

## Annexure A

### Management Discussion and Analysis

#### Cautionary Statement

Some statements in the Management Discussion and Analysis describing the Company's objectives, predictions, expectations and the macro-economic estimates may be "forward-looking statements". Actual results may differ from the forward-looking statements contained in this document due to various uncertainties. These uncertainties may be due to various factors affecting global supply-demand and export import trend, macro-economic policy fluctuations, new regulations and pricing. The Company does not assume responsibility for any of the forward-looking statements contained in this report as the same may be altered in future due to the subsequent development and events.

#### Global Economy

The global economy is experiencing a cyclical recovery, reflecting a rebound in investment, manufacturing activity and trade. This improvement is primarily on account of accommodative policies, rising confidence and firming commodity prices. Global growth is projected to edge up to 3.1 percent in 2018 and gradually moderate to an average of 3 percent in 2019-20. The rebound in global investment growth was supported by favorable financing costs, rising profits, and improved business sentiment across both advanced economies and emerging market and developing economies. This synchronous, investment-led recovery is providing a substantial boost to global exports and imports in the near term. Also, Global economy is anticipated to grow faster mostly due to lower tax rates in the United States, but tensions over trade threaten to derail months of synchronized global expansion. The uncertainty over global trade will keep the turbulence of the exporters and economic sentiments.

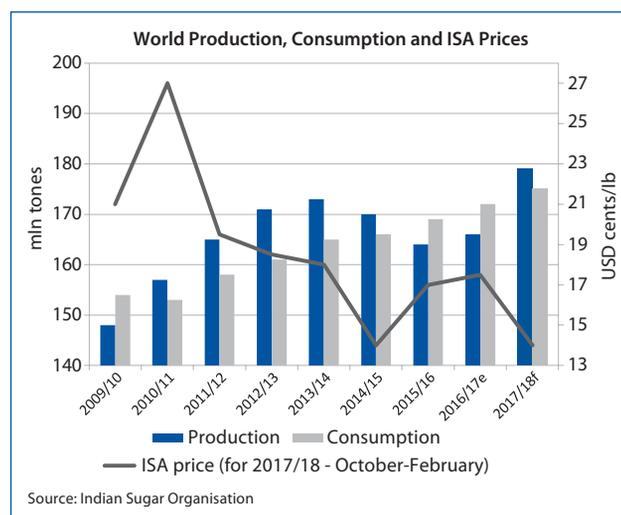
#### Indian Economy

India is emerging as the fastest growing economy in the world and is expected to be one of the top three economic powers of the world over coming years. According to IMF Indian economy is poised for a growth of 7.4 per cent on good performance by sectors like agriculture, construction and manufacturing. Revival in rural demand and gaining traction in infrastructure spending is likely to drive India's growth in current year. India is predicted to be a fastest growing economy amongst other emerging markets. The strong consumption story particularly in Rural India and improvement in domestic demand is a positive sign that growth is picking up and will continue to maintain strong momentum going forward. Economy is experiencing recovery from the effects of demonetization and the Goods and Services Tax.

#### Global Sugar Economy

The global market for sugar and sweeteners is estimated to reach about \$62 billion in 2018. Most of the sugar extraction is from sugarcane

which comprises of around 80% and sugar beet around 20%. Globally, around 460 million tonnes of sugar is produced every year. The largest producers of sugar are Brazil, India and the European Union.



World production experienced a major surplus on account of massive production in China, Europe, India and Thailand. World production is expected to be higher by 5.2 mln tonnes than world consumption. Brazil's sugar crop, leader in sugar production, was downgraded while India's output was upgraded. Global production is expected to rise sharply to 178.7 mln tonnes.

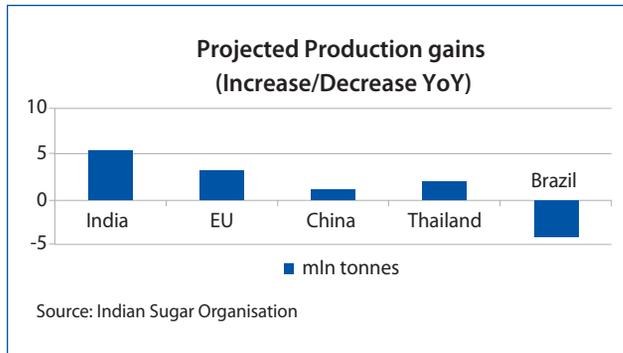
#### World Sugar Balance Sheet (mln tonnes)

Particulars	2017/18	2016/17	Change	
			in mln tonnes	in %
Production	178.70	168.23	10.47	6.2%
Consumption	173.55	170.77	2.77	1.6%
Surplus/Deficit	5.15	-2.54	-	-
Import demand	57.34	60.68	-3.34	-5.5%
Export availability	60.90	60.53	0.37	0.6%
End Stocks	90.53	88.94	1.59	1.8%
Stocks/Consumption ratio in %	52.16	52.08	0.08	0.2%

Source: International Sugar Organisation

#### Outlook

World production increased considerably from last season by almost 6.2%. Despite major surplus in world production, global export availability is projected to show no major change as it considerably exceeds a projected global import demand.



**Production Falls and Rises in 2017/18**

Falls	Changes from 2016/17 in mln tonnes	Rises	Changes from 2016/17 in mln tonnes
Brazil	-3.95	India	+5.500
		EU	+3.288
		Thailand	+2.135
		China	+1.200

Source: Indian Sugar Organisation  
 World production in 2017/18 - 178.7 mln tonnes  
 World production in 2016/17 - 168.2 mln tonnes

In 2017/18, world beet sugar production is expected to increase by around 4.6 mln tonnes. World cane sugar output is forecasted to rise by 5.9 mln tonnes, on account of higher crops projected for leading Asian producers. Importing countries are also expected to improve their output by 1.9 mln tonnes, from 33.01 mln tonnes in 2016/17 to 34.9 mln tonnes in the current season. The EU, India and Russia are expected to become net-exporters in 2017/18.

**World Cane and Beet Sugar Production (mln tonnes)**

Particulars	1970s*	1980s*	1990s*	2000s	2015/16	2016/17	2017/18f
	Average						
World production	81.9	101.8	118.4	140.2	164.3	168.2	178.8
From beet	32.6	37.9	37.4	32	33	35.9	40.5
From cane	49.3	63.9	81	108.2	131.3	132.3	138.3
Cane sugar as % of world total	60.2	62.8	68.4	77.2	80	78.7	77.3

\*Raw sugar value  
 Source: Indian Sugar Organisation

**Global Price Scenario**

World market prices have remained protected in a relatively narrow range established in the second half of 2017. Indeed, market values for raw sugar (the ISA Daily Price) varied from USD 13.27 cents/lb to 15.37 cents/lb. The ISA daily price improved in October 2017 and November 2017 has suffered slow but steady erosion. In December 2017, it lowered to 14.4 cents/lb which further went down to 14.1 cents/lb in January 2018 and was as low as 13.6 cents/lb during February 2018. Spot white sugar prices (the ISO White Sugar Price Index) have been also restrained within the range from USD 352.40/tonne to USD 398.40/tonne. The index have been showing a similar slow erosion in terms of monthly averages with a decrease from USD 390.78/tonne in November 2017 to 371.55/tonne in January 2018 and USD 358.98/tonne in February 2018. In March 2018 the prices further declined to USD 354.1 per tonne as the production of sugar had reached to level of 29.5 mln tonnes.

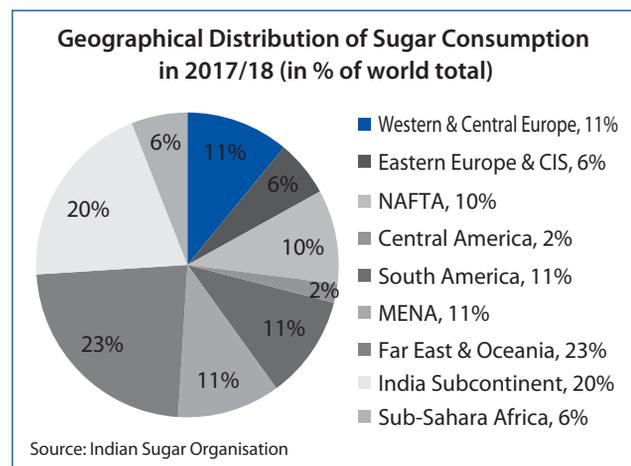
**Demand Outlook**

Production growth in importing countries is expected to cover the increase in consumption. This season may experience a decrease in global import demand. In 2017/18, global use of sugar is anticipated to grow at a moderate growth rate by 1.62%; compared to 1.00% in 2016/17 and 1.97% in 2015/16. Production growth in importing countries is

assumed to cover the share of their increase in consumption. As a result of production growth in importing countries there is an expectation in decrease in the global import demand.

**Consumption Outlook**

With the expectation that the consumption growth rate will not exceed 1.6% in 2017/18, world sugar consumption is expected to be mainly driven by growth in population and income.



## Molasses

Internationally molasses is mainly used as an ingredient in livestock feed rations and as a fermentation substrate. In the feed market, it is likely to face strong competition from grains in general and corn in particular. However, the situation in the fermentation market is more positive as Asian producers of monosodium glutamate (MSG) and amino acids have switched away from tapioca and back towards sugar and molasses for their substrate thanks to competitive prices in that region. Molasses output from the key Asian exporters like India, Pakistan and Thailand rebounded in 2018 on back to higher production. However, this does not necessarily translate into boosted export availability.

## Global Ethanol

Ethanol, also called alcohol, ethyl alcohol, and drinking alcohol, is a chemical compound and is often abbreviated as EtOH. Ethanol is a volatile, flammable, colourless liquid with a slight characteristic odour. It is a substance and is the principal type of alcohol found in alcoholic drinks.

Ethanol is naturally produced by the fermentation of sugars by yeasts or via petrochemical processes, and is most commonly consumed as a popular recreational drug. Ethanol also has medical applications as an antiseptic and sterilizer. The compound is widely used as a chemical solvent, either for scientific chemical testing or in synthesis of other organic compounds, and is a vital substance utilized across many different kinds of manufacturing industries. Ethanol is also used as a clean-burning fuel source.

World ethanol production is forecasted to increase from 100.9 bln litres to a fresh record of 102.5 bln litres in 2018. An anticipated rebound in CS Brazil's output underlies the higher global number. Weakness in the world sugar market will likely prompt Brazilian mills to allocate more cane to ethanol production. Increased EU beet crops especially in regions where there is industrial capacity to produce ethanol from beet and increase marketing of higher blend products have provided abundant feedstock for ethanol producers. China has experienced a production rise on account of selling off of government owned corn stocks; production is expected to be at record highs for both EU and China countries in 2018. Meanwhile other producers are also expected to increase output levels including India, Thailand and Argentina.

## Domestic Sugar Industry Overview

Indian Sugar industry is of a significant importance to economic development of the nation. Indian Sugar industry is the second largest agro-based industry contributing significantly to the socio-economic development of the nation. However, in India, sugar is mainly produced out of sugarcane. There are two different raw materials sugarcane and beet through which refined sugar is produced. Indian sugar industry development aids to growth in the rural areas through generation of employment. The various byproducts of sugar industry contribute to the economic growth of the nation to promoting a number of supplementary industries. Sugarcane emerged as a multiple usage crop used as a basic raw material for the production of sugar, ethanol, paper, electricity. The ethanol requirement of the country is growing and Molasses is the only source to manufacture Ethanol out of sugarcane.

## Regional Overview

As per ISMA, domestic sugar industry experienced excess production of sugar at 31.5 mln tonnes; higher productivity and increased area under sugarcane cultivation led by rainfall were the most important reason for increase in sugar production.

Uttar Pradesh continues to be the largest sugar producing state this year. There was marginally higher production as the area under high yielding and high sugar recovery variety has been significantly more than the last year. Private Mills in Uttar Pradesh sold sugar in aggressively to clear their cane arrears to farmers. Crushing units in Maharashtra sold their new season's output at low prices to meet their daily expenses. In addition, Uttar Pradesh is produced a large quantity of sugar this year too due to a surge in cane area, yield and sugar recovery. Production up to March 31, 2018 in Uttar Pradesh reached 95.40 mln tonnes of sugar in 2017-18 while Maharashtra produced 101.27 mln tonnes and Karnataka too produced 35.56 mln tonnes of sugar. Considering higher production GOI has allowed to export, 2 mln tonnes of sugar out of 2017-18 production.

## Demand Supply Scenario

The sugar season SS17-18 started with an opening inventory of 3.96 mln tonne. The country produced 31.5 mln tonne, increase of almost 55%. However, the consumption is also expected to be in the range of 25.2 mln tonne thereby leaving the closing inventory at 10.26 mln tonne being net of import/ export.

Particulars	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018E
Opening Stock	7.6	8.2	6.5	8.8	7.7	3.96
Production	25.1	24.3	28.3	25.1	20.3	31.5
Increase in Production	-4.56%	-3.19%	16.46%	-11.31%	-19.21%	55.17%
Internal Consumption	23.0	24.0	24.8	24.6	23.8	25.2
Closing Stock – net of exports/imports	8.2	6.5	8.8	7.7	4.0	10.26
FRP	170	210	220	230	230	290
SAP (UP)	280	280*	280*	280	305	315

**Challenges Faced**

Indian sugar industry faced challenges this year (2017/18) due to over production situation; many proactive steps and policies were implemented to support the sugar prices. By the end of March sugar output had reached 28.18 mln tonnes. According to ISMA, 331 mills were operating at the end of March, while 193 mills have shut crushing operations in the current year. Domestic consumption is estimated by the industry at around 25.2 mln tonnes. This leaves significant volumes as exportable surplus and the country may become a net exporter. Overall crushing capacity of the sugar sector is expected to increase significantly as around 80 closed co-operative sugar factories are expected to become operational in the coming months, of which around 40 are in Maharashtra, while another 30 are located in UP. In Uttar Pradesh high-yielding Co-238 variety is expected to occupy almost 80% of the total planted area, as a result overall sugar production is projected to increase. Government focus to increase farm income and non-implementation of Rangarajan Committee Formula will have a cost on sugar sector health.

**Ethanol**

With a 25% recovery in sugar production anticipated for the 2017/18 season, molasses availability has also been increasing. This has led to mills discounting molasses prices to clear stocks in order to allow continued milling operation, rather than targeting high returns. These discounted prices are attractive for the Indian ethanol industry, as they had already contracted a record volume to the Oil Marketing Companies which are state entities charged with procurement, distribution and blending.

**Indian Sugar Prices**

In India, average monthly domestic sugar prices in August 2017 stood at INR 35,733/ tonne which declined significantly by 16.2% in March 2018. Good monsoons and higher cane acreage resulted in surplus production putting downward pressure on prices. Furthermore, prices have also suffered as mills have aggressively sold sugar in order to pay farmers cane dues. Cane prices were increased by 11% with the added provision that mills are required to pay cane farmers within two weeks of harvesting. However falling prices made it difficult for millers to meet this compulsion. In order to keep prices from falling too low, in early February 2018, Government imposed a limit on the amount of sugar that mills can sell during the months of February and March 2018. Mills were required to hold at least 83% of their opening stock from January and February's production and 86% in March 2018, according to Government directives. Parallel to this government doubled the import duty on sugar from 50% to 100% in early February – mainly aimed at quelling imports from neighbouring Pakistan.

**Cogeneration**

In India, the Maharashtra state's power minister had agreed to fix the entry-level tariff from cogeneration units at INR 5/unit in early February.

The minister stated that power purchase agreements would soon be signed with mills and millers would have to be prepared to bid competitively.

**Company Overview**

Avadh Sugar & Energy Limited is an integrated sugar player dealing in sugar, spirits and ethanol, Cogeneration and other byproducts. Company is having four sugar mills at Uttar Pradesh with a combined crushing capacity of 32,000 TCD. Company is having two distilleries with a total capacity of 200 KLPD Cogeneration facilities with capacity of 74 MW. Company is strategically located in Uttar Pradesh, the major state in manufacturing for sugar.

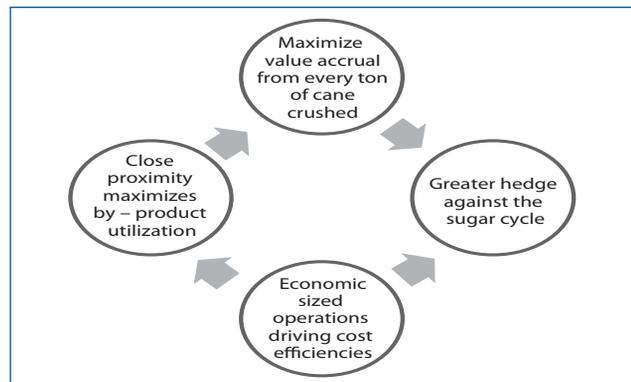
Current capacities and geographical presence of the plants of the companies

Type	Plant (Uttar Pradesh)	Capacities
Sugar Mills	Hargaon Sugar Mills	10,000 tonnes of sugarcane per day
	Rosa Sugar Works	4,800 tonnes of sugarcane per day
	New India Sugar Mills	7,000 tonnes of sugarcane per day
	Seohara Sugar Mills	10,000 tonnes of sugarcane per day
Distilleries	Hargaon Distillery	100 KLPD of Industrial Alcohol/Ethanol
	Seohara Distillery	100 KLPD of Industrial Alcohol/Ethanol
Co-Generation Power Plants	Hargaon Power	15 MW Power
	Hata Power	35 MW Power
	Seohara Power	24 MW Power

**Segmental Strategy Going Forward:**

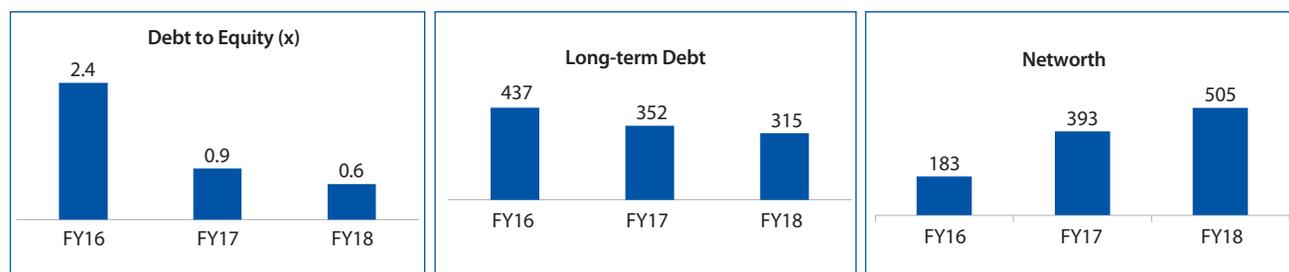
As a strategy, the Company is adopting various measures to increase yield per Acre as well as Ongoing efforts to improve realizations through varietal improvement of cane and educating farmers on best farming practices. De-bottlenecking to enhance crushing capacity can give boost to our existing sugar business.

Consistent increase in power generation will help to achieve better operational efficiency. The Company is investing to reduce steam consumption in sugar manufacturing which will further result in increased supply to grid.



## Financial Parameters

The Company is focusing on improving key financial parameters such as increasing network, reduction in total borrowings and lower debt-equity.



## Operational Highlights

### Sugar Production

Particulars	Sugar Season 2017-18				Sugar Season 2016-17			
	Hargaon	Seohara	Rosa	Hata	Hargaon	Seohara	Rosa	Hata
Sugarcane crushed (lac quintals)	233.32	199.54	91.54	81.40	177.05	168.70	52.03	59.23
Recovery %	10.96	11.61	11.28	10.66	11.67	11.71	10.46	9.36
Sugarcane produced (lac quintals)	25.56	23.13	10.36	8.67	20.66	19.73	5.44	5.54
Crushing days	236	196	145	195	178	169	139	97

### Alcohol Production (including Ethanol)

Particulars	Financial year 2017-18		Financial year 2016-17	
	Hargaon	Seohara	Hargaon	Seohara
Alcohol Produced (lac litres)	274.11	221.14	275.47	265.64
Recovery (%) (litres per quintal)	22.78	23.10	22.94	23.05
No. of distillery operational days	273	230	254	266

### Power Generated, Consumed and Sold

Particulars	Financial year 2017-18			Financial year 2016-17		
	Haragon	Seohara	Hata	Hargaon	Seohara	Hata
Power generated	624.89	963.51	553.00	510.20	879.46	449.91
Power sold to grid (units in lac)	422.67	626.05	663.17	316.53	555.05	407.66
No. of days worked	189	186	128	155	173	101

## Financial Highlights

Particulars	Year ended 31st March 2018	Year ended 31st March 2017
Revenue from Operations (Gross)	236844.35	197643.20
Other Income	412.52	242.32
Profit before Finance Cost, Depreciation & Tax	27298.47	43026.39
Finance Cost	11427.95	13777.53
Depreciation	4446.35	4593.60
Tax Expenses	2607.78	4323.00
Net Profit/Loss	8816.39	20332.26

### Human Resources management and Industrial relations

The Company aspires to act as a catalyst for transforming its human capital necessary for a sustained business outperformance. The human resource makes the heart and soul of the organisation. The Company is committed to encourage and inspire its employees to realise their maximum potential thereby adding value to the organisation.

Regular training and development sessions are conducted to upgrade its employees' and keep them abreast of latest industry trends. Health and safety are paramount for the Company's employees. All manufacturing facilities are closely monitored in terms of safety of operations of machinery. We are proud of our talent pool. We encourage healthy conversations for employees with their supervisors and leaders to maintain transparency. The Company believes in offering equal opportunity to everyone in the organisation. The Company does not distinguish between people on basis of caste, creed, gender and physical abilities.

The current strength of management staff in 2017-18 is 104 and non-management staff is 1680.

### Corporate Social Responsibility

We demonstrate environmental and social responsibility at every step. We aim to benefit the communities around us – workforce, public and environment. We organise regular medical camps, give free medicines and also any emergency medical equipment required by the deprived. We are sowing the seeds for a budding nation by providing education to the underprivileged children and giving them access to free books. We also run an inter-level college for the students. We consider ourselves responsible for the environment around us and consciously take efforts for its upliftment.

### Internal Control Systems

Avadh Sugar & Energy has a vigorous internal control system in place. The internal control system is designed to maintain efficiency, measurability and verifiability, reliability of accounting and management information. Internal audit is conducted for all the processes to identify risks and verify whether all systems and processes are commensurate with the business size and structure. Usage of SAP has increased the operational efficiency significantly. Adequate internal control systems safeguard the assets of the company with timely identification and intervention to alleviate risks. The internal controls are verified by the members of Audit Committee to keep a check on the existing systems and take corrective action to further enhance the control measures.

### Risk Management

The risk committee comprises members of the Board of Directors. The committee has prepared a complete Risk Management policy that is imbibed at the operations level to curb internal and external risk challenges. The committee also spreads awareness among employees about various risks associated with the market. An enterprise-wide risk identification, management and reduction programme helps Avadh Sugar & Energy take risk-eliminating actions more proactively and in advance.

The Committee implements measures to counter all risks. Structural risks like sugar price volatility, low sugar recovery, State Advised Price fixation by Government and other industry risks are mitigated through R&D, organising seminars to educate farmers about efficient harvesting practices and adopting operational efficiency at the facilities. These help increase cane yields, improve sugar recovery and help the Company navigate various industry risks and challenges.