Research Article PROBLEMS FACED BY SUGARCANE GROWERS IN GUJARAT STATE

CHAUDHARI V.P.* AND TRIVEDI S.M.

Post Graduate Institute of Agri-Business Management, Junagadh Agricultural University, Junagadh, 362 001, Gujarat, India *Corresponding Author: Email - viral6929@gmail.com

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Abstract: The study was intended to identify the problems faced by the sugarcane growers in Gujarat state. A total 240 farmers were selected by the random sampling method from Gujarat state. When attempting to rank the problems, Garratt's ranking method was used. The result revealed that the majority of farmers faced low rate for sugarcane with a 80.24 mean score (rank I) followed by the high labour charges and non-availability of labour with mean score 71.34 (rank II) and 66.53 (rank III) dishonest in weighing at weigh bridge. Other significant issues were high cost of transportation, delay in payment of instalments, unnecessary deductions in the name of toll, charges, lack of mechanical harvester, diseases and insect pest, lack of regular visit and guidance by expert, lack of training facility on sugarcane cultivation and non-availability of credit at proper time and as required quantity.

Keywords: Sugarcane growers, Sugar Co-operatives, Problem analysis, Garratt's ranking

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Introduction

In a predominantly agricultural country like India, the role of agro-based industries, especially sugar co-operatives are highly prominent. The sugar industry has a great significance that cannot be undervalued in its relation to the agricultural and industrial economy of rural India. It is an industry that affects agriculture fundamentally. Therefore, the expansion of the sugar industry in India is crucial for the upliftment of the socio-economic life of India. The sugar industry has provided the most effective instrument for carrying progressive trends into the countryside. The most outstanding feature of the industry is the vital link between the factory and the cultivators whose interests and well-being are interdependent. No other agro-based industry can compete with it in having a great impact and close connection between the agriculturists and the factory owners. Obviously, the sugar industry is agro-industry par excellence and consequently serves as a very important vehicle for carrying progressive influences into the countryside of India. Gujarat accounts for about 3 per cent of India's production of sugarcane. The major sugarcane growing districts in Gujarat are Surat, Navsari, Bharuch, Tapi, Narmada, Valsad, Gir Somnath and Vadodara, which together contributes to about 99.57 per cent and 99.64 per cent of total area and total production of sugarcane respectively. Sugarcane is main cash crop of South Gujarat [1-3].

Material and Methods

In this study, at the first stage, total twelve sugar co-operatives was selected purposively that are active and in working conditions from total 30 sugar co-operatives society. At the second stage, 240 farmers in all were chosen for the study. The information on sample distribution is provided in [Table-1] below.

To identify the problems of sugarcane growers, a questionnaire was designed covering the important aspects of the sugarcane cultivation. Garret's ranking method was used which help to convert theoretical data into the numerical form. The major advantage of this technique as compared to simple frequency distribution is that here problems are arranged based on their importance from the point of view of respondents.

Garrett's formula for converting ranks into a percent is given by, Percent Position = $(100 (R_{ij}-0.5)) / N_j$ Where.

R_{ij} = Rank given for ith item by jth individual N_i = Number of items ranked by jth individual

The relative position of each rank obtained from the above formula is converted into scores by referring to the table given by Garrett (transmutation of orders of merit into units of amount or scores) for each factor scores of all individuals have been added and then divided by the total number of respondents for the specific factor (problems) attributes.

Result and Discussion

The problems faced by the sugarcane growers are based on their experience, the facilities given by selected co-operative societies and their personal expectations from the existing co-operative society's structure. The problems faced by farmers in co-operative societies are given in [Table-2]. The highest mean score (80.24) was observed in case of problem of low rate for sugarcane. Majority of farmers said that comparatively very low price of sugarcane was offered by sugar cooperatives of Gujarat state. The second problem was the high labour charges and non-availability of labour with mean score 71.34. It indicates that the sugar cooperative society charged a high price for sugarcane harvesting and other labour work. Third major problem was dishonest in weighing at weigh bridge with mean score 66.53. Farmers' finished goods are sold based on their weight, and deceptive manipulation of the quantities delivered results in significant financial losses. With a mean score 59.37, the fourth most important problem faced by farmers in co-operative societies was the high cost of transportation. Fifth problem was waiting in a long queue for harvesting with mean score 57.22. Farmers have to wait in a long queue to harvest because co-operative society harvesting cards are issued so early and harvesting normally takes two to three months to finish. Therefore, crop quality and quantity would both be affected. Other significant issues were delay in payment of instalments, unnecessary deductions in the name of toll, charges, lack of mechanical harvester, diseases and insect pest, lack of regular visit and guidance by expert, lack of training facility on sugarcane cultivation and non-availability of credit at proper time and as required quantity.

Problems Faced by Sugarcane Growers in Gujarat State

Table-1 The details of the selection of sample size

SrNo	Name of sugar co-operative	No. of Villages	No. of Farmers from each village	No. of Farmers
1	Bardoli	4	5	20
2	Madhi	4	5	20
3	Kamrej	4	5	20
4	Mahuva	4	5	20
5	Sayan	4	5	20
6	Chalthan	4	5	20
7	Valsad	4	5	20
8	Dadaria	4	5	20
9	Pandvai	4	5	20
10	Vataria	4	5	20
11	Gandevi	4	5	20
12	Dharikheda	4	5	20
	Total	48		240

Table-2 Garret's ranking of problems faced by sugarcane growers of Sugar Co-operatives in Gujarat, (n=240)

SrNo	Particulars	Total score	Mean score	Rank
1	Low rate for sugarcane (Not getting satisfactory price from the produce)	19258	80.24	I
2	Waiting in a long queue for harvesting	13733	57.22	V
3	Dishonest in weighing at weigh bridge	15967	66.53	III
4	Unnecessary deductions in the name of toll, charges, etc.	11842	49.34	VII
5	Delay in payment of instalments	12815	53.40	VI
6	High labour charges and non-availability of labour	17121	71.34	ll l
7	High cost of transportation	14248	59.37	IV
8	Lack of mechanical harvester	10561	44.00	VIII
9	Lack of training facility on sugarcane cultivation	6517	27.15	XI
10	Lack of regular visit and guidance	7427	30.94	Х
11	Non-availability of credit at proper time and as required quantity	5271	21.96	XII
12	Diseases and insect pest	9622	40.09	IX

It can be concluded from the given table that the farmers faced problems related to price, excessive labour costs, lack of labour, dishonest weighing at the weighbridge, and non-availability of labour. Hebbal (2015) observed the same result for problems of sugarcane growers in Karnataka's Kalaburgi district.

Conclusion

The use of resources in the Sugar industry is spatially organised by the countries that produce sugar and the countries that buy or trade sugar. The producing countries are normally tropical countries and they are sometimes developing countries. This ensures that the consumption and use of sugar which is in demand for more production. The linkages of sugar are led by the farmers who farm the sugarcane product, the workers that work in the refining process, the engineers and the exporters.

Sugarcane farmers in the study area experienced a number of problems, of which, difficulty in getting satisfactory price from the produce, high cost of transportation and dishonest in weighing at weigh bridge were significant. Other significant issues were high cost of transportation, delay in payment of instalments, unnecessary deductions in the name of toll, charges, lack of mechanical harvester, diseases and insect pest, lack of regular visit and guidance by expert, lack of training facility on sugarcane cultivation and non-availability of credit at proper time and as required quantity.

Suggestions

The most important recommendation is to proper review of government's policy of FRP/MSP. This need to be increased.

Sugarcane growers need to be educating on recent techniques of cultivation like Israel model.

There should be Option for factory's transportation service.

It is imperative that sugarcane mills, industries and co-operatives buy cane as soon as it is harvested and without losing weight.

As per sugarcane Control Act 1966, every sugar mills / factories/ co-operatives should follow the FRP fixed by government and make payment within 15 days of harvested

The government should construct sugarcane research and development facilities in each district of each state to assist sugarcane growers.

There should be some systems for providing suitable seeds, fertilizers and pesticides to the member farmers.

Application of research: The study of sugarcane growers' problems will be

useful to farmers for its better development and expansion of enterprise.

Research Category: Agri-Business Management

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**Research Guide or Chairperson of research: Dr S. M. Trivedi

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Study area / Sample Collection: Gujarat state

Cultivar / Variety / Breed name: Sugarcane

Category of sugarcane growers name: On- farm, Off-farm, Commercial farmers

Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

Ethical Committee Approval Number: Nil

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