Research Paper Management

An Empirical Study on Management Practices in Cooperative Sugar Factories of Gujarat

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ABSTRACT

The cooperative sugar factories are agribusiness units incorporated under cooperative form of business organizations in Gujarat. Sugar being an essential commodity, this industry enjoys the benefits of 'sellers markets'. They aren't required to go out in the market in search of customers. In this industry the competition is for raw materials as there are several alternatives uses of the cane sugar. The mind sets of management and employees of this industry is more 'production oriented' rather than 'productive oriented' and thus management function is being practiced merely as an administrative function rather than the strategic one. Since long researchers, practitioners and policy makers have studied various technical aspects of this industry from time to time so as to increase the production efficiency of sugarcane and sugar. However there is paucity of research on management aspects of this industry. In modern times 'management, is being treated as a technology and one of the most fundamental factor of production. Thus in this paper the researcher wants to study and know the various professional practices and procedures of management adopted in managing the cooperative sugar factories of Gujarat.

KEYWORDS Management Practices, Sugar Factories, Management Style

BACKGROUND OF THE RESEARCH:

The art of management has come of ages and we all have been practicing management in our daily lives. During the last decade as we have witnessed a paradigm shift in management of enterprises from production based to productive and efficiency based. In modern times 'Management' is treated as a technology and first and the fundamental factor of production.

The cooperative sugar factories in our country have been doing a commendable job for all these years in terms of uplifting the socio-economic conditions of its stakeholders. However it is at the crossroads now in the present era of liberalization, privatization and globalization in a market oriented economy. Old values and relationships have been overpowered by new values and relationships. The earlier regime of 'Command and Control' is changing at a faster pace. The command and control has shifted to the market oriented forces from the hands of the cooperative forces. Customers and profitability have become the focus. Some of the leaders of the cooperatives movement still feel that cooperatives are insulated and the members will not change their loyalty. But they fail to understand that the economic interest of the people has now become primary and social interest has become secondary, in the background of 'Consumerism' in a 'Market Economy'. The cooperative sugar factories of India in general and Gujarat in particular are facing several challenges in terms of its management and governance. In spite of the giant economic strength of this sector, it has not been given due attention as far as its management is concerned.

There are very few studies that have studied the general management aspects of cooperative sugar factories. Majority of the studies carried out in the past deals with enhancing the technical or agricultural efficiencies of sugar factories. It was thus felt that there was a need to find out whether various functions of general management like planning, organizing, decision making, controlling etc are performed effectively and efficiently. Therefore in this paper an attempt has been made to study the various general management practices and procedures applied in managing the cooperative sugar factories of Gujarat.

BRIEF PROFILE OF COOPERATIVE SUGAR FACTORIES OF GUJARAT:

The genesis of cooperative sugar factory in Gujarat can be traced since 1956 when Bardoli Pradesh Sahakari Khand Udyog Sangh, Bardoli, District Surat was incorporated. As on 31st March 2010, twenty six sugar factories were registered in state under cooperative model. Out of these, only seventeen factories are operational. Fifteen factories in South Gujarat and two factories in Saurashtra Zone were operational during the study period. Sugar cane in the state is cultivated in almost 1.50 to 2.00 lakh hectares of cultivable land. The Gujarat Sugar Industry has 65,000 T.C.D. total installed capacity as on date. For the crushing season 2008-2009, the industry crushed 94.07 lakh tonnes of sugar cane, producing 10.09 lakh tonnes of white sugar with 10.854 percent recovery. During this crushing season, 4.15 lakh tonnes of molasses was also produced. The state sugar industry also have nine distillery units installed and operational to manufacture 278 lakh litres of rectified spirit and 218 lakh litres of absolute alcohol. This industry gives full time employment to approximately 20,000 employees and during the crushing season this industry indirectly gives employment to almost 3 lakh people. Majority of sugar factories in Gujarat are located in rural areas and that too in tribal inhabited areas. Almost 3 lakh farming families, who are small and marginal farmers, are associated with sugar industry of the state. The cooperative sugar factories also runs hospital, schools, colleges and other social activities for the benefit of its members and people inhabiting within their cane procuring zones.

LITERATURE REVIEW:

Davis (1999) studied and explored the relation between current management thinking in a broad sense and the particularities of managing a cooperative enterprise. In the author's words "managers managing cooperative organizations should have access to not only the best and latest management techniques, methodologies and strategies but they should also understand how to apply them in the context of the cooperative values and purposes that their organizations serve". Datta et. al. (2000) conducted a study on "Economic Efficiency of Indian Sugar Industry" and examined three fundamental managerial functions-namely, procurement, processing and marketing and recommended several policy measures to be taken by industry and government for making it competitive in the globalized world. Lopoyetum et. al. (2003) discussed various fundamental management dimensions of cooperatives. According to them professionalization and modernization of operations of cooperatives involves a wide range of management strategies which is capable of solving problems of various sectors of

cooperative. Rayudu (1999) has highlighted the professionalization of cooperative management as an emerging discipline for practicing managers. He discussed the characteristics of a profession and matched it with various functions that a cooperative manager performs. In line with this, many institutions have been established at district, state and national level to impart professional management education with special reference to cooperatives. Kamat (1966) in his PhD. dissertation titled "Management of Cooperative Sugar Factories in Maharashtra" studied 12 cooperative sugar factories in Maharashtra and concluded that large gap remains in what is being accomplished and what would be done with higher standards of cooperative business management practices. Chockalingam et. al. (2007) in their paper highlighted the industrial sickness in the selected cooperative sugar mills in Tamil Nadu, through financial analysis especially using ratio analysis. The causes of industrial sickness are analyzed covering three different aspects namely financial, operational and managerial and suggested revival measures for cooperative sugar mills in Tamil Nadu. Ansari (1984) in his paper highlighted the application of effective costing techniques to save the cooperative sugar factories from losses and to make them economically and commercially viable units. He suggested using techniques like budgets, standard costing system, material and inventory control, management reporting system etc.

OBJECTIVES OF THE STUDY:

1. To study and analyze various professional management practices and procedures adopted in managing cooperative sugar factories of Gujarat.
2. To evaluate and understand the extent of authority delegated to managing directors.

HYPOTHESIS FOR THE STUDY:

1. The general management practices and procedures adopted by management of cooperative sugar factories differ significantly from each other.
2. The authorities of managing directors differ significantly across the industry.

RESEARCH METHODOLOGY:

The Cross-Sectional descriptive research design was used for conducting this research work. The data for this research paper had been taken from primary data collected from thirteen cooperative sugar factories of Gujarat during June 2008 for the doctoral thesis that was prepared for submission to Department of Business Management, Saurashtra University, Rajkot, Gujarat.

Sampling Frame:

The directory/annual report of Gujarat State Federation of Cooperative Sugar Factories Ltd., Gandhinagar had been considered as sampling frame to identify target population. In a cooperative sugar factory, Managing Director is the chief operating officer, who is also the member of board of directors and mainly responsible for carrying out all the managerial functions of the factory. Therefore managing director and his team of key posts officers formed the sampling unit.

Sampling Method:

Judgemental sampling method had been used for the purpose of data collection. The samples had been selected taking into consideration following factors.

1. Sugar factories should be in cooperative form of organization and registered in Gujarat under 'The Gujarat Cooperative Societies Act, 1961'.
2. Factories should have plant capacity ranging between 1,250 to 10,000 TCD and it should be located either in Saurashtra or South Gujarat zone.
3. It should be engaged in manufacturing of white sugar.
4. Factories should be functional and not closed, liquidated or on the verge of liquidation and required data was available for last five years or at least for last four years.

Sample Size:

According to the annual report/directory of Gujarat State Federation of Cooperative Sugar Factories Ltd., Gandhinagar, 17 cooperative sugar factories had actually been functional during the study period. Hence, out of 17 sugar factories, 13 factories, which operated during different crushing season and having different plant size and located in different sugar zones of Gujarat comprises of actual sample.

Data Collection:

Structured questionnaire was designed keeping in mind the objectives of the study for collecting primary data. Nominal and Likert scale were used to recorded and measure the responses. The questionnaire was pre-tested before final use. Some senior professionals affiliated to cooperative sugar factories in Gujarat also evaluated and approved the questionnaire. The questionnaire was sent to thirteen cooperative sugar factories followed by personal interaction of the researcher with managing directors and officers of all these factories. All the thirteen factories responded by completely filling up the questionnaire. The managing directors and officers of these factories also positively responded during the personal interaction of the researcher at their plant sites. Secondary data was collected from the libraries of management and cooperative institutions located in the state.

Data Preparation & Analysis:

The collected data was edited, coded, tabulated, grouped and organized according to the requirement of the study and than entered into SPSS for analysis. For analyzing the hypothesis t test was used.

Limitations of the Study:

The study was focused on one single state, viz., Gujarat. The analysis is based on the primary data generated through questionnaire and collected from the key post officers of the factories and as such its findings depend entirely on the accuracy of such data. Different experts have different views on evaluating attitude and general practice of the factories hence the views used in the study for the present purpose can not be treated as the absolute and perfect.

ANALYSIS OF DATA:

The basic general management functions like planning, organizing, decision-making and controlling performed by managing directors and key post officers was studied. The degree of authority of MDs was also studied. The application of t-test to examine the differences in general management practices and procedures does not show significant differences accept for one function. Table 1 show that management practices in cooperative sugar factories of Gujarat are almost similar and do not differ significantly. As management has to be flexible and tailor made to suit the needs of respective factories, every factory have crafted, designed, developed and adopted procedures and practices suitable to their environment and the factory. This is evident from Table 1 where significance level of p value 0.000 has been achieved where $p \leq 0.05$ at 95% confidence level for all the managerial practices like planning process, evaluation of results, preparation of budgets, communication processes, delegation of authority to various department heads, preparation of financial statements and developing relevant policies and procedures for smooth conduct of routine administration and to make the operational management of the sugar factory very efficient and effective. However significant difference is observed for having in place current job description for each position in the factory. This is a serious issue as duplication of efforts leads to higher labour cost per unit of product. The reason for this is that cooperative sugar factories have not realized the importance of modern HR practices. The current HR practices are traditional where by HR department is more involved in HR administration and record keeping. In fact all the units have a 'Time Office' rather than full fledge HR department. The majority of the staff of Time Office is not professionally qualified to handle the modern HR functions.

The application of t-test to examine the differences in authori-

ty of MD's does not show significant differences for certain routine type of decisions. This is evident from Table 2 where significant level at 95 % confidence level for authority to give incentives to the subordinates is 0.013, significant level for other authorities like selection of new techniques of work, to manage funds of the factory, to set standards and targets of performance, selection, designing, implementation of control system and authority in planning and scheduling of operations is 0.000 ($p \leq 05$). However authority for decisions like hiring and firing of employees, purchasing of necessary supplies and decisions related to capital expenditure are insignificant. This is evident from Table 2 as significant levels for all these three authority areas is 0.131, 0.055 and 0.209 respectively where is $p \geq 0.05$.

CONCLUSIONS:

The results of the study indicates that many of the scientific tools and techniques of modern management practices are used for performing general managerial functions in cooperative sugar factories of Gujarat for majority of managerial decision making areas. Although cooperative sugar factories in state have not become very professional in their management approach as compared to private sector companies, yet many factories have excellent performance track records and have manage to achieve desired results. However modern HR practices are neglected and management of cooperative sugar factories of the state too failed to understand the strategic role that HR can play in changing agri business environment. Thus HR functions needs a fresh revamping so that employees inefficiencies and redundancy if any can be removed and improve the efficiencies of the factories to the fullest extent.

MD's are also well equipped with the requisite level of authority for majority of decision areas. Authority of these officers has been restricted for certain crucial areas as these decision areas may have long term financial and social implications. The Principles of Scientific Management also approves this point as group decision making for strategic and crucial areas is more effective and sound rather than individual decision making.

ANNEXURE

Table 1

One-Sample Statistics and one Sample't' test

S. No	Variable	N	Mean	Std. Deviation	Std. Error Mean	't' Value	df	Sig. (2-tailed) 'p'
1	Sufficient vision provided	13	4.7692	0.43853	.12163	14.546	12	0.000
2	Effectively involved in planning process	13	4.4615	0.51887	.14391	10.156	12	0.000
3	Plans implemented & results evaluated	13	4.2308	0.59914	.16617	7.407	12	0.000
4	Budget Process	13	3.6154	0.76795	.21299	2.889	12	0.014
5	Quality information provided	13	4.6154	0.50637	.14044	11.502	12	0.000
6	Atmosphere of trust	13	4.6923	0.63043	.17485	9.679	12	0.000
7	Members communicated effectively	13	4.7692	0.43853	.12163	14.546	12	0.000
8	Problems shorted out quickly	13	4.8462	0.37553	.10415	17.725	12	0.000
9	In place current job description	13	3.0769	0.86232	.23916	0.322	12	0.753
10	Authority delegated to Dept. Heads	13	4.3077	0.48038	.13323	9.815	12	0.000
11	Monthly Financial statement prepared	13	4.3077	0.75107	.20831	6.278	12	0.000
12	Year end financial statements accurate to month end FS	13	4.1538	0.68874	.19102	6.040	12	0.000
13	Relevant policies & procedures are in place	13	4.6154	0.50637	.14044	11.502	12	0.000

Table 2

One-Sample Statistics and one Sample't' test

S. No	Variable	N	Mean	Std. Deviation	Std. Error Mean	't' Value	df	Sig. (2-tailed) 'p'
1	Authority to give incentives to sub-ordinates	13	3.6923	0.85485	.23709	2.920	12	0.013
2	Hiring & firing of employees	13	3.5385	1.19829	.33235	1.620	12	0.131
3	Authority in purchasing of necessary supplies	13	3.6154	1.04391	.28953	2.125	12	0.055
4	Authority to make capital expense decisions	13	2.6154	1.04391	.28953	-1.328	12	0.209
5	Authority in selection of new technique of work	13	4.3077	0.85485	.23709	5.516	12	0.000

6	Authority to manage funds	13	4.0000	0.57735	.16013	6.245	12	0.000
7	Authority to set standards & targets of performance	13	4.5385	0.66023	.18311	8.402	12	0.000
8	Authority in selection, design, implementation of control system	13	4.5385	0.66023	.18311	8.402	12	0.000
9	Authority in planning & scheduling of operations	13	4.7692	0.43853	.12163	14.546	12	0.000

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