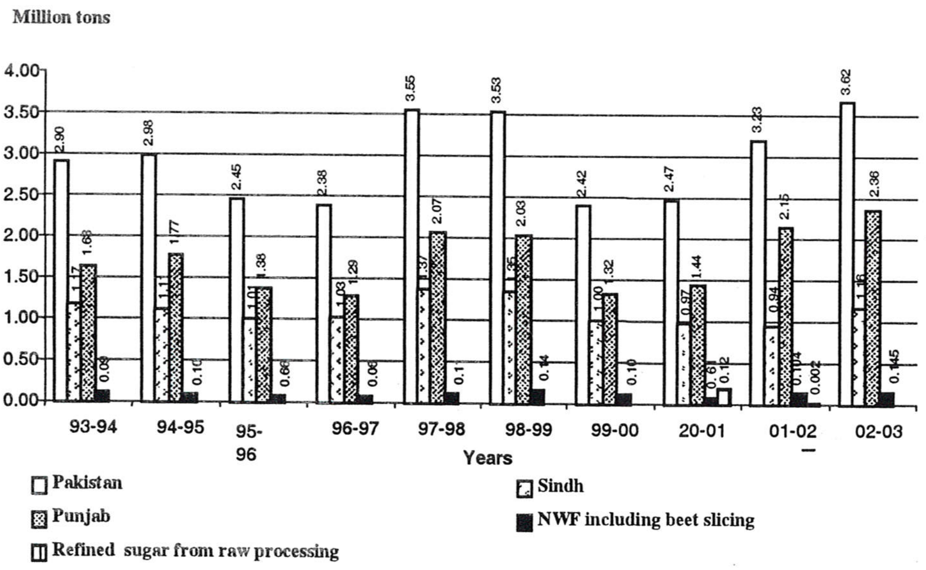
Year / Description	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03
Operative	04	04	04	03	02	03	03	03	03	03
Non-operative	02	02	02	03	04	03	03	03	03	03
Total	06	06	06	06	06	06	06	06	06	06

World Sugar Production, Consumption and ISA prices



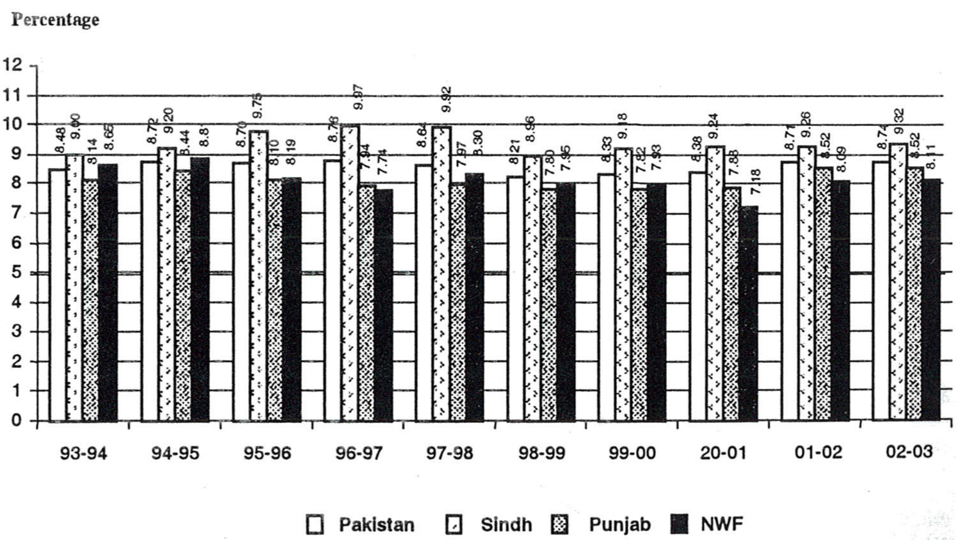
International Sugar Organization MEGAS (02)13- September 2002

10-YEAR SUGAR PRODUCTION FROM SUGARCANE IN PAKISTAN, SINDH,PUNJAB & FROM SUGARCANE & BEET IN NWF



Legend 1 cm = 500, 000 tons

10-YEARS SUGAR RECOVERY % SINDH, PUNJAB, NWF



Legend 1 cm = 2 percent

SINDH CONTRIBUTION IN CANE SUGAR PRODUCTION OF PAKISTAN (Tons)

Year	Pakistan	Sindh	Sindh Share %
1993-94	2,900,524	1,172,508	40.424
1994-95	2,983,082	1,107,880	37.138
1995-96	2,449,598	1,008,127	41.155
1996-97	2,378,752	1,028,169	43.223
1997-98	3,548,960	1,374,485	38.729
1998-99	3,530,932	1,353,013	38.320
1999-20	2,414,746	996,317	41.259
2000-01	2,466,788	968,175	39.248
2001-02	3,197,745	940,959	29.426
2002-03	3,662,050	1,156,726	31.586

SUGARCANE SUPPORT PRICE MILL-GATE DELIVERY

(Rupees per 40 kgs.)

Year	Sindh	Punjab	NWFP	Quality * Premium
1993-94	18.25	18.00	18.00	0.22
1994-95	20.75	20.50	20.50	0.27
1995-96	21.75	21.50	21.50	0.27
1996-97	24.50	24.25	24.25	0.27
1997-98	36.00	35.00	35.00	0.32
1998-99	36.00	35.00	35.00	0.50
1999-20	36.00	35.00	35.00	0.50
2000-01	36.00	35.00	35.00	0.50
2001-02	43.00	40.00	40.00	0.50
2002-03	43.00	40.00	40.00	0.50

* QP is being enforced in Sindh alone.

Districtwise Final Position
Season '2002 - 03'

SINDH

Sr. No.	Name of District and Sugar Mills	No. of Working Days	Sugarcane Crushed Tons	Sugar Production Tons	Reco-very %	Raw Sugar Processing Tons	Raw Sugar Production Tons	Reco-very %	Total Sugar Cane + Raw Tons	Molasses Production Tons	Reco-very %
BADIN DIST. 5 Mills.											
1.	Army Welfare	89	332,931	32,961	9.90	—	—	—	32,961	16,775	5.04
2.	Bawany	94	399,158	38,017	9.53	—	—	—	38,017	20,345	5.10
3.	Fauji-Khoski	93	360,003	34,225	9.52	—	—	—	34,225	18,173	5.05
4.	Mirza	88	288,080	28,351	9.84	—	—	—	28,351	15,726	5.46
5.	Pangrio	88	272,718	27,288	10.00	—	—	—	27,288	13,640	5.00
	Total	452	1,652,891	160,841	9.73	—	—	—	160,841	84,659	5.12
	Averages:	90	330,578	32,168	9.73	—	—	—	32,168	16,932	5.12
DADU DIST. 1 Mill.											
6.	Dadu	Not operated									
	Total	—	—	—	—	—	—	—	—	—	—
	Average	—	—	—	—	—	—	—	—	—	—
HYDERABAD DIST. 8 Mills.											
7.	Ansari	114	633,048	64,065	10.12	—	—	—	64,065	35,252	5.57
8.	Bachani	Under Installation									
9.	Faran	98	627,726	59,955	9.57	—	—	—	59,955	29,930	4.78
10.	Fauji-TMK	111	411,197	41,487	10.08	—	—	—	41,487	18,960	4.61
11.	Matiari	137	517,940	48,518	9.37	—	—	—	48,518	27,400	5.29
12.	Mehran	112	635,388	57,296	9.00	—	—	—	57,296	34,645	5.45
13.	Seri	111	375,300	35,649	9.49	—	—	—	35,649	21,210	5.65
14.	Sindh Abadgar's	96	374,760	38,270	10.20	—	—	—	38,270	18,800	5.01
	Total	779	3,575,359	345,240	9.66	—	—	—	345,240	186,197	5.21
	Averages:	111	510,766	49,320	9.66	—	—	—	49,320	26,600	5.21
KHAIRPUR DIST. 2 Mills.											
15.	Khairpur	134	512,871	42,633	8.32	—	—	—	42,633	30,077	5.87
16.	Ranipur	130	386,751	30,950	8.00	—	—	—	30,950	21,413	5.54
	Total	264	899,622	73,583	8.18	—	—	—	73,583	51,490	5.72
	Averages:	132	449,811	36,791	8.18	—	—	—	36,791	25,745	5.72
LARKANA DIST. 1 Mill.											
17.	Naudero	83	141,213	11,737	8.31	—	—	—	11,737	7,062	5.00
	Total	83	141,213	11,737	8.31	—	—	—	11,737	7,062	5.00
	Average	83	141,213	11,737	8.31	—	—	—	11,737	7,062	5.00
MIRPURKHAS DIST. 5 Mills.											
18.	Al-Abbas	109	531,940	50,851	9.55	—	—	—	50,851	27,630	5.20
19.	Digri	78	368,734	35,354	9.58	—	—	—	35,354	18,936	5.13
20.	Mirpurkhas	97	415,111	39,898	9.61	—	—	—	39,898	20,683	4.98
21.	Tharparkar	102	383,193	35,917	9.37	1,065	906	86.24	36,823	21,041	5.49
22.	Najma	22	52,096	1,519	4.99	1,222	1,039	85.05	2,558	4,359	8.39
	Total	408	1,751,073	163,538	9.34	2,287	1,945	85.05	165,483	92,649	5.29
	Averages:	82	350,215	32,708	9.34	457	389	85.05	33,097	18,530	5.29

Cont'd....

Sr. No.	Name of District and Sugar Mills	No. of Working Days	Sugarcane Crushed Tons	Sugar Production Tons	Reco-very %	Raw Sugar Processing Tons	Raw Sugar Production Tons	Reco-very %	Total Sugar Cane + Raw Tons	Molasses Production Tons	Reco-very %
	NAWABSHAH DIST. 3 Mills.										
23.	Al-Noor	111	622,697	52,508	8.40	—	—	—	52,508	34,824	5.58
24.	Habib	107	755,621	65,839	8.71	—	—	—	65,839	41,439	5.48
25.	Sakrand	98	501,123	43,900	8.75	—	—	—	43,900	26,715	5.33
	Total	316	1,879,441	162,247	8.63	—	—	—	162,247	102,978	5.48
	Averages:	105	626,480	54,082	8.63	—	—	—	54,082	34,326	5.48
	SANGHAR DIST. 1 Mill.										
26.	Sanghar	108	447,676	40,026	8.94	—	—	—	40,026	22,393	4.99
	Total	108	447,676	40,026	8.89	—	—	—	40,026	22,393	5.00
	Averages:	108	447,676	40,026	8.89	—	—	—	40,026	22,393	5.00
	SUKKUR DISTT. 1 Mill.										
27.	Kiran	—	—	Not operated	—	—	—	—	—	—	—
	Total	—	—	—	—	—	—	—	—	—	—
	Average	—	—	—	—	—	—	—	—	—	—
	THATTA 5 Mills.										
28.	Al-Asif	85	265,822	26,126	9.80	—	—	—	26,126	13,171	4.94
29.	Dewan	101	824,622	80,315	9.74	—	—	—	80,315	42,604	5.17
30.	Shahmurad	102	401,406	38,939	9.70	—	—	—	38,939	20,261	5.05
31.	Larr	110	576,636	54,135	9.40	—	—	—	54,135	33,057	5.74
32.	Thatta	—	—	Not operated		—	—	—	—	—	—
	Total	388	2,068,486	199,515	9.65	—	—	—	199,515	109,093	5.27
	Averages:	97	517,122	49,879	9.65	—	—	—	49,879	27,273	5.27

DISTRICTWISE SUMMARY

Sr. No.	Name of District	No. of Working Days	Sugarcane Crushed Tons	Sugar Production Tons	Reco-very %	Raw Sugar Processing Tons	Raw Sugar Production Tons	Reco-very %	Total Sugar Cane + Raw Tons	Molasses Production Tons	Reco-very %
1.	Badin	452	1,652,891	160,841	9.73	—	—	—	160,841	84,659	5.12
2.	Dadu	—	—	—	—	—	—	—	—	—	—
3.	Hyderabad	779	3,575,359	345,240	9.66	—	—	—	345,240	186,197	5.21
4.	Khairpur	264	899,622	73,583	8.18	—	—	—	73,583	51,490	5.72
5.	Larkana	83	141,213	11,737	8.31	—	—	—	11,737	7,062	5.00
6.	Mirpurkhas	408	1,751,073	163,538	9.34	2,287	1,945	85.05	165,483	92,649	5.29
7.	Nawabshah	316	1,879,441	162,247	8.63	—	—	—	162,247	102,978	5.48
8.	Sanghar	108	447,676	40,026	8.89	—	—	—	40,026	22,392	5.00
9.	Sukkur	—	—	—	—	—	—	—	—	—	—
10.	Thatta	388	2,068,486	199,515	9.65	—	—	—	199,515	109,093	5.27
	Grand Total 2002-03 season	2,798	12,415,761	1,156,726	9.32	2,287	1,945	85.05	1,158,671	656,520	5.29
	Averages:	100	443,420	41,312	9.32	1,144	973	85.05	41,381	23,447	5.29
	2001-2002 Season	104	10,162,607	940,960	9.26	17,608	16,348	92.85	957,308	522,938	5.15

MILLWISE FINAL STATEMENT
SUGARCANE CRUSHING, SUGAR PRODUCTION, MOLASSES PRODUCTION & RECOVERY % FOR THE SEASON 2002-2003

SR. NO.	NAME OF SUGAR MILLS	NO. OF DAYS OPERATED	SUGARCANE CRUSHED TONS	SUGAR PRODUCTION TONS	RECO-VERY %	MOLASSES PRODUCTION TONS	RECO-VERY %
PUNJAB							
01.	Abdullah	147	960,586	77,080	8.10	45,300	4.71
02.	Adam	172	503,018	45,285	9.01	20,230	3.99
03.	Ashraf	151	638,361	58,500	9.17	31,710	4.97
04.	Baba Farid	149	468,868	37,517	8.01	22,050	4.70
05.	Brothers	149	1,008,298	78,636	7.80	48,590	4.82
06.	Chanar	144	733,923	62,901	8.57	35,040	4.78
07.	Chudhary	143	858,422	71,917	8.37	39,459	4.59
08.	Chistia	172	540,000	43,000	7.94	21,000	3.70
09.	Crescent	156	331,960	24,685	7.43	15,250	4.59
10.	Fatima	149	815,325	72,003	8.60	39,137	4.80
11.	Fuji-Sangla	161	476,027	41,449	8.71	22,491	4.73
12.	Fecto	149	709,892	50,014	7.04	34,738	4.89
13.	Gojra Samundri	138	348,872	27,967	8.02	17,236	4.94
14.	Gunj Buksh (Pasrur)		80,000	3,500	7.30	3,000	3.75
15.	Hamza	157	1,184,201	116,862	9.87	56,974	4.81
16.	Haseeb Waqas	149	956,591	81,533	8.52	44,620	4.66
17.	Husein	150	663,111	57,791	8.71	31,156	4.70
18.	Indus	159	652,729	61,581	9.43	32,940	5.05
19.	Ittefaq	148	746,255	62,400	8.36	36,139	4.84
20.	J.D.W.	170	1,094,212	109,875	10.04	49,594	4.53
21.	Kamalia	147	748,706	65,291	8.72	37,210	4.97
22.	Kashmir	139	881,758	76,935	8.70	41,099	4.65
23.	Kohinoor	166	630,565	48,786	7.74	29,383	4.66
24.	Layyah	143	719,746	54,767	7.61	34,242	4.76
25.	National	161	670,491	56,378	8.40	30,491	4.55
26.	Noon	154	459,238	40,782	8.86	20,384	4.44
27.	Pahrianwali	158	685,291	58,379	8.52	35,730	5.22
28.	Pattoki	153	486,600	37,905	7.79	23,442	4.82
29.	Phalia	146	768,112	67,855	8.83	36,479	4.75
30.	Punjab	164	636,625	57,148	8.97	28,495	4.47

Contd. on Page ___

SR. NO.	NAME OF SUGAR MILLS	NO. OF DAYS OPERATED	SUGARCANE CRUSHED TONS	SUGAR PRODUCTION TONS	RECO-VERY %	MOLASSES PRODUCTION TONS	RECO-VERY %
31.	Ramzan	145	926,984	80,010	8.62	38,948	4.20
32.	Shahtaj	144	1,088,652	103,618	9.52	52,398	4.81
33.	Shakarganj	187	1,675,370	127,060	7.58	84,277	5.03
34.	Sheikhoo	150	1,067,113	88,057	8.25	51,984	4.87
35.	Tandianwala	160	854,076	71,168	8.33	41,926	4.91
36.	United	156	634,138	58,675	9.25	28,954	4.57
37.	Yousaf	148	843,348	71,094	8.52	40,765	4.83
	Non-Members						
38.	Humza (Qand Ghar)		160,000	12,000	7.50	6,000	3.12
39.	Medina not operated (40) Mian Mohammad (Azad Kashmir) under installation.						
	Total 2002-2003	5,534	27,707,464	2,360,404	8.52	1,308,861	4.72
	Average	154	729,144	62,116	8.52	34,444	4.72
	2001-2002 Season	141	25,252,609	2,156,055	8.52	1,224,543	4.85

Summary

Season:	2002-2003	2001-2002
Average Working Days	154	141
No. of Operative Mills	38	37
Cane Crushed (Tons)	27,707,464	25,252,609
Sugar Production (Tons)	2,360,404	2,152,177
Recovery %	8.52	8.52
Raw Sugar Production (Tons)	—	3,878
Total Sugar Production (Tons)	2,360,404	2,156,055
Molasses Production	1,308,861	1,224,543
Recovery %	4.72	4.85

MILLWISE FINAL STATEMENT
SUGARCANE CRUSHING, SUGAR PRODUCTION, MOLASSES PRODUCTION & RECOVERY % FOR THE SEASON 2002-2003

N.W.F.P.

SR. NO.	NAME OF SUGAR MILLS	NO. OF DAYS OPERATED	SUGARCANE CRUSHED TONS	SUGAR PRODUCTION TONS	RECO-VERY %	MOLASSES PRODUCTION TONS	RECO-VERY %
1.	Bannu	129	253,534	18,270	7.25	11,795	4.68
2.	Chashma	144	889,074	64,698	7.28	44,332	4.98
3.	Frontier	151	110,158	10,680	9.70	3,390	3.08
4.	Khazana	121	295,225	30,164	10.22	11,156	3.79
5.	Premier	142	239,819	21,105	8.80	8,150	3.40
6.	Saleem	.........Not Operated.........					
	Total 2002-2003	687	1,787,810	144,917	8.11	78,823	4.41
	Average	137	357,562	28,983	8.11	15,765	4.41
	Total 2001-2002	94	1,293,422	104,611	8.09	61,739	4.77

SUMMARY

Season:	**2002-2003**	**2001-2002**
Average working days	137	94
No. of operative mills	05	05
Cane crushed (tons)	1,787,810	1,293,422
Sugar production (tons)	144,917	104,611
Recovery %	8.11	8.09
Molasses production	78,823	61,739
Recovery %	4.41	4.77

BEET SLICING, SUGAR PRODUCTION, MOLASSES PRODUCTION & RECOVERY % FOR THE SEASON 2002-03

N.W.F.P.

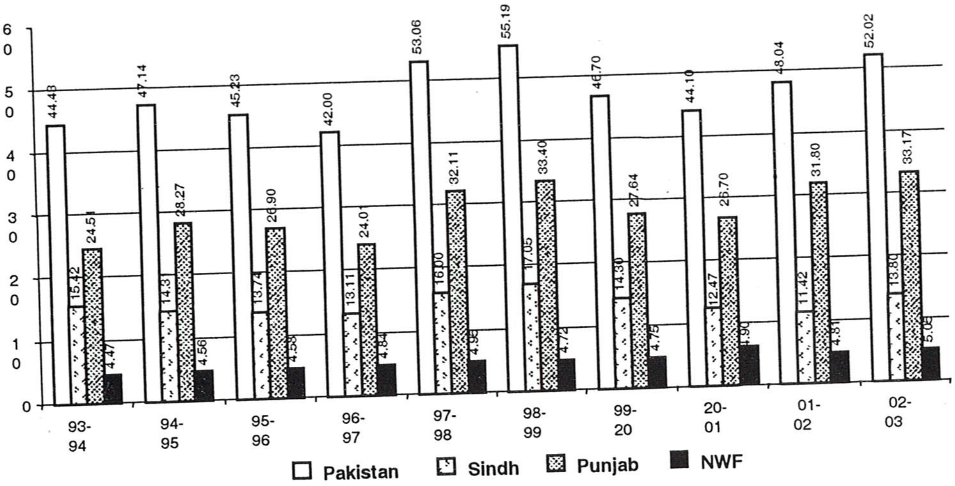
SR. NO.	NAME OF SUGAR MILLS	NO. OF DAYS OPERATED	BEET SLICED TONS	SUGAR PRODUCED TONS	RECO-VERY %	MOLASSES PRODUCTION TONS	RECO-VERY %
01.	Frontier	35	40,866	4,175	10.24	1,701	4.32
02.	Khazana	35	76,629	7,556	9.90	3,273	4.37
03.	Premier	36	104,568	10,335	10.00	3,516	4.10
	Total 2002-2003	106	222,063	22,066	9.94	8,490	3.82
	Average	35	74,021	7,355	9.94	2,830	3.82
	Total 2001-2002	37	316,041	29,172	9.23	13,376	4.23

SUMMARY

Season:	**2002-2003**	**2001-2002**
Average working days	35	37
No. of operative mills	03	03
Beet Sliced (tons)	222,063	316,041
Sugar production (tons)	22,066	29,172
Recovery %	9.94	9.23
Molasses production	8,490	13,376
Recovery %	3.82	4.23

10-YEAR SUGARCANE PRODUCTION [Tons)
SINDH, PUNJAB, NWF & PAKISTAN

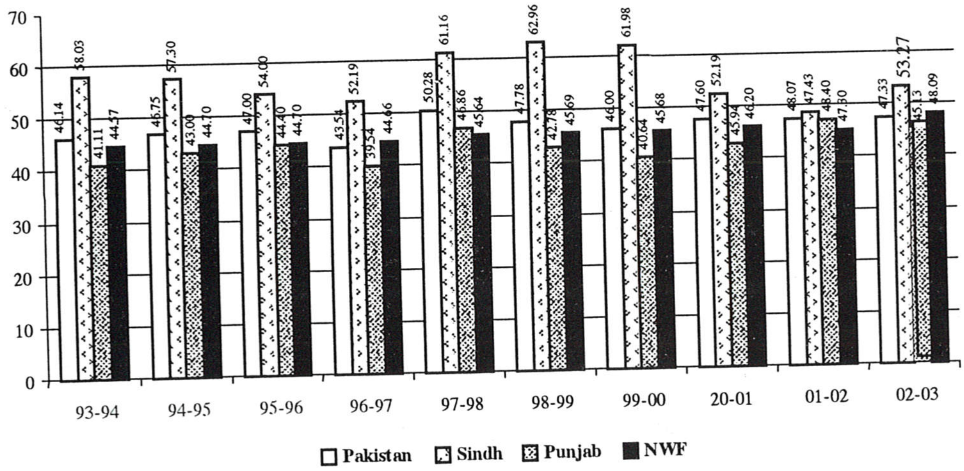
Million tons



Legend 1 cm = 10 million tons

10-YEAR SUGARCANE YIELD %
SINDH, PUNJAB, NWF & PAKISTAN

Percentage



Legend 1 cm = 10 percent

AREA, PRODUCTION, YIELD AND UTILISATION OF SUGARCANE BY SUGAR INDUSTRY

PAKISTAN

Year	Area Hectares	Production Tons	Yield Per Hectare	Utilisation % by Sugar Mills
1993-94	962,800	44,427,000	46.14	76.93
1994-95	1,009,000	47,168,447	46.75	75.49
1995-96	963,100	45,229,700	47.00	62.24
1996-97	964,511	41,998,409	43.54	64.65
1997-98	1,056,200	53,104,200	50.28	77.29
1998-99	1,155,100	55,191,100	47.78	77.90
1999-20	1,015,073	46,696,673	46.00	62.07
2000-01	926,542	44,099,146	47.60	66.69
2001-02	999,393	48,041,000	48.07	76.41
2002-03	1,099,700	52,050,000	47.33	80.52

SINDH

Year	Area Hectares	Production Tons	Yield Per Hectare	Utilisation % by Sugar Mills
1993-94	265,764	15,421,018	58.03	84.50
1994-95	249,741	14,310,347	57.30	84.12
1995-96	254,392	13,737,168	54.00	75.00
1996-97	251,211	13,110,609	52.19	78.68
1997-98	261,586	15,999,614	61.16	86.59
1998-99	270,800	17,050,700	62.96	88.53
1999-20	230,561	14,290,793	61.98	75.97
2000-01	238,842	12,466,146	52.19	84.19
2001-02	240,693	11,416,330	47.43	89.02
2002-03	259,000	13,798,000	53.27	89.98

PUNJAB

Year	Area Hectares	Production Tons	Yield Per Hectare	Utilisation % by Sugar Mills
1993-94	596,200	24,510,000	41.11	81.87
1994-95	656,700	28,268,000	43.00	74.20
1995-96	605,600	26,880,000	44.40	63.22
1996-97	604,200	24,010,200	39.74	67.03
1997-98	685,300	32,110,600	46.86	80.59
1998-99	780,300	33,382,800	42.78	78.13
1999-20	680,162	27,641,780	40.64	60.88
2000-01	581,000	26,700,000	45.96	67.67
2001-02	657,000	31,803,000	48.41	79.40
2002-03	735,000	33,169,000	45.13	83.53

NWFP

Year	Area Hectares	Production Tons	Yield Per Hectare	Utilisation % by Sugar Mills
1993-94	100,300	4,470,000	44.57	24.25
1994-95	102,100	4,562,200	44.70	25.85
1995-96	102,500	4,583,000	44.70	17.84
1996-97	108,400	4,841,600	44.66	15.38
1997-98	108,600	4,956,500	45.64	26.30
1998-99	103,300	4,719,500	45.69	34.78
1999-20	104,050	4,753,000	45.68	27.27
2000-01	106,000	4,897,000	46.20	17.30
2001-02	101,000	4,787,000	47.40	27.02
2002-03	105,000	5,049,000	48.09	35.41

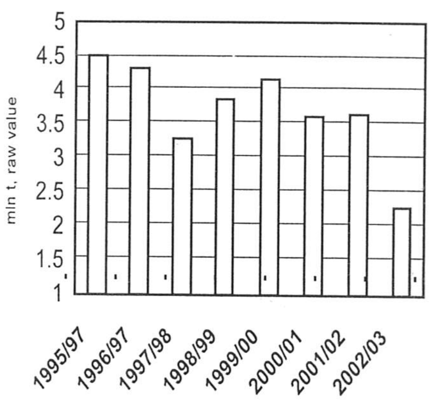
BALOCHISTAN

1993-94	500	25,000	50.00	—
1994-95	500	27,900	55.80	—
1995-96	600	29,532	49.22	—
1996-97	700	36,000	51.43	—
1997-98	700	37,500	53.57	—
1998-99	700	38,100	54.43	—
1999-20	300	11,100	37.00	—
2000-01	700	36,300	51.43	—
2001-02	700	35,000	50.00	—
2002-03	700	34,000	48.57	—

IMPORT OF SUGAR

Year July - June	Quantity Tonnes	Value in '000' Rs.	Average price per tonne Rs.
1993-94	47,669	444,105	9,316
1994-95	5,188	68,761	13,254
1995-96	3,480	54,311	15,607
1996-97	681,083	9,861,825	14,479
1997-98	109,393	1,658,988	15,165
1998-99	10,125	153,110	15,122
1999-20	487,248	6,431,899	13,200
2000-01	930,145	14,457,000	15,543
2001-02	85,684	932,244	10,880
2002-03	8,315	152,746	18,370

Fig. 7 Sugar Production in Cuba

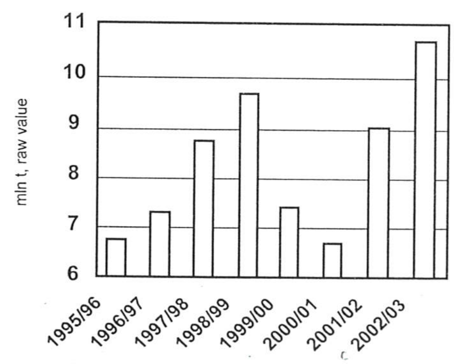


IMPORT OF CITRIC ACID

Year July - June	Quantity kilogram	Value '000' Rs.
1993-94	1,456,286	63,995
1994-95	1,759,415	73,323
1995-96	3,194,608	136,279
1996-97	1,672,911	82,934
1997-98	1,897,245	95,960
1998-99	3,270,915	175,506
1999-20	2,856,768	151,765
2000-01	4,257,916	215,509
2001-02	3,186,467	170,169
2002-03	3,878,633	158,992

Source: Federal Bureau of Statistics.

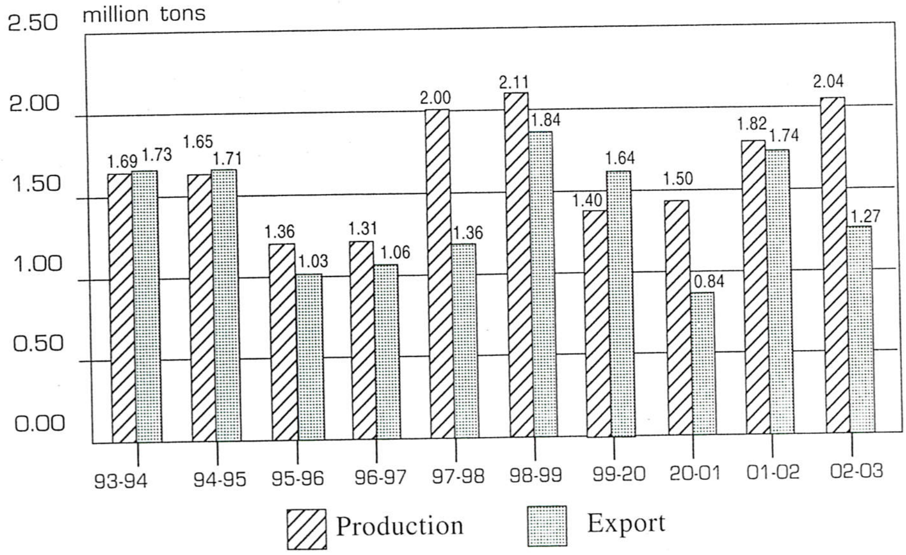
Fig. 12 China: Sugar Production



EXPORT OF MOLASSES

Fiscal Year	Quantity Tonnes	Value in '000' Rupees	Average Price per tonne Rs.
1993-94	1,729,921	2,504,619	1,447.82
1994-95	1,709,044	2,784,451	1,629.24
1995-96	1,029,768	2,388,533	2,319.49
1996-97	1,056,334	2,021,755	1,913.93
1997-98	1,356,328	2,536,432	1,870.07
1998-99	1,835,410	1,973,529	1,075.25
1999-20	1,641,033	2,030,732	1,237.47
2000-01	841,500	2,224,645	2,643.67
2001-02	1,742,695	4,218,478	2,420.66
2002-03	1,272,630	2,652,975	2,084.63

10-YEAR MOLASSES PRODUCTION AND EXPORT

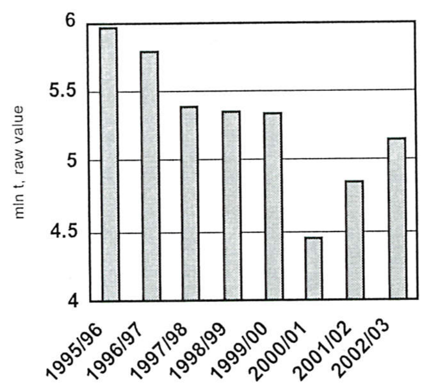


Legend 1 cm = 500,000 tons

PAKISTAN SUGAR EXPORT
Sugar Year October - September

Fiscal Year	Quantity Tons	Value in '000' Rs.
1993-94	121,565	1,204,964
1994-95	327,591	3,910,274
1995-96	Nil	Nil
1996-97	Nil	Nil
1997-98	477,331	6,682,634
1998-99	648,230	8,574,786
1999-20	Nil	Nil
2000-01	Nil	Nil
2002-03	32,230	443,154

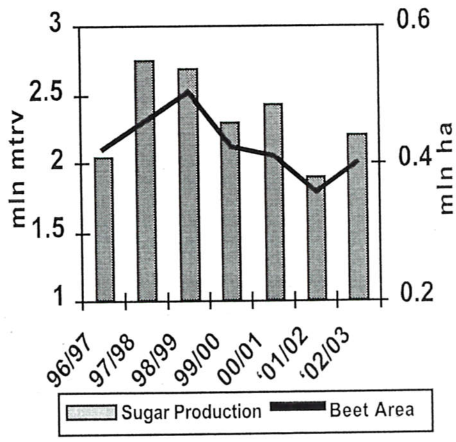
Fig. 13 Sugar Production in Australia



EXPORT OF FERMENTATION ETHYL ALCOHOL

Fiscal Year	Quantity Litres	Value in '000' Rupees
1993-94	13,206,697	125,866
1994-95	6,050,900	68,137
1995-96	4,666,000	64,455
1996-97	1,232,145	18,273
1997-98	4,107,000	69,646
1998-99	6,722,000	115,788
1999-20	7,608,000	136,364
2000-01	14,150,000	313,647
2001-02	19,535,000	450,919
2002-03	16,341,575	342,658

Fig. 10 Turkey - Sugar Production and Beet Areas



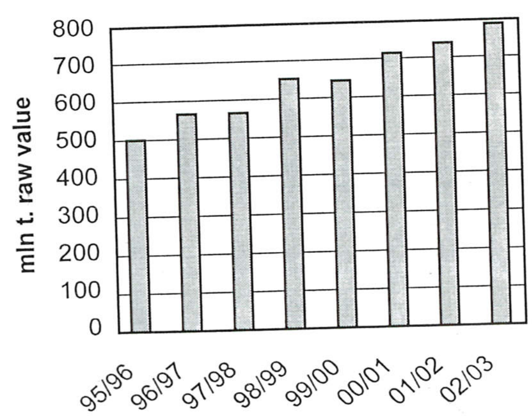
Source: Federal Bureau of Statistics

FIVE-YEAR MONTHWISE WHOLESALE SUGAR PRICE PER 100 KGS

(Price in rupees)

Month	2002-03	2001-02	2000-01	1999-00	1998-99
October	2,051	2,128	2,544	1,954	1,695
November	1,978	2,010	2,513	1,890	1,760
December	1,863	1,920	2,383	1,665	1,706
January	1,796	1,884	2,360	1,719	1,740
February	1,850	2,043	2,356	1,939	1,740
March	1,803	2,131	2,338	1,991	1,723
April	1,778	2,082	2,475	2,074	1,774
May	1,779	2,038	2,413	2,104	1,864
June	1,769	2,040	2,475	2,219	1,880
July	1,751	2,080	2,476	2,245	1,875
August	1,740	2,058	2,400	2,513	1,889
September	1,801	2,085	2,258	2,400	1,933
Total	21,959	24,499	28,991	24,713	21,579
Average	1,830	2,042	2,416	2,059	1,798

Fig. 11 Sugar Production in Sudan



Weekly International Sugar Prices (Per Ton)
(October 2002 to September 2003)

Date	US $	Date	US $
06-10-02	197	06-04-03	216
13-10-02	199	13-04-03	204
20-10-02	198	20-04-03	209
27-10-02	191	27-04-03	221
03-11-02	201	04-05-03	216
10-11-02	205	11-05-03	203
17-11-02	196	18-05-03	204
24-11-02	209	25-05-03	207
01-12-02	208	01-06-03	208
08-12-02	212	08-06-03	195
15-12-02	210	15-06-03	198
22-12-02	209	22-06-03	199
29-12-02	212	29-06-03	198
05-01-03	215	06-07-03	200
12-01-03	218	13-07-03	196
19-01-03	222	20-07-03	200
26-01-03	228	27-07-03	207
02-02-03	239	03-08-03	212
09-02-03	243	10-08-03	201
16-02-03	234	17-08-03	198
23-02-03	243	24-08-03	197
02-03-03	226	31-08-03	198
09-03-03	228	07-09-03	188
16-03-03	221	14-09-03	188
13-03-03	220	21-09-03	184
30-03-03	215	29-09-03	186

Source: Print media

DISTRICTWISE SUGARCANE AREA, PRODUCTION AND YIELD PER HECTARE IN SINDH PROVINCE

	1998-99	1999-2000	2000-01	2001-02	2002-03
BADIN					
Area (H)	62,613	30,898	43,792	47,872	52,139
Production (T)	4,090,876	1,869,098	2,155,631	2,025,236	2,576,814
Yield (Per H/T)	65.34	60.49	49.22	42.30	49.42
DADU					
Area (H)	5,492	5,460	3,841	2,738	3,390
Production (T)	271,968	276,320	152,623	106,901	170,891
Yield (Per H/T)	49.52	50.61	39.74	39.04	50.41
HYDERABAD					
Area (H)	65,726	65,760	53,124	54,791	57,622
Production (T)	4,430,695	4,348,488	2,672,753	2,799,949	3,218,008
Yield (Per H/T)	67.41	66.13	50.31	51.10	55.85
JACOBABAD					
Area (H)	39	48	36	60	38
Production (T)	1,311	1,575	779	2,141	1,472
Yield (Per H/T)	33.62	32.81	21.64	35.68	38.74
KHAIRPUR					
Area (H)	12,196	11,119	24,372	23,438	24,578
Poduction (T)	689,547	703,390	1,305,692	1,264,921	1,287,575
Yield (Per H/T)	56.54	63.26	53.57	53.97	52.39
LARKANA					
Area (H)	1,079	1,163	743	619	517
Production (T)	45,967	53,109	24,896	23,372	19,010
Yield (Per H/T)	42.60	45.67	33.51	37.76	36.77
MIRPURKHAS					
Area (H)	24,948	27,966	16,781	13,916	15,931
Production (T)	1,535,663	1,417,379	758,981	511,691	769,051
Yield (Per H/T)	61.55	50.68	45.23	36.76	48.27

NAWABSHAH	1998-99	1999-2000	2000-01	2001-02	2002-03
Area (H)	22,473	21,017	30,192	31,794	33,096
Production (T)	1,394,989	1,454,183	1,906,966	1,819,592	1,979,161
Yield (Per H/T)	62.07	69.19	63.16	57.23	59.80
NOWSHERO FEROZ					
Area (H)	23,816	21,834	21,357	18,980	22,072
Production (T)	1,461,877	1,467,549	1,279,273	857,359	1,300,284
Yield (Per H/T)	61.38	67.21	59.90	45.17	58.91
SANGHAR					
Area (H)	11,723	10,637	10,826	11,457	11,778
Production (T)	752,028	704,440	547,883	579,817	654,272
Yield (Per H/T)	64.15	66.23	50.61	50.61	55.55
SHIKARPUR					
Area (H)	265	242	179	167	108
Production (T)	9,796	9,257	5,166	5,233	3,928
Yield (Per H/T)	36.97	38.25	28.86	31.34	36.37
SUKKUR					
Area (H)	12,071	9,408	9,902	8,119	9,110
Production (T)	630,477	549,779	533,538	360,160	450,052
Yield (Per H/T)	52.23	58.44	53.88	44.36	49.40
THATTA					
Area (H)	28,319	25,009	23,697	26,742	28,226
Production (T)	1,735,481	1,436,226	1,121,965	1,059,958	1,367,086
Yield (Per H/T)	61.28	57.43	47.35	39.64	48.43
SINDH'S TOTAL					
Area (H)	270,800	230,561	238,842	240,693	258,605
Production (T)	17,050,700	14,290,793	12,466,146	11,416,330	13,797,604
Yield (Per H/T)	62.96	61.98	52.19	47.43	53.35

* H = Hectare
* T = Tons

Source: Director General, Agriculture Extention, Government of Sindh.

AVERAGE FARMERS COST OF SUGARCANE PRODUCTION :

	SINDH	PUNJAB	NWFP
Season 1993 - 94			
Cost of Production per acre	8224.66	7600.69	7852.66
Add:			
Transport Octroi	3.24	2.75	2.08
Development cess	0.14	0.44	0.27
Cost of production per 40 kg			
Including Land Rent	17.26	17.93	17.58
Excluding Land Rent	15.46	14.15	12.93
Season 1994 - 95			
Cost of Production per acre	9368.29	8314.67	8453.28
Add:			
Transport Octroi	3.24	2.75	2.08
Development cess	0.14	0.45	0.27
Cost of production per 40 kg			
Including Land Rent	19.19	19.33	18.74
Excluding Land Rent	17.16	15.34	13.90
Season 1995 - 96			
Cost of Production per acre	9954.35	8732.52	8969.40
Add:			
Transport Octroi	3.24	2.75	2.08
Development cess	0.14	0.51	0.27
Drainage cess	0.08	—	—
Cost of production per 40 kg			
Including Land Rent	20.26	20.20	19.75
Excluding Land Rent	18.01	15.99	14.90
Season 1996 - 97			
Cost of Production per acre	10902.73	9649.74	9688.93
Add:			
Transport Octroi	3.50	3.00	2.25
Development cess	0.25	0.54	0.27
Drainage cess	0.08	—	—
Cost of production per 40 kg			
Including Land Rent	22.23	22.26	21.31
Excluding Land Rent	19.70	17.60	16.07
Season 1997- 98			
Cost of Production per acre	13156.52	11452.06	11434.42
Marketing Expenses			
Transport Octroi	3.50	3.25	2.50
Development cess	0.25	0.60	0.27
Drainage cess	0.08	—	—
Cost of production per 40 kg			
Including Land Rent	26.05	26.06	24.95
Excluding Land Rent	23.18	21.02	19.52
Season 1998 - 99			
Cost of Production per acre	14564.07	12943.46	12670.63
Add:			
Transport Octroi	3.50	3.27	2.53
Development cess	0.32	0.88	0.27
Drainage cess	0.08	—	—
Cost of production per 40 kg			
Including Land Rent	28.48	29.26	27.37
Excluding Land Rent	25.27	23.44	21.17
Season 1999 - 2000			
Cost of Production per acre	15101.29	13533.59	13187.34
Add:			
Transport Octroi	3.50	3.27	2.53
Development cess	0.32	0.88	0.27
Drainage cess	0.08	—	—
Cost of production per 40 kg			
Including Land Rent	29.38	30.40	28.38
Excluding Land Rent	26.18	24.58	22.17
Season 2000 - 2001			
Cost of Production per acre	15638.57	14030.28	13667.34
Add:			
Transport Octroi	3.53	3.53	2.70
Development cess	0.32	0.40	0.27
Drainage cess	0.08	—	—
Cost of production per 40 kg			
Including Land Rent	30.32	31.15	29.48
Excluding Land Rent	27.11	25.33	23.27
Season 2001 - 2002			
Cost of Production per acre	18009.94	16704.82	16650.11
Add:			
Transport Octroi	40.50	4.50	3.70
Development cess	0.32	0.40	0.27
Drainage cess	0.08	—	—
Cost of production per 40 kg			
Including Land Rent	35.29	37.30	36.26
Excluding Land Rent	30.79	28.90	20.56
Season 2002 - 2003			
Cost of Production per acre	21191	17922	17734
Add:			
Transport Octroi	4.50	4.50	3.70
Development cess	0.32	0.50	0.27
Drainage cess	0.08	—	—
Cost of production per 40 kg			
Including Land Rent	36.25	36.71	34.26
Excluding Land Rent	32.01	28.56	25.19

Source: Agriculture Prices Commission (APCom)

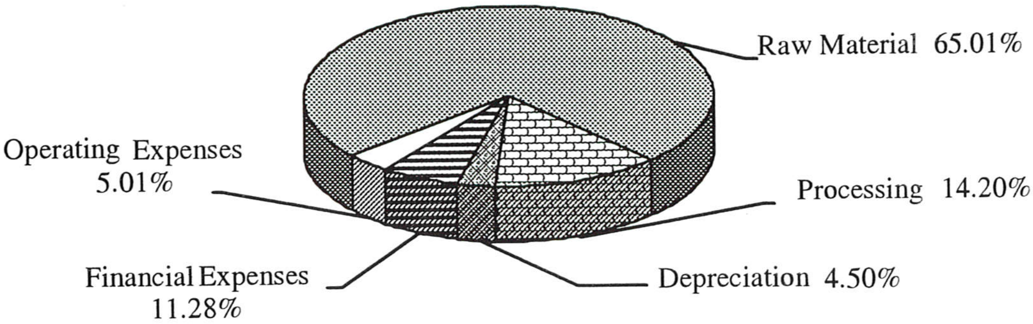
AREA, YIELD AND PRODUCTION OF SUGARCANE: 1991 - 92 TO 2002 - 2003

YEARS	PUNJAB	SINDH	NWFP	BALOCH.	PAKISTAN
AREA			000 HECTARES		
1991-92	536.2	255.3	104.0	0.6	896.1
1992-93	536.1	248.0	99.9	0.6	884.6
1993-94	596.2	265.8	100.3	0.5	982.8
1994-95	656.7	249.7	102.1	0.5	1009.0
1995-96	605.6	254.4	102.5	0.6	963.1
1996-97	604.2	251.2	108.4	0.7	964.5
1997-98	685.3	261.6	108.6	0.7	1056.2
1998-99	780.3	270.8	103.3	0.7	1155.1
1999-00	672.1	230.6	106.3	0.6	1009.8
2000-01	580.9	238.6	105.8	0.7	926.2
2001-02	689.8	240.7	106.5	0.6	1037.6
2002-03	735.0	259.0	105.0	0.7	1099.7
YIELD			TONNES PER HECTRE		
1991-92	37.3	55.8	43.9	47.8	43.4
1992-93	37.4	54.7	44.3	48.2	43.0
1993-94	41.1	56.0	44.6	50.2	46.1
1994-95	43.0	57.3	44.7	55.8	46.7
1995-96	44.4	54.0	44.7	49.2	47.0
1996-97	39.7	52.2	44.7	51.4	43.5
1997-98	46.9	61.2	45.6	53.6	50.3
1998-99	42.6	63.0	45.7	54.4	47.8
1999-00	40.3	62.0	46.3	54.3	45.9
2000-01	43.3	52.2	46.3	51.9	45.9
2001-02	47.0	48.6	45.2	53.7	47.2
2002-03	45.1	53.3	48.1	48.6	47.3
PRODUCTION			000 TONS		
1991-92	20026.8	14240.5	4568.9	28.7	38864.9
1992-93	20044.8	13556.8	4426.4	28.9	38058.9
1993-94	24510.8	15421.0	4470.1	25.1	44427.0
1994-95	28268.0	14310.3	4582.2	27.9	47168.4
1995-96	26880.0	13737.2	4583.0	29.5	45229.7
1996-97	24010.2	13110.6	4841.6	36.0	41998.4
1997-98	32110.6	15999.6	4956.5	37.5	53104.2
1998-99	33382.8	17050.7	4719.5	38.1	55191.1
1999-00	27081.3	14290.8	4917.1	43.4	46332.6
2000-01	25133.0	12466.2	4887.2	36.3	42532.7
2001-02	32455.0	11689.9	4812.8	32.2	48989.9
2002-03	33169.0	13798.0	5049.0	34.0	52050.0

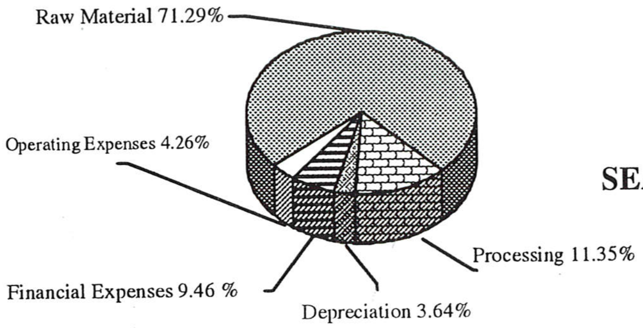
Source:Agriculture Prices Commission (APCom)

SUGAR PRODUCTION COST COMPONENTS %

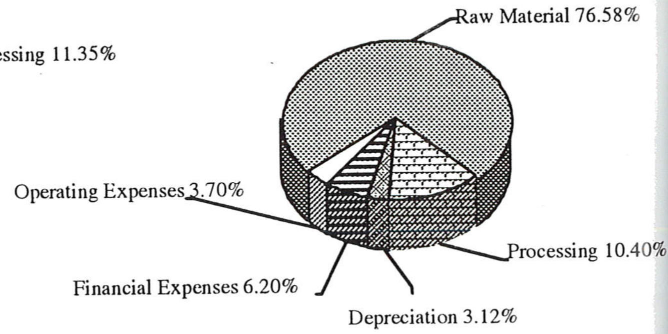
SEASON: 2002-03 (Estimate)



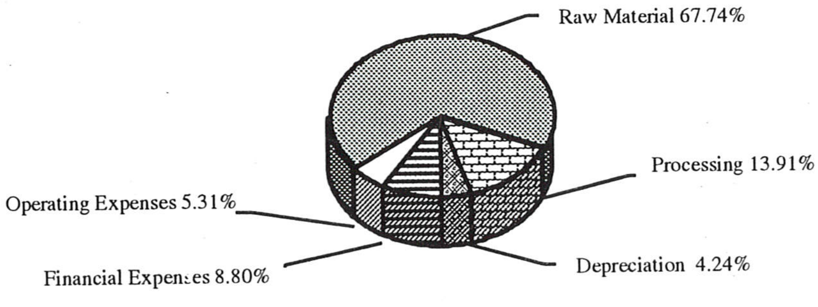
SEASON: 2001-02



SEASON: 2000-01



SEASON: 1999-2000

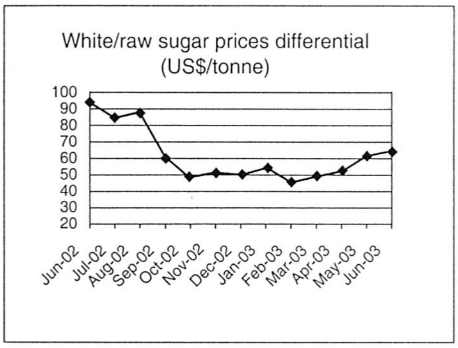


ESTIMATES OF WORLD PRODUCTION AND CONSUMPTION 2002-2003 CROP CYCLE

		Production	Consumption		Surplus/ Deficit
Kingsman (b) *	17-May	139.23	134.00		+5.23
USDA (c)	29-May	138.31	133.45		+4.86
ABARE (b)	24-June	138.10	135.00		+3.10
C.Czarnikow (c)	14-Aug	143.13	138.92	**	+4.21
ISO (b)	16-Sep	139.90	136.24	***	+3.66
Kingsman (b) *	19-Sep	139.50	136.00		+3.50
ED&Fman (c)	2-Oct	142.28	136.86		+5.42
C.Czarnikow (c)	13-Nov	143.17	139.53	**	+2.64
ISO (b)	15-Nov	141.75	137.39	***	+4.36
F.O. Lucht (b)	19-Nov	143.14	136.57	****	+4.54
USDA (c)	27-Nov	138.77	135.50		+3.27
FAO (c)	15-Dec	140.70	136.00		+4.70
Kingsman (b) *	16-Jan	141.27	138.66		+2.61
C-Czarnikow (c)	13-Feb	143.77	141.64	**	+2.13
ISO (b)	18-Feb	141.49	138.21		+3.28
ED&Fman (c)	21-Feb	142.64	136.80		+5.84
F.O. Licht (b)	8-Apr	142.64	139.42	****	+0.98
Kingsman (b) *	16-Apr	142.2	139.50		+2.68
C.Czarnikow (c)	14-May	147.56	141.29	**	+6.27
ISO (b)	14-May	141.96	138.65		+3.31
ED&Fman (b)	11-June	147.50	139.08		+8.42
ABARE (b)	23-June	145.00	139.40		+5.60

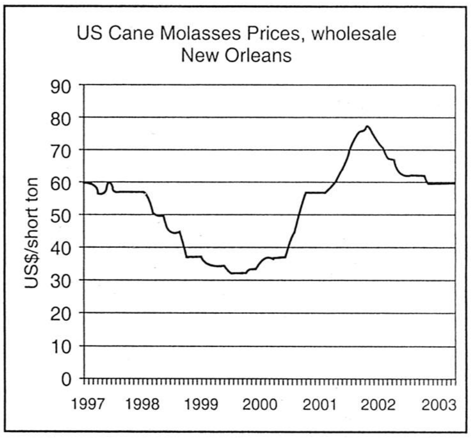
(b) = balance; (c) = individual crop years aggregated;
all figures in mln tonnes, raw value
* *April/May*
** *including 1 mln tonne allowance for unrecorded disappearance*
*** *including adjustment for unknown trade of 2.601 mln tonnes*
**** *excluding unreported consumption of 2.243 mln tonnes*

MECA(03)09, - May 2003



arrival of the new season's European sugar, higher

International Sugar Organization



MECAS(03)13, 9 July 2003

International Sugar Organisation

Fig. 2 Cane and Beet Sugar Production (mln mtrv)

	1960s	1970s	1980s	1990s	2000/01	2001/02	2002/03
			a v e r a g e				
World sugar production	61.6	81.9	101.8	118.4	131.4	137.4	142.0
Beet sugar production	26.8	32.6	37.9	37.4	36.0	33.2	36.6
Cane sugar production	34.8	49.3	63.9	81.0	95.4	104.2	105.4
Cane sugar as % of world total	56.5	60.2	62.8	68.4	72.6	75.8	74.2

PSMA National Structure

S.NO.	NAME	POSITION	ORGANISATION	ADDRESS	PHONE NO.	FAX NO.
1.	Mr. Iskandar M. Khan	Chairman	Premier Sugar Mills Limited	20-A, Markaz, F-7, Islamabad.	051-2650805 051-2650806-7	051-2651285 0512651286
2.	Mr. Shunaid Qureshi	Vice-Chairman	Al-Abbas Sugar Mills Limited	50-A/3, Duplex Town House, Gulsan-e-Faisal Cop. Society, Bath Island, Karachi.	021-5831249 021-5831250 021-5831251-2	021-5831253
3.	Mr. Javed A. Kayani	"" ""	Chanar Sugar Mills Limited	40-A, Lawrence Road, Lahore.	042-6317447-9 042-6316910	042-6362054 042-6362055
4.	Mr. Abdul Qadar Khattak	"" ""	Premier Sugar Mills Limited	Mardan, NWFP.	0931-62051 0931-62052	0931-62989
5.	Mr. Aslam Faruque	Member	Mirpurkhas Sugar Mills Limited	2nd Floor, Modern Motors House, Beaumont Road, Karachi.	021-5682565-7 021-5684451	021-5682839 021-5688036
6.	Mr. Anwar Wahla	"" ""	Punjab Sugar Mills Limited	Modern Flour Building, Shalimar Road, Lahore-39.	042-330297 042-334058	042-5710879
7.	Haji Munawwar Khan	"" ""	Bannu Sugar Mills Limited	Serai Naurang, Distt: Bannu.	09261-2005 09261-2309	09261-2302
	PSMA-Central Secretariat					
	Mr. K. Ali Qazilbash	Secretary General	PSMA-Centre	24-D, Rashid Plaza, Quaid-e-Azam Avenue, Islamabad.	051-2270525 051-2823971	051-2274153
	PSMA-Sindh Zonal Committee					
1.	Mr. Shunaid Qureshi	Chairman	Al-Abbas Sugar Mills Limited	50-A/3, Duplex Town House, Gulsan-e-Faisal Cop. Society, Bath Island, Karachi.	021-5831249 021-5831250 021-5831251-2	021-5831253
2.	Mr. Naveed M. Javeri	Member	Digri Sugar Mills Limited	48/J/1, Block-6, PECHS, Karachi.	021-4541195-6 021-4541197-8	021-4534501
3.	Mr. Abdul Wajid	"" ""	Ranipur Sugar Mills Limited	1308, 13th Floor. Chapal Plaza, Hasrat Mohani Road, Karachi.	021-2411368 021-2411369	021-2413547
4.	Mr. Aslam Faruque	Member Central Committee	Mirpurkhas Sugar Mills Limited	2nd Floor, Modern Motors House, Beaumont Road, Karachi.	021-5682565-7 021-5684451	021-5682839 021-5688036
	PSMA-Sindh Secretariat					
	Mr. Umar Latif	Secretary	PSMA Sindh Zone	1st Floor, Modern Motors House, Beaumont Road, Karachi.	021-5686526	021-5680344

S.NO.	NAME	POSITION	ORGANISATION	ADDRESS	PHONE NO.	FAX NO.
	PSMA-Punjab Zonal Committee					
1.	Mr. Javed A. Kayani	Chairman	Chanar Sugar Mills Limited	40-A, Lawrence Road, Lahore.	042-6317447-9 042-6316910	042-6362054 042-6362055
2.	Mian Fawad Ahmed	Member	Fatima Sugar Mills Limited	C-1, First Floor, Hassan Arcade, Multan Cantt.	061-512031-2 061-546228	061-511677 061-584666
3.	Mian Shahid Shafi	" "	Ittefaq Sugar Mills Limited	19-Bridge Colony, Abid Majeed Road, Lahore.	042-6665967 042-6665968-9	042-6665958
4.	Mr. Anwar Wahla	Member Central Committee	Punjab Sugar Mills Limited	Modern Flour Building, Shalimar Road, Lahore-39.	042-330297 042-334058	042-5710879
	PSMA-Punjab Secretariat					
	Lt. Col.(R) Maqsood Ahmed Chema	Secretary	PSMA-Punjab Zone	Happy Homes, 38-A, Main Gulberg, Lahore.	042-5710190 042-5877634	042-5752940
	PSMA-NWFP Zonal Committee					
1.	Mr. Abdul Qadar Khattak	Chairman	Premier Sugar Mills Limited	Mardan, NWFP.	0931-62051 0931-62052	0931-62989
2.	Chaudhry M. Ashiq Khalid	Member	Khazana Sugar Mills Limited	13-KM,Charsada Road, Peshawar.	091-241694 091-245732	091-240550
3.	Haji Mnuawwar Khan	Member Central Committee	Bannu Sugar Mills Limited	Serai Naurang, Distt: Bannu.	09261-2005 09261-2309	09261-2302
	PSMA-NWFP Secretariat					
	Mr. Abdul Qadar Khattak	Chairman	PSMA-NWFP Zone	Mardan, NWFP.	0931-62051 0931-62052	0931-62989

Fig. 16 India: Sugar Exports

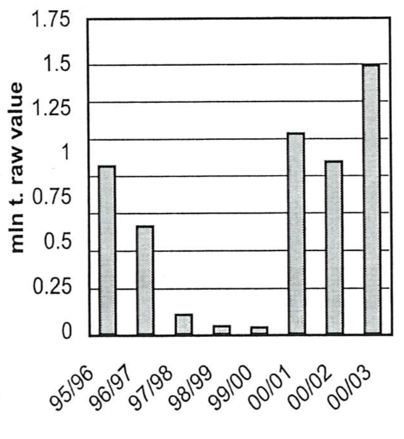
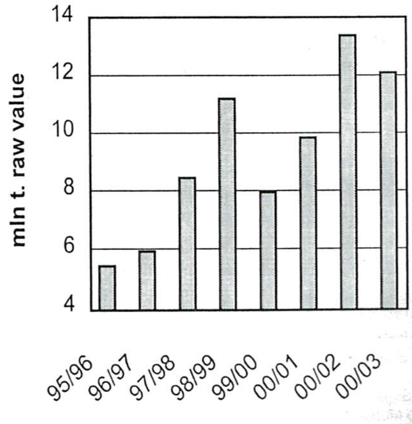


Fig. 17 Brazil: Sugar Exports



NAME AND ADDRESSES OF PSMA—SZ MEMBER SUGAR MILLS

Name of Sugar Mills and Representative	Phone No. Head Office	Fax No. Head Office	E-mail Address	Phone No. Factory	Fax No. Factory
Al-Abbas Sugar Mills Ltd. Plot No. 50-A/3, Unit No 'H', Duplex Town House, Street No. 2, Gulshan-e-Faisal Coop. Housing Society, Bath Island, Karachi. Mr. Shunaid Qureshi Chief Executive	5831249-52	5831253	sugar@cyber.net.pk	02231-896235-8	02231-896234
Al-Asif Sugar Mills Ltd. 4th Floor, Bank House No.1 Habib Square, M.A. Jinnah Road, Karachi Qazi Amjad Abid Abbasi Chairman	2427216 2410885	2429092	info@al-asifsugarmills.com	029-775156	
Al-Noor Sugar Mills Ltd. 96-A, Sindhi Muslim Society, Karachi. Mr. Ismail Zakaria Chief Executive	4550161-63 4551990 4559863	4556675 4551370	alnoor@fascom.com	02424-747	02424-686
Ansari Sugar Mills Ltd. 41-K, Block-6, P.E.C.H.S., Karachi-75400. Mr. Dinshaw H. Anklesaria Chief Executive.	111-484-848 4531105 4531642	4546456 4535374		02238-642	02238-707
Army Welfare Sugar Mills Badin Col (R) Zahin Ullah Khan General Manager			awsmawt@yahoo.com	0227-61205 0227-61970	0227-61733
Bawany Sugar Mills Ltd. 4th Floor,Bank House No.1 Habib Square M.A.Jinnah Road,Karachi. Qazi Amjad Abid Abbasi Chairman	2427216 2410885	2429092	info@bawanysugarmills.com	0227-730001 0227-730215	0227-730093
Dewan Sugar Mills Ltd. Dewan Centre,3-A, Lalazar, Beach Hotel Road,Karachi. Mr. Dewan M. Yousaf Farooqui Managing Director	111-313-786 5611098-9	5610765 5611345	dewanyousuf@dewangroup.com.pk	029-770443 021-5611498	029-770443
Digri Sugar Mills Ltd. 48-J/1, Block-6, P.E.C.H.S., Karachi. Mr. Naveed Muhammad Javeri Chief Executive	4541195-8	4534501	digri@cyber.net.pk	023221-200	023221-276
Faran Sugar Mills Ltd. 3rd Floor, Bank House No.1, Habib Square, M.A.Jinnah Road, Karachi-74000. Mr. Mohammad Amin Bawany Chief Executive	2418050-4	2421010	Violin@cyber.net.pk	0221-610456 0224-41575	0221-610456
Fauji Sugar Mills-Khoski Khoski Badin Brig. (Retd) Aslam Paunwar Khan General Manager	Office & Factory 0227-740151-4 0227-740156 0227-61520	0227-740155	fsmk-badin@fastmail.fm		
Fauji Sugar Mills-TMK Tando Mohammad Khan Col. (R) Muhammad Wallayait General Manager	Office & Factory 0224-41461 0224-41846 0224-41721	0224-41122	fsmltmk@hyd.paknet.com.pk		

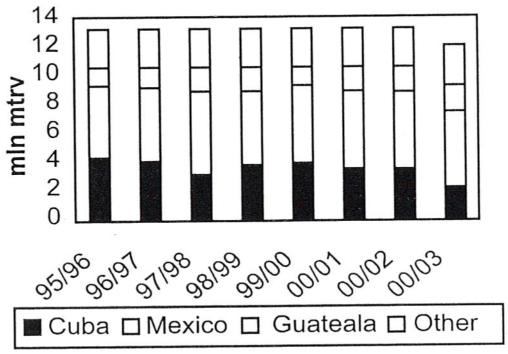
Name of Sugar Mills and Representative	Phone No. Head Office	Fax No. Head Office	E-mail Address	Phone No. Factory	Fax No. Factory
Habib Sugar Mills Ltd. 3rd Floor, Imperial Courts Dr. Ziauddin Ahmed Road, Karachi. Mr. Raeesul Hassan Chief Executive	5680036-9	5684086	sugar@habib.com	0241-60751-5	0241-61314
Khairpur Sugar Mills Ltd. ST-10, D/14, Jumani Arcade Main University Road,Karachi. Mr. Muhammad Mubeen Jumani Chief Executive	4931021-4	4933313		071-22554	071-22554
Larr Sugar Mills Limited 16-E,Block-6, Rashid Minhas Street, P.E.C.H.S., Karachi. Mr. Abdul Rauf Farouk Managing Director	4545591-4	4537720	lsml@cyber.net.pk	029-777139	029-777139
Matiari Sugar Mills Ltd. Matiari House, C-48, KDA Scheme No.1, Karachi. Mr. Masood Ahmed Managing Director	4521382 4529698 4536614	4541734	matsug@attglobal.net	0221-619925 02203-762	02203-507
Mehran Sugar Mills Ltd. 8th Floor, Adamjee House, I.I.Chundrigar Road, Karachi Mr. Ahmed Ebrahim Hasham Director	2417131-4	2416477	mehransugar@yahoo.com	02231-890856 02231-891984	02231-890568
Mirpurkhas Sugar Mills Ltd. 2nd Floor, Modern Motors House Beaumont Road, Karachi. Mr. Mahmood Faruque Managing Director/Chief Executive	562565-7 5682569-70	5682839	msmho@sat.net.pk	0231-62961-2 0231-73060	0231-73062
Mirza Sugar Mills Limited 10th Floor, Lakson Square Building No.1 Sarwar Shaheed Road Karachi. Dr. Mrs. Fahmida Mirza Chairperson	5680151	5680183	msml1@cyber.net.pk	0227-61253 0227-61477	0227-61253
Naudero Sugar Mills IPvt) Ltd. 2nd Floor, Block-4, Hockey Club of Pakistan STadium Karachi-75350. Mr. Anver Majid Manging Director	5655131-4	5680533	naudero@cyber.net.pk	0741-447393	0741-447216
Najma Sugar Mills Ltd. Sikandar House, F-58, Park Lane, Block-5, Clfton, Karachi. Mr. Jahanzeb Sikandar Chief Executive	583,1082 5670321 051-227-249	5831069 051-2272065	nsml@khi.comsets.net.pk	0231-68486	0231-68486
Pangrio Sugar Mills Ltd. 10th Floor, Lakson Square Bldg. No.1 Sarwar Shaheed Road, Karachi. Mr. Sajid H. Naqvi Chairman/Chief Executive	5680151	5680183	psml2@cyber.net.pk	0227-61532 0227-45260	0227-54260
Ranipur Sugar Mills Ltd. 1308, 13th Floor, -Chapal Plaza, Hasrat Mohani Road, Karachi. Mr. Abdul Wajid Chairman	2411368-9	2413547	ranipur@cyber.net.pk	0792-630206-7	0792-630570

Name of Sugar Mills and Representative	Phone No. Head Office	Fax No. Head Office	E-mail Address	Phone No. Factory	Fax No. Factory
Sakrand Sugar Mills Ltd. 41-K, Block-6,PECHS, Karachi.	111-484-848	4546456		024171-631	024171-638
Mr. Salman Khalid Mirza Receiver	4531637 4531642	4535374		024171-637 024171-639	
Sanghar Sugar Mills Ltd. 101-Ocean Centre, Talpur Road, Karachi. Mr. Rashid A. Mateen Executive Director	2427171-2	2410700	ssml@cyber.net.pk	02346-42000 02346-42043	02346-42158
Seri Sugar Mills Ltd. 1st Floor, Hassan Ali Centre M.A.Jinnah Road, Karachi. Mr. Ashraf W. Tabani Executive Director.	2437828 2439630	2413600	tabani@cyber.net.pk	0224-41881 0224-41888	0320-4222972
Shahmurad Sugar Mills Ltd. 96-A, Sindhi Muslim Society, Karachi. Mr. Yousuf Ayoob Managing Director	4550161-3 4550031	4556675 4551370	alnoor@fascom.com	0224-43162 0224-43172	
Sindh Abadgar's Sugar Mills Ltd. 164-L, Block-3, PECHS, Karachi. Mr. Omer H. Said Executive Director.	4557936 4559741	4558109	sasm@fascom.com.	0224-41537 0224-41364	0224-41537

NAME AND ADDRESSES OF NON-MEMBER SUGAR MILLS

Bachani Sugar Mills Ltd. 202-2nd Floor, Europa Centre Hasrat Mohani Road, Off: I. I. Chundrigar Road, Karachi. Mr. Noorul Amin Bachani Chairman	2627607 2638459	2627607		02231-897200	02231-897200
Tharparkar Sugar Mills Ltd. C-27, Beveraly Estate, Plot No. F-24, Block-9, Kehkashan, Clifton, Karachi. Syed Imtiaz Ali Shah Chairman	5863730 5863915	5863729		0231-66606 0231-66306	0231-66606
Dadu Sugar Mills Under Sindh Privatisation Commission Government of Sindh Mr. lal Din Kashmiri Secretary Privatisation Commission	9202077				
Kiran Sugar Mills Ltd. 40-B East Avenue, Phase-I Defence Housing Authority, Karachi. Euro Plus Ltd. of Belgium					
Thatta Sugar Mills Under Privitisation Commission Government of Sindh Mr. Lal Din Kashmiri Secretary Privatisation Commission.	9202077				

Fig. 8 Sugar Production in Central America

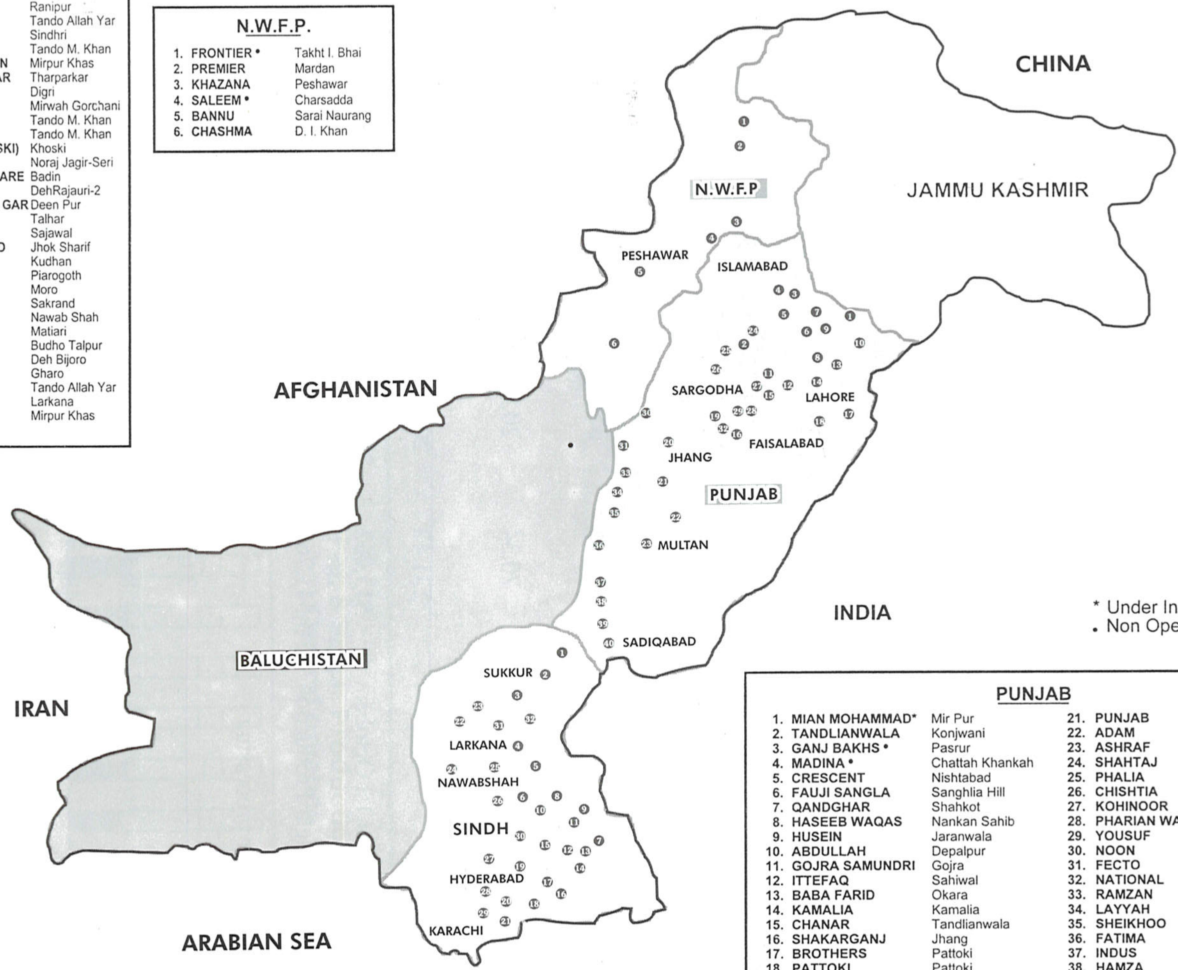


SUGAR AND SUGARCANE

Data Sheet

Year	1998-99	1999-2000	2000-01	2001-02	2002-03
Sugarcane area HA	1,155,100	1,015,073	926,542	999,700	1,099,700
Sugarcane produced	55,191,100	46,696,673	44,099,146	48,041,000	52,050,000
Yield / ha-tonnes	47.77	46.00	47.60	48.05	47.33
Cane utilized by mills	42,994,911	28,982,711	29,408,723	36,708,638	41,911,034
% age of utilization	77.90	62.07	66.69	76.41	80.52
Sugar production	3,530,931	2,414,746	2,466,788	3,197,745	
Recovery %	8.21	8.33	8.39	8.71	8.74
No. of mills operative	73	67	65	69	71
Cane support price per 40 kgs. Punjab, NWFP / Sindh	35 / 36	35/36	35/36	40/43	40/43
Av. wholesale price including Sales Tax Rs. / Kg.	20.34	20.59	24.21	20.41	18.30
Av. Inter. export price US$ / tonne	231.47	206.49	240.34	207.83	191
Beginning stocks 1st October	513,062	371,394	27,274	633,870	637,149
Cane + Beet Sugar Production	3,541,763	2,429,364	2,484,064	3,226,917	3,684,116
From raw sugar processing	—	—	531,930	22,111	1,945
Imports	3,697	420,621	632,645	29,692	8,315
Total available	4,058,522	3,221,379	3,675,913	3,912,590	4,331,525
Export	648,230	22,160	—	—	100,000
Net available	3,410,292	3,199,219	3,675,913	3,912,590	4,231,525
End stock	371,394	27,274	633,870	637,149	759,103
Lifting/consumption	3,038,898	3,171,945	3,042,043	3,275,441	3,472,422

LOCATION OF SUGAR FACTORIES IN PAKISTAN



SINDH

1.	KIRAN •	Rohri
2.	KHAIRPUR	Khairpur
3.	RANIPUR	Ranipur
4.	MEHRAN	Tando Allah Yar
5.	SANGHAR	Sindhri
6.	FARAN	Tando M. Khan
7.	MIRPURKHAN	Mirpur Khas
8.	THARPARKAR	Tharparkar
9.	DIGRI	Digri
10.	AL-ABBAS	Mirwah Gorchani
11.	FAUJI (TMK)	Tando M. Khan
12.	ANSARI	Tando M. Khan
13.	FAUJI (KHOSKI)	Khoski
14.	SERI	Noraj Jagir-Seri
15.	ARMY WELFARE	Badin
16.	PANGRIO	DehRajauri-2
17.	SINDHABAD GAR	Deen Pur
18.	BAWANY	Talhar
19.	LARR	Sajawal
20.	SHAHMURAD	Jhok Sharif
21.	MIRZA	Kudhan
22.	DADU •	Piarogoth
23.	AL-NOOR	Moro
24.	SAKRAND	Sakrand
25.	HABIB	Nawab Shah
26.	MATIARI	Matiari
27.	DEWAN	Budho Talpur
28.	THATTA •	Deh Bijoro
29.	AL-ASIF	Gharo
30.	BACHANI •	Tando Allah Yar
31.	NAUDERO	Larkana
32.	THAR •	Mirpur Khas
33.	NAJMA	

N.W.F.P.

1.	FRONTIER •	Takht I. Bhai
2.	PREMIER	Mardan
3.	KHAZANA	Peshawar
4.	SALEEM •	Charsadda
5.	BANNU	Sarai Naurang
6.	CHASHMA	D. I. Khan

* Under Installation
• Non Operational

PUNJAB

1.	MIAN MOHAMMAD*	Mir Pur	21.	PUNJAB	Mian Chanu
2.	TANDLIANWALA	Konjwani	22.	ADAM	Chistian
3.	GANJ BAKHS •	Pasrur	23.	ASHRAF	Ashrafabad
4.	MADINA •	Chattah Khankah	24.	SHAHTAJ	Mandi Bahauddin
5.	CRESCENT	Nishtabad	25.	PHALIA	Karamanwala
6.	FAUJI SANGLA	Sanghlia Hill	26.	CHISHTIA	Sillanwali
7.	QANDGHAR	Shahkot	27.	KOHINOOR	Jauharabad
8.	HASEEB WAQAS	Nankan Sahib	28.	PHARIAN WALI	Lalian
9.	HUSEIN	Jaranwala	29.	YOUSUF	Shahpur
10.	ABDULLAH	Depalpur	30.	NOON	Bhalwal
11.	GOJRA SAMUNDRI	Gojra	31.	FECTO	Darya Khan
12.	ITTEFAQ	Sahiwal	32.	NATIONAL	Bhalwal
13.	BABA FARID	Okara	33.	RAMZAN	Chiniot
14.	KAMALIA	Kamalia	34.	LAYYAH	Layyah
15.	CHANAR	Tandlianwala	35.	SHEIKHOO	Kot Addu
16.	SHAKARGANJ	Jhang	36.	FATIMA	Kot Addu
17.	BROTHERS	Pattoki	37.	INDUS	Kot Bhaodur
18.	PATTOKI	Pattoki	38.	HAMZA	Jetha Bhutta
19.	CHAUDHRY	Gojra	39.	JDW	Mouza Sharin
20.	KASHMIR	Shorkot	40.	UNITED	Sadiqabad