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Growth of Sugar Mills in Uttar Pradesh- A District Wise Analysis (2001-2017)

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Research Article

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ABSTRACT

Uttar Pradesh lying in the Indo-Gangetic plains is among the most fertile land of India. Sugarcane is the highest produced crop of the state by producing 145.39 Million Tonnes (MT) in the year 2015-16. There are 119 operational sugar mills crushing sugarcane in Uttar Pradesh in the year 2017 even though, the condition of sugar mills in the state is vicious. The present research work is based on both primary and secondary data and is analytical, descriptive and applied. Quantitative methods are used for the outcome of appropriate results. The overall trend of the growth of sugar mills in Uttar Pradesh is downward. High State Advised Price (SAP), low investment and use of out-dated machinery results in the closure of sugar mills. There is a need of a proper organizational setup and a formation of a committee for the working and maintenance of sugar mills in Uttar Pradesh

INTRODUCTION

Uttar Pradesh abbreviated as U.P. lying in the Indo-Gangetic plains is among the most fertile land of India. Uttar Pradesh ranks first in the production of food grains. It is highest producer of wheat and second highest producer of rice. Among cash crops, Sugarcane is the highest produced crop of the state by producing 145.39 Million Tonnes (MT) in the year 2015-16. Sugar industry is among the important agro-industry in Uttar Pradesh employing more than 70 per cent of the population [1]. Uttar Pradesh is known as the Sugar Bowl of India having large area under sugarcane production and having large number of sugar mills. Sugar is the primary product of sugarcane. There are 119 operational sugar mills crushing sugarcane in Uttar Pradesh in the year 2017 even though, the condition of sugar mills in the state is vicious. Sugar mills are dealing with the problems during the crushing period leading to the lower production of sugar. The growth of sugar mills is discontinuous creating problematic situation for the sugar industry in Uttar Pradesh. Through this research paper the growth and distribution of sugar mills in each district of Uttar Pradesh is presented and an attempt is made to highlight the problems faced by sugar mills in the state.

In an Impact Assessment Study (2012) it is said that the problems faced by sugar mills is related to supply of stale sugarcane, manual entries on cane purchase centres and mills capacity is not fully utilized. The long distance between agricultural land and sugar mills decreases the quantity of sucrose which affects the production of sugar. Farmers convert their sugarcane supply to jaggery producers developing loss conditions for sugar mills.

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Commission of Agricultural Costs And Prices (2015) gave 'Price Policy For Sugarcane 2016-2017 Sugar Season' in which they recommended that the state advised price imposed by states on sugar mills is in no continuation with ex- mill sugar price which results into cane arrears and subdues [2]. Inequity in water use among different states as sugarcane consumes 70 percent of irrigation water, thus, conscious policy making is required to achieve satisfactory production of sugar per drop of water.

Objectives of study

The main objectives of the research work are:
- To study the trend of growth of sugar mills in Uttar Pradesh.
- To study the problems associated with sugar mills in Uttar Pradesh.

Study area

Uttar Pradesh lies in the Northern part of India. Its latitudinal and longitudinal extent is 23°52'N to 30°24'N and 77°5'E to 84°38' E respectively. Uttar Pradesh is the fifth largest state of India covering an area of 240,928 sq km constituting 7.33% of land area of India. Uttar Pradesh is bounded by Nepal and Uttarakhand in the North, Himachal Pradesh in the North-west, Haryana, Delhi and Rajasthan in the West, Madhya Pradesh in the South, Chhattisgarh and Jharkhand in the South-East and Bihar in the East. Ganga is the main river of this region having Yamuna as it major tributary. Uttar Pradesh lies in the sub-tropical belt of India where mean annual temperature ranges between 17°C to 24°C. In the terai belt of Uttar Pradesh the rainfall varies from 100-200 cm while in the Western U.P. it ranges from 50-100 cm. Alluvial soil is the dominant soil of the region.

Data source

The present research work is based on both primary and secondary data. Primary survey is conducted using questionnaire method for sugar mill owners of the selected area. The secondary data has been collected from the Sugarcane Department U.P., Uttar Pradesh Sugar Mills Association (UPSMA). Other information has been collected from U.P. government websites, published research papers, books, newspapers etc.

MATERIALS AND METHODS

The research work is analytical, descriptive and applied. Quantitative methods are used for the outcome of appropriate results. Questionnaire method is used in which questions are asked from sugar mill owners to access the problems in the working of sugar mills. Growth of sugar mills are represented with the help of bar diagram and number of sugar mills in each district of Uttar Pradesh is shown in a tabular form. Distribution of sugar mills are shown with the help of maps developed using Arc GIS 10.2 software. The time period of 2001, 2007, 2012 and 2017 is selected to display the growth and distribution of sugar mills. Districts are divided as per the administrative divisions given by the Census of India 2001 and 2011. Bulandshahr district is selected for survey in which 4 sugar mills are questioned.

RESULTS AND DISCUSSION

Growth of sugar mills in Uttar Pradesh

To interpret the present scenario of sugar mills in Uttar Pradesh it is necessary to study the pattern of growth of sugar mills as well. Uttarakhand was carved out from Uttar Pradesh on 9th November, 2000 [3]. Thus, to study the status of sugar mills in U.P. four years i.e. 2001, 2007, 2012 and 2017 have been selected for representing the trend in sugar mills from coming in existence of the new state till the present. Following table shows the number of sugar mills in each district of Uttar Pradesh (Table 1).

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Table 1: Showing the growth of sugar mills in each district of Uttar Pradesh.

Districts	Number of sugar mills				Districts	Number of sugar mills			
	2001	2007	2012	2017		2001	2007	2012	2017
Aligarh	1	2	2	1	Jaunpur	1	0	0	0
Ambedkar nagar	1	2	1	1	Kanpur nagar	1	1	0	0
Amroha	3	4	4	3	Kasganj	1	1	1	1
Azamgarh	1	0	0	1	Kushinagar	6	6	5	5
Badaun	1	1	2	2	Lakhimpur kheri	6	9	9	9
Baghpat	3	3	3	3	Maharajganj	2	2	2	2
Bahraich	3	4	4	4	Mathura	1	1	0	0
Ballia	2	2	1	0	MAU	1	1	1	1
Balrampur	2	3	3	3	Meerut	4	6	5	6
Barabanki	1	1	1	1	Moradabad	1	4	4	4
Bareilly	4	5	5	5	Muzaffarnagar	6	8	8	8
Basti	3	4	4	3	Pilibhit	3	4	4	4
Bijnor	7	10	9	9	Rampur	1	3	3	3
Bulandshahr	3	4	4	4	Saharanpur	6	8	7	6
Deoria	4	2	1	1	Sambhal	1	2	2	3
Faizabad	2	2	2	2	Sant kabir nagar	0	0	1	0
Farrukhabad	1	1	1	1	Sant ravidas nagar	1	0	0	0
Ghaziabad	1	1	1	1	Shahjahanpur	3	5	4	5
Gonda	1	3	3	3	Shamli	2	3	3	3
Gorakhpur	2	2	0	0	Sitapur	5	6	5	5
Hapur	1	2	2	2	Sultanpur	1	1	1	1
Hardoi	1	3	4	3	Operational mills	101	132	122	119
					Mills in Western U.P.	26	35	33	33
					Mills in Central U.P.	37	52	49	53
					Mills in Eastern U.P.	38	45	40	33

Table 1 depicts the Number of Sugar Mills in Each District of Uttar Pradesh during 2001, 2007, 2012 and 2017. It is seen that except the districts of Baghpat, Faizabad, Farrukhabad, Ghaziabad, Mau and Sultanpur all other districts have discontinuous pattern of growth of sugar mills. Bijnor and Lakhimpur Kheri districts have the highest agglomeration of 9 sugar mills in the state respectively. In the districts of Ballia, Gorakhpur, Mathura, Kanpur Nagar sugar mills closed down to 0 in the year 2017 [4]. In terms of total operational sugar mills in U.P. record rise of 31 sugar mills is noticeable between 2001 and 2007 after that till the year 2012, 10 sugar mills got closed which further fall down to 119 sugar mills experiencing the closure of 3 sugar mills in the year 2017. Similar pattern is followed in each zone (Western U.P., Central U.P. and Eastern U.P.) of Uttar Pradesh having highest number of sugar mills in the year 2007 after which a fall in the number of sugar mills is experienced. Though, the central zone of Uttar Pradesh made a remarkable recovery with 53 sugar mills in the year 2017. 4 new sugar mills are opened from the year 2012 which is even higher than the sugar mills in 2007 i.e. 52. The Central zone is having the highest number of sugar mills among all three zones of U.P. The trend of the growth of sugar mills in Uttar Pradesh is presented in a graph below (Figure 1).

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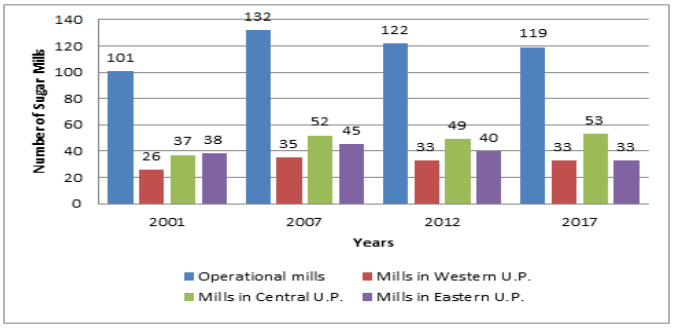
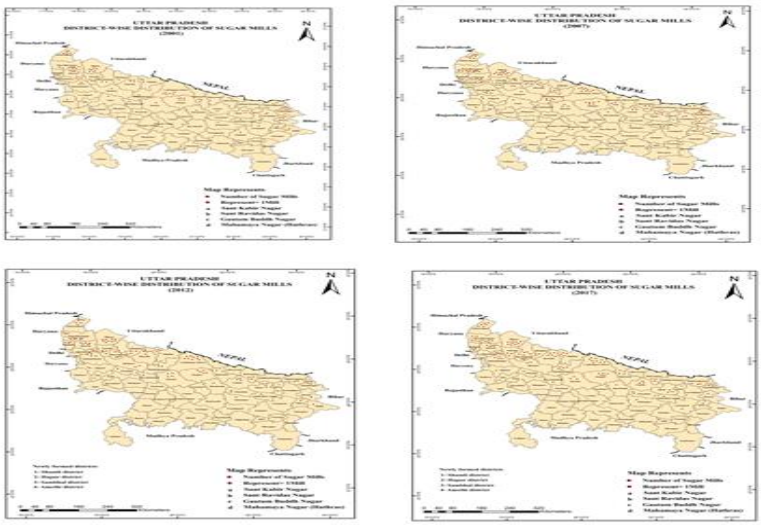
Figure 1: Uttar Pradesh growth of sugar mills (2001-2017).



Graph 1 depicts the trend of growth of sugar mills in Uttar Pradesh. An upward trend is seen between the year 2001 and 2007 but the overall trend is sloping downward. Among each zone of Uttar Pradesh only central zones has showed a rising pattern after 2012. Both Western and Eastern zone have equal number of sugar mills but the difference is the number of sugar mills in Eastern U.P. are constantly falling though the number is constant in Western U.P. for the year 2012 and 2017.
Based on the above data the distribution of sugar mills in each district of Uttar Pradesh for their respective years are as follows (Figure 2).

Figure 2: Uttar Pradesh district wise distribution of sugar mills (2001-2017).



Problems of sugar mills in Uttar Pradesh

To conduct a detailed study on the problems of sugar mills in Uttar Pradesh both primary and secondary method are used. Bulandshahr district is selected to study the problems of sugar mills at a regional level and for overall problems of sugar mills of Uttar Pradesh government reports, research papers, newspaper articles are studied to analyse the present conditions sugar mills are dealing with. Bulandshahr district is having 4 sugar millsin which 1 is cooperative sugar mill and other 3 are private sugar mills. All the four mills crush high, medium and low quality of sugarcane and manufacture processed sugar. The main crushing season lie between December to February with an average crushing days ranging between 100-200 days. More than 200 villages are covered by each sugar mill in Bulandshahr district within a distance of 5-10 km. Though the distance of sugar mills from the agricultural land is appropriate however it is agreed by the mill owners that farmers are not satisfied with the working of sugar mills. The major problem faced by the sugar mill is related to the out-dated technology. The machines used in sugar mills are not able to crush sugarcane after a certain amount making it impossible for sugar mills to buy large number of

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sugarcanes from the farmers. State Advised Price (S.A.P.) is another issue faced by the sugar mills. It is seen that sugar mills are unsatisfied with SAP fixed by the state government and strongly agree to fix it at a certain price. Lack of investment and low attention towards the sugar mills make it difficult to work in a continuous pattern and fulfil the demand of farmers [5]. Because of the prevailing conditions one sugar mill got closed in the year 2015 due to lack of proper working. There is a need of promoting research and development in the field of sugar mills.

The outcome of the above mentioned data is even though the Uttar Pradesh is the largest producer of sugarcane in India the conditions of sugar mills are vicious in the state. The number of sugar mills is falling in each district of Uttar Pradesh from 2001-2017 resulting into the large number of closures and sloping pattern in the total number of operational mills. Among the three zones of Uttar Pradesh only Central U.P. has shown a positive signs with increasing number of sugar mills in comparison of previous years. In a regional study of sugar mills in Bulandshahr district of U.P. it is found out that lack of proper investment, use of out-dated technology sugar mills are dealing with the difficulties during the crushing period of sugarcane. High SAP is becoming a problem for the sugar mills in dealing with the farmers and buying sugarcane which results into the shutdown of sugar mills. A proper research and development is needed in the sugar mills sector for the overall development of the sugarcane industry.

CONCLUSION

Uttar Pradesh is the fifth largest state of India having agriculture as the main economic activity. Lying in the great plains of India and having alluvial soil as the dominant soil of the region, Uttar Pradesh is the most fertile area of India. Sugarcane industry is the major agro- based industry employing more than 70 per cent of the population of the state. Uttar Pradesh is the largest producer of sugarcane in India and is also known as the sugar bowl of India because of the largest production of sugarcane and having highest number of sugar mills. The growth of sugar mills in Uttar Pradesh is showing a downward pattern and the distribution of the sugar mills in each district of the state is showing a large number of closures. The sugar mills are dealing with the problems of out-dated technology, lack of investment, lack of research and development in this sector and high rate of state advised price. All these problems make it difficult for the sugar mills to work in a proper condition and to produce a satisfactory amount of sugar. There is a need of a committee working for the welfare and maintenance of sugar mills, a time to time check-up of the machineries and establishment of government sugar mills can make a situation somehow better to deal with.

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