

A Study of Danteshwari Maiya Co-Operative Sugar Factory Limited

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ABSTRACT

India is an agrarian country. Agriculture supplies are not only food grains but also raw material for agro based industry. Sugar industry is such an industry which uses sugarcane as a raw material. Sugarcane supplies for sugar industry are beneficial for the farmer's not only economic development but also increases living standard. Sugar industry is 2nd largest agro based industry in India. India is 2nd largest sugarcane producer country of sugar. Sugar industry is an old organized consumer industry in India. Sugar industry employs millions of people. Co-operative sugar mill established by state government of Chhattisgarh on year 2009 for development of sugar cane cultivation, economic development of farmers, increase in employment and increase in production of sugar; to be self dependent to fulfil consumer's demand of sugar; to utilise it's resources in state. There are two co-operative sugar mill had established before this sugar mill in district Kabirdham and Ambikapur of state and running successfully. There is continuous increase in production of sugar in Chhattisgarh. It is the important agro based industry in this region. After establishing this mill farmers of this area are taking interest in producing sugarcane. Statistical data depict the fact that farmer's are motivated to cultivation of sugar cane. It is beneficial cash crop out of other traditional crops.

Keywords: co-operative, sugar factory, sugarcane, press mud, molasses, bagasse.

INTRODUCTION:

India is an agrarian country. Agriculture supplies are not only food grains but also raw material for agro based industry. Many industries are agro based e.g. Jute industry, textile industry, Silk industry; sugar industry etc. out of these sugar industries is such an industry which uses sugarcane as a raw material. Sugarcane supplies for sugar industry are beneficial for the farmer's not only economic development but also increases living standards. Sugar industry is 2nd largest agro based industry in India. India is 2nd largest sugarcane producer country. Sugarcane crop is about 44 lakh hectare agricultural land in India. Maximum part of sugarcane uses for producing sugar. Some part uses for jaggery (Gud) & khandsari. By products of sugar industry is helpful to developing many other industries. Sugar industry is an old organized consumer industry in India. Sugar industry employs millions of people.

Co-operative sugar mill established by state govt. on year 2009 for development of sugar can cultivation, economic development of farmers, increase in employment and increase in production of sugar in state .There are two co-operative sugar mill had established before this sugar mill in dist Kabirdham and Ambikapur. There is continuous increase in production of sugar in Chhattisgarh.

Introduction of Balod district:

Balod is situated 58 km distance from Durg district Head Quarter. of Chhattisgarh. and 100 km distance from State Capital. 687 revenue villages and 16 forest villages in Balod district. Revenue area of Balod district is 278000 hectare. Balod is agrarian district like other district of Chhattisgarh. In Balod district 175545 hectare Kharif crops and 86303 hectare Rabi crops taken by summers.

Before announcing a separate district Balod granted many development schemes by the Chief Minister M Dr. Raman Singh Which includes Danteshwari Maiya co-operative sugar mill (2009).

Introduction of Karkabhat:

According to the census 2011 Karkabhat the place code as village code is 44321. Karkabhat village is situated in Balod district of Chhattisgarh. Distance of this village from district H.Q. is 19 km. Area of this village is 400.65 hectare. Karkabhat population is 431.

Introduction of Dantashwari maiya sugar factory:

Dantashwari Maiya co-operative sugar mill is started in the year 2009. It is the important agro based industry in this region. After establishing this mill farmers of this area are taking interest in producing sugarcane. A Main feature of this plant is as follows.

1. Cost of plant – Rupees. 48.50 Crore.
2. Registration No. of plant- 145 (Date. 01.04.2002).
3. Plant completion date -15.12.2009.
4. Milling capacity of plant – 1250 Metric Ton per day.
5. Milling period – November to March.
6. Lease land taken from Government. – 150 Acre.

LITERATURE REVIEW:

Singh, N.P., & Paramatma (2007) “Sugar industry in Uttar Pradesh: Efficiency Still holds the key” According to this study those sugar mills are in profits which are working on large scale. Private sector mills are running efficiently there for they are getting advantage of large scale of production. Sugar cane supply is the key factor of utilisation of capacity. So that private sector western region of Uttar Pradesh is earning more economic profit than other regions.

Khumbhar, M Vijay (2009) “Crises in sugar co-operative in maharashtra” According to this study sugar cane availability, export policy, price crash, delay in decision making and mismanagement are bigger hurdle for future of sugar mills.

Herekar, Dr. Hrakash M. & Shinde, Uday Kumar R. (Aug 2011) “Challenges before sugar cooperatives in Maharashtra” According to this study cooperative sugar mills are financially weak and sick because of corruption, unprofessional management, lack of modernization, price crash and short margin natural vagaries. Government cooperative management farmers, employees and all stakeholders should join hands to solve these problems.

Samuel, J.J.J., (2012) “A study of the management of Tiruttani co-operative sugar mills limited at Thiruvallangadu in Tiruvallur dist.” According to this study India is the largest producer of sugarcane and second largest agro based industry. Tiruttani co-operative sugar mill is earning foreign exchange for India it has received so many awards from central as well as state government. The over all production performance is quite satisfactory. Ratio analysis reveals that mills financial position is sound.

Todkuri G.V. (2012) “Role of co-operative sugar factories in rural development a case study of Damaji sugar factory, Managalweda” This study reveals that Shri Sant DamaJi cooperative sugar factory is working for rural area development cogeneration and distillery projects should be started soon which can give large profit and employment opportunity.

Gupta Dr. Yashwant & Gupta Neeraj Kumar (2012) “Financial wealth health of Mawana sugar mill- a case study” According to this study Mawana sugar mill is financially good for two years of study and sick for three years. Net profit ratio is very poor and this mill has maintained high degree of financial consistency. It is facing a problem of low sugar percentage, low recovery rate, age old technology, accumulated sugar stock, huge interest borrowing, Mawana sugar mill it should decreased the bank borrowing.

Dangat, Nilesh R. (2013) “Problem of sugar co-operative in India” According to this study sugar mills of Maharashtra are contributing 40% of national sugar supply. This sugar mills are the hall mark of the industry in the involvement of large number of small and marginal farmers regardless the size of their holding. These mills are facing some problems like short margin obsolete technology, entry of private sector, shortage of sugar cane, corruption, policy hurdles.

Shinde, Dilip P. (2016) “Growth and productivity of co-operative sugar factory in Maharashtra” According to this study adequate irrigation facilities and other complimentary inputs are key factor of utilisation of production capacity. There is a need of coordinated and concerted effort for appreciation and consolidation of the needs of consumers.

Parkhe, G.G. (2016) "Co-operative sugar factory in India: Challenges and opportunities" According to this study cooperative sugar mills in Maharashtra state are helping in economic and social development in rural areas. Mills are establishing institutions like school, co-operative banks, hospitals, dairy and poultry unit, consumer stores, libraries, laboratories recreation centres etc. These institutions are profitable for population living there.

Objects of Sugar Factory:

1. To provide education and training facilities to the members for their benefit.
2. To suggestion and help to members to management and related matters.
3. To start information service to the members.
4. To publish literature and document of sugar factory to members benefit.
5. To do other activities which are contingent and for getting object and development of by- product industry favourable to sugar factory.

OBJECTS OF THE STUDY:

1. Study of role of sugar factory in agricultural development relating to sugarcane crop.
2. Role of sugar factory in development of local employment.
3. Role of economic development of sugarcane producer farmers.
4. Study the process of sale of agricultural product in sugar factory.
5. Investigating the problems of sugar factory.
6. To find out problems of farmers related to Danteshwari maiya co-operative society.

Sampling method:

There are five blocks in Balod district Dondi, Gurur, Dondilohara, Balod, Gundardehi. Out of these five blocks, three blocks have been selected at randomly by lottery method Dondi, Dondilohara and Balod. Sugarcane producer's farmer in three blocks selected at random of which 40 from Balod block, 40 from Dondilohara and 20 from Dondi block selected for study. Total 100 sugar cane produce farmer's selected for study.

Collection of data:

Proposed research work is carried out to know whether Danteshwari maiya sahakari sugar mill karkabhat is profitable to farmers of Balod dist. Effectiveness of sugar mill in employment generation and farmers are encouraged for sugar canes cultivations or not.

Primary Data:

This research is related to role of study of cooperative sugar factory karkabhat to the development of sugar cane farming trying to know beneficial or not to the farmers and role of development and employment. Randomly selected farmers of 3 blocks (Balod, Dondilohara and dondi) of Balod district and information collected through direct interview and questionnaire. Conclusion derived from analysis of collected data.

Secondary data:

In this research, secondary data taken from collected and published report of sugar factory and different related web sites.

Hypothesis:

1. Farmers are encouraged for cultivation of sugar cane through Danteshwari maiya co- operative sugar mill.
2. Farmers of Balod district are benefiting by Danteshwari maiya co operative sugar mill.
3. Producer of sugar cane are receiving worth of their product timely from co operative sugar mill.

Area of study:

This study related to procedure of by Danteshwari maiya co operative sugar factory. Along with farmers of Balod district nearby farmers from Durg, Dhamtari, Bemetara and Rajnandgaon district also supply sugar cane to co-operative sugar mill. But my study is limited to Balod dist. Producers of sugar cane of Balod district who supply there product .So my study is limited to those producers from Balod district who are supplying there product to sugar mill.

Limitations of study:

- As only Balod district dealt in survey so it does not represent the view of the Chhattisgarh state.
- Size of the research may not be substantial.
- There was lack of time on the part of respondents.
- The survey was carried through questionnaire and the questions were based on perception.
- Complete data was not available due to sugar factory privacy and secrecy.

Objective of sugar mill:

1. To manage education and training programs to its member.
2. To counsel and help of its member for its member for management and other works.
3. To start information services to facilitate its member.
4. To publish literature and other document o facilitate its members.
5. To perform any other activity by which is necessary to achieve its objectives and development of sugar mill and it's by product mills.

Working procedure of mill:

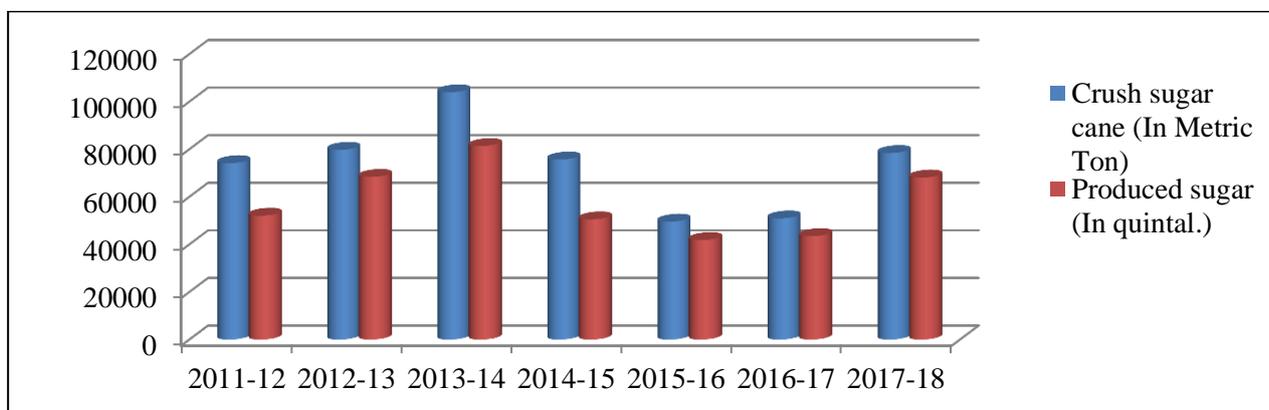
1. Acquisition of sugar cane:- Sugar cane is supplied to by Danteshwari Maiya Co-operative sugar mill from dist Balod, Durg, Dhamdha, Dhamtari, Patan, Rajnandgaon, Dongargadh etc.
2. Price determination of sugar cane:-Minimum support price is determined by government .Producers sells their product on that rate.
3. Payment to farmers:- Farmers are paid for their sugar cane by Bank a/c.

Production of sugar from sugar cane

(2011-12 to 2017-18)

Year	Crush sugar cane (In Metric Ton)	Produced sugar (In quintal.)	Recovery (in percent)
2011-12	74141.36	52075.00	7.02 □
2012-13	79743.19	68360.00	8.66 □
2013-14	103931.34	81332.00	7.92 □
2014-15	75670.53	50515.00	6.79 □
2015-16	49553.61	41825.00	8.69 □
2016-17	50918.90	43455.00	8.53%
2017-18	78398.93	68090.00	8.68%

Source: Danteshwari maiya co-operative sugar factory limited karkabhat



By inspection of above table it is clear that crushed sugar can 74141.36 Metric ton in year 2011-12 ,79743.19 Metric ton in year 2012-13, 103931.34 Metric ton in year 2013-14, 75670.53 Metric ton in year 2014-15 ,49553.61 Metric ton in year 2015-16, 50918.90 Metric ton in year 2016-17 and 68090 Metric ton in year 2017-18. In year 2013-14, 103931.345 Metric Ton sugar cane was crushed it was highest.

Production of sugar in year 2011-12 5205 quintal, 2012-13 68360 Quintal, 2013-14 81332 Quintal, 2014-15 50515.09 Quintal, 2015-16 41825 Quintal, 2016-17 43455 Quintal, 2017-18 68090 Quintal in year 2013-14, 81332.8 Quintal of sugar was produced. It was highest among study years.

Recovery percentage of sugar from sugarcane was 7.02 □ in 2011-12, 8.66% in 2012-13, 7.92% in 2013-14,

6.79% in 2014-15, 8.69% in 2015-16, 8.53% in 2016-17, 8.68 % in 2017-18. Recovery percentage of sugar from sugarcane was 8.69% which was highest in 2015-16. While in year 2014-15 it was lowest at 6.9%. The sugar recovery in sugarcane varies from state to state average sugar recovery in the country is 10.25%. But the average rate of this factory is less than average rate of a country.

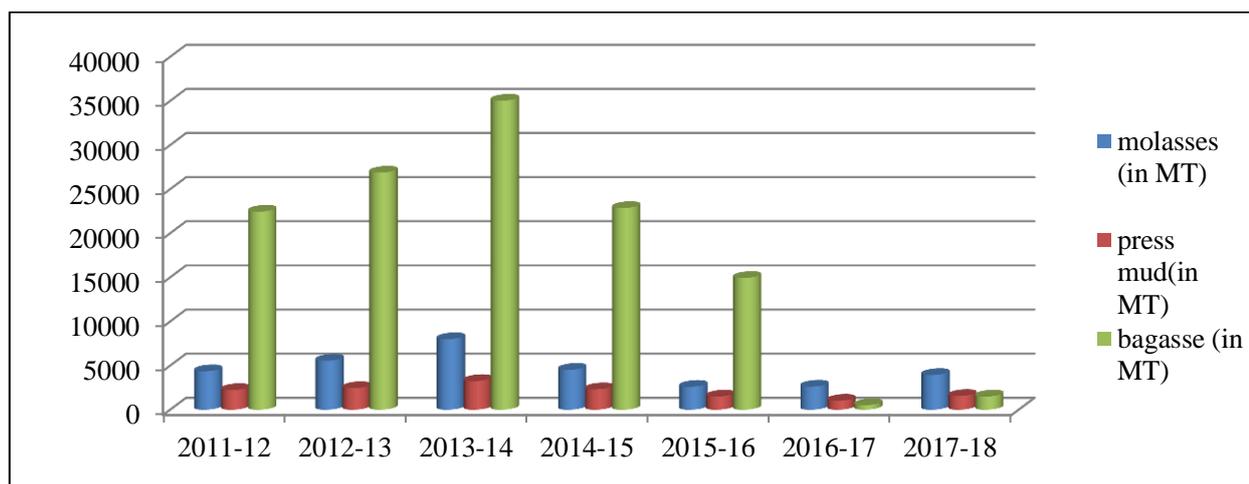
By products of sugar

(2011-12 to 2015-16)

(Figure in Metric ton)

By Product	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Molasses (in MT)	4360.00	5560.00	8000.00	4530.00	2600.00	2620	3940
press mud (in MT)	2231.65	2448.11	3253.05	2315.51	1496.51	1018	1560
Bagasse (in MT)	22457.41	26881.43	35035.25	22860.0	14940.41	515.58	1500

Source: Danteshwari maiya co-operative sugar factory limited karkabha



1. It is clear by inspection of above data that production of molasses was 4360 Metric ton, 5560 Metric ton, 8000 Metric ton, 4530 Metric ton, 2600 Metric ton, 2620 Metric ton, and 3940 Metric ton in succeed of year 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, and 2017-18. Highest production of molasses was in year 2013-14 which was 8000 Metric ton.
2. Production of press mud was 2231.65 Metric ton, 2448.11 Metric ton, 3253.05 Metric ton, 2315.51 Metric ton, 1496.51 Metric ton, 1018 Metric ton and 1560 Metric ton in succeeding year 2011-12, 2013-14, 2014-15, 2015-16, 2016-17 and 2017-18 highest production of was 3253.05 Metric ton in year 2013-14.
3. Similarly production of bagasse was 22457.41 Metric ton, 26881.43 Metric ton, 35035.25 Metric ton, 22860.06 Metric ton, 14940.41 Metric ton , 515.58 Metric ton, 1500 Metric ton was in succeeding year 2011-12, 2013-14, 2014-15 2015-16 2016-17 and 2017-18 and Highest production of bagasse was 35035.25 Metric ton in year 2013-14.

Production of Brown sugar

(2011-12 to 2015-16)

Year	Brown sugar in Quintal
2011-12	1220.00
2012-13	680.00
2013-14	800.00
2014-15	25.00
2015-16	1326.00
2016-17	935.00
2017-18	840.00

Source: Danteshwari Maiya cooperative sugar factory

By inspection of above table it is clear that production of brown sugar was 1220 Quintal, 680 Quintal, 8000

Quintal, 25 Quintal 1326 Quintal 935 Quintal, and 840 Quintal in succeeding year 2011-12, 2013-14, 2014-15, 2015-16, 2016-17, and 2017-18. Highest production of brown sugar was 1326 Quintal in year 2015-16 and lowest production was 25 Quintal in year 2014-15.

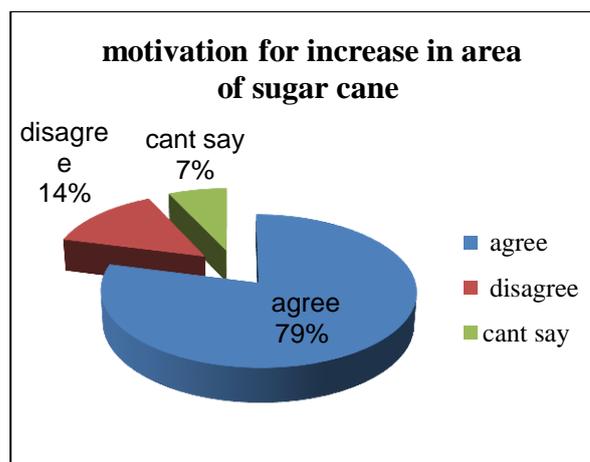
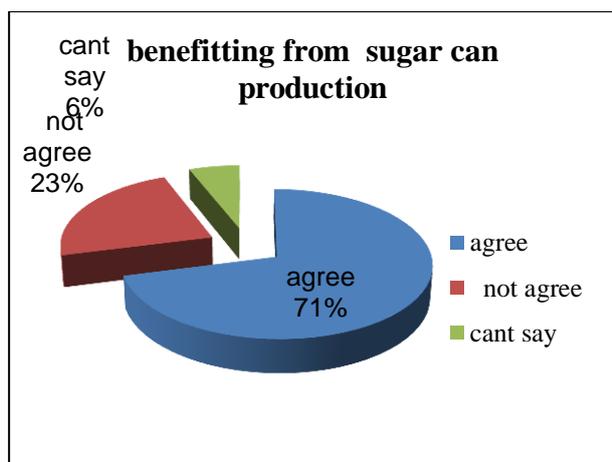
OBSERVATIONS AND DISCUSSIONS:

From the field survey report the following parameters / indicators conclude the observation and analysis.

Parameters / Indicators of Analysis

benefiting from sugar can production	71% (agree)	23% (disagree)	06% (cant say)	100
motivation for increase in area of sugar cane crop	79% (agree)	14% (disagree)	07% (cant say)	100
Worth of sold product received timely	69% (timely)	27 % (delay)	04% (cant say)	100
Satisfaction from working process of sales in sugar factory	53% (satisfied)	38% (unsatisfied)	09% (cant say)	100

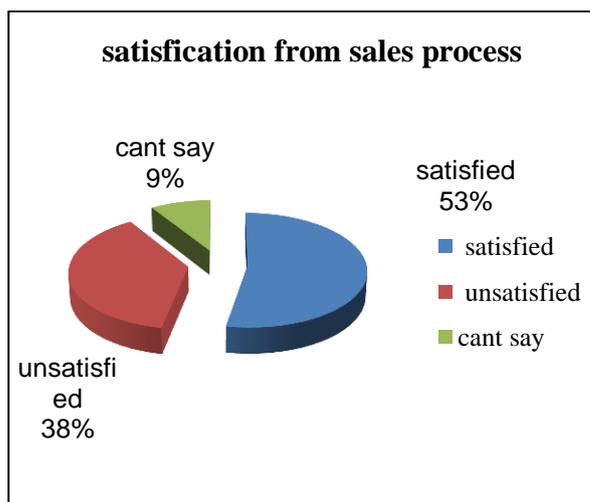
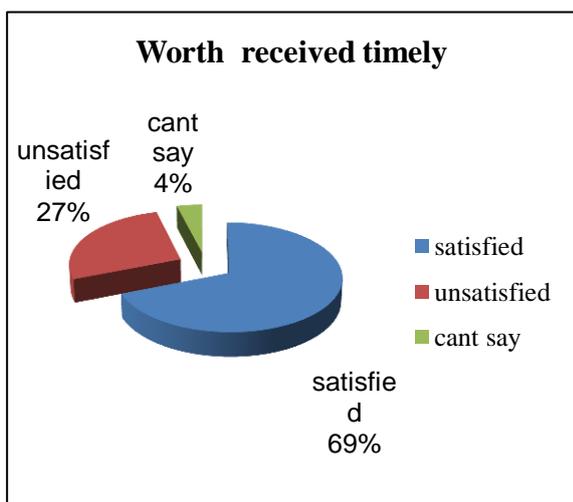
Source: Primary data collected from fieldwork (Survey Data)



CONCLUSION:

By inspection of above table it is clear that 71% farmers agree that they are getting advantage from cultivation of sugar cane .23% are not agree with this while 6% of farmer’s are neutral. So it can be concluded that farmer’s are being benefited by cultivation of sugar cane.

Above table depicts that 79% of farmers are agree that they are motivated to increase area of sugarcane crop, 14% of farmers are disagree this fact, While 07% farmers are neutral. So it can be concluded that in place of traditional crop (rice) farmers are motivated to increase area of sugar cane crop.



Above table depicts that 69% of farmer's are receiving worth of sugarcane timely while 27% of farmers denies above fact while 4% farmers are neutral. It can be concluded that there is a need to improvement in payment method.

Above table depicts that 53% farmers are satisfied while 38% farmers are not satisfied with procedure of sugar mill and 9% of farmers are neutral in above fact. It can be concluded that farmers are not satisfied with selling procedure of sugar cane. There is a need of improvement in selling procedures of sugar cane.

To utilise its full capacity sugar mill requires at least 4000 Hectares of area. But at present only 1500 to 1700 Hectares of area is providing sugar cane to mill. It is increasing but its rate is very slow. So there is a need of awareness program for farmers of Balod district so that sugar cane supply become absolute. If area of production of sugar cane increases than following advantages can be pointed out:

1. Factory can work in its full capacity than Factory will be in state of profit.
2. Farmers will benefit.
3. Sugar production increases in state.
4. Employment will increase.
5. By product factories can be established.
6. Movement of cooperative will get power.
7. Development of Balod district will get support.

Problem (Weakness) of sugar factory:

1. The farmer has to face many difficulties if he is not able to get enough credit at the right time.
2. Farmers are not available for modern and advanced agricultural technology.
3. The support price set by the government is also less as compared to the cost of production of sugarcane due to discontent among farmers.
4. It is also a problem for the farmers not to get the price of sugarcane sold at the right time.
5. Sugarcane sales take two to three days, so that farmers have to face many difficulties.
6. Farmers have to face many difficulties due to the absence of the best practices of lodging in Sugar Factory at the time of sale of sugarcane.
7. The availability of pesticides and medicines to sugarcane growers is not available by the Agriculture Department.
8. The capacity of the factory is 1250 MT per day of sugarcane crushing but sufficient quantity of sugar cane is not available every day in due to lack of sugarcane production, the capacity of the factory is not fully utilized, due to which the factory is not in status profit.
9. Most temporary employees are appointed in the factory every year and no training facility is also being made available to them.
10. High quality of sugar is not produced in mill.
11. Sugar cane productions in the area has not been expanded according to the capacity of the factory
12. Lack of communication between farmers and factory management is not a critical meeting of farmers and factory management.

SUGGESTION:

1. Farmers should be provided the facility of training for agriculture in a modern way rather than traditional agriculture.
2. Loans should be provided at the right time and in sufficient quantity of farmers
3. In order to increase the area of sugarcane, the farmers should be encouraged through all the agricultural development officers and employees.
4. To sell sugarcane, farmers should be called by giving a token to sugar factory, so that they will not face any difficulties.
5. Pesticides and sedative drugs should be made available to farmers by the Agriculture Department at a lower cost.

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