

To Study the Average Sugar Recovery of Co-Operative Sugar Factories in Ahmednagar District (From 2005-06 To 2014-2015)

Prin. Dr.S.K.Wadekar

M.Com., M.Phil., M.B.A., Ph.D., D.Litt.

Hon. Balasaheb Jadhav Arts, Commerce and Science College, Ale, Tal – Junnar, Dist – Pune, 412 411

ARTICLE DETAILS

Article History

Published Online: 10 October 2018

Keywords

capacity utilization, Average sugar recovery

ABSTRACT

Sugar factory is one of the important agro based industries in India and is highly responsible for creating significant impact on rural economy in particularly and country's economy in general. The growth of the sugar factory largely depends upon the price of the input and output. This can neither be manipulated nor controlled as it is fully influenced by the government policy however factors like installed capacity, capacity utilization, manufacturing cost and recovery can easily be manipulated to the best advantage of the factory. The yield of gur from sugar cane depends mostly on the quality of the cane and the efficiency of the extraction of juice. High quality cane has good juice content with high sugar levels. Poor quality cane or cane that has been harvested early may have similar juice content but the sugar levels will be reduced.

1. Introduction

History of sugar factories -

It is universally acknowledged that India is the homeland of sugarcane and sugar .there are references of sugar cane cultivation, its crushing and preparation of gur in atharvaveda as well as kautaliya Arthsashastra.The scribes of alexander the great, who came to India in 327 BC recorded that inhabitants chewed a marvelous reed which produced a kind of honey without the help of bees. The Indian religious offering contain five amrit (elixirs) like milk, curd, ghee (clarified butter), honey and sugar –which indicates how important sugar is not only as an item of consumption but as an item which influences the Indian way of life .it is understood that sugar was initially made in India during fourth and sixth centuries by cutting sugarcane into pieces, crushing the pieces by weight to extract the juice and then boiling it to crystalize These crystals were called 'sarkara' meaning gravel in Sanskrit .the word sugar is a derivative of 'sarkara'.

Indian sugar factories scenario-

India is the world's largest producer of sugar cane and second largest producer of sugar after Cuba .but India becomes the largest producer if gur and khandsari also included .this industry involved a total capital investment of Rs

1,250 crore and provides employment to 2.86 lakh workers in addition ,2.50corre sugarcane growers also get benefit from this industry .

Maharashtra sugar factories-

Maharashtra sugar industry is the one of most notable and large –scale sugar manufacturing sectors in the country .the ace of growth of sugar manufacturing has been massive over the Past few years. The sugar industry in Maharashtra is highly popular in co-operative sector.at present there are 173 cooperative sugar factories in that employing 165,000 people almost 800,000 are engaged in the harvesting and transportation of sugarcane to factories from the fields. The industry provides annual revenue of over Rs.22 billion to the government due to sugar industry allied businesses including milk cooperation, fertilizer supply and irrigation system have flourished. The presence of this industry has led to development of rural places, from which the sugarcane is drawn to factories, including and improved road network, transportation facilities, medical facilities, education facilities and banking

NUMBER OF FACTORIES UNDER CRUSING IN MAHARASHTRA			
YEAR	CO-OPERATIVE	PRIVATE	TOTAL
2001-2002	122	13	135
2002-2003	144	15	159
2003-2004	120	16	136
2004-2005	83	18	101
2005-2006	120	22	142
2006-2007	141	22	163
2007-2008	145	26	171
2008-2009	116	28	144
2009-2010	111	30	141
2010-2011	123	41	164

2011-2012	119	51	170
2012-2013	108	62	170
2013-2014	96	61	157
2014-2015	94	58	152

Ahmednagar sugar factories-

Sugar production is the primary business among farmers of the western Maharashtra region In Nagar district there are 15 sugar industries out of total 12 sugar factories are in co-operative sector and 2 private sectors and one industry is close.

The first co-operative sugar factory was formed in Asia's late Padmashree Dr .vittalrao vikhe patil inspired and supported by late vaikunta Mehta and prof.bhagwangadgil in 1950 at pravaranagar Ahmendnagar district of Maharashtra.

2. Scope of the study-

- 1) To study the production process of sugar factory.
- 2) To know the importance of co-operative movements rural development in Nagar district.

3. Objectives of the study -

- 1) To study the average sugar recovery of cooperative sugar factories.
- 2) To understand the progress of cooperative sugar factory in Ahmendnagar district.

4. Research methodology-

To attain the objectives and forgetting firsthand information knowledge of representative co-operative sugar factory Preliminary discussion were held with the workers/employee office and administrative department, accountant ,finance executives in Ahmendnagar co-operative sugar industry. The study is based on primary data and secondary data.

5. Data collection-

Primary Data-

- 1) Primary data collected from questionnaire
- 2) Data collected from face to face interview with finance department/officials and non-officials and other experts in the field.

Secondary Data-

- 1) Financial report of sugar factories.
- 2) Financial data published in sugar federation council and Investopedia.
- 3) Various newspapers like local national and international.
- 4) Various websites related to the topic.

Table no. 2Total average sugar recovery of cooperative sugar factories in ahmednagar district from 2005-2015

(Amounts in percentage)

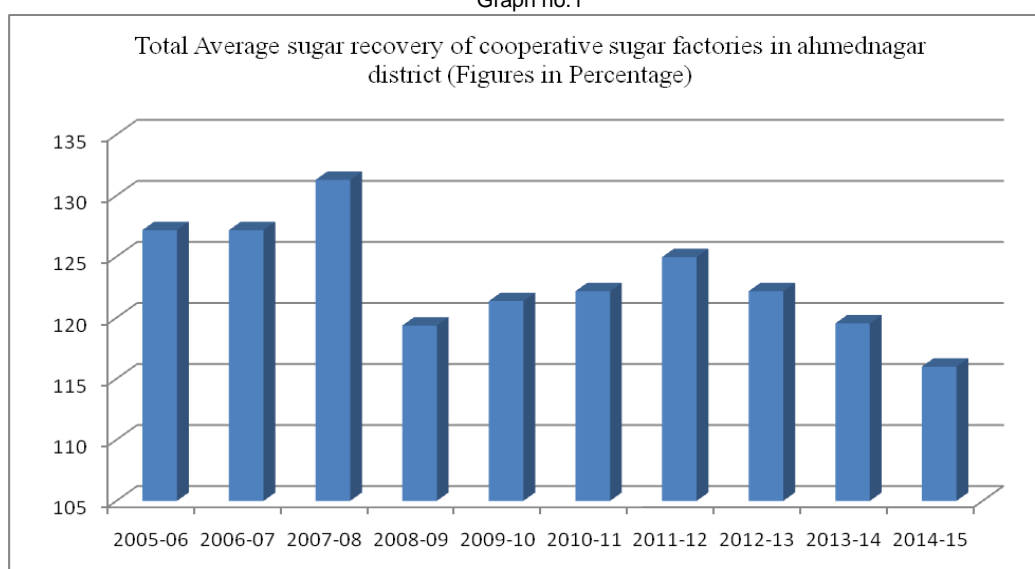
SR. NO	NAME OF THE SUGAR FACTORIES	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	TOTAL	AVERAGE
1	Agasti S.S.K LTD	11.56	11.56	12.37	10.67	10.98	11.34	11.66	11.42	11.55	11	114.11	20.74727
2	Ashok S.S.K.LTD	11.45	11.45	11.86	11.1	11.23	11.23	11.4	11.08	10.74	10	111.54	20.28
3	Dyneshwar S.S.K.LTD	11.37	11.37	11.32	10.7	10.68	10.8	10.94	10.88	9.6	10	107.66	19.57455
4	Kukadi S.S.K LTD	11.46	11.46	11.95	11	11	11.73	10.98	10.53	10.7	11	111.81	20.32909
5	Mula S.S.K LTD	11.25	11.25	12.28	10.9	10.9	10.65	11.21	11.11	10.65	11	111.2	20.21818
6	Sangamner S.S.K LTD	11.55	11.55	11.82	11.15	11.63	11.51	11.87	11.79	11.81	11	115.68	21.03273
7	Sanjivani S.S.K LTD	12.36	12.36	12.36	10.55	10.75	10.56	10.98	11	10.7	10	111.62	20.29455
8	Shankarrao Kale S.S.K LTD	10.98	10.98	11.84	10.72	10.92	10.62	11.29	10.97	10.97	10	109.29	19.87091
9	Shivajirao Nagawde S.S.K LTD	11.13	11.13	11.48	10.27	10.86	10.8	10.85	10.67	10.98	11	109.17	19.84909
10	PD Vitthalrao Vikhe S.S.K LTD	12.57	12.57	12.57	11.03	11.1	11.58	12.29	12.15	11.84	11	118.7	21.58182
11	Vrudheshwar S.S.K LTD	11.5	11.5	11.45	11.27	11.32	11.36	11.5	10.58	10	10	110.48	20.08727
	TOTAL	127.18	127.18	131.3	119.36	121.37	122.18	124.97	122.18	119.54	116		
	AVERAGE	21.19667	21.19667	21.88333	19.89333	20.22833	20.36333	20.82833	20.36333	19.92333	19.33333	111.9327	

Sources – annual report of all cooperatives sugar factories in ahmednagar district for the year 2005-2015

Table no 3. Average growth rate per year

SR. NO	NAME OF THE SUGAR FACTORIES	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	TOTAL	AVERAGE
1	Agasti S.S.K LTD	-	7.01	(13.74)	2.91	3.28	2.82	(2.06)	1.14	(4.76)	(4.84)	(8.26)	
2	Ashok S.S.K.LTD	-	3.58	(6.41)	1.17	-	1.51	(2.81)	(3.07)	(6.89)	(12.66)	(25.57)	
3	Dyneshwar S.S.K.LTD	-	(0.44)	(5.48)	(0.19)	1.12	1.30	(0.55)	(11.76)	4.17	(12.05)	(23.88)	
4	Kukadi S.S.K LTD	-	4.28	(7.95)	-	6.64	(6.39)	(4.10)	1.61	2.80	(4.01)	(7.13)	
5	Mula S.S.K LTD	-	9.16	(11.24)	-	(2.29)	5.26	(0.89)	(4.14)	3.29	(2.22)	(3.09)	
6	Sangamner S.S.K LTD	-	2.34	(5.67)	4.30	(1.03)	3.13	(0.67)	0.17	(6.86)	(4.76)	(9.05)	
7	Sanjivani S.S.K LTD	-	-	(14.64)	1.90	(1.77)	3.98	0.18	(2.73)	(6.54)	(19.09)	(38.72)	
8	Shankarrao Kale S.S.K LTD	-	7.83	(9.46)	1.87	(2.75)	6.31	(2.83)	-	(8.84)	(8.93)	(16.80)	
9	Shivajirao Nagawde S.S.K LTD	-	3.14	(10.54)	5.74	(0.55)	0.46	(1.66)	2.91	0.18	(1.17)	(1.48)	
10	PD Vitthalrao Vikhe S.S.K LTD	-	-	(12.25)	0.63	4.32	6.13	(1.14)	(2.55)	(7.09)	(12.49)	(24.44)	
11	Vrudheshwar S.S.K LTD	-	(0.43)	(1.57)	0.44	0.35	1.23	(8.00)	(5.48)	-	(13.04)	(26.50)	
	TOTAL	-	36.46	(98.95)	18.78	7.32	25.74	(24.53)	(23.91)	(30.55)	(95.28)	(184.91)	

Graph no.1



6. Average Sugar Recovery

Interpretation-

- 1) During the year 2005 to 2015, minimum Average sugar recovery is 9.6% and maximum Average sugar recovery is 12.57% for poor performing cooperative sugar factory in ahmednagar district
- 2) In the year 2005 to 2015, total Average sugar recovery performing cooperative sugar factory in ahmednagar district is 127.18,127.18,131.3,119.36,121.37,122.18,124.97,122.18,119.54,116.1% respectively.

- 3) During the period 2005 to 2015, Average sugar recovery performing cooperative sugar factory in ahmednagar district is 21.19,21.19,21.88,19.89,20.22,20.36,20.82,20.36,19.92,19.33 respectively.
- 4) During the period 2005 to 2015,average Average sugar recovery of each performing cooperative sugar factory in ahmednagar district is 114.11,111.54,107.66,111.81,111.2,115.68,111.62,109.29,109.17,118.7,110.48 respectively.
- 5) During the period 2005 to 2015 Average sugar recovery of total performing cooperative sugar factory in ahmednagar district is 11 %

- 6) At the end of march 2015, Average sugar recovery performing cooperative sugar factory in ahmednagar district is 11,10,10,11,11,11,10,10,11,11,10 % respectively.
- 7) In the 10 years period from 2005 to 2015 , Average sugar recovery of the performing cooperative sugar factory in ahmednagar district is - , 36.46, -98.95, 18.78, 7.32, 25.74, -24.53, -23.91,-30.55,-95.28 % respectively.

7. Conclusion-

Massecuite the concentrated cane juice obtained after boiling also known as rap or final syrup. Sugar recovery is the percentage of sugar production in metric ton to the sugarcane crushed in metric ton. If the sugar recovery strategy for improving then varieties and varietal scheduling, staggered planting, use of early maturing high sugar varieties, healthy

seed programmed, optimum age of harvest, peak maturity of cane, maturity survey based cutting orders, clean cane supply, optimum cane harvest rate to meet the crushing rate, efficient cane harvest labor force, efficient communication system, efficient cane harvesting programmed

8. Suggestions-

1. While studying the Ahmendnagar all cooperative sugar factories it is observed that there is no proper annual planning before starting its work of the next crushing season.
2. The factory should try to plan financial transaction carefully so as to enable them to reduce the expenses on short margins problems.

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