

## AN EMPIRICAL STUDY ON COMMUNICATION SYSTEM IN SELECTED COOPERATIVE SUGAR FACTORY

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### ABSTRACT

This research paper highlights the importance of communication system in selected sugar factories. Human resource is one of the most vital assets of an organization. It is the people who make other resources moving, they perform various activities in different functional areas. Human resource handles all physical and financial resources in an organization. Without their proper communication and efforts, these non-human resources remain idle. The sugar industry plays a very significant role for the development of rural area. The economy of Western Maharashtra and its vicinity is highly dominated by sugar industry situated in this area. The role of human resource work force managerial, supervisory and below managerial level staff and its contribution for the development of sugar factories, the research study deals with communication system adopted by the selected cooperative sugar factories.

**KEYWORDS:** Communication System, Human Resource, Significant Role, Sugar Industry, Rural Development

### INTRODUCTION

Sugar industry is the second largest industry after the textile industry in India. It is playing a very prominent role for the development of Indian economy. It is believed that India is the original home of sugarcane. Now a days sugar production and consumption is expanded dramatically, so numbers of people are getting employment opportunities directly and indirectly from this sector. The most outstanding feature of the industry is its vital link between the sugar factory and the cultivators whose interests are inter-dependent.

Sugar industry is labour intensive industry employing more percentage of population of the society, covering both organised and unorganised human resources. As in case with any other industry, sugar industry employs multi-skilled workers at different levels of management. It is of prime importance from the management perspective to utilize the skills of the employees in optimum manner.

Communication system is concerned with human being employed in the sugar factories it may be in private or public or cooperative sector. It deals with the process of developing people, in accordance with their aspirations and to suit the organizational needs. Human resource can be used as a means for developing other resources in a proper manner. Therefore, effective communication system affect the overall performance of the organisation and in sugar industry human resource is playing vital role. Sugar industry playing very significant role for the development of rural area.

The economy of western Maharashtra and its vicinity is highly dominated by sugar industry situated in this area. Hence, the detailed research study of selected sugar factories will be an advantage to the development of communication system of selected sugar factories.

## REVIEW OF LITERATURE

The word “communication” is derived from “Communis” (Latin), meaning “Common”. It stands for a natural activity of all human beings to convey opinions, feelings, information and ideas to others through words (written or spoken), body language or signs. Geroge Varman in his book *Effective Communication of Ideas* defines effective communication as “purposive interchange, resulting in workable understanding and agreement between the sender and receiver of a message”. (Business Communication- P. D. Chaturvedi and Mukesh Chaturvedi–2004).

In modern connotation, communication is not mere the exchange of the idea and thoughts and is said to be, “The total sum of all aspects that individuals do when they want to create a clear-cut understanding in the receivers’ minds and persuades them to act or react in desired manner.”

Communication is considered to be the back bone of the organizations. The entire process of inputs and outputs of organizations is likely to be mediated through Communication. The structure, extensiveness, and scope of organizations are almost entirely determined by communication techniques (Bernard, 1938). Communication plays an important role in knowledge management; particularly in minimizing the “silos of knowledge” problem that undermines an organizations potential (S. Greegard 1998). Communication has proven as elusive as the unicorn.

The noise level has gone up so fast that no one can really listen any more to all that babble about communication. But there is clearly less and less communicating. The communication gap within in the institutions and groups in society has been widening steadily—to the point where it threatens to become an unbridgeable gulf of total misunderstanding. (Peter Drucker 1977).

Communication is significant as it serves four major functions within a groups or organization-control, emotional, motivation expression and information. (Stephen P. Robbins 1993). Various components of an organization and also between organizations, such as its size, it’s differentiated structure and its ability to handle decisions in a Company coordinates manner are supposed to relate each other at least in part through communication (George R. Terry and Stephen G. Franklin 1987).

Communication refers to the process by which information is transmitted and understood between two and more people. We emphasize the world understood because transmitting the sender’s intended meaning is the essence of good communication. Corporate leaders spend almost 80 % of their day communicating, so it communication skills. (L. E. Penley, E. R. Alenander, I. E. Jernigan and C. L. Henwood 1991). They are supposed to be relegated to communication. It is possible for example, that message passing from one person to another is inversely proportional to the distance between them. (Miller, 1951: French, 1956).

## SCOPE OF THE STUDY

Research study has focused on communication system conducted in selected sugar factories. The areas of the study are as follows -

- The number of permanent employees working in selected sugar factories.
- Existing communication system in the sugar factories in general.
- Study of the managerial, supervisory and below managerial level staff of selected sugar industries.

Research study has related to an evaluation communication pattern the rational behind the study is to understand the communication with special reference to Upward, Downward, Interdepartmental communication, communication barriers, Mode of preference by the employees.

### **OBJECTIVES OF THE STUDY**

- To understand different communication system with special reference to upward and downward communication.
- To evaluate communication process between various departments.
- To evaluate the communication barriers in various departments.
- To understand different mode of preference of communication at different levels in the organization.

### **HYPOTHESIS OF THE STUDY**

- There exists a differences of Upward communication differs between different levels of the organization structure.
- Communication barriers exist between different levels in the organisation.
- The mode of communication preferences changes between different levels of the organizational structure.

### **RESEARCH METHODOLOGY**

#### **Organization Communication Questionnaire**

The questionnaire prepared and used for research study keeping in view the set objectives of the study. The questionnaire consists of five dimensions namely:

- Upward Communication
- Downward Communication
- Inter-departmental Communication
- Communication Barriers
- Combine factors of different aspects of communication system.

#### **Mode of Communication**

Ten different modes of communication have been identified and given to the respondents to rank them according to the numerical order of reference. They were: Face to Face Communication, Notice board, Conferences, Daily news bulletins, General Body Meeting, E-Mail, Telephone talk, Hand bills, Monthly Bulletins, Circulars.

#### **Samples**

The universe of the sample includes all the employees from Shri. Chatrapati Shahu Cooperative Sugar Factory Ltd., Kagar Dist. Kolhapur and Shri. Tatyasaheb Kore Warana Cooperative Sugar Factory Ltd., Warananagar, Dist. Kolhapur. In these factories there are 446 and 642 (Permanent) total 1088 employees are working, out of these 245 employees have been selected as respondent on the basis of convenience. The respondents did not properly answer some of the questionnaires.

And some of the questions that were not properly answered by the respondents have been rejected. In the final version, only 223 samples were retained. It includes Managerial, Supervisory and below supervisory level respondents.

### Scoring Pattern

The questionnaire was given in a likert five point scale viz., always, usually, sometimes, seldom and never etc. there are positive and negative statements.

A) Always: 5 Points, B) Usually: 4 Points, C) Sometimes: 3 Points, D) Seldom: 2 Points, E) Never: 1 Points

### Statistical Analysis

The Mean, Standard deviation and 't' test was tabulated to know the communication difference between different levels of organizational hierarchy. The mean difference was also tabulated to know the communication effectiveness between different levels of organizational hierarchy. The rank coloration effect between three levels of organization structure in communication media.

### The Significance of the Study

In the changing business environment in sugar industry and its important contribution towards rural area. A study of communication system becomes an important component of sugar factories. Like the functional areas of production, marketing and finance, communication too is shaping into a distinct area, in the form of corporate communication. Organizational communication is the transfer of information and knowledge among organizational members for the purpose of increasing organizational efficiency and effectiveness. From the Manager perspective, some of the major factor that dictate specifics common needs include the nature of the industry, organizational culture, levels and goals, size of the enterprise, personal need for autonomy and the need for increased quality work life by the personnel.

The present study is related to "A Study of communication system in Cooperative sugar factories with special reference to Shri. Chatrapati Shahu Cooperative Sugar Factory Ltd., Kagar Dist. Kolhapur and Shri. Tatyasaheb Kore Warana Cooperative Sugar Factory Ltd., Warananagar, Dist. Kolhapur. The present study aims to assess the different aspects of the communication with special emphasis on upward communication and downward communication and the same time evaluates the horizontal and interdepartmental communication. Further the study evaluates the different barriers of communication, which are affecting effective organizational function. It is also an attempt to study the existing effectiveness of different management aspect of the communication system. Further the study evaluates the communication to understand in respect of honesty, encouragement, confidence and overall effectiveness.

### ANALYSIS AND INTERPRETATION OF DATA

The sample size for the present research work is as follows -

- Top level employees      35
- Middle level employees    78
- Lower level employees    110

The Top level of management includes the Chief Managers and Sr. Managers. The Middle level management includes Managers and Superintendents. The Lower level management includes Supervisors and below supervisors staff.

**Table 1: The Table Showing Mean, Standard Deviation and ‘t’ Score between Various Levels of Employees Regarding Upward Communication**

Level of Employees	Mean			Standard Deviation			Degree of Freedom	‘t’ Score
	Top	Middle	Lower	Top	Middle	Lower		
Top and Middle	4.21	2.87	--	0.68	1.14	--	134	5.9*
Top and Lower	4.21	--	2.36	0.68	--	0.86	102	10.43*
Middle and Lower	--	2.87	2.36	--	1.14	0.86	182	3.52*

\* = P < 0.05

The above table is related to Upward Communication between Top and Middle level, Top and Lower level and Middle and Lower level employees. The obtained ‘t’ score is 5.9 is significant at 0.05 level of confidence. It indicates that there is difference between Top and Middle level, Top and Lower level and Middle and Lower level employees regarding the upward communication. It means that Top level executives and Middle level executives the communication regarding suggestions, encourage the idea from subordinates and information receiving from the subordinates are not so smooth as it should be.

**Table 2: Table Showing Mean Differences Regarding Upward Communication**

Level of Employees	Mean			Mean Difference
	Top	Middle	Lower	
Top and Middle	4.21	2.87	--	2.34
Top and Lower	4.21	--	2.36	2.85
Middle and Lower	--	2.87	2.36	0.51

To make further analysis the mean score of Top, Middle and Lower level respondents have been tabulated, which is projected in the table 2. It indicates that the mean value of Top level employees regarding upward communication is 4.21, whereas Middle level mean value is 2.87 and lower level employees mean value is 2.36. It indicates that upward communication is better projected among the Top and Middle level employees as compared to the Lower level employee.

*The hypothesis is tested “There exists a differences of Upward communication differs between different level of the organisation structure.” This hypothesis is accepted because all the ‘t’ tests are significant at 0.05 level.*

**Table 3: The Table Showing Mean, Standard Deviation and ‘t’ Score between Top Level & Middle Level Employees Regarding Downward Communication**

Level of Employees	Mean			Standard Deviation			Degree of Freedom	‘t’ Score
	Top	Middle	Lower	Top	Middle	Lower		
Top and Middle	3.67	2.82	--	1.63	1.07	--	134	3.19*
Top and Lower	3.67	--	3.02	1.63	--	1.11	102	2.45*
Middle and Lower	--	2.82	3.02	--	1.07	1.11	182	1.07*

\* = P < 0.05

The above table is related to downward communication between Top- Middle, Top-Lower and Middle-Lower level of employees. The obtained ‘t’ scores are 3.19, 2.45, 1.07 are significant at 0.05 level of confidence. It indicates that there are differences between Top, Middle and Lowe level managers regarding downward communication in the factory.

It means the downward communication differences exist in the organisation. The communication differences are related with understanding the intention of communication, improving working condition, difficulty in getting information from superiors and advice regarding job-related matters.

**Table 4: The Table Showing Means Differences between Various Levels**

Level of Employees	Mean			Mean Difference
	Top	Middle	Lower	
Top and Middle	3.67	2.82	--	0.85
Top and Lower	3.67	--	3.02	0.65
Middle and Lower	--	2.82	3.02	0.20

To make further analysis, the mean score of Top Middle and Lower level executives have been tabulated, which is projected in Table 4. It indicates that the mean value of Top level staff regarding downward communication is 3.67, whereas Middle level mean value is 2.82 and Lower level employees are 3.02. It indicates that downward communication is better projected among the Top and Middle level employees as compared to the Lower level employees.

**Table 5: The Table Showing Mean, Standard Deviation and 't' Score Between Various Levels of Employees Regarding Inter-Departmental Communication**

Level of Employees	Mean			Standard Deviation			Degree of Freedom	't' Score
	Top	Middle	Lower	Top	Middle	Lower		
Top and Middle	3.21	2.86	--	1.61	1.21	--	134	1.26*
Top and Lower	3.21	--	2.56	1.61	--	0.78	102	2.98*
Middle and Lower	--	2.86	2.56	--	1.21	0.78	182	1.86*

\* = P < 0.05

Table 5 is related to inter-departmental communication between Top, Middle and Lower levels employees. The obtained 't' scores are significant at 0.05 level of confidence. It means the inter-departmental communication differs at different levels in the factory. It basically related with routine work type of communication.

**Table 6: The Table Showings Mean Differences between Various Levels**

Level of Employees	Mean			Mean Difference
	Top	Middle	Lower	
Top and Middle	3.21	2.86	--	0.36
Top and Lower	3.21	--	2.56	0.55
Middle and Lower	--	2.86	2.56	0.30

The above table is related to inter-departmental communication. The mean scores of top level and middle level and lower executives have been tabulated and are shown in the above table. It indicates that the mean value of top level employees regarding upward communication is 3.21, whereas Middle level value is 2.86 and lower level employees mean value is 2.56. It indicates that upward communication is better projected among the top level and middle level employees as compared to the lower level employees.

**Table 7: The Table Showing Mean Standard Deviation and 't' Score between Various Levels of Employees Regarding Communication Barriers**

Level of Employees	Mean			Standard Deviation			Degree of Freedom	't' Score
	Top	Middle	Lower	Top	Middle	Lower		
Top and Middle	4.03	2.54	--	1.07	1.04	--	134	6.64*
Top and Lower	4.03	--	3.22	1.07	--	1.05	102	3.59*
Middle and Lower	--	2.54	3.22	--	1.04	1.05	182	4.34*

\* = P < 0.05

Table 7 is related to communication barriers between top level and middle level, Top level and lower level, Middle level and level lower level employees. The obtained 't' scores of top to lower and middle to lower are significant at

0.05 level of confidence. It indicates that there difference between top and middle level employees regarding communication barriers.

**Table 8: The Table Showing Mean and Mean Difference between Various Departments**

Level of Employees	Mean			Mean Difference
	Top	Middle	Lower	
Top and Middle	4.03	2.54	--	0.35
Top and Lower	4.03	--	3.22	0.55
Middle and Lower	--	2.54	3.22	0.30

Table 8 shows that the communication barriers are better projected among the lower level employees as compared to those in the middle level. The mean value of middle level employees is 2.54, whereas the lower level mean value is 3.22.

It indicates middle level employees communication barriers are better than lower level employees. Also the mean value of top level is 4.03 whereas middle level is 2.54. The differences show that the communication barriers are more than those faced by the middle level employees.

*The hypothesis is tested "Communication barriers exist between different levels in the organisation." This hypothesis is accepted because the 't' score is significant at 0.05 level.*

**Table 9: The Table Showing Mean Standard Deviation and 't' Score between Various Levels of Employees Regarding Combine Factors of Effective Communication System**

Level of Employees	Mean			Standard Deviation			Degree of freedom	't' Score
	Top	Middle	Lower	Top	Middle	Lower		
Top and Middle	3.52	2.65	--	1.13	0.88	--	134	1.94*
Top and Lower	3.52	--	2.60	1.13	--	0.98	102	6.52*
Middle and Lower	--	2.65	2.60	--	0.88	0.98	182	0.56*

\* = P < 0.05

The above table shows combined factors of effective communication system between Top to Middle and Lower, and Middle to Lower levels of employees. The obtained 't' scores of Top to Middle and Lower levels are significant at 0.05 level of confidence. It means the inter-departmental communication is related to working job related aspects. The obtained 't' score 0.56 is not significant at 0.05 level of confidence. It indicates that there is no difference between middle and lower level employees regarding inter-departmental communication.

**Table 10: The Table Showing Mean and Mean Difference between Various Departments**

Level of Employees	Mean			Mean Difference
	Top	Middle	Lower	
Top and Middle	3.52	2.65	--	0.87
Top and Lower	3.52	--	2.60	0.92
Middle and Lower	--	2.65	2.60	0.05

To make further analysis the mean score of Top, Middle and Lower executives have been tabulated, and are shown in Table 10. The mean value of Top level employees is 3.52, whereas Middle level is 2.65 and Lower level is 2.60. It indicates that Combine factors of effective communication system are better projected among the Top and Middle level employees as compared to the Lower level employees.

**Table 11: The Table Showing Order of Preference on Different Modes of Communication Ranked by Top, Middle and Lower Levels of Employees**

S. No	Modes of Communication	Top Level		Middle Level		Lower Level	
		Mean Value	Rank	Mean Value	Rank	Mean Value	Rank
1	Face to face communication	1.42	I	1.92	I	2.52	I
2	Notice Board	8.28	IX	6.00	VII	3.15	II
3	Conference	4.71	IV	4.37	III	4.31	III
4	Daily News Bulletins	5.00	V	5.66	VI	5.31	V
5	General Body Meeting	6.24	VII	7.55	VIII	5.68	VI
6	Email	3.85	III	4.70	V	6.42	VII
7	Telephone Talk	2.28	II	3.63	II	4.36	IV
8	Hand Bills	5.85	VI	4.40	IV	7.00	VIII
9	Monthly Bulletins	7.14	VIII	7.82	IX	7.78	IX
10	Circulars	9.14	X	8.25	X	8.21	X

The above table indicates the preferences for communication mode of the Top, Middle and Lower levels of employees.

**Table 12: Obtained Rank**

S. No.	Level of Employees	Rank Correlation Coefficient
1	Top to Middle Level	0.9030*
2	Top to Lower Level	0.5393*
3	Middle to Lower Level	0.6727*

\* = P < 0.05

The obtained rank correlation between Top to Middle level is 0.9030, which is significant at 0.05 levels. It means that there is a significant correlation between top and middle level employees, with respect to different modes of communication.

The same thing is true in between Top to Lower level (0.5393) and Middle to Lower level (0.6727). It indicates that all the levels in the organisation generally accept the modes of communication equally.

*The hypothesis "The mode of communication preferences changes between different levels of the organizational structure." This hypothesis is accepted because all the Rank Correlation Co-efficient are significant at 0.05 level.*

## **THEORETICAL IMPLICATIONS**

On the basis of empirical work the researchers would like to place suggestions:

- On the basis of the obtained 't' score between top to middle, top to lower and middle to lower levels are 5.9, 10.43 and 3.46 respectively, which is significant at 0.05 levels of confidence. It means communication channel is not as free as it to be, therefore more openness in upward communication is required between the levels of management.
- It is seen in the downward communication table, the flow of organizational communication is from top-middle-lower levels have significant differences. Hence the effective measures such as close contacts, occasional meets and regular discussions should be adopted to bring out the continuous and free flow of communication.

- In the organisation in inter-departmental communication system there are considerable differences between various levels of management. Steps should be taken to maintain the proper flow of message from top to middle and lower levels in the factory.
- Department wise meetings should be conducted twice in a month.
- Important instructions should be passed in writing only.

## CONCLUSIONS

The sugar industry plays a very significant role for the development of rural area. The economy of Western Maharashtra and its vicinity is highly dominated by sugar industry situated in this area. The role of human resource work force managerial, supervisory and below managerial level staff and its contribution for the development of sugar factories, the research study deals with communication system adopted by the selected cooperative sugar factories. On the basis of above researcher found that communication channel is not as free as it to be, therefore more openness in upward communication is required between the levels of management. Hence the effective measures such as close contacts, occasional meets and regular discussions should be adopted to bring out the continuous and free flow of communication.

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