



The Study Of Distribution And Evelopment Of Sugar Factories In Solapur District (M.S.)

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Abstract:

The sugar industry has played a pivotal role in shaping the socio-economic landscape of Solapur district, Maharashtra. As one of the most important agro-based industries in India, sugar production not only supports agriculture but also stimulates trade, commerce, and transportation while providing direct and indirect employment opportunities. Solapur district, despite being located in a rain-shadow zone with uncertain and scanty rainfall, has emerged as a leading center of sugar production in Maharashtra. The study, based on secondary data collected from government records, statistical abstracts, and published research, examines the distribution and development of sugar factories in the district between 2017 and 2022. During this period, the number of sugar factories increased from 34 to 43, with the overall crushing capacity rising significantly from 117,830 MT/day to 148,150 MT/day. The findings highlight tahsil-wise variations, with Malshiras, Mohol, Madha, and South Solapur showing the most substantial growth, while Karmala and Sangola recorded minimal or no change. The study concludes that irrigation development, favorable soil conditions, and rising sugar demand in domestic and international markets have been the primary drivers of growth. However, sustainability challenges related to drought, water scarcity, and the need for efficient irrigation systems remain critical issues for the industry's future.

Key Words: Distribution, Economy, Solapur, Sugar industry, Sugarcane

Introduction:

Indian economy is an agrarian economy. 70 per cent of the descendants of this country rely on agriculture. Industries play an important role in the economic development of a region. It also stimulates the growth of trade, commerce and transportation. The overall impact of the development can also be seen in the development of agriculture and industries of the region. Sugar industry is one of the most important agro based industry. India is the largest consumer of sugar in the world and Indian sugar industry is the 2nd largest agro-industry located in the rural India. The industry generates power along with sugar not only for its own requirement but surplus power for export to the grid based on byproduct bagasse. It also produces ethanol, an eco-friendly and renewable energy for blending with petrol.

Sugarcane is most important commercial crop of Solapur district as like India and tropical countries. The district accounts 18.25% of the cane crushed in the state during 2012-13. Solapur is one of the significant sugar producing district in Maharashtra. The first sugar factory was started on co-operative base. The crushing season of sugar industry has been from middle of October to end of the march. Sometimes period was short due to shortage of sugarcane. Agro-climatically, the entire district comes under the rain shadow area.

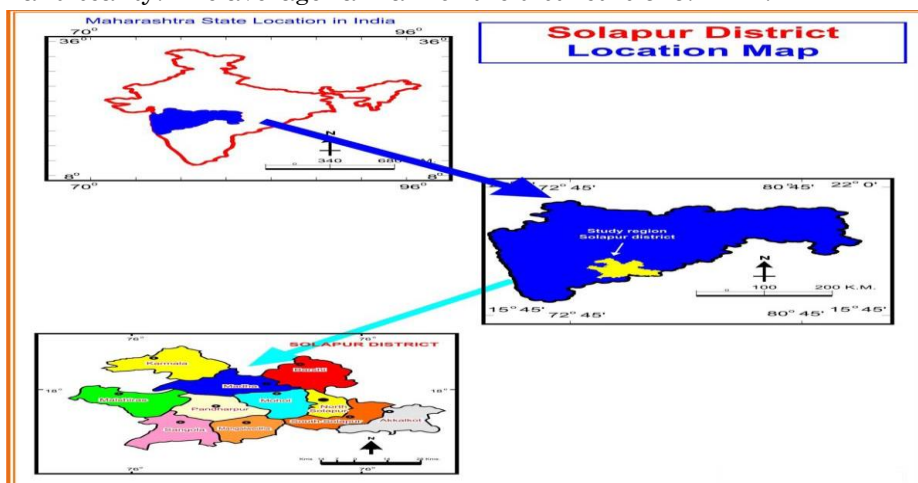
Sugar industry is one of the largest agro based processing industries in India, has been instrumental in resource mobilization, employment generation, income generation, and creating

social infrastructure in rural areas (Dr. R. K. Patil and S. Rajguru, 2022). Sugar Industries play a very vital role in the economic development of a region. It also supported to the growth of trade, transportation and commerce. Today it is urgent need to study the distribution and development of sugar factories in Solapur district for finding the future scope for development of sugarcane factories. Therefore, attempt is made here to “A study of distribution and development of sugar factories in Solapur district”.

Study Region:

For the present investigation Solapur district is selected as a study region. Geographically Solapur district is located between 17°10' North to 18°32' North latitude and 74°42' East to 76°15' East longitude. It covers an area of 14,895 sq. km. The district is situated on the south eastern fringes of the state of Maharashtra and the district is bounded on the north by the Ahmednagar district and Osmanabad district, on the east by Osmanabad and Gulbarga district of the state of Karnataka, on the south by Sangli and Bijapur district and on the west by Pune and Satara district.

The shape of district resembles flying eagle. The proportion of area of Solapur district as compare to Maharashtra is about five (5%) per cent. It is administratively sub-divided into 11 tahsils. The soils of the district can be classified into three main types. These are black soil, coarse grey soil and reddish soil. Agro-climatically, the entire district comes under the rain shadow area. Rainfall is uncertain and scanty. The average rainfall for the district is 545.4 mm.



Objective:

The main objectives of this paper are as following.

- 1) To study the tahsil wise distribution of sugar factories in Solapur District.
- 2) To study the crushing capacity of sugar factories in Solapur District and changes their in

Database and Methodology:

The study was conducted in the Solapur district of Maharashtra state. For the purpose of the study, only secondary information was collected from different sources. Data regarded to distribution, crushing capacity of sugar factories and geographical information was collected through Agriculture Department, District statistical Department of Solapur and socio-economic abstract of Solapur district in 2017-18 and 2021-22. For the present study period of investigation is from 2017 to 2022. Some data collected from the government reports, available journals, articles, newspapers and websites etc.

Result and Discussion:

The first sugar factory was started in 1932 at Malinagar, Malshiras tahsil in Solapur district. There were 34 sugar factories till the end of 2017, among them 17 were co-operative and 17 were private based. Table no.01 shows the distribution and crushing capacity of sugar industry of Solapur district during 2017-18.

Table no.2.11
Distribution, Crushing Capacity & Actual Crushing of Sugar Industries in Solapur District (2017-18 and 2021-22)

Tahsil	No. of Sugar Industry		Changes	Crushing capacity (MTs/Day)		Changes
	2017-18	2021-22		2017-18	2021-22	
Akkalkot	3	3	0	10500	10500	0
Barshi	3	4	1	8750	10000	1250
Karmala	4	4	0	9750	9750	0
Mangalwedha	4	4	0	13500	13500	0
Malshiras	5	6	1	20200	21450	1250
Mohol	3	5	2	9880	17750	7870
Madha	4	4	0	9750	18250	8500
North Solapur	2	3	1	13500	16000	2500
Pandharpur	3	4	1	12500	13500	1000
Sangola	1	2	1	2500	5000	2500
South Solapur	2	4	2	7000	17000	10000
District Total	34	43	9	117830	148150	30320

(Source: Compiled by researcher on the basis of Socio-economic Abstract of Solapur District 2017-18 and 2021-22)

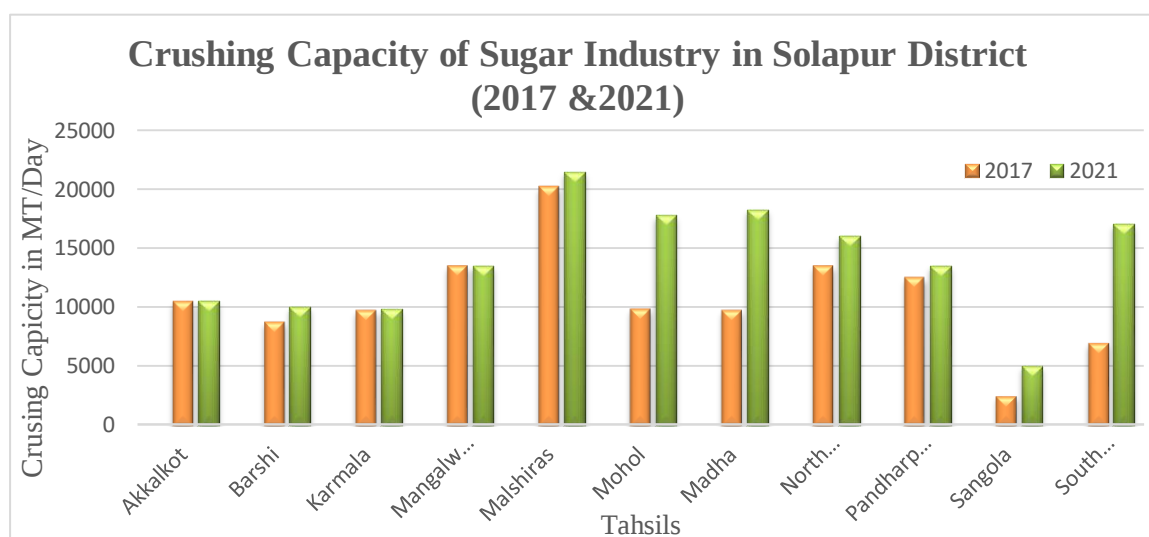


Figure no.2

The distribution of sugar industry in Solapur district is uneven. The table No. 1 shows that, there were 25 sugar industries in the year 2011-12, among them 15 were co-operative and 10 were private based, but spatial distribution varies from tahsil to tahsil. The largest number of sugar factories were found in Malshiras tahsil which is 4 sugar industries. It is due to first sugar industry started in Malshiras tahsil and also development of irrigation facility. The moderate level sugar industries were observed in Barshi, Mohol, Madha and North Solapur tahsil i.e. 2-3 sugar industries, while low level sugar industries were found in South Solapur, Akkalkot, Sangola and Mangalwedha tahsil i.e. < 2 sugar industries.

During the year 2021, there were 43 sugar industries found in Solapur district, the spatial distribution varies from tahsil to tahsil. The largest number of sugar industries were found in Malshiras and Mohol tahsil which is > 4 sugar industries. The moderate level sugar industries were observed in Barshi, Mangalwedha, Pandharpur, Madha, North Solapur, South Solapur,

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Akkalkot and Karmala tahsil i.e. 3-4 industries, while low level sugar industries were found only in Sangola i.e. < 3 industries.

The table no. 1 indicates that region as a whole has +18 sugar industries were increased during the period of investigation. The positive change is recorded in all tahsils of district. The high change is recorded in Mangalwedha and South Solapur tahsil during the period of investigation.

Table no. 1 and figure no. 1 also shows that, there were 65500 MT/day crushing capacity of sugar industry in 2011-12 in study region. The spatial distribution varies from tahsil to tahsil. The high crushing capacity of sugar industry were found in Malshiras tahsil which is > 10000 MTs/day. It is due to high concentration of sugar industry in Malshiras tahsil. The moderate level crushing capacity of sugar industry were observed in North Solapur, Mohol, Madha, Karmala and Pandharpur tahsil i.e. 5000 to 10000 MTs/day, while low level sugar industries were found in Barshi, Mangalwedha, Sangola, South Solapur and Akkalkot tahsil, i.e. <5000 MTs/day.

During the year 2021, the per day crushing capacity of sugarcane industry were increases and become 148150 MTs/day. The spatial distribution varies from tahsil to tahsil. The high crushing capacity of sugar industry were found in Malshiras, Madha, North Solapur, South Solapur and Mohol tahsil which is > 15000 MTs/day. It is due increasing production of sugarcane which lead to development of sugar industry in this region. The moderate level sugar industries were observed in Akkalkot, Barshi, Mangalwedha and Pandharpur tahsil i.e. 10000 to 15000 MTs/day, while low level sugar industries were found in Karmala and Sangola tahsil, i.e. >10000 MTs/day. The table no. 01 shows that region as a whole has +82850 MTs/day increasing crushing capacity of sugar industry. The high change in per day crushing capacity of sugarcane industry were recorded in Mohol, Madha and South Solapur tahsil during the period of investigation, whereas the tahsil Akkalkot, Karmala and Mangalwedha were remain same per day crushing capacity of sugarcane industry in study region.

Conclusion and suggestion:

The study of sugar factory distribution and development in Solapur district reveals a remarkable expansion of the industry in the last decade, particularly between 2017 and 2022. The number of factories increased by 18, accompanied by a substantial rise of +82,850 MT/day in crushing capacity. This growth has been concentrated in tahsils such as Malshiras, Mohol, Madha, North and South Solapur, largely due to irrigation development and favourable agro-climatic conditions for sugarcane cultivation. In contrast, tahsils like Karmala and Sangola remain underdeveloped in terms of sugar industry presence, pointing to the need for policy interventions and investment. The dominance of private sugar factories over cooperative ones indicates a structural shift in the district's industrial ownership patterns. While the sugar industry has generated employment, improved infrastructure, and stimulated rural economies, it also faces challenges of resource sustainability. Being a drought-prone district, overdependence on water-intensive sugarcane crops could endanger long-term viability. Adoption of drip irrigation, water conservation methods, and diversification of cropping patterns will be essential for ensuring sustainable growth. Overall, Solapur district demonstrates the transformative impact of the sugar industry on rural development but must balance economic gains with ecological responsibility to secure the industry's future.

The empirical results suggest that, develop new sugar industry or increases per day capacity of sugar industries in Karmala and Sangola tahsil. It is also urgent need to improve awareness about drip irrigation system among sugarcane growing farmer due to Solapur district is drought affected which led to may be close the sugar industry due to lack of sugarcane.

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