

Brief Review of Sugar Industries in Malshiras tahsil, Dist- Solapur

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Abstract- This research article aims to find the development and growth of sugar industry in Maharashtra state, Solapur district in general and Malshiras tahsil in particular. From the historical review of genesis of sugar industry it is found that, first sugar industry in the Maharashtra begins at Malinagar in Malshiras tahsil. At present there are four sugar industries are function in the Malshiras tahsil. Crushing capacity and sugarcane are tremendously increasing from last three decades which clearly shows that, Malshiras tahsil is new hub for sugar industry in whole district as well as Maharashtra state. Climate, irrigation facility and soil fertility have great advantages to the establishment of sugar industry in this tahsil.

Keywords: Sugar industry, growth, Malshiras tahsil, crushing capacity.

I. INTRODUCTION

Sugarcane is known in India from times as back as one thousand B.C. sugar was known during the days of Buddha. Reference to sugar are found in Indian literature as old as 200 B.C. for a long time India enjoyed monopoly in production and supply of sugar. It is from India that China, Ceylon, Jawa, Persia, Spain, Cuba, Mexico, Jamaica, Peru, Brazil learn't the art of cultivating sugarcane and producing sugar there from. There are two important periods of development of sugar industry in India i.e. pre-independent period and period after independence. In 1610 first two sugar factories were established in Madras State area in southern part of India. Then sugarcane plantation and sugar industry started in Bihar, Uttar Pradesh and Bengal States. Slowly area under sugarcane and number of sugar factories increased in India. This growth of sugar industry was greatly helped by setting-up. Sugarcane breeding institute in 1912 at Coimbatore. All these sugar factories were in private sector.

It is interesting to note that, from 1960 onward the sugar industry become more prosperous. In the period 1960-61 there were 194 sugar factories producing 3.021 million tones sugar. In the next decade upto 1970-71 the number of sugar factories were increased up to 215 and sugar production was also increased upto 3.74 million tones. It is interesting to note that, within the next decade (1970-71 to 1980-81) there were 100 new sugar factories added which increases sugar production up to 5.15 million tones. 1990-91 the number of sugar factories was increased upto 392 whereas sugar production was increased upto 12.04 million tones. In this decade the sugar factories were drastically increased and many sugar factories have expanded their crushing capacities. The government policies for co-operative sugar

factories were more liberal. In the period of (1990-91 to 2000-2001) the number of sugar factories were increased upto 436 while in the same period sugar production is increased upto 18.511 million tones. In the year 2010-11 there are 515 sugar factories running in India and sugar production increased up to 24.394 million tons. Since 2006 government relaxed registration norms of sugar industry, which encourage the private investor to start new sugar factory. This leads the competition for rate of sugarcane as well as growth of sugar production.

Sugar Industry in Maharashtra State-

Sugarcane has come to be cultivated in Maharashtra, Since time unmemorable. Black Cotton Soil, tropical climate and availability of assured water supply have contributed to the growth of sugarcane cultivation. With the construction of medium and large size irrigation projects area under sugarcane increased.

Pre independence Period – The first sugar factory in Maharashtra was established in 1919 at Haregaon in Ahmednagar district by a British Company. In 1930 Walchand Group erected a second sugar factory at Walchandnagar in Pune district. In 1930 the government of India appointed, "Taraff Commission to examine the needs of protection of sugar industry. The commission had recommended the production protection for a period of fourteen year to Sugar industry. They have also adopted a favourable policy and provided incentive to the industry. It has resulted in establishment of ten more sugar factories in private sector. In 1933 three more sugar factories at Phaltan in Satara district, Kolhapur in Kohapur district and Rawalgaon in Nasik district come in to existence. In 1934 Belwandi and Tilaknagar in Ahmednagar district and Malinagar in Solapur district in 1939. Sakharwadi in Satara district and Shripur in Solapur district were erected and in

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1941 Changdeonager and Laxmiwadi in Ahmednagar district came up making the total number twelve (12). All these factories have developed their own sugarcane farms, for regular and good quality sugarcane supply. They have adopted modern techniques of sugarcane cultivation and goods seeds. They have developed these sugar factory sites in modern villages having good housing blocks for employees, sanitation and drinking water facilities, education facilities, sports and recreational facilities, developed the village roads for regular sugarcane supply, avoid the problem of water logging in the field they have developed good drainage systems and becomes the models of development of rural areas. These were the islands of development in the rural areas.

Post Independence Period - After independence first sugar factory on Co-operative basis was established at Pravaranagar in Ahmednagar district. The establishment of Co-operative sugar factory at Pravaranagar was itself a very good beginning and there after many Co-operative sugar factories have been established in the Maharashtra. Table No. 4.3 is showing the growth of sugar factories in Maharashtra State (1961 to 2011).

Table No. 1
Growth of sugar factories in Maharashtra state.

Sr. No.	Year	No. of Sugar Factories
1	1960-61	27
2	1970-71	41
3	1980-81	77
4	1990-91	97
5	2000-2001	137
6	2010-2011	163

Today Maharashtra state is one of the leading state in sugar and sugarcane production in India. Sugar industry in Maharashtra is second largest agro-based industry next to cotton in which higher investment is made. The sugar factories in Maharashtra enjoy higher rate of recovery in comparison to those in other states. The geographical and climatically conditions are favourable. Management practices of Co-operative sugar factory are innovative. Sugar factories have been engaged in harvesting and transportation sugarcane from the farm of member farmers. They also maintain showing records which enables them to harvest cane at the time of full maturity. Skilled and experienced labour cut cane very near to the root where higher portion of sucrose is concentrated. This has very favourable effect of sugar recovery. Most of the sugar factories in Maharashtra undertake welfare activities for workers, farmer, members and other public in general. All there has brought about desirable socio economic changes in rural areas.

Table No. 1 showing the growth of sugar factories in Maharashtra. In the year 1960-61 there were only 27 sugar

factories in Maharashtra state. In the next decade (1960-61 to 1970-71)number increased upto 41. The increase of area under sugarcane crop leads to start the new sugar factories in Maharashtra. In the next decade (1970-71 to 1980-81)the number of sugar factories increased upto 77. With the development of irrigation facilities and government policies to develops sugar industry on co operative basis the number of sugar factories increase upto 97 in the next decade (1980-81 to 1990-91) upto 97. The number of sugar factories in the year 2000-2001 increased surprisingly upto 137. With increase in number the sugar factories have also expanded their crushing capacity. In the year 2010-2011 there were about 163 sugar factories in Maharashtra.

The first sugar factory in the Solapur district was started in 1932 at Malinagar, in Malshiras tahsil in private sector. Upto 2010-11 there were 17 co-operative sugar factories and 9 private sugar factories in the Solapur district. Table No. 4.4 showing the growth in number of Sugar factories in Solapur district.

Table No. 2
Growth of sugar factories in Solapur district

Sr. No.	Year	Sugar factories
1	1960-61	02
2	1970-71	04
3	1980-81	08
4	1990-91	11
5	2000-01	17
6	2010-11	26

Source: Compiled by researcher.

Two private sugar factories were started in 1932 and 1943 respectively in Malshiras tahsil. And upto 1960-61 there were only two sugar factories in Solapur district. In the decade 1960-61 to 1970-71 two (02) co-operative sugar factories were started again in Malshiras tahsil in 1963 and in 1968. Therefore, upto 1970-71 there were only four (04) sugar factories in Solapur district. With the completion of Ujani irrigation project on Bhima river, irrigation facilities developed in Karmala, Madha, Mohol, Barshi, Pandharpur, Sangola and Madhatahsil of Solapur district. Due to this area under sugarcane increased and co-operative sugar factories were started in other parts of the district. Accordingly in the decade of 1970-71 to 1988-81 four more sugar factories were established in North Solapur, Pandharpur, Barshi and Mohol tahsil. In the next decade 1980-81 to 1990-91 three more sugar factories were established in Mangalwedha, Karmala and Akkalkot tahsil. After 1990-91 upto 2000-2001 six more sugar factories were established in Pandharpur, Madha, Sangola, Mohol, North Solapur and Karmala tahsil of districts. Therefore, upto 2000-2001 there were 17 sugar factories in various tahsil of Solapur district. Within next decade (2001-2011) the number of sugar factories reached upto 26, out of which 17 were in co-operative sector and 09 in private sector.

RESEARCH METHDODOLOGY

Materials and method- Research methodology contains objectives, data collection methods and study universe.

Objectives- The specific objectives of this study are as follows.

1) To analyse historical review of Sugar Industry in the Malshiras tahsil.

2) To find out growth trends of Sugar Industry in Malshiras tahsil.

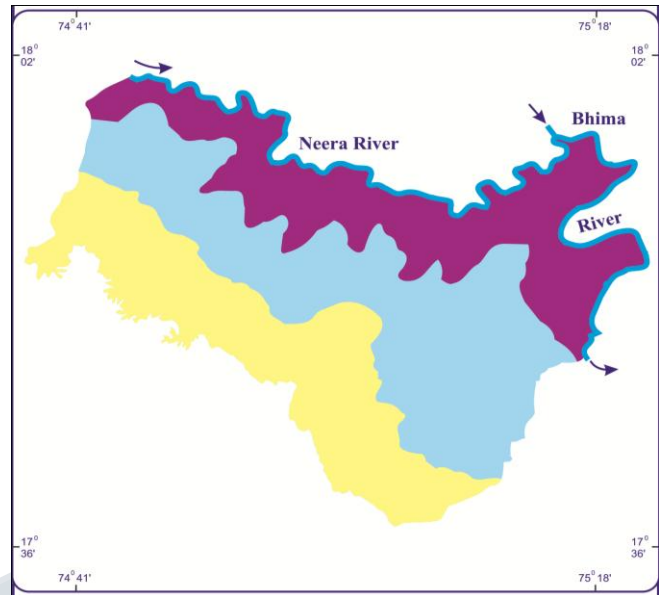
3) To evaluate Sugar Industry in Malshiras tahsil.

Data Collection tool- The data in context with sugar industry’s trends in the Malshiras tahsil are collected from the field visit as well as secondary resources.

1) Primary data collection: The information regarding the sugarcane cultivation in the Malshiras tahsil are collected from the repeated visits to the different parts of the Malshiras tahsil. During field visits researcher meet with various farmers and collect notes and information of sugarcane cultivation. Field visits were performed during the November 2012 to June 2013.

2) Secondary data collection: Information regarding the sugarcane cultivation in the Malshiras tahsil is collected from the unpublished and published records, reports and books by the Tahsil Agriculture Officer and annual magazines of all sugar industires in Malshiras tahsil.

Study Universe: Malshiras tahsil is one of the eleven tahsils in the Solapur districts situated on the western part of the district, it is exteneded between 170 36’ to180 1’ North latitudes and 740 42’ East to 750 13’ East longitude. It is bounded on the north by Poona district, on the west by Satara district, on the south by Sangli district, Sangola tahsil and on the east by Madha and Pandharpur tahsil of Solapur distrcet. Malshiras tahsil as a whole is monotonously underlain by Deccan trap basaltic lava flows, which in turn covered by thin mantle of soil. These lava flows on account of weathering give rise to undulating topography. The climate of the region is agreeable and free form extremes of hot and cold, except hot months of March, April and May. The manson rain covers the region from mid June to the end of September. There are two peaks of rainfall in the region. The first peak is in June (206.37 mm) whereas second is in Septemper (280.93 mm). The rainfall throughout the region is scanty and spread unevenly over the region.



Picture No.1.1 Study area Malshiras tahsil.

II. RESULTS AND DISCUSSION

Malshiras tahsil is well known for its irrigation for agriculture and sugar industry development in Solapur district. Malshiras tahsil is the first in Solapur district where canal irrigation facility developed before independence (1930). Therefore, first private sugar factory in Solapur district was established in Malshiras tahsil at Malinagar in 1932. One more private sector sugar factory started in 1943 at Shripur. After independence two more sugar factories are added in co-operative sector. At present there are four sugar factories in Malshiras tahsil. Table No. 3 showing the growth of sugar factories in Malshiras tahsil.

Table No. 3
Growth of sugar factories in Malshiras tahsil

Sr. No.	Sugar Factory	Establishment Year
1	The Saswad Mali Sugar Factory Ltd. , Malinagar	1932
2	The Brahan Maharashtra Sugar Syndicate Ltd. Shripur	1943
3	Sahakar Maharshi Shankarrao Mohite-Patil Sahakari Sakhar Karkhana Ltd. Shankarnagar– Akluj	1963
4	Shri. Shankar Sahakari Sakhar Karkhana Ltd. Sadashivnagar	1968

The Saswad Mali Sugar Factory:- (Saswad Mali)

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The Saswad Mali Sugar factory is one of the oldest private sugar factories. Not only in the Solapur district but also in the state of Maharashtra. It has established on 9th November 1932 as the private enterprise of Mali community, located 3 kms east of Akluj city and 16 kms east from the taluka headquarter.

The town Saswad is located in the Purandar tahsil of Pune district 32kms south-east of Pune city. The tahsil is drought prone tahsil of Pune district and people (farmers) are mostly engaged in vegetable and fruit farming and supplying to Pune city. Still it is well known for the production of certain fruits like clustered apple, guava and sapota. Being a drought prone area majority of the people of Mali community migrated to different places in western Maharashtra at the beginning of 19th century. At first they were migrated to Kopergaon in Ahmednagar district. They have taken the land on lease and started sugarcane farming for the production of jaggery. After the completion of Bhandardara Dam on Pravara River in Ahmednagar district, canal irrigation facility was available in Shrirampur tahsil of Ahmednagar district. With the development of irrigation facility, first sugar factory in private sector was established in Shrirampur tahsil. With the development of sugar factory some of the Mali community people from Kopergaon migrated to Shrirampur. Again they have taken land on lease and started the production of sugarcane. With the completion of Bhatghar irrigation project in Bhor tahsil in Pune district irrigation facilities were developed in many tahsils of Satara, Pune district and Malshiras tahsil of Solapur district. With this development some of the Mali community leaders migrated towards the Malshiras tahsil. They have taken the land on lease and decided to factory named as start sugar factory. As originally they were migrated from Saswad. With this name they have established The Saswad Mali sugar factory Ltd. It was in 1932. At the beginning the crushing capacity of this factory was 250 TCD. It was producing 14325 M/Tonnes of sugar. At present the crushing capacity is 2500 TCD and producing 636556 M. Tonne of sugar. Table No. 4 showing the production of sugar.

Table No. 4
Sugar production of Saswad Mali Sugar Factory

Sr.No.	Year	Production of Sugar in M. Tonnes	Growth rate In %
1	1960-61	14325	--
2	1970-71	13105	-8.51
3	1980-81	12657	-3.41
4	1990-91	24996	97.48
5	2000-01	41345	65.40
6	2010-11	63655	53.96

Source : Records and Books of SMSF.

The Saswad Mali Sugar Factory is oldest sugar industry in Solapur as well as Malshiras tahsil. In the 1960-61, sugar production was 14325 MT which is decreases by -8.51 percent in 1970-71 and -3.41 percent in 1980-81. During these periods famine and lower prices for sugarcane hampers the sugar production. However, in the next decades sugar production is increased by 97.48 percent (1980-81, 1990-91). Government policies to support the cash crop like sugarcane and permission for export of raw sugar favors the sugar industry. Along with this sugar factories have had increased their crushing capacities. In the decade (1990-91 to 2000-2001), sugar production also increased by 65.40 percent. While in the 2010-11, sugar production slightly increased, showing growth of 53.95 percent. This is because of unfavorable monsoon since last four year.

Shri Pandurang Sahakari Sakhar Karkhana Ltd, Shripur.

Shri Pandurang Sahakari Sakhar Karkahana Ltd, Shripur formerly known as the Brahan Maharashtra sugar syndicate Ltd. Shripur. It was established in 1943. Initially this sugar factory is converted from Jaggery factory and privately owned by Brahan Maharashtra Group of Industries of Dnyaneshwar Agashe.

This sugar factory was established near Borgaon and Mahalung villages 7 km south-east of Akluj. In 1990-91 this private sugar factory was converted in to co-operative factory and known as Pandurang Sahakari Sakhar Karkhana Ltd. Shripur. At the beginning its crushing capacity was 800 TCD producing 3140 M.tonnes of sugar. After 1990-91 the capacity increased up to 2500 TCD and producing 26756 M. tonnes of sugar. Table No. 4.7 shown the sugar production of Shri Pandurang Sahakari Sakhar Karkhana Ltd. Shripur.

Table No. 5
Sugar production of Shri Pandurang Sahakari Sakhar Karkhana Ltd. Shripur.

Sr. No.	Year	Production of Sugar in M.Tonnes	Growth rate In %
1	1960-61	13540	--
2	1970-71	12790	-5.54
3	1980-81	16340	27.76
4	1990-91	26756	63.74
5	2000-2001	80407	200.51
6	2010-2011	127023	57.97

Source: Records and Books of SPSSK.

Pandurang SSK Ltd. Shripur witnesses continuous increase of sugar production. The decadal growth of sugar production is shown in the table No. 4.6. In the year 1970, sugar production is decreased by -5.54 percent due to low rainfall and low price to sugarcane. While in the next

decade 1970-71 to 1980-81 sugar production is increased by 27.76 percent and this growth trend is continue in next decade and sugar production increased up to 63.74 percent. In 2000-2001, this sugar factory increased crushing capacity and its sugar production was remarkably increased by 200.51percent. Whereas in the next decade 2000-2001 to 2010-11 although the sugar production is increased but its growth is not constant as compare to last decade.

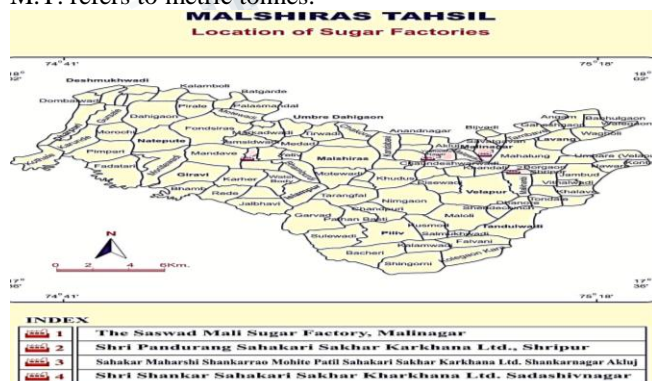
Sahakar Maharshi Shankarrao Mohite-Patil Sahakari Sakhar Karkhana Ltd. Shankarnagar-Akluj:-

It is first co-operative sugar factory not only in Malshiras tahsil but also in Solapur district with the development of this cooperative sugar factory, others cooperative sugar factories started in various tahsil of Solapur district. Therefore, this cooperative sugar factory is a mile stone in development of cooperative sugar factories in other part of Solapur district. It was started in 14th February 1963. Formerly known as Yashwant Sahakari Sakhar Karkhana Ltd. Yashwantnagar, Akluj. Founded by a great visionary late Shankarrao Mohite-Patil. After the death of Shankarrao Mohite-Patil it is named as Sahakar Maharshi Shankarrao Mohite-Patil Sahakari Sakhar Karkhana Ltd. Shankarnagar-Akluj. Initially its crushing capacity was only 1000 TCD in 1963. It was further increased up to 1750 TCD in 1981 and 4500 TCD in 1991. At present the crushing capacity is 7500 TCD.

Table No.6
Sugar production of Sahakar Maharshi Shankarrao M.P.S.S. Karkhana Akluj.

Sr. No.	Year	Production of Sugar in M.Tonnes	Growth rate In %
1	1960-61	13540	--
2	1970-71	12790	-5.54
3	1980-81	16340	27.76
4	1990-91	26756	63.74
5	2000-2001	80407	200.51
6	2010-2011	127023	57.97

Source: Records and Books of SMSSKL.
M.T. refers to metric tonnes.



SMSMPSSK Ltd. Shankarnagar-Akluj has one of the famous and mostly awarded sugar industry in Maharashtra. The sugar production trend of this sugar factory is continuously changing. In the year 1980-81, sugar production increases by 70.49 percent, 1990-91 it further increases by 46.84 percent. In the same decade this sugar factory crushing capacity was increased upto 3000 TCD. While in next year crushing capacity of this sugar factory is was increased 5000 TCD and in the 2000-01 this sugar factory has highest sugar production in the state. In the year 2010 the management of sugar factory decided to increase their crushing capacity up to 7500 TCD. But the first crushing season the new machinery didn't performed well because of technical difficulties and resulted in decreases in the sugar production by -1.13percent.

Shri Shankar Sahakari Sakhar Karkhana Ltd. Sadashivnagar:-

The fourth sugar factory in the Malshiras tahsil was started in the year1968. The Chitale Sugar Works Ltd. was famous for manufacturing of Jaggery in the western part of Malshiras tahsil. Due to economic crises this company was closed. Late Sahakar Maharshi Shankarrao Mohite-patil purchased the Chitale Sugar Works Ltd. And on 22nd April 1968 started, as Shri Shankar Sahakari Sakhar Karkhana Ltd. Sadashivnagar. The first crushing season was started in 1969-70. In the beginning crushing capacity of this factory was 800 TCD. At present the crushing capacity is 2500 TCD. Sugar production of the sugar factory is given in the table No. 7.

Table No.7
Sugar production of Shankar Shakari Sakhar Karkahana Sadashivnagar.

Sr.No.	Year	Production of Sugar in M.Tonnes	Growth rate In%
1	1960-61	-	--
2	1970-71	9232	--
3	1980-81	15104	63.60
4	1990-91	45539	200.50
5	2000-2001	70023	53.76
6	2010-2011	76473	9.21

Source : Records and Books of SSSKL.

Shankar Sahakari Sakharkarkhana Ltd. Sadashivnagar was started in 1968. In 1970-71 season production of sugar was 9232 M.tonnes. Up to 1980-81 season it increased up to 15104 M.tonnes. Showing 63.60 percent growth in production. In the next decade (1980-81 to 1990-91) . Sugar factory has increased its crushing capacity, therefore, sugar production increased up to 45539 M/tonnes, showing 200.50 percent growth in production. Again in next decade (1990-91 to 2000-2001) Sugar factory has increased its crushing capacity, therefore, sugar production increased up to 70023 M.tonnes showing 53.76 percent growth in production. At

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present it is producing 76473 M.tonnes of sugar (2010-2011)

Increased crushing capacity of Sugar factories in Malshiras tahsil.

Initially the crushing capacity of four sugar factories in Malshiras tahsil was very low with the gradual increase in sugarcane production every sugar factory tries to increase their crushing capacity. Table No. 8 showing the initial and increased capacity of sugarcane crushing.

Table No. 8

Increase crushing capacity in Malshiras tahsil

Sr. No.	Factory	Crushing Capacity at the beginning	Crushing Capacity at Present
1	The Saswad Mali Sugar Factory, Malinagar	250 TCD (1934-35)	2500 TCD (From 1993)
2	Shri. Pandurang Sah. Sakhar Karkhana Ltd. Shreepur	800 TCD (1943)	5000 TCD (From 2010-11)
3	Sahakar Maharshi Shankarrao Mohite-Patil S.S.K. Ltd. Shankarnagar	1000 TCD (1963)	7500 TCD (From 2010-11)
4	Shri. Shankar Sah. Sakhar Karkhana Ltd. Sadashivnagar	800 TCD (1978)	2500 TCD (From 1992)

Source: Annual Sugar Factory Report (1960-2011)

The first sugar factory in 1932 started with only 250 TCD only. The second started with 300 TCD only. After 1961 two more sugar factories started with 1000 TCD and 800 TCD respectively. The present capacity of these sugar factories given in the table shows that the crushing capacity of Saswad Mali increased upto 2500 TCD, The Pandurang Sahakari increased up to 5000 TCD. Sahakar Maharshi up to 7500 TCD and Shankar Sahakari up to 2500 TCD. With the increase in crushing capacity the total production of sugar in Malshiras tahsil is increased and showing in Table No. 9.

Table No.9

Total of Sugar production by different factories in the Malshiras tahsil.

Sr.No.	Year	Sugar Production in M. tonnes	Growth Rate%
1	1960-61	27865	---
2	1970-71	63928	129.42
3	1980-81	64228	0.437
4	1990-91	169400	163.83
5	2000-01	313775	85.22
6	2010-11	387771	23.58

Table No. 9 giving details of sugar production in Malshiras tahsil. Up to 1960-61 two private sugar factories producing sugar. Therefore, production of sugar is less (27865 Metric

tonnes) in the decade 1960-61 to 1970-71 two more sugar factories were established in the region and production of sugar increased up to 63928 M. tonnes. Showing 129.42 percent increase in sugar production in the region. There was no considerable increase in next decade (1970-71 to 1980-81). But after 1981 sugar production in the tahsil showing tremendous increase. Therefore up to 1991 production of sugar reached up to 169400 metric tonnes. Showing 163.83 percent increase. This is due to increased crushing capacity of sugar factories, development of lift irrigation schemes and increase in sugarcane production due to this again sugar production almost doubled in next decade (1990-91 to 2000-2001) Recently in 2010-2011 crushing season sugar production reached up to 38771 metric tonnes showing 23.58 percent growth as compare to 2010-2011.

IV. CONCLUSION

Maharashtra state is one of the leading state in production of sugar and sugarcane in India. The sugar factories in Maharashtra enjoy higher rate of recovery as compare to other states. In pre independence period there were twelve (12) sugar factories in private sector. Solapur district is one of the leading district in sugarcane production and total number of sugar factories in Maharashtra. The first sugar factory was established in 1932 producing only 14325 M. tonnes of sugar. Up to 2010-11 number increased up to twenty six (26) producing 131.93 lakh M.tonnes sugar. After independence first two factories on co-operative basis were also started in Malshiras tahsil. Therefore, Malshiras tahsil is an important tahsil in Solapur district regarding sugar industry, production of sugar and area under sugarcane. At present there are four (04) sugar factories in tahsil producing 387771 M.tonnes of sugar. These sugar factories have increased their crushing capacity gradually and therefore at present the daily crushing capacity is 17500 metric tonnes of sugarcane. Due to this area under sugarcane increased up to 23667 hectares in 2010-11 crushing season as compare to 2340 hectare in 1960-61.

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