

# Management discussion and analysis



According to UN, India emerged as the third most attractive investment destination after China and the US. The year also witnessed parliamentary elections with NDA government entering its second consecutive term.

## Global economic overview

The pace of global economic activity remained weak in 2019 owing to a slowdown in the momentum of the manufacturing sector coupled with a global financial sluggishness. As a

result, global growth was 2.9% in 2019, the lowest since 2008–09. The world appeared to be perched at the precipice of a recession in 2020 following the outbreak of the Covid-19 pandemic.

## Review of the Indian economy

According to estimates of CSO, the Indian economy grew at an 11-year low of 4.2% in FY2019-20, compared to 6.8% in FY2018-19. This reflects muted corporate performance and subdued tax collection.

Manufacturing growth was seen at 2% year-on-year, a 15-year low as against 6.9% growth in FY19.

The nominal per capita net national income was estimated at ₹1,34,226 in 2019-20, up 6.09% from ₹126,521 in 2018-19. The government's fiscal deficit widened to 4.6% against the target of 3.8% because of declining revenues due to cut in corporate tax rates. Since February 2019, the RBI cumulatively cut rates by 135 bps five times in a row to 5.15%, the lowest since March 2010.

A sharp deceleration in economic growth and surge in inflation weighed on the rupee exchange rate with the Indian rupee becoming one of the worst performers among Asian peers, marked by a depreciation of nearly 2% since January 2019. Retail inflation climbed to a six-year high of 7.35% in December 2019, breaching the RBI's upper band of 6% for

the first time since the Monetary Policy Committee.

Despite the slowdown, India was among the top 10 recipients of Foreign Direct Investment (FDI) in 2019, attracting \$49 billion in inflows, a 16% increase over the previous year. The majority of this FDI went into service industries, including information technology; the country saw all-time high private equity investments at \$49 billion in 2019, mainly on account of the infrastructure sector accounting for 30% of all investments by value in 2019 compared to 12% in 2018.

India emerged as the fifth largest world economy in 2019, overtaking the UK and France with a gross domestic product (GDP) of US\$2.94 trillion. India jumped 14 places to 63 in the 2020 World Bank's Ease of Doing Business ranking.

According to UN, India emerged as the third most attractive investment destination after China and the US. The year also witnessed parliamentary elections with the NDA government entering its second consecutive term.

## Key government initiatives

**Corporate tax relief:** The government reduced the corporate tax rate to 22% from 25% to promote investments; it

announced a new tax rate of 15% for new domestic manufacturing companies,

providing a boost to the Make-in-India initiative.

## Outlook

The immediate outlook for the Indian economy appears uncertain in 2020-21 on account of the pandemic induced lock-

down. However, the long-term outlook appears favourable: much of India's consumption is under-penetrated on a per

capita basis and this reality could correct with speed over the foreseeable future.

	Q1, FY20	Q2, FY20	Q3 FY20	Q4 FY20
Real GDP growth (%)	5.2	4.4	4.1	3.1

(Source: Economic Times, CSO, Economic Survey, IMF)

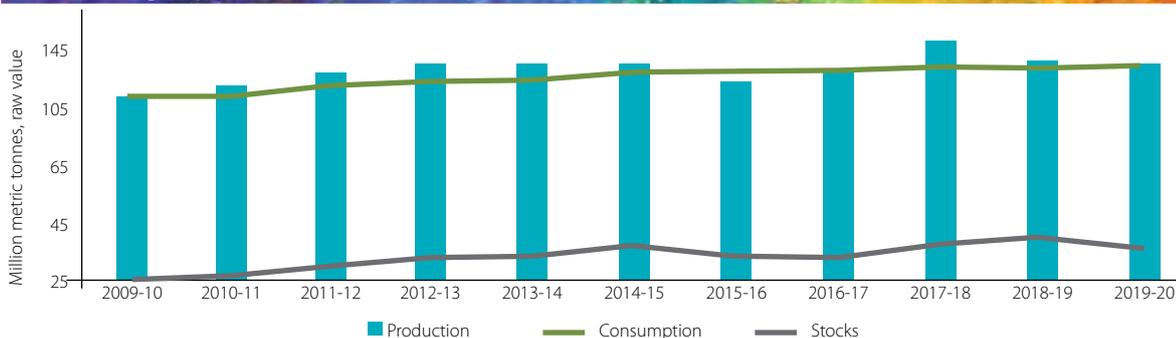
## Overview of the global sugar industry

Global sugar production is estimated to fall to around 175.1 million tonnes, significantly below 184.9 million tonnes of sugar produced in 2018-19. The global sugar deficit forecast for 2019/20 is set to rise to a significant 7.5 million tonnes, compared to ~7.8 million tonnes two

years ago. Global sugar consumption is estimated to rise 0.9% to 185.6 million tonnes, in part owing to the ongoing reformulation of beverages, particularly in sugar producing countries. Besides, the onset of the global pandemic is expected to stagger global consumption.

Global sugar prices are still trying to recover from a 10-year low in 2018. Realisations finished 2019 at 13.42 c/lb compared to 12.03 c/lb at the close of 2018.

## Global sugar production, consumption and stock





**Brazil:** Sugar cane production and harvesting, which started in April 2019, ended with production slightly lower than the 2018-19. An estimated 594 million tonnes of sugar cane was crushed through the 2019-20 harvest. The sugar produced was approximately 28.5 million tonnes in 2018-19 to 27.5 million tonnes in 2019-20. Sugar exports in 2018-19 declined from 28.2 million tonnes in 2017-18 to 19.5 million tonnes; exports for

the current season are estimated to drop to 18 million tonnes, which could be a 12-year low.

**Thailand:** For the 2019-20 crop there was a significant drop in sugar production from 14.9 million tonnes in 2018-19 to 8.4 million tonnes. Sugar exports from Thailand dropped to around 7.0 million tonnes from 11.4 million tonnes exported in 2018-19.

### Indian sugar industry

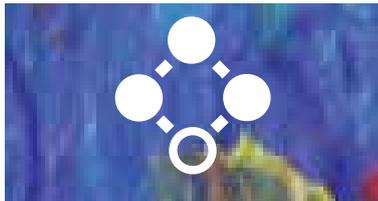
India continues to be the second-largest sugar manufacturer in the world. During sugar season 2019-20, 457 sugar mills engaged in crushing operations as against 527 mills in the previous year. Around 268.2 lac tones of sugar was produced until 31st May 2020 as against 330 lac tones produced in the previous season. The production decline is largely attributable to a drop in sugar cane production across Maharashtra, Karnataka and other states.

crushing about 10-12 days earlier than the previous year, producing more than what they had produced in the previous season.

In Maharashtra, sugar production for season 2019-20 was around 61.61 lac tonnes compared to 107.08 lac tonnes produced during the same period in the previous season.

In Karnataka, 64 sugar mills produced 33.55 lac tonnes of sugar compared to 38 lac tonnes of sugar in the previous year.

In Uttar Pradesh, 119 sugar mills were in operation, producing 126.4 lac tones of sugar. Uttar Pradesh mills commenced



Uttar Pradesh mills commenced crushing about 10-12 days earlier than the previous year, producing more than what they had produced in the previous season

### India sugar Balance Sheet (in million tonnes)

Particulars	SS2018-19	SS2019-20
Opening balance (as on 1st October)	10.7	14.6
Estimated sugar production	33.2	27.0
Imports	0.0	0.0
Sugar availability	43.9	41.6
Estimated domestic consumption	25.5	25.0
Estimated exports	3.8	5.5
Closing balance (as on 30th September)	14.6	11.1

### Exports

Sugar exports were permitted due to a bumper sugarcane production for two consecutive seasons – SS 2018 and SS 2019 – that resulted in ~10 million tonnes of sugar inventory being shipped.

The Cabinet Committee on Economic Affairs approved a lumpsum export subsidy of ₹10,448 per tonne of sugar to mills for sugar season (SS) 2020 or from October 2019 to September 2020. The

approval entailed an estimated expenditure of ₹6,260 crore for the government covering marketing costs, handling, upgrading, other processing costs, international and internal transport and freight charges on export up to 6 million tonnes (MT) of sugar, limited to the maximum admissible export quantity allocated to sugar mills for SS 2020.

## Sugar price

The government announced a Fair and Remunerative Price of ₹275 per quintal of sugar cane at 10% sugar recovery with a premium of ₹2.75 for every 0.1% increase in recovery. India's ex-mill sugar prices

are expected to remain stable within ₹31 per kilograms to ₹33 per kilograms even as production has declined. Sugar prices averaged between ₹31 per kilograms to ₹34 per kilograms during this sugar season

supported by increased minimum selling prices (MSP) and lower sugar estimates for the season 2019-20 despite high sugar inventories.

## Key government initiatives

**Minimum selling price:** With the objective to benefit sugarcane farmers and help clear cane arrears, the Union Government increased the minimum selling price (MSP) of sugar from ₹29 per kilograms to ₹31 per kilograms from February 2019.

**Sugar cane price:** The Central and State governments (like Uttar Pradesh) maintained FRP and SAP, protecting the prospects of sugar manufacturers.

**Exports:** The government provided millers with an export subsidy of ₹10,448 per tonne.

**Buffer stock:** The Central government announced a buffer stock of 4.0 million tonnes to take care of the excess inventory in the system on which holding charges in form of interest and insurance are being reimbursed.

## Ethanol

The India ethanol market is projected to grow to \$ 7.38 billion by 2024, catalysed by a CAGR of 14.50% during 2019-2024. The Government plans to enhance ethanol production to 9 billion litres from 3.55 billion litres by 2022 complemented by a fuel blending rate of 10% by 2022. To achieve this target, the Government provided an approval to 362 new ethanol plants to add 5.5 billion litres of installed capacity for an investment of ₹18,000 crore.

Ethanol can now also be produced directly from cane juice and from B-Heavy (BH) molasses in addition to the conventional route of production through C-Heavy (CH) molasses. The price of ethanol from sugarcane juice was fixed at ₹59.48 per litre; ethanol extracted from B-Heavy molasses was priced at ₹54.27 per litre; the price of ethanol extracted from CH molasses was fixed at ₹43.75 per litre. India requires 5.11 billion litres of ethanol to address its 10% blending

target. In 2019-20, oil companies signed contracts for 1.7 billion litres; contracts of an additional 200 million litres are in the pipeline. The country enjoys an ethanol demand of 5.11 billion litres from oil marketing companies. On account of a decline in sugar production during the year, only 5.6% of the ethanol blending could be achieved in 2020.

## India: Ethanol used as beverage, fuel, and other industrial chemicals (million litres)

Calendar year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Beginning stock	112	125	33	60	60	75	61	128	146	222
Production	1522	1681	2154	2057	2002	2292	2061	1671	2693	3000
Imports	144	61	5	108	193	204	432	718	633	750
Exports	53	119	177	233	180	165	136	141	130	100
Consumption	1600	1715	1955	1932	2000	2345	2290	2230	3120	3820
Fuel consumption	50	365	305	382	350	685	1110	675	1600	2400
Ending stocks	125	33	60	60	75	61	128	146	222	52
<b>Production capacity</b>										
Number of refineries	115	115	115	115	115	160	161	161	166	166+
Nameplate capacity	1500	1500	2000	2000	2000	2100	2210	2215	2300	2600
Capacity use (%)	101	112	108	103	100	109	93	75	117	115
<b>Co-product production (1000 MT)</b>										
Bagasse	87690	102714	108309	102360	105642	108699	97485	79176	120422	112640
Press mud	11692	13695	14441	13648	14086	14493	12852	10438	15876	14850
<b>Feedstock use for fuel (1000 MT)</b>										
Molasses	208	1521	1271	1592	1458	2854	4625	2813	6667	9600
<b>Market penetration (Litres)</b>										
Fuel ethanol	50	365	305	382	350	685	1110	675	1600	2400
Gasoline	19563	20716	21842	23749	25848	29651	33265	35956	39015	41596
Blend rate (%)	0.3	1.8	1.4	1.6	1.4	2.3	3.3	1.9	4.1	5.8

[Source: [https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Biofuels%20Annual\\_New%20Delhi\\_India\\_8-9-2019.pdf](https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Biofuels%20Annual_New%20Delhi_India_8-9-2019.pdf)]

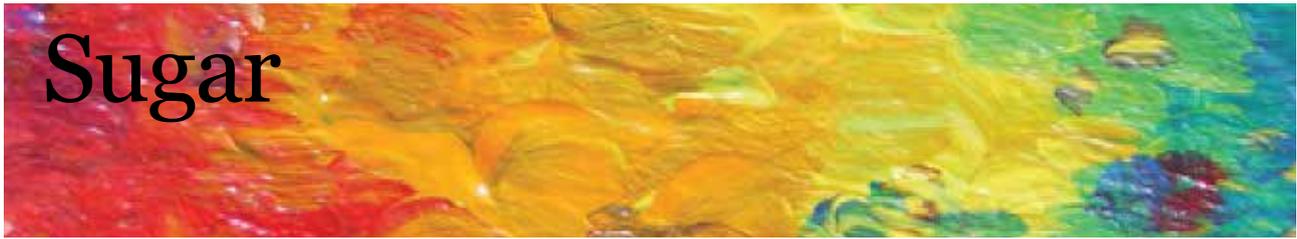
## Co-generation

Sugar cane is one of the most promising agricultural sources of biomass energy. Sugar cane yields two kinds of biomass (sugarcane trash and bagasse). Bagasse is the fibrous residue left after milling sugarcane with 45-50% moisture content and a mixture of hard fibre with soft and smooth parenchymatous (pith) tissue with high hygroscopic property.

For every 100 tonnes of sugar cane crushed, a sugar factory produces nearly 30 tonnes of wet bagasse. Bagasse is used as a primary fuel source by sugar mills. When bagasse is burned, it produces sufficient heat and electrical energy to supply sugar mill needs. The carbon dioxide emitted on burning the bagasse is equal to the amount of CO<sub>2</sub> that the

sugarcane plant has absorbed from the atmosphere during growth, making cogeneration greenhouse gas-neutral.

About 158 bagasse co-generation (simultaneous production of electricity and thermal energy in sugar mills) projects were commissioned to generate 1666 MW of surplus energy in 2019.



₹ crore, **Revenues, 2019-20**,  
₹3821.59 crore in 2018-19



**Proportion of overall  
2019-20 revenues from  
sugar**  
(77.78% in 2018-19)

## Overview

Balrampur Chini Mills is the second largest sugar manufacturing company in India with a cumulative crushing capacity of 76500 tonnes of cane per day.

The business is the largest within the Company and a platform that generates value for downstream businesses like ethanol and co-generation. Over the years, the Company has earned respect for being one of the most efficient sugar

manufacturers on the one hand and delivering among the best sugar quality standards on the other.

The Company has eight manufacturing plants in Eastern Uttar Pradesh and two in Central Uttar Pradesh. Most plants are proximate, facilitating economies of cane procurement, resource transfer and logistics.

## Strengths

**Scale:** The Company is among the largest sugar manufacturers in Uttar Pradesh, capitalising on superior economies of scale.

**Geography:** The Company's manufacturing units in the Eastern and Central Uttar Pradesh has superior cane quality.

**Cane management:** The Company facilitates the availability of superior seeds and quality agri-inputs to farmers, resulting in superior cane quality and one of the best recoveries in Uttar Pradesh.

**Evangelist:** The Company is encouraging mechanised farming in exchange for better yields.

**Energy reduction:** Process efficiency helped the Company moderate energy consumption.

**Quality:** Efficient operations and stringent quality checks enabled the Company to produce superior sugar quality, commanding better realisations

**Farmer-friendly:** More than 90% of the Company's command area is covered with early maturing seeds.

## Operational highlights, 2019-20

- Crushed 102.03 lac tonnes of cane (110.36 lac tonnes in 2018-19)
- Achieved sugar recovery of 11.93%, compared to 11.58% in 2018-19
- High recovery was driven by plant efficiency, effective cane management and growing coverage of early-maturing cane varieties
- Initiated cost optimisation projects across plants
- Undertook cane development, enhancing yields in command areas
- Exported 2.6 lac tonnes of sugar (revenues of ₹548.68 crore)



## Road ahead

The Company will continue to engage in cane development to improve its operations and efficiencies.

## Operational summary

### CANE CRUSHED (lac tonnes)

Location	March 2016	March 2017	March 2018	March 2019	March 2020
Balrampur	12.02	12.34	13.61	16.17	15.46
Babhnan	8.77	9.84	10.11	13.00	11.75
Tulsipur	7.11	6.25	7.04	9.22	8.11
Haidergarh	3.31	3.75	4.89	5.10	4.70
Akbarpur	7.14	7.51	8.65	11.36	10.24
Rauzagaon	5.62	6.92	8.16	9.12	9.02
Mankapur	7.69	8.43	9.20	11.43	10.17
Kumbhi	10.01	10.48	13.90	15.64	13.58
Gularia	9.79	10.75	13.35	15.06	14.30
Maizapur	2.79	3.19	3.87	4.26	4.70
<b>Total</b>	<b>74.25</b>	<b>79.46</b>	<b>92.78</b>	<b>110.36</b>	<b>102.03</b>

### SUGAR PRODUCED (lac tonnes)

Location	March 2016	March 2017	March 2018	March 2019	March 2020
Balrampur	1.30	1.28	1.44	1.86	1.70
Babhnan	0.97	1.00	1.03	1.41	1.30
Tulsipur	0.76	0.65	0.73	0.99	0.91
Haidergarh	0.34	0.36	0.48	0.56	0.52
Akbarpur	0.78	0.76	0.91	1.29	1.22
Rauzagaon	0.61	0.75	0.90	1.09	1.08
Mankapur	0.85	0.84	0.95	1.30	1.09
Kumbhi	1.17	1.24	1.64	1.93	1.70
Gularia	1.14	1.26	1.56	1.84	1.57
Maizapur	0.30	0.33	0.42	0.51	0.58
<b>Total</b>	<b>8.22</b>	<b>8.47</b>	<b>10.06</b>	<b>12.78</b>	<b>11.67</b>

# Distillery

549.09

₹ crore, **Distillery revenues, 2019-20**, ₹467.70 crore in 2018-19

9.94%

**Proportion of overall 2019-20 revenues from distillery operations**  
(9.52% in 2018-19)

## Overview

BCML entered the distillery business in 1996. The Company has commissioned four distilleries (Balrampur, Babhnan, Mankapur and Gularia) with a cumulative production capacity of 520 KLPD ; it is primarily engaged in the production of industrial alcohol and ethanol. The Company's distillery capacity is dedicated to the manufacture of ethanol. The Company converts a majority of rectified spirit produced in the distilleries

into ethanol, empowering it to service OMC contracts. These large contracts are backed by improved realisations, helping the Company generate superior revenue visibility, bottomline and performance.

The 160 KLPD distillery at Gularia commenced operations in January 2020, selecting to manufacture ethanol through the B-Heavy route.

## Strengths

**Balanced:** The Company manufactures ethanol from C-Heavy and B-Heavy routes, enhancing its flexibility to address respective government tenders.

**Scale:** The Company possesses a capacity of 520 KLPD, resulting in economies of scale and the ability to consume all captively produced molasses.

**Caring:** The Company proactively invested in environment management initiatives to minimise the impact of distillery operations on the environment. It installed incinerator boilers in its distillery to make operations ZLD and increase distillery operating days.

**Ethanol:** The Company focused on manufacturing ethanol with assured offtake by oil manufacturing companies

## Operational highlights, 2019-20

- Generated ₹549.09 crore in revenues (₹467.70 crore in the previous year)
- Marketed 10.92 crore bulk litres of ethanol (10.79 crore bulk litres in the previous year)

- Average blended realisations stood at ₹44.69 per ltr in 2019-20 against ₹41.29 per ltr in 2018-19.
- Distillery operated for higher number of days in 2019-20 owing to a higher availability of molasses

## Road ahead

The Company expects to improve operational efficiencies and scale output from its Gularia facility during the financial year 2020-21. The newly installed capacity is

expected to help the Company bid for larger quantities and achieve nearly 95% capacity utilisation.

(in crore bulk litres)

Alcohol	March 2016	March 2017	March 2018	March 2019	March 2020
Alcohol production (including Ethanol, ENA etc.)	7.06	7.22	8.10	10.66	12.76
Alcohol sales	6.47	6.92	8.07	11.10	11.93

# Co-generation

450.50

₹ crore, Co-generation  
**Revenues, 2019-20, ₹615.83**  
 crore in 2018-19

8.15%

**Proportion of overall  
 2019-20 revenues from  
 co-generation**  
 (12.53% in 2018-19)

## Overview

Balrampur entered the business of power co-generation in 2003, incentivised by the attractive long-term tariff revised upwards every few years on the one hand and tax-free revenues on the other. Besides, the business made a complete utilisation of bagasse generated through sugar manufacturing, providing raw material at no cost to the Company.

Over the years, the Company commissioned aggregate saleable cogeneration capacity of 165.20 megawatts. Of the total power generated, the Company consumes nearly

37% within and markets the rest to the state electricity grid.

The UP Electricity Regulatory Commission (UPERC) announced a 35% reduction in the tariff payable to the cogeneration units in the state to the state electricity board. The proposed tariff cut is expected to affect revenues for integrated sugar manufacturing companies (the matter is sub-judice). Owing to the reduction in power tariff, the Company has started exploring selling bagasse instead of its in-house consumption in captive power plants.

## Strengths

**Scale:** The Company created a saleable cogeneration capacity of 165.2 MW after addressing captive needs.

## Operational highlights, 2019-20

- Generated 90.24 crore units of power (104.97 crore units in the previous year)
- Exported 52.61 crore units to the state electricity grid (66.38 crore units in the previous year)
- Average realisation stood at ₹3.06 per unit in 2019-20 against ₹4.94 per unit in 2018-19

## Road ahead

The Company will focus on improving plant efficiencies with the objective to report a higher plant load factor.

(in crore units)

Power	March 2016	March 2017	March 2018	March 2019	March 2020
Power generation	74.69	75.37	87.41	104.97	90.24
Power sales	53.07	51.05	56.80	66.38	52.61

# How we have generated a larger cane quantum across the years

## Overview

Cane availability and quality play critical roles in the success of a sugar business; cane availability helps optimise production whereas cane quality influences mill recovery.

The Company made the farmer's prosperity its principal objective. It engaged in cane development, examined cane varieties, identified one to suit the Uttar Pradesh topography, recommended this selection to farmers and persuaded most to graduate from their long-standing variety to the one suggested. Besides, the Company provided subsidised seeds,

monitored planting and cane growth until harvest. The result was that the new variety delivered a superior cane yield and recovery – a win-win.

Conventionally, the Company utilised prevailing and popular cane varieties across compacted command areas. The overall focus lay in protecting cane output from pests and increasing cane coverage across its command areas.

A few years ago, BCML introduced a new dimension in its command areas: the Company made the farmers acquainted with C0 238, a superior and early-maturing

cane variety. The Company advocated its use, showcased its robustness on captive demonstration farms, strengthened its cane development team assigned with the objective to evangelise its planting and implemented a number of forward-looking practices that enhanced yields. The team assisted farmers in providing superior seeds and agri-inputs at subsidised costs and farm equipment. Besides, it introduced better farming practices including ratoon management that translated into higher yields, income and multi-year prosperity.

BCML's cane development comprised the following objectives



## Friend, philosopher and guide

BCML's engagement with the farmer is like a friend-philosopher-guide positioned to maximise farmer value. The result is that the Company has, through various interventions, emerged as the farmer's go-to agency for advice, support and

guidance. This positioning has been facilitated by the Company's capacity to advise farmers on what kind of cane variety to use and remunerate the farmer around a standard payment cycle, strengthening the farmer's trust and cash flow. The result is an unquestioned farmer trust in the Company's judgment, resulting

in a seamless alignment between farmer and corporate interests.

## Increased farm mechanisation

Farm mechanisation was negligible in BCML's command areas for two reasons: low equipment accessibility and

conventional mindsets. The farmer used traditional planting equipment but with awareness, the use of farm mechanisation equipment is growing. BCML facilitated this transition through encouragement to local entrepreneurs in purchasing model technology agri-implements for providing other growers of the area the agri-implement services on a custom hire basis and reasonable charges, training farmers in superior plantation techniques. The Company trains farmers in trash mulching that enhances soil fertility.

### Increased use of agri-inputs

The quality and availability of agri-inputs catalyse crop yield and health. A number of years ago, farmers in BCML's command areas consumed average products with erratic outcomes. BCML made a timely intervention to assist farmers make informed decisions through standardised products and processes; the Company conducted soil tests across farms to ascertain specific needs. It appointed a vendor to provide quality inputs at subsidised costs, strengthening cane yields. Besides, the Company engaged in forecasting studies, providing farmers with agrochemicals to protect crops from probable pest attacks.

### Ratoon management

The ratoon crop was regarded as a bonus crop, offering a lower cultivation cost by 20-30% as it obviated the need for seed material. Owing to this, growers gave little care to the ratoon crop, thereby

generating lower recovery and yield. As ratoon management is relatively less prevalent in Eastern Uttar Pradesh, the Company provided training to farmers to enhance the ratoon crop across its command areas, enhancing cane output by promoting a trash mulcher machine and ethophon chemical for improving ratoon sprouting and sustaining soil health as well as enhancing output. A ratoon yield competition programme was launched for healthy competition among cane growers for getting a better ratoon yield. Total integrated ratoon management practice was suggested to growers, which not only resulted in increased yields to growers but also increased recovery.

### Management of insects, pests and disease

The management of insects, pests and disease is of utmost importance to achieve sustainable performance since its incidence directly impacts not only the yield of sugarcane but also the sugar recovery. The Company follows not only a proactive and preventive approach but the crop is monitored in the entire life cycle right from sowing to harvesting for managing insects, pests and disease.

Major steps included:

- Soil treatment to manage soil-borne pathogens like red rot, wilt, root rot etc. Application of agri-inputs to manage the infestation of termite and root borer.
- Management of soil borne and insects borne diseases as well as termite insect

with seed treatment in hot & normal water. Rogueing of red rot affected plant and spot application of bleaching powder was done to manage Red rot spread.

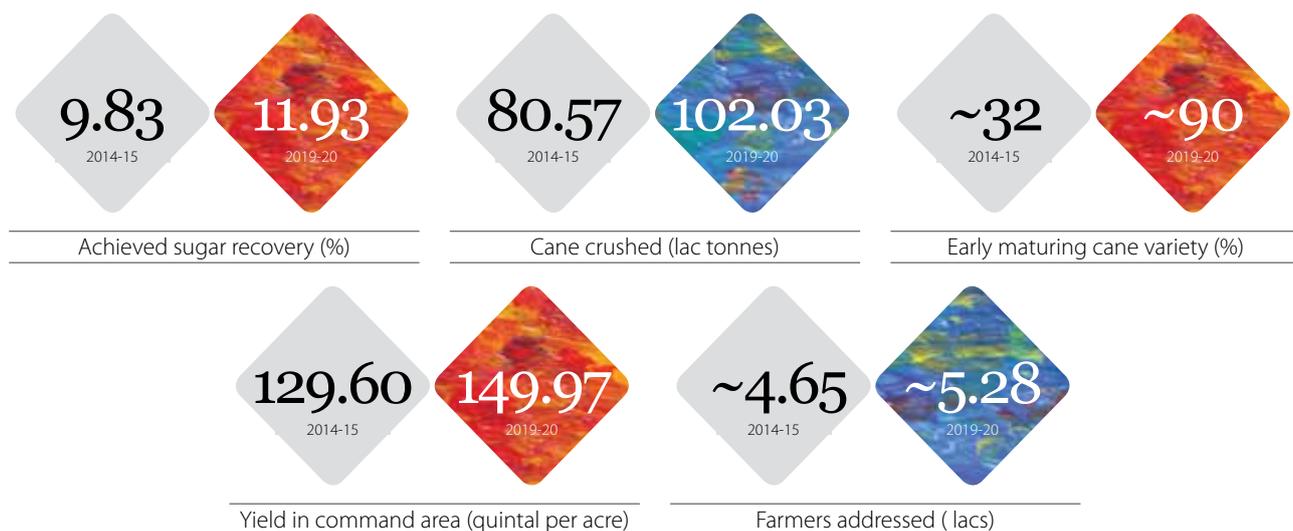
- Overall management of red rot and smut disease by foliar spray.
- Managing the infestation of termite and root borer in the standing crop after rain.
- Management of various borers viz. early shoot borer, top borer, root borer etc.
- Management of other pests and disease as per occurrence by using recommended pesticides and fungicides through foliar spray.

### Seed diversification

The Company covered more than 90% of its aggregate command areas with the superior early variety. As a proactive precautionary measure, the Company identified other early maturing cane varieties for future seed multiplication programme, ensuring that there is proper varietal balance of high yielding sugarcane varieties.

### Field staff training

Field training drives sugar cane yield and quality comprising the use of modern practices. This training helps widen the bandwidth of the Company's field staff, making them the first points of reference whenever a farmer seeks to have field issues addressed with immediacy and informed inputs.



# How we are investing in our people to create a new company

## Overview

Human resource management at BCML is all about exploring knowledge, building a culture, developing and enhancing skills and creating an environment of learning and reinventing oneself.

Over the recent years, BCML's endeavor has been to formulate a structured human resource framework to catalyse organisational growth. The human resource journey is based on four key pillars: talent acquisition, performance management, training & development, and talent development.

**Talent acquisition (Recruitment, selection and induction):** The talent acquisition process takes every possible measure (like screening / multi-layer selection / background verification/ cultural orientation etc) to map the right talent for the right role. BCML has created a recruitment panel, helping organisation-wide engagement without candidate bias, resulting in better cultural assimilation and organisation-centric knowledge.

**Performance management:** BCML has invested in a well-accepted Performance

Management System, which is performance and competence-driven. The defined key result areas (KRA) are directly/ indirectly linked to business goal. The PMS policy is designed in a manner that every employee is evaluated based on her/ his contribution to the final goal. There is a constructive discussion based on mid-year performance analysis with key team members. This is followed by a well-designed annual appraisal process across the group, which helps in a continuous analysis that helps bridge the gap between the desired and actual output.

**Training & development:** Skill development in BCML is a continuous process. BCML developed a structured training needs Identification process followed by specialised technical/ functional training by external /internal experts. Leadership workshops were organised in line with the competency matrix of organisation. A post-training effectiveness feedback mechanism ascertained the impact of the training and workshops. Specialised workshops were conducted in collaboration with external expert agencies to obtain vision and goal

alignment between the corporate and unit teams. The leadership team of the organisation was sent to premier Institutes to attend leadership training and coaching programmes.

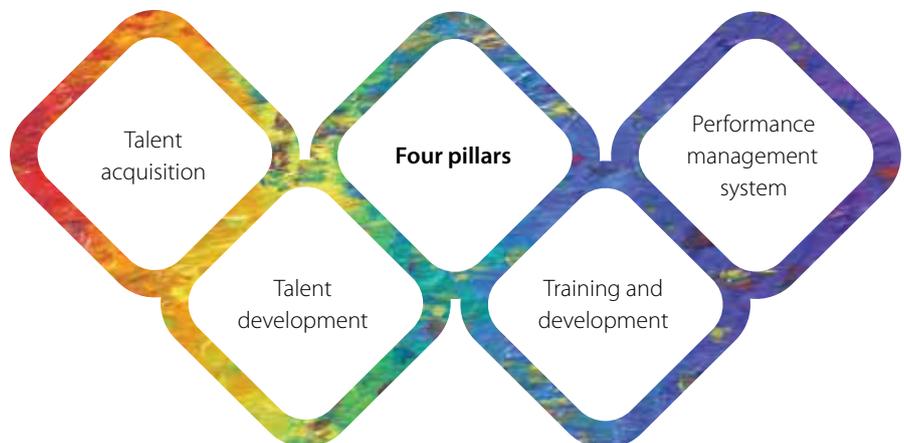
**Talent development:** Talent development is an area attracting BCML's focus. BCML invested in multiple initiatives like designing a well-defined KRA / performance-driven PMS to identify talent across the group. Ongoing initiatives like Hipot Model (Hi Potential) and GT (Graduate Trainee) development will create a significant talent pool.

The BCML management also takes initiatives in adding value to the top performers by educating and training them through management-driven programs from institutes like IIM /XLRI.

**Policies:** BCML has multiple employee benefit policies like Vehicle Policy, Furniture Policy, Club membership benefits, Medclaim Policy for family / Mobile Policy/ Employee Yearly Health Check facilities etc.), strengthening the retention of employees.

Employees

Four pillars of BCML's HR management



# How an increasingly digitalised platform is transforming our company

## Overview

With 10 units crushing cane from lakhs of farmers, it became cumbersome to track each function across units. As a result, the units created independent businesses. There was a premium on operating standards and reports. The result: each

unit worked in a silo and the best practices were hard to implement. Besides, the data generated in a unit would not help in organisation-wide decision making.

This created a room for digital interventions that would transform a conventional business into a modern one.

In 2014, the Company implemented SAP ERP to replace indigenously developed accounting software. The introduction of SAP enhanced standardisation around a common platform, strengthening systematic uniformity that enhanced information flow and decision making.

## Key initiatives, 2019-20

Though IT automation was in its early stages, the Company identified intervention areas to reduce costs and enhance process efficiency.

The Company embarked on a pilot project in the area of plant maintenance and spares management at one of its manufacturing plants: to capture equipment-wise and spares-wise data. It is expected that in the event of equipment failure, the fault can be traced leading to necessary spares across the Company's various facilities, moderating time and

costs and inspiring optimal stocking. The Company is training employees in data management and analysis with the objective to scale to other plants.

- The Company plans to introduce SOPs of various functions; SOP compliance will be monitored through a tamper-proof online dashboard at the corporate office; besides, SOP-wise and plant-wise data is expected to facilitate informed decision-making.
- The Company introduced software to document cane development; employee-wise data of field officers is captured and

tracked around a format and handheld devices, helping the Company generate accurate geo-tagged data.

- The Company upgraded its SAP HANA system to the latest generation during the year under review; one of the first few companies in India to do so in sugar sector. It has moved from an on-site server to a cloud server, enhancing security. The Company strengthened centralised anti-virus monitoring; updates are monitored centrally to ensure that no machine within the system skips a crucial update and becomes vulnerable.

## Road ahead

Going ahead, the IT team will work on the effective implementation of the pilot project, creating a cultural shift within the Company.



# How we have reinforced our positioning as an environmentally responsible player

## Overview on Environment Management and Sustainability

There are a growing number of manufacturers globally who are realising the importance of a business model that synthesises financial and environmental benefits through sustainable business practices and responsible manufacturing techniques.

There are stringent environmental regulations to address global environment challenges.

It is the responsibility of manufacturers to catalyse responsible business practices with the view to curb resource depletion, water scarcity, pollution and other harmful effects their manufacturing practices may have on the environment. Responsible enterprises are thus channelising their manufacturing processes through

sound models that moderate energy consumption and reducing the negative impact on the environment, while enhancing employee, community and product safety.

BCML's sustainable development is directed to address the needs of today without compromising the ability of succeeding generations.

## The United Nations' sustainability principles

The United Nations has outlined 10 principles for responsible manufacturing leading to environmental sustainability

### Human rights

**Principle 1:** Businesses should support and respect the protection of internationally proclaimed human rights;

**Principle 2:** Make sure that they are not complicit in human rights abuses

### Labour

**Principle 3:** Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

**Principle 4:** The elimination of all forms of forced and compulsory labour

**Principle 5:** The effective abolition of child labour

**Principle 6:** The elimination of discrimination in respect of employment and occupation.

### Environment

**Principle 7:** Businesses should support a precautionary approach to environmental challenges

**Principle 8:** Undertake initiatives to promote greater environmental responsibility

**Principle 9:** Encourage the development and diffusion of environment friendly technologies

### Anti-corruption

**Principle 10:** Businesses should work against corruption in all its forms, including extortion and bribery

# Sustainability at BCML

BCML has invested in sustainable initiatives to reinforce its respect as responsible corporate. The conventional method of sugar manufacturing has been marked by environmental risk. The process warrants the use of extensive steam, molasses (by-product) and bagasse (by-product). Molasses is harmful for the

environment and can affect the aquatic ecosystem if not treated prudently, whereas bagasse is flammable and requires cautious management.

### BCML's sustainability focus

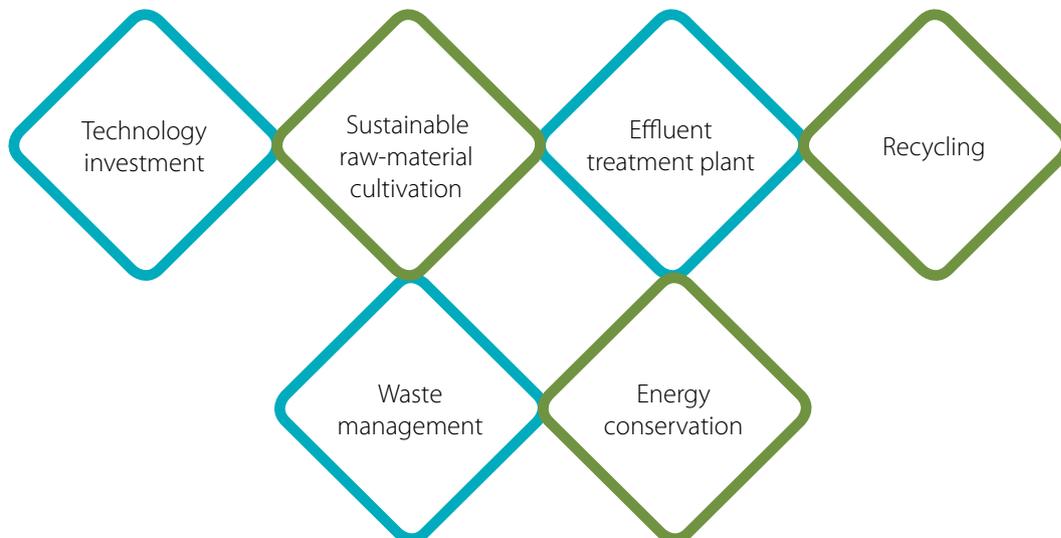
The focal point of the Company's operating policy is an integration through which the by-product of one process

serves as raw material for another. This has enabled the Company to optimise resource utilisation while reducing waste disposal and logistics cost. Over the years, the Company made proactive investments in multiple areas with the objective to moderate carbon footprint and costs, strengthening long-term sustainability.

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### BCML's integrated environment focus

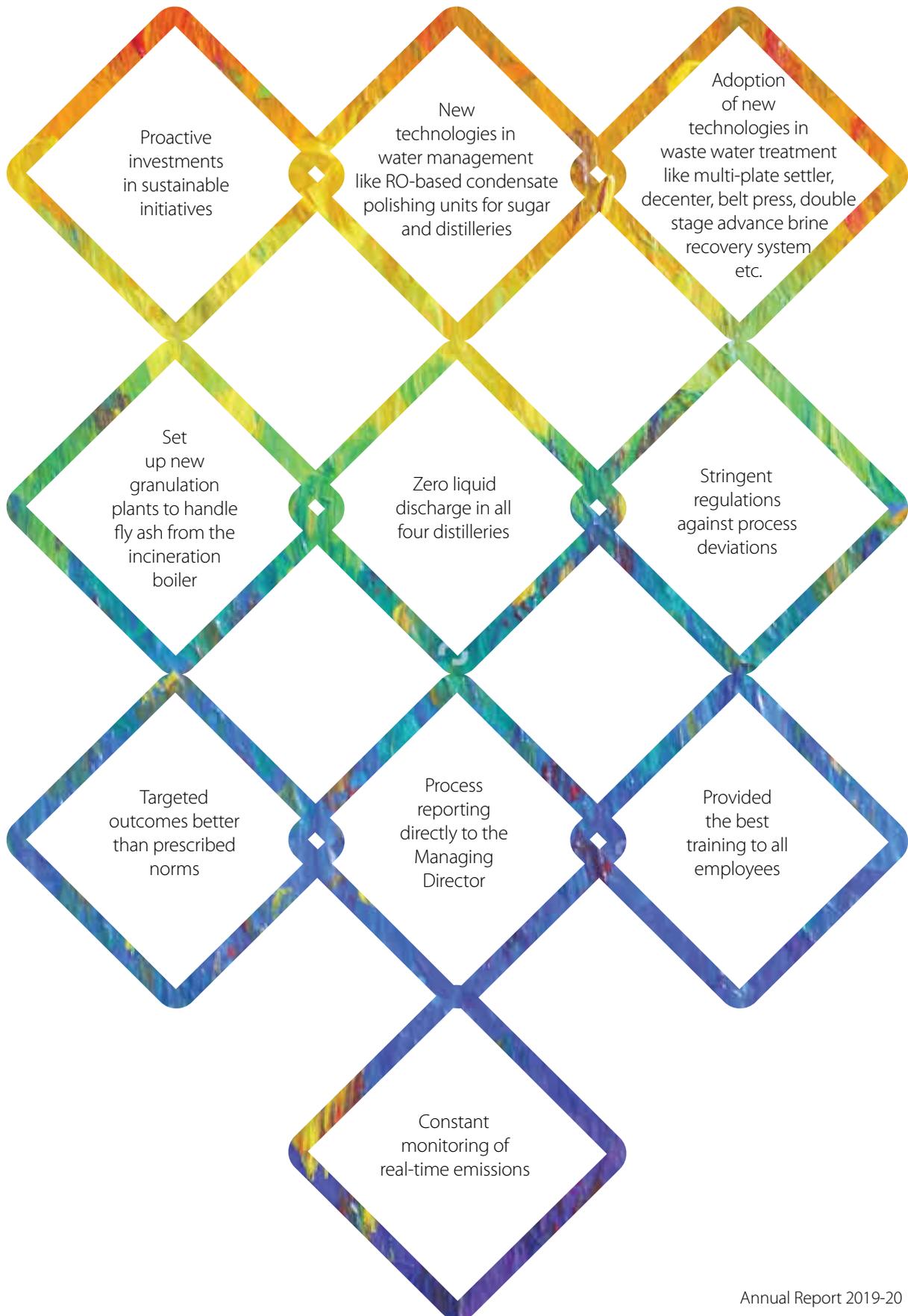
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## How BCML responded

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## Why is environment management important?

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### BCML's sustainable initiatives

At BCML, our overarching principle has extended from mere regulatory compliance to forward-looking environment management. The Company has undertaken various initiatives to enhance environment integrity.

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#### Sustainable Sugarcane Initiative

The Sustainable Sugarcane Initiative (SSI) is a novel approach towards intensive sugarcane production, following the principle of 'more with less', similar to the SRI (System of Rice Intensification) technique of rice cultivation. SSI improves

the productivity of water, land and labour, while also reducing the overall pressure on water resources.

The Sustainable Sugarcane Initiative (SSI) method of sugarcane production uses

less seeds, less water and guarantees an optimum utilisation of fertilisers and land to achieve greater yields. Driven by farmers, SSI is an alternative to conventional seed, water and space intensive sugarcane cultivation.

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#### India's sugar production Vision 2030

With a vision to improve cane productivity using sustainable methods and contributing to the country's food and energy needs, the industry has been exploring available options.

Sugar consumption in the next five years is expected to touch 36 million tonnes due to improved domestic supply and

strong demand. The population in the country is set to reach 1.50 billion by 2030 at the present compound growth rate of 1.6% per annum. The projected requirement of sugar for domestic consumption in 2030 is 36 million tonnes. To achieve this target, projected sugarcane production of 500 million

tonnes warranted an annual increase by 7-8 million tonne. The increased production needs to be achieved from the existing cane area through improved productivity (> 100 t/ha) and sugar recovery (> 11%) Since, further expansion is not feasible, there is a premium on enhancing cane yield in a sustainable way.

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# Waste management

## Industrial waste generation

The fundamental objective of solid waste management is to minimise pollution and utilise waste as a resource. These goals need to be ideally achieved in a way that is financially sustainable and involve minimal risk.

Waste minimisation and waste management have so far not been given their due attention. Industries are characterised based on their production types and pollution loads. During industrial processes, different pollutants are produced at each production stage based on the raw materials used, technology employed, chemicals and other materials used.

## Present status of waste management in Indian sugar industry

Indian sugar manufacturing units, like all industrial sectors, are obliged to meet the standards and regulations set by the government related to sustainable production and are often faced with stiff penalties for non-compliance. The major waste

products from sugar processing are bagasse and press mud. Major waste product from alcohol production (distilleries) is spent wash. All the waste and by-products of the industry have reusing and recycling values attached. Presently, a significant amount of cane trash is burnt in sugarcane fields resulting in a heavy loss of nutrients, death of microbes, environmental pollution etc. This adverse effect on agriculture can be allayed through composting and vermicomposting.

## BCML and waste management

The Company reuses waste products and byproducts to reduce disposal, emissions and discharge. In season 2019-20, the Company generated 31.25 lacs MT of bagasse and 57.07 lacs qtls of molasses, using the same to manufacture downstream products. In season 2019-20, the Company generated 38.27 lacs qtls of filter cake as process waste, distributed among farmers as organic manure. To ensure the storage of fly ash generated out of boilers (0.48 Lacs MT in 2019-20), the Company rented brick kilns.

# Water management

## Water management in India's sugar industry

Indian sugar mills generate 0.22 to 0.25 cubic meter of waste water and 0.18 to 0.20 treated water for every tonne of cane crushed by them. During 2019-20, India produced around 27 million tonnes of sugar; at this production level, the Indian sugar processing industry generated 54.0 MLD of treated water.

The combined sugar mill waste water comprises Biochemical Oxygen Demand (BOD) of 400 to 600 mg/ltr whereas the pollution standards of the country stipulate that BOD of waste water should be less than 30 mg/ltr for disposal into inland surface water sources and less than 100 mg/ltr for disposal on land.

During the process of sugar manufacture, excess condensates are accumulated and reused. Sugarcane juice extracted in mills, after clarification, boiled in multiple effect evaporates, vaccum pan etc. If the condensate is contaminated by juice during boiling in the evaporator and pan due to entrainment, it has to be treated in ETP as waste water. It is important for sugar manufacturers to take preventive steps towards the contamination of condensate. The uncontaminated condensate is recycled.

A large quantity of water is also required for cooling bearings and glands, air compressors, the sulphur burner and massecuites.

It is suggested that cooled condensate water should be recycled instead of being released as waste water. The waste water from sugar mills contains large quantities of bio-degradable organic matter and go through extensive biological treatment. In general, anaerobic biological processes have advantage over aerobic processes when the BOD and COD inputs are very high.

## BCML's wastewater management

The Company complies with the Central Pollution Control Board's effluent treatment norms. The Company installed diverse new technologies like RO and advance oxidation based Condensate Polishing Units (CPU). Ion Exchange column rinse water recovery system (UF and double stage RO base), and excess hot condensate separate cooling tower, recycle the excess water during the sugar manufacturing process to reduce the use of ground water. In waste water treatment, the Company installed a sulphate removal system at its various double sulphitation units for the first time in the sugar industry.

# Emissions



Mg/Mn<sup>3</sup> is the benchmark for particulate matter released into the air by bagasse fired boilers as per general emission standards

## Emissions in the Indian sugar industry

All cane-based sugar mills in India use bagasse as a fuel in boilers. The burning of bagasse in boilers produces particulate matter, oxides of nitrogen, carbon, sulphur and water vapour. Except for particulate matter, emissions of bagasse-fired boilers are within the limits prescribed by the pollution control authorities.

The particulate matter, usually referred to as fly ash, consists of ash, unburnt bagasse and carbon particles. Fly ash is light and contains a large percentage of fine particulate matter. If air pollution control equipment is not installed at the sugar processing units, fly ash can escape into the atmosphere through the chimney. The particulate matter coming out of the chimney travels long distances, depending on the particle size and atmospheric conditions. It results in reduced visibility in the areas surrounding

the sugar mill. The heavier particles settle on vegetation. There could be reports of dizziness and irritation in the eye, nose, throat and lungs from residents in the surrounding areas.

As per the general emission standards, particulate matter is required to be within 150 mg/Nm<sup>3</sup>. In case of horse shoe/pulsating grate and in the case of spreader stoker bagasse-fired boilers, the particulate matter emission is required to be within 500 mg/Nm<sup>3</sup> and 800 mg/Nm<sup>3</sup> respectively.

## BCML and its emission control initiatives

The Company has invested adequately in emission control by way of ESP, bag filters and scrubbers. It has also implemented online systems to monitor emissions across manufacturing units. These systems monitor emissions with online alerts in case of deviations. These investments improved ambient air quality.

# Effluents

## Effluent generation in sugar factories

### Effluents in sugar factories are generated in the following ways:

- **Mill house:** Cleaning and washing, juice leakages, spillages of mill bearing water
- **Boiling house:** Chemical boiling and tube cleaning of evaporator and pans, excess condensate water, pump leakages, daily and periodic cleaning and washing, laboratory and domestic water usage
- **Spray pond:** Blow down of spray pond water
- Boiler blow down and reject of DM/RO plants
- Power plant cooling tower blow down.

### BCML's basic concepts

- The quality of treated water is maintained as per standard parameters of treating effluent.
- The stringent regulatory norms for discharge are met under all circumstances.
- The aim is to keep the environment free from effluent contamination.
- Minimal electricity consumption, low chemical consumption with low and moderate operational and maintenance costs.

## STANDARD PARAMETERS OF TREATED EFFLUENT WATER

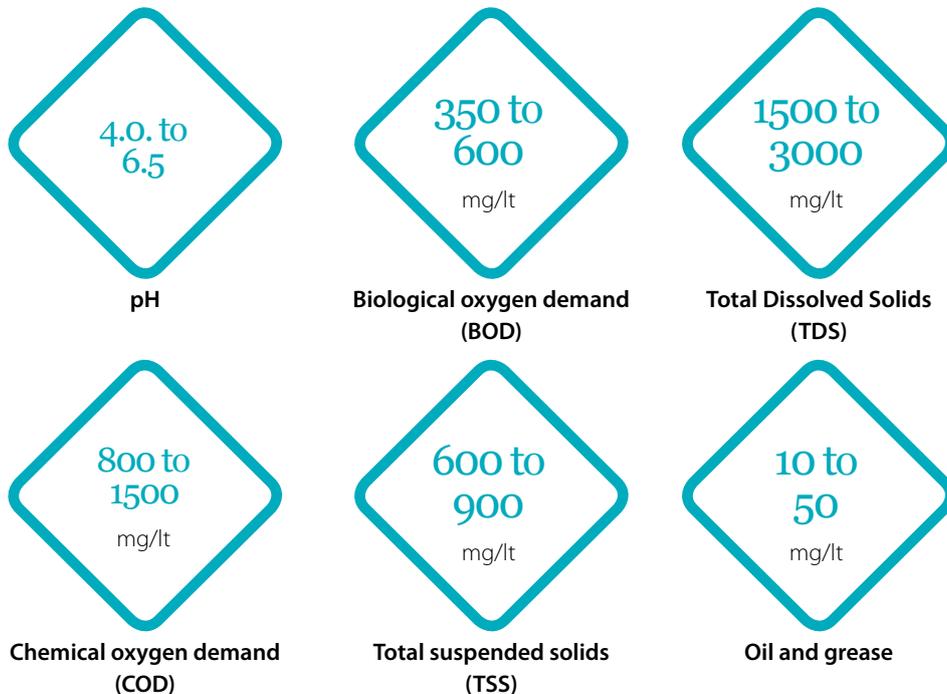
Parameters	Standard norms	Inland surface water	Land for irrigation
pH	5.5 to 8.5	3.5 to 8.5	5.5 to 8.5
Total dissolved solids	< 2100	---	---
Total suspended solids	< 30	< 30	< 100
Chemical oxygen demand (COD)	< 250	< 250	---
Biological oxygen demand (BOD)	< 100	< 30	< 100
Oil & grease	< 10	< 10	< 10

### BCML and its effluent treatment initiatives

The Company was among the first in Uttar Pradesh to install incinerators in distilleries for ₹225 crore in 2015-16. Spent wash generated during distillation process of ethanol is concentrated in multiple effect evaporators (MEE), it is called slop and this slop is used as a fuel along with bagasse in the incineration boiler. Condensate water of spent wash MEE is treated in a condensate polishing unit (CPU) to reuse and achieve zero liquid discharge. The Company has invested in

new boilers in 2016-17 and 2019-20. The fly ash generated from incineration boiler is rich in potash. The Company has installed the granulation plant in its distillery units to produce granules distributed as fertiliser to farmers at subsidised rates. After taking all measures, the Company sealed all outgoing drains from its manufacturing units ensuring zero liquid discharge.

### General parameters of raw effluent water generated in sugar industry



# Energy conservation

## Energy conservation initiatives

The various means by which the Indian sugar industry can save energy and/or fuel are :

- Efficient use of mechanical/electrical energy
- Maximum generation of steam per unit bagasse or fuel
- Maximum generation of power per unit of steam
- Minimum consumption of processed steam
- Maximum heat recovery through the reclamation of a hot condensate, flashing etc.

## ENERGY REQUIREMENTS IN A SUGAR MANUFACTURING PLANT

Unit	Percentage
Juice extraction plant	40-45%
Juice purification plant	10-15%
Sugar crystallisation	15-20%
Sugar centrifugals	10-15%
Steam generation	5-10%

## BCML and its energy conservation initiatives

The Company undertook various energy efficiency initiatives, which resulted in enhanced power efficiency, lower steam consumption and moderated power consumption per tonne of crushed cane.

# Health and safety

## Industrial health and safety in India

Health and safety of workers should be one of the most important priorities of any industrial unit. The workers are the resource, the ones who keep the production process in motion and generate revenues.

## BCML and its health and safety Initiatives

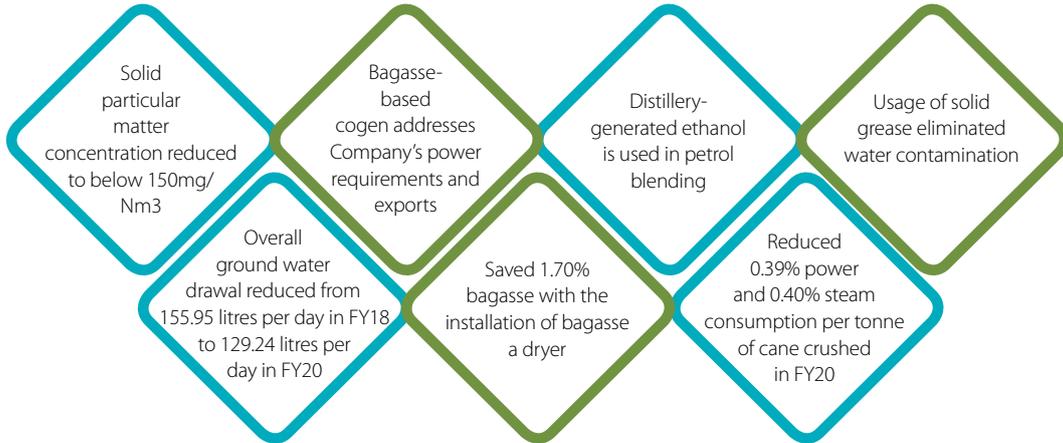
The Company conducts various safety audits to ensure that its standards are at par with stipulated safety standards. It conducts training to ensure that all employees are equipped with the necessary safety knowledge; it provides personal protective equipment. This,

coupled with the development of SOPs, has ensured better employee health and safety. The Company formed an EHS committee comprising members of all departments to identify issues and resolve them quickly.

## Outlook

Going forward, the Company will continue to invest in sustainable initiatives. The Company plans to maintain environmental impact substantially below the statutory norms and reduce water consumption per tonne of cane. It will also continue to upgrade its equipment and conduct training sessions to ensure they are at par with the best standards pertaining to environment and safety.

## Impact of our environment initiatives



Specific steam consumption per tonne of cane crushed (units)

Ground water drawal per tonne of cane crushed (ltrs)



# SWOT analysis of the Indian sugar industry

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>▶ Sugar cane is among the most profitable cash crops in India</li> <li>▶ India is the second-largest sugar producer and the largest sugar consumer in the world</li> <li>▶ Sugar industry supports downstream sectors and a large Indian rural ecosystem</li> <li>▶ The Indian sugar industry provides direct employment (including ancillary activities) to ~0.5 million workers</li> </ul>	<ul style="list-style-type: none"> <li>▶ High raw material supply in the industry causes high cane arrears for farmers</li> <li>▶ The industry uses outdated technology</li> </ul>
Opportunities	Threat
<ul style="list-style-type: none"> <li>▶ India's per capita sugar consumption at 19.6 kilograms is lower than global average of 22.6 kilograms</li> <li>▶ Better farm practices can significantly increase yield and recovery</li> <li>▶ Mandatory ethanol blending program of the government driving ethanol offtake</li> <li>▶ Technology upgradation can result in superior byproduct utilisation</li> </ul>	<ul style="list-style-type: none"> <li>▶ The sector is often impacted by a political agenda</li> <li>▶ Lack of infrastructure often makes cane farming dependent on climatic vagaries</li> </ul>

## Financial review

### Capital structure

The equity share capital of the Company stood at ₹2,200.00 lacs as on 31st March, 2020 (22,00,00,000 equity shares of ₹1 each) compared to ₹2,284.38 lacs as on 31st March, 2019 (22,84,38,327 equity share of ₹1 each). During the year, the Company completed a buyback of 84,38,327 equity shares.

### Other equity

Other equity of the Company increased by 14.01% from ₹2,05,985.50 lacs as on 31st March, 2019 to ₹2,34,841.16 lacs as on 31st March, 2020. This was mainly on account of profit retention during the year after paying off dividend and for buy-back of equity shares. During the year, the Company transferred ₹84.38 lacs from the Securities Premium to Capital Redemption

Reserve on account of buy-back. Reserves on account of storage fund for molasses increased from ₹39.85 lacs to ₹87.19 lacs on account of fresh reserves created during the year as per the requirement. Further, ₹20000.00 lacs was transferred from Retained Earnings to General Reserve.

Free reserves (excluding amalgamation reserve of ₹4224.23 lacs) of the Company stood at ₹2,26,549.68 lacs as on 31st March, 2020 accounting for 96.47% of the total reserves.

### Debt profile

Total long-term borrowings, including current maturities, stood at ₹44,829.67 lacs as on 31st March, 2020, compared to ₹37574.92 lacs as on 31st March,

2019. During the year under review, the Company repaid ₹6,009.62 lacs and availed fresh loans of ₹13024.00 lacs under the Central Government Scheme for extending financial assistance to sugar mills for enhancement and augmentation of ethanol production capacity.

Working capital borrowings reduced by 24.09% from ₹1,39,466.24 lacs as on 31st March, 2019 to ₹1,05,869.20 lacs as on 31st March, 2020 owing to the liquidation of stock and realisation of debtors.

### Capital employed

The capital employed by the Company in the business increased marginally from ₹3,80,011.23 lacs as on 31st March, 2019 to ₹3,82,423.59 lacs as on 31st March,

2020. ROCE for the year stood at 13.18% as compared to 17.88% during 2018-19.

### Net block

Net block of the Company stood at ₹1,63,644.24 lacs as on 31st March, 2020 compared to ₹1,46,738.26 lacs as on 31st March, 2019. The Company provided ₹10,141.73 lacs as depreciation and amortisation during the year. During the year, ₹25,437.91 lacs was added to the Company's asset block. Additions were mainly on account of the new 160 KLPD distillery plant set up by the Company at its Gularia Unit.

### Investments

Investments stood at ₹18,543.21 lacs as on 31st March, 2020 compared to ₹12,005.73 lacs as on 31st March, 2019. During the year, the Company invested ₹8250.00 lacs in Auxilo Finserve Private Limited, an associate of the Company (NBFC private limited company based in India engaged in financing activities in the education sector). Debentures of Visual Percept Solar Projects Private Limited (associate of the Company) for an amount of ₹1646.05 lacs were redeemed during the year.

### Trade and other receivables

Trade and other receivables reduced by 46.83% from ₹45003.36 lacs as on 31st March, 2019 to ₹23928.87 lacs as on 31st March, 2020. The outstandings included ₹17,282.27 lacs on account of the supply of power to UPPCL.

### Trade and other payables

Trade and other payables increased from ₹61,850.39 lacs as on 31st March, 2019 to ₹67,795.18 lacs as on 31st March, 2020. The outstanding were mainly on account of cane price dues to farmers.

### Other financial assets

Other financial assets increased from ₹19277.07 lacs as on 31st March, 2019 to ₹29,989.62 lacs as on 31st March, 2020. The increase was mainly on account of claims receivables amounting to ₹29,597.40 lacs under various schemes announced by the Government. During the year, the Company received ₹18710.54 lacs out of the opening amount of claim

receivable of ₹18973.48 lacs as on the last day of the previous year.

### Other financial liabilities

Other financial liabilities increased from ₹11,974.03 lacs as on 31st March, 2019 to ₹16,583.76 lacs as on 31st March, 2020. The increase was mainly on account of current maturities of long-term debt, security deposits and retention money. During 2020-21, ₹8,336.52 lacs is repayable compared to ₹6009.62 lacs repaid during 2019-20.

### Other non-current assets

Other non-current assets reduced from ₹3,198.32 lacs on 31st March, 2019 to ₹483.54 lacs as on 31st March, 2020. The decrease was mainly on account of a reduction in capital advances owing to the capitalisation of fixed assets.

### Other non-current liabilities

Other non-current liabilities stood at ₹Nil as on 31st March, 2020 compared to ₹35.93 lacs as on 31st March, 2019.

### Other Current Assets

Other Current Assets stood at ₹7382.39 lacs on 31st March, 2020 as compared to ₹2070.45 lacs as on 31st March, 2019. The increase was mainly on account of Income Tax refundable and Interest Accrued thereon.

### Other Current Liabilities

Other Current Liabilities increased from ₹3552.41 lacs as on 31st March, 2019 to ₹5911.71 lacs as on 31st March, 2020. The increase was mainly on account of increase in advances from customers.

### Debtors' turnover

Debtors' turnover ratio stood at 20 days during 2019-20 as compared to 27 days during 2018-19. This was mainly owing to a realisation of receivables.

### Inventory turnover

Inventory turnover ratio for 2019-20 stood at 188 days as compared to 198 days during 2018-19. Decrease in inventory turnover ratio was mainly on account of decrease in stock of sugar owing to exports. Closing stock of sugar reduced

by 5.24% to 67.35 lac quintals as on 31st March 2020.

### Interest Coverage Ratio

Interest coverage ratio stood at 10.63 times during 2019-20 as compared to 16.83 times during 2018-19. This was on account of lower profits earned by the Company during 2019-20 along with an increase in interest expenses. The allied business i.e. distillery performed well during the year under review, which enabled the Company to report stable profits compared to the previous year.

### Current Ratio

Current ratio improved from 1.37 in 2018-19 to 1.46 in 2019-20.

### Debt-Equity Ratio

The long-term debt-equity ratio increased marginally from 0.18 times to 0.19 times during 2019-20. This was on account of increase in long-term borrowings availed by the Company amounting to ₹13024.00 lacs under the Scheme for extending financial assistance to sugar mills for enhancement and augmentation of ethanol production capacity.

### Operating Profit Margin

Operating Profit Margin decreased from 16.08% during 2018-19 to 14.38% during 2019-20.

### Total Comprehensive Income Margin (%)

Total Comprehensive Income decreased from 13.19% during 2018-19 to 10.59% during 2019-20.

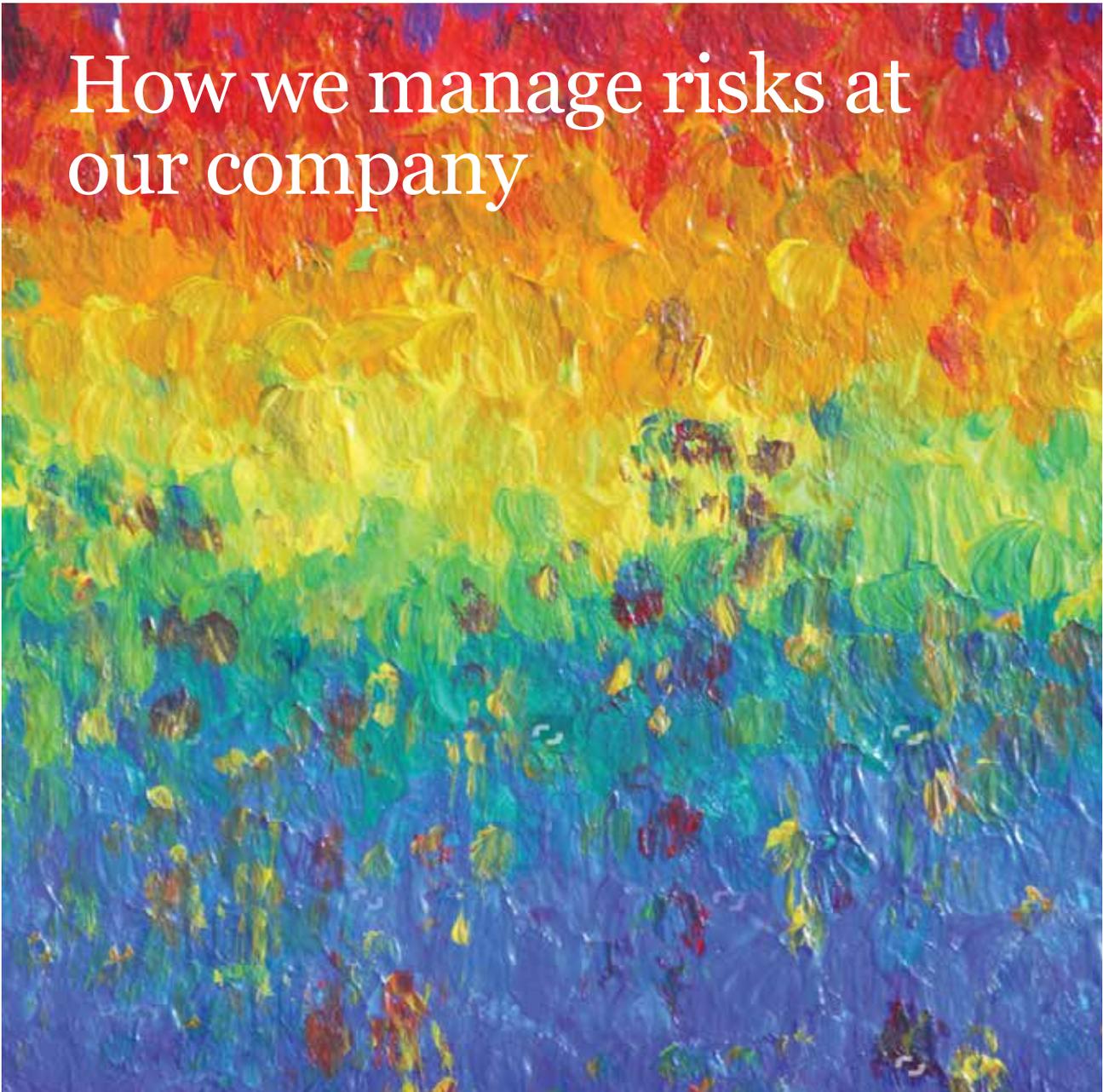
### Return on Net Worth

Return on Net Worth decreased from 31.74% during 2018-19 to 23.11% during 2019-20.

### Return on Capital Employed

Return on Capital Employed decreased from 21.79% during 2018-19 to 17.89% during 2019-20.

# How we manage risks at our company



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## Risk management structure

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## Overview

BCML continues to strengthen its comprehensive system to promptly identify risks, assess their materiality and take measures to minimise their likelihood and losses in FY20 as well.

Risk management was applied across all management levels and functional areas. Risk management roles were distributed across the Board of Directors, Audit Committee of the Board of Directors.

## Functions

The Risk Management Committee performed the following functions:

- Supervising, guiding, reviewing and identifying current and emerging risks;
- Developing risk assessment and measurement systems;
- Establishing policies, practices and other control mechanism to manage risks;
- Reporting results of risk to the Board; and

- Reviewing and identifying risk in other emerging areas

## Implementation

The Company's Board-approved Risk Management Policy comprised material risks faced by the Company that were identified and assessed. The Company set up a policy framework for ensuring better management of its asset & liability profile.

## Key risks and their mitigation

### Demand risk

Reduced product off-take could affect business sustainability

#### Risk mitigation

- India continues to be second largest sugar producer; it is also the largest consumer of sugar in the world. Sugar consumption is increasing year-by-year, albeit at a nominal rate, due to country's demographic advantage.
- India's per capita consumption of sugar is lower than the global average, which leaves headroom for growth.
- The Central Government intends to raise ethanol blending in petrol to 20% by 2030, generating adequate demand for ethanol.
- Power is sold to the State grid under a long-term PPA.

### Climatic risk

Excessive, deficient or untimely rain and other adverse agro climatic conditions could affect the quality and quantity of sugar cane

#### Risk mitigation

- The Company's manufacturing facilities are located in the natural sugar cane producing region, which also possesses relatively better irrigation infrastructure compared to Western/ Southern India.
- The cane development team of the Company actively monitors the planting/growth of sugarcane and disease infestation programme so that timely action can be taken to avoid or minimise damage.

### Business cyclicity risk

The Company's performance may be affected by an over dependence on a particular vertical.

#### Risk mitigation

- The Company's robust integrated business model of utilising by-products for the production of power and ethanol reduces the impact of cyclicity.
- With continuous augmentation of capacity in distillery and co-generation capacity, the proportion of revenues from these two segments is showing signs of improvement.

### Technological obsolescence

Inefficient processes can lead to cost overruns

#### Risk mitigation

- The Company has been proactive in making investments in the latest technology. It has the latest plants and follows best possible agri-practises; it maintains plants in a good condition through continuous upgradation.

## Cost risk

Increasing cane prices and input costs could affect profitability

### Risk mitigation

- To moderate the impact of cane cost, the Company is working on the improvement of cane varieties which would generate higher yield to farmers and millers.
- The Company diversified into the distillery and cogeneration business to broad-base the revenue base and minimise the impact of input cost increase in sugarcane.

## Regulatory & government intervention risk

Business operations may be affected on account of excessive government intervention

### Risk mitigation

- In the last couple of years, the Government has taken numerous rational decisions whether related to the fixation of cane price or with respect to the management of demand and supply of sugar in the country. In other words, the Government's interventions in the last couple of years have been positive. A favorable Government Policy in ethanol blending insulates the Company against adverse price realisations.

## Finance risk

A stretched Balance Sheet could affect business sustainability

### Risk mitigation

- The Company follows a judicious policy on mix of equity and debt.
- The Company's gearing as on 31st March 2020 was among the lowest in the industry. Other financial and liquidity ratios were at a healthy level.

## Cyber risk

This could lead to financial loss, disruption or damage to the reputation of the Company from some sort of failure of its information technology systems

### Risk mitigation

- The IT department of the Company maintains and upgrades the systems on a continuous basis. The internal team imparts training and awareness programs to users on cyber security and threats.
- Identity and access control is deployed through MAC-based filtering and user authentication to access internet and business applications.
- The Company ensures data security by having identity and access control and authorisation matrix and all critical business data (user data and application data) are backed-up at multiple locations.
- Complex password protection is enabled at multiple levels to access business technology to ensure data integrity. Only licensed software is used in the IT systems.
- The Company's gateway is secured using UTM firewall device, which protects incoming and outgoing web and mail traffic. End points are deployed with managed antivirus for client security.
- Disaster recovery is in place to ensure business continuity.

## Foreign exchange fluctuation risk

Foreign exchange volatility could result in unwarranted revenue losses

### Risk mitigation

- The Company's operations do not generally entail foreign exchange risks
- As a matter of prudence, the Company hedges long-term and short-term foreign exchange exposures, if any



### **Internal control systems and their adequacy**

The internal controls are commensurate with the size and the nature of the operations of the Company. These controls have been designed to provide a reasonable assurance with regard to maintaining proper accounting controls, monitoring of operations, safeguarding of resources and utilising them to the maximum, promoting operational efficiency, compliances with applicable regulations and ensuring reliability of financial reporting. In addition, there is an internal audit process that reviews the in-system checks and regularly covers significant operational areas.

The Audit Reports, submitted by the Internal Auditors, are reviewed by the Audit committee. Any suggestion for improvements submitted to the Committee is considered and the implementation of corrective actions, wherever required, is followed up. Statutory and Internal Auditors are also invited to the Audit Committee meetings for ascertaining their views on the adequacy of internal control systems. Periodically, the Board is informed of the same.

### **Cautionary statement**

The statements in the 'Management discussion and analysis' section with regard to projections estimates and expectations have been made in good faith. The achievement of results is subject to risks, uncertainties and even less than accurate assumptions. Market data and information are gathered from various published and unpublished reports. Their accuracy, reliability and completeness cannot be assured.