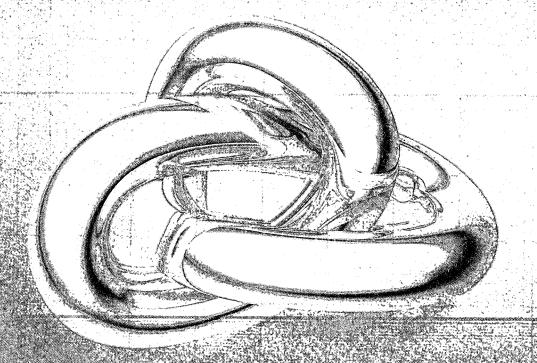


# THE TOTAL FOR SUCCESSION



ANNUAL REPORT 2006-07

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Technology is at the heart of our conviction to achieve our vision of leadership in each of our businesses. The continual R&D in our engineering businesses, as well as associations with leading institutes and corporations, allow Triveni to be placed at the foreiront of each of these businesses. Our developments in our sugar businesses in terms of varietal balances, cane and farm productivity measures, and sugar processing equipment allow us to sustain our leadership in this field.



Contract Section



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Customers are a true judge of the success of our products. A market leadership position in each of our engineering businesses, in terms of market share, coupled with near 99% repeat orders, is testimony to the customer delight that we strive to achieve. In our sugar business, the premium that we are able to achieve on the sale price of our sugar is testimony to our quality and customer acceptance.

We at Triveni are proud that our portfolio of businesses conforms to the notion of sustainability; not only in an ecological sense, but also in terms of social prosperity. Sugar cane is one of the most productive C4 crops in the world, which is a determination of how productively crops convert CO2 into biomass through photosynthesis, and that blomass is later used to produce power through our co-generation legitities. The other by-product of the sugar manufacturing process - molasses, is also converted into ethanol – a clean, green alternative to petrol/diesel. This renewable crop also allows Triveni to participate in the development of rural India through the distribution of income to more than 350,000 farmers who supply us with supercene. Of course, our outreach programmes touch the lives of each of our farmers and their families, which we estimate to be over 1.5 million people. In our engineering businesses, we are the undisputed market leader in providing renewable energy and water solutions to our clients.



At Triveni Engineering and Industries Limited all our factors of production join seamlessly as our guiding principles - Technology, Customer Satisfaction and Sustainability - are not viewed as distinct thoughts but rather as essential parts of a whole. Transforming these concepts into reality, we bring you a review of our financial year 2006-07 and our thoughts on the years to come.



### Chairman's message

### A view from the top

Our vision for Triveni has been built over the years on the three pillars of Technology, Customer Satisfaction and Sustainability. Whether it is our businesses in the engineering space or our sugar businesses, we have ensured that these three attributes percolate through to all our business endeavours.

We completed major expansion of all our businesses with a total expenditure of over Rs. 11 billion. This has brought global economies of scale to all our businesses, de-risked and diversified our sugar operations, and installed state-of-. the-art equipment in our turbine and gear units to help retain our low cost manufacturing and technology edge. We believe that these investments, coupled with prudent cost control and an emphasis on research and development, will ensure sustained growth in the years to come. Our diversified business has stood the scrutiny and rationale of being a conglomerate, as evidenced by the exceptional growth and profitability of our engineering businesses. This mitigated the adverse fundamentals in our sugar business, and enabled us to achieve overall profitability in what has probably been the worst year for the sugar industry in Uttar Pradesh.

## Perspective - ENGINEERING BUSINESSES - Turbines, Gears, Water

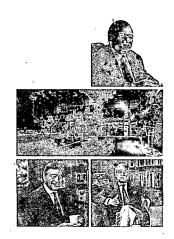
Our engineering business is well poised to take advantage of the India Growth story. With Indian economic growth estimated at about 9%, and with the capital goods segment growing by over 20%, industries in India are expanding their business multifold. As power and water are essential inputs for industrial companies, the products manufactured by us have a ready market: Power is seen as a significant bottleneck in achieving the envisaged growth and the Government is making concerted efforts to address this problem by incentivising the setting up of captive power plants, and encouraging the use of bio-mass

based raw materials for generation of power. One-third of the capacity addition envisaged under the Eleventh Five Year plan is to come from captive/cogeneration and bio-mass based power plants, and this is exactly the market for our range of steam turbines. Our industrial customers which are mainly in the cement, carbon black, textiles, steel, chemicals, metals, sugar, refinery and paper industries, are expanding their operations, and this bodes well for all of our engineering businesses.

Steam turbines manufactured and supplied by us continue to have a dominant share of the market in India in terms of volume and number of installations (over 75% in our range). Triveni's Turbine Business Group's (TBG) outstanding order book is almost 85% of the increased revenues forecast for the coming year. During the year, we tied-up with Beijing BEIZHONG Steam Turbine Generator Co. Ltd. (BZD), a Chinese turbine manufacturer for higher range of turbines upto 330 MW, and also signed a partnership with GE for packaging and selling of high speed reciprocating compressors for the Oil & Gas industry in India.

What sustains our edge in this competitive arena is talent and technology. State-of-the-art manufacturing backed by strong engineering support, helps us maintain our edge in manufacturing costs versus our competitors. We have a strong Research and Development programme which include joint programmes with the premier institutes in India, such as the Indian Institute of Science, Bangalore. We are in the process of setting up a training institute at our facility in Bangalore, which will act as a knowledge and development centre comparable to . the best industrial institutes globally. Our R&D efforts will enable us to continuously upgrade technology to increase the efficiency and performance of our turbines.

Our High-speed Gear unit at Mysore is also growing in strength. We are in the process of extending our range of



products to include hydel, marine and niche low speed gears. This will help us broaden our market reach and address the requirements of customers in the focused industries for Triveni. Here too, we are continuing to invest in the best machine tools available globally, to preserve our edge in manufacturing cost and quality.

Non-availability of water is viewed as an area of major concern globally. While the demand for potable drinking water in India is a serious problem, the need for treated water as a process requirement for industry is also increasing rapidly. Fast depleting and contaminated ground water reserves are forcing companies to rely on technological solutions such as recycling and desalination to sustain their businesses. Our internal capabilities of design and engineering, and our association with one of the world's most comprehensive technology providers, has positioned us as a favoured supplier for high quality water and waste water treatment products and services.

At Triveni, customer satisfaction is an integral part of our business. Our nation wide Customer Care Centres are equipped to handle a service request within the least possible time, mostly within 24 hours, and this critical feature serves to distinguish Triveni from our competitors. With our extensive domain knowledge and engineering expertise, we now refurbish and service products manufactured by other turbine companies, even for capacities beyond our own product range. This is

tremendous growth area for the Turbine group both in India and overseas, and comes with good margins.

## Perspective - SUGAR BUSINESSES - Sugar, Co-Generation, Distillery

With our expansion plans complete, your company continues to be among the top three sugar producing companies in India, accounting for a total crushing capacity of 61,000 TCD. In 2007-08, we expect to raise sugar production from our seven units by 30% and also produce more power and alcohol. This allows us to produce with better economies of scale and ensure high productivity at a low operating cost. With focused and more intensive cane development efforts, we expect an improvement in recoveries in the coming years, and this will help us remain an efficient producer.

We are intensifying our efforts to increase sugar cane yields by supporting farmers with information and investments for irrigation facilities, fertilizer usage, control of insects and pests, and adoption of best farming practices. Increasing yields will improve the return to the farmer and lower pressure for unreasonable cane prices. This will not only bring down cane costs but also sustain the viability of our sugar operations by ensuring long term availability of cane.

With record global production of more than 167 million tonnes, an increase of almost 10% over the last year, we expect global sugar prices to be under strain for 2007-08. However, increasing crude prices are leading Brazil, the world's largest producer, to divert more sugar cane into ethanol manufacture, and we expect the global outlook for 2008-09 to improve for the sugar fundamentals.

India has recorded a bumper sugar production of 28.5 million tonnes in the year ended 30<sup>th</sup> September 2007, which is close to 10 million tonnes higher than the previous season. Even though consumption in the country is growing by 3-4%, closing inventory as on 30<sup>th</sup> September 2007 is about 11 million tonnes. Increasing inventories and the

banning of exports by Government resulted in sugar prices declining continually since July 2006. With high State Advised Cane prices, and the steep decline in sugar realisations, our company incurred substantial losses in its sugar operations. However, on account of our co-generation operations these losses for the sugar group, were mitigated to some extent.

We believe that the current season 2007-08 would lead to a production of 30 million tonnes, and in the light of the current low sugar prices, mills in UP have approached the Allahabad High Court seeking relief against the recently announced State Advised Cane Price. Results from our integrated sugar operations in 2007-08 are expected to be much better than the previous year. We estimate that some farmers will switch to alternate crops in the following season, which will result in a significantly lower sugar production in 2008-09 and lead to the firming of sugar prices in the medium term.

Co-products of the sugar industry, power and alcohol, continue to act as a ballast to the uncertain profitability of sugar operations. The Government of India's initiative to adopt green energy has accelerated with the recent announcement of an approval of Cabinet Committee on Economic Affairs, for the 5% mandatory blending of ethanol, this will be followed by a 10% mandatory blending from October 2008. Further, sugar plants have also been given permission to convert sugar cane juice directly into fuel ethanol. We hope this will kick start the country wide implementation of ethanol blending on a consistent basis and will result in the increased demand for ethanol from sugar producers.

Your company has de-risked sugar manufacturing by augmenting its co-generation capacity with a new 23 MW co-generation plant at Khatauli and the 160,000 litre per day distillery at Muzaffarnagar. Our co-generation capacity now accounts for 68 MW, out of which around 42 MW is surplus and

exported to the UP state grid. Coupled with the accrual of Carbon Credits on account of the "Green Power" produced, and the surety of power export revenues by virtue of a long term power purchase agreement with the U.P. Power Corporation Limited, co-generation will continue giving sustained benefits to our sugar business group. Our distillery operations were commissioned in April and currently we are manufacturing industrial and extra-neutral alcohol. With the recent Government press release, we believe oil marketing companies would be tendering for more quantities of fuel ethanol for blending above 5%, which would enable us to start deliveries.

Our commitment to give back to society, has manifested itself in our efforts to provide medical care and education to our stakeholders and their families through rural medical centres and education institutions. Care for our environment has motivated us to plant more than five thousand trees in the last fiscal year — a small step in controlling greenhouse gases in the long run.

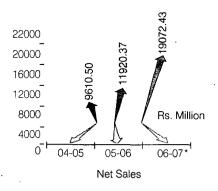
I would like to thank all of you for your support and confidence in Triveni, and assure you of our commitment to strive for bigger achievements in the coming years.

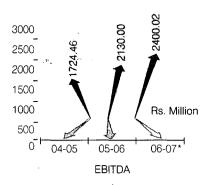
With best regards

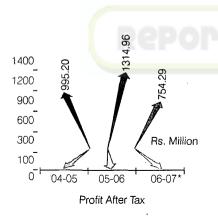
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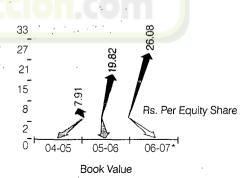
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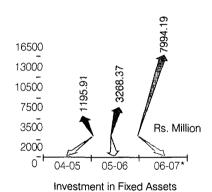
# Financial highlights

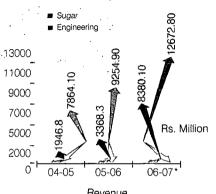












Revenue Sugar Business & Engineering Business

# Sugar Businesses

SUGAR BUSINESS GROUP COGENERATION GROUP DISTILLERY GROUP



## **Industry Overview**

### WORLD SUGAR BALANCE OCTOBER/SEPTEMBER\* (million tonnes, raw value)

Sugar 🚉	200	2003-04	4 2004-05	2005-06	2006-07
Opening Stocks	5	67.7	66.7	60.6	64.5
Production	15	50.4 143.7	141.0	152.5	167.3
Imports	2	18.3 49.1	50.9	53.4	51.3
Disappearance	13	89.7 141.5	144.0	146.1	150.4
Exports		19.8 52.3	54.0	55.9	56.3
Ending stocks	; ; (	66.7	,60.6	64.5	<sub>22</sub> 76.4
Stocks in per cent of consumption 48.53		18.53 47.2°	1 42.10	44.16	50.83

<sup>\*</sup>Source: F O Licht Sugar Report

World sugar production for the October/ September 2007 period is estimated to exceed all earlier expectations. The figure for October/September 2006/07 now estimated at 167.3 million tonnes, is significantly higher than the 152.5 million tonnes produced in the previous year. Of the total sugar production, over 130 million tonnes is from sugar cane while the balance was produced from sugar beet. During 06-07, the growth has come from sugar cane, while beet sugar production has shown a decline primarily due to lower production from the European Union (by 21%) and the rest of Europe (by 10%). While Africa and North & Central America produced only a little more than in 2005/06, Asia (34% increase in production) and in particular India (48% increase in production) led the explosive rise in output during 2006-07. Brazil, India, China and USA are the major sugar producing countries accounting for 50% of the total global sugar production. Brazil continues to be the largest producer, while India continues to be the largest consumer and the second largest producer.

While the global production of sugar is estimated to have grown by 9.6% during 2006-07, the consumption has only risen

by 2.9% at 150.4 million tonnes. On the global trading front, while exports have shown a marginal increase at 56.3 million tonnes as against 55.9 million tonnes as against 55.9 million tonnes, imports have shown a decline from 53.4 million tonnes in 2005-06 to 51.3 million tonnes in 2006.07. India continues to remain the largest consumer of sugar followed by China, Brazil, USA and the Russian Federation. Consumption in China, India and Brazil is growing at a higher rate than the world average. Consequently, these geographies are expected to play a larger role in the global sugar trade in the coming years.

The main producers of sugar in the world are also the leading exporters excepting India and are highly dependent on the world trade. Australia exports over 75% of its production, while Brazil exports over 65% of its production. India is however unique, as it has the world's largest consumption market. India's dependence on the world trade was marginal in the past. With the current year's record production and expected bumper crop in 2007-08, the potential for India to export large quantities is taken into consideration in the world trade. This has resulted in softening of prices. India has to export large quantities either as raw

sugar or white sugar in the next two years to reduce the inventory. This measure will lead to a certain degree of price stability within the country.

With rising crude prices as well as soft sugar prices, Brazil has been diverting more sugar cane for manufacture of ethanol. Brazil currently is using approx. 55-56% of its total sugar cane production for manufacture of ethanol, significantly higher than the previous year. Going



forward, Brazil's utilisation of sugar cane to manufacturing ethanol will determine the volume of sugar available for the international market.

Global sugar prices have also shown significant volatility during the past eighteen months. The steep fall in raw sugar prices in New York from 18.93 cents/lb in February 2006 to 11.6 cents/lb currently is clear evidence that sugar exporters face a serious problem which is not likely to disappear overnight. Similarly, the white sugar prices have also shown significant decline from its peak of USD 490 per tonne and is moving more or less in line with raw sugar prices. The spread between the raw and white sugar contracts has also come down drastically, signifying an even availability of both products.

Some of the key structural changes that are underway in the global sugar market are:

Reduction in sugar production in the EU

- Rising crude prices in global market
- Diversion of more sugar cane to manufacture of ethanol by Brazil
- China to emerge as one of the world's largest importers by 2015
- Russian dependence on imports is likely to reduce
- India's announcement of mandatory blending of 5% ethnanol in petrol from October 07 and 10% from October 2008 and also allowing mills to produce ethanol directly from sugar cane juice.

#### Outlook

On expectation of a continued increase in production from Asian countries, especially India, the global market for sugar will remain in surplus in 2007-08 as output will once again overshoot

demand. This will lead to another rise in inventory and low world market prices. World trade will also be impacted on account of weak US dollar which will result in lower income in local currency for the exporters. However, on account of rising crude prices and increased sugar inventory, it is estimated that Brazil will be producing less sugar in 2007-08, indicating that the global sugar prices have resistance at a price that equals the cost of production of marginal Brazilian sugar. Also, India is likely to enter the down phase in its production cycle in 2008-09 which would take pressure off the market. Hence, the outlook for 2008-09 is for an improvement in sugar fundamentals.

### Domestic Overview

### INDIAN SUGAR BALANCE OCTOBER/SEPTEMBER\* (million tonnes, white)

	2002-03	2003-04	2004-05	2005-06	2006-07 (P)	2007-08 (F)
Opening Stock	7. 4. 4. 4. 11.3. <del>1</del> . 12.	## 11.6; V	(\$ 8.5 <b>%</b> )	4.0*	7-Y-1-3-9*	116°
Production	20.2	14.0	12.7	19.3	28.5	30.0
Imports		0.4	2.1	00,	0.0	0.0
Total Available	31.5	26.0	23.3	23.3	32.4	41.6
Local consumption:	\$ \\ \tag{\chi_\tag{\chi}\tag{\chi_\tag{\chi}\tag{\chi_\tag{\chi_\tag{\chi_\tag{\chi_\tag{\chi}\tag{\chi_\tag{\chi}\tag{\chi_\tag{\chi}\tag{\chi_\tag{\chi}\tag{\chi}\tag{\chi_\tag{\chi}\	A 217.387 A	4 F 4 8 5 6 5	18.5	19.0	20:51
Exports	1.5	0.2	0.0	1.1	1.8	3.5
Total dispatches	19.9	17.5 4.	18.5	19.6	20.8	24.0
Closing Stock	11.6	8.5	4.8	3.7	11.6	17.6
Closing Stock / Consumption	n (%) 63.5	49	26	20	61,4	£ 186 € 1

<sup>\*</sup>Adjustment made as per Central Excise Certificate

Source: Upto 2006-07 ISMA and future projections - company forecasts

Indian sugar industry in the past two seasons has shown a significant growth in output. From the lowest production in a decade of 12.7 million tonnes in 2004-05, the sugar production has galloped to 28.5 million tonnes in 2006-07. This was largely on account of good climatic conditions, remunerative sugar cane pricing, on-time payments to farmers and setting up of new production capacities.

Sugar prices reached a peak of Rs. 20,000 per tonne during the first quarter of calendar 2006. However, on the back of expected higher production for the 2006-07 season coupled with the Government ban on exports, sugar prices started declining from July 06 onwards. The decline in sugar prices continued since then and towards the first quarter of

calendar 2007, in most part of the country, sugar prices went below the cost of production.

In the sugar year 2006-2007, India's sugar production is estimated to have increased strongly by 48% to 28.5 million tonnes. Even after accounting for a consumption of 19.0 million tonnes and