SUMMARY, FINDINGS, CONCLUSIONS AND SUGGESTIONS

CHAPTER VI
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SUMMARY

The process of economic reforms initiated during 1991-92 has necessitated a thorough revision in the perception of Indian industry. The arrival of Multi National Corporations have dumped in variety of quality products at comparatively lower prices. Excellence in performance and quality in all spheres of business activity with an access to the latest information technology have become issues for the very survival of our industry. A willful attempt should be made to align the various forces of management, government, labour and industry and focus on critical issues of employee relation, policies, training and development etc.

These factors highlight the essentiality of equipping Indian industry to face the challenges, to stand on its own and to excel its performance on a par with its major competitors by improving its overall efficiency. When efforts are aimed at this, one cannot belittle the role of "people" in an organisation. Perhaps one of the biggest questions confronting organisations today is the, "people" question. The contributed efforts of people are vital to accomplish the desired goals of an organisation. It is a challenging task of the management to get people to perform at a higher
than "normal" percent of their physical and mental capacities and also maintain satisfaction.

This can be achieved by motivating people for efficient performance. In general motivation is an inspirational process which impels the members of the team to work effectively and to be loyal to the group in carrying out the job. It is the process of indoctrinating employees with unity of purpose and the need to maintain harmoneous relationships among people.

Needless to say that a highly motivated and committed work force is inevitable to improve the performance of Indian industry. The present study attempts to analyse the effects of motivational factors on the efficiency of employees in the selected units of the public and private sector companies. For this purpose it also scans the various factors related to the work life such as working environment, employee relation, remuneration, welfare activities, scope for personal developments, degree of involvement in decision making, work culture, antecedents of workers etc.

The specific objectives set for the study are:-

1. To measure and compare the level of efficiency of workers in the selected public sector and private sector units.

2. To analyse the level of satisfaction with work life over the sample units.
3. To locate the factors motivating the workers for better performance.

4. To examine the relationship between efficiency, satisfaction and motivational factors with the antecedents of employees.

On the basis of the above objectives, the following major hypothesis have been formulated:

1. The average efficiency level of workers in Kerala is medium.

2. There is no significant difference in the levels of efficiency of the workers in the public and private sector units in Kerala.

3. There is no significant relationship between the level of efficiency of workers and their antecedents.

4. There is no significant difference in the workers' level of satisfaction with regard to work life over different companies.

5. There is no significant difference in the magnitude of factors motivating the workers for better performance over different companies.

6. There is no significant difference in the relationship between factors motivating the workers and their antecedents.

7. Immediate financial improvement is the most important variable influencing the level of satisfaction.
8. There is no significant difference in the level of satisfaction and expectation of motivating factors of workers over the different companies.

Methodology

The study has been designed as a descriptive one based on survey method. Both primary and secondary data have been used for this purpose. The secondary data have been collected from various reports, journals, audited statements, books etc.

For collecting primary data, three units, one from public sector and two from private sector have been identified from the modern manufacturing sector. Of the twelve public sector units consistently running at profit, the Malabar Cements Ltd., Walayar, was selected by using lottery method. Similarly out of the twenty two profit making private sector units, The Commonwealth Tiles Ltd., Feroke and Grasim Industries Ltd., Mavoor, were selected at random by using the same method.

Selection of Workers: From each of the selected company, a minimum of 10 percent has been selected at random by using lottery method. Thus there are 72 workers from MCL, 56 workers from CTL and 64 workers from GIL, leading to a total of 192 workers.
Method of Data Collection

A structured interview schedule was advocated by undisguised personal interview method to collect the required information from the respondents. The schedule contained four parts, regarding - labour efficiency, satisfaction of work life, motivating factors and antecedents of workers. a self evaluation schedule for the workers and a supervisory evaluation schedule for the concerned supervisors were prepared and employed.

Measurement of Labour Efficiency

For measuring labour efficiency, twelve variables were identified from the available literature and rated on a five point scale. The scores obtained for these twelve variables under self evaluation and supervisory evaluation are computed separately and then averaged to arrive at the labour efficiency index of each worker. Thus labour efficiency index ranges from a maximum of 60 points and a minimum of 12 points.

Measurement of satisfaction with work life

Satisfaction scores are also measured by seventeen variables on a five point scale with a maximum obtainable score of 85 and a minimum of 17 points.
Identification of Motivating Factors

A list of seven possible motivating factors have been identified from the available literature and by using constant sum scaling technique their preferences have been identified.

Tools used for Data Analysis

Both mathematical and statistical techniques have been used in analysing the data. Some of the tools used are:

1. Mean and standard deviation - to measure the efficiency of labour in the three sample units.

2. Analysis of variance - to test the variability of mean efficiency level over different companies and the antecedents of workers and also to analyse the variability in the level of satisfaction of the workers over different companies and the antecedents of workers.

3. Regression analysis - to measure the relationship between workers' satisfaction with work life and expectation of motivational factors between different companies.

5. Factor Analysis - to establish relationship between workers satisfaction and expectation of motivational factors in aggregate.

6. Student 't' test - to measure the variability of factors motivating the workers for better performance, between private and public companies.

7. MANOVA test and Wilk's Lamda Values - to measure the variability in the factors motivating the workers in aggregate.

8. Univariate 'F' test - to locate that motivational factor which induce overall differences among the three companies.

Chapter Scheme

The whole study is presented in six chapters:

Chapter I is the introduction part stating the scope, objectives, hypothesis, methodology, tools used, limitations of the study etc.

In Chapter II a brief review of various literature available related to the study are given.

Chapter III is devoted to explain some of the important theories of motivation.

Chapter IV illustrates the profile of the sample units.
Chapter V is the core segment of the study dealing with the analysis and interpretation of the data.

In Chapter VI the summary, findings, conclusion and suggestions about the study are given.

Review of Literature

A wide range of literature was made available on various topics related to the subject under study. A brief review of these collections has been done under five heads: Studies on Job Satisfaction; Productivity and Performance; Motivation; Group Dynamics and Alienation; and Workers' Participation. Some of these studies have been conducted in India while some others outside the country.

There are company based and community based studies covering various aspects. Studies on "on the job factors" and "off the job factors", physical conditions and work culture, incentives and disincentives at work, satisfiers and dissatisfiers, human relations etc. are included. Studies on other factors relating to productivity, personality, attitude etc. are also available in the listed works on "personality and work motivation, labour productivity, organisational climate, job attitudes, need for achievement etc.

It is worth mentioning that the literature review covers published materials on multi dimensional topics such as job expectations, motivator-
hygiene factors, supervisor - subordinate relations, nature of technology and work organisation, bureaucracy and work motivation etc. Moreover, there are also other studies on human behavioural aspects such as group dynamics, team work, stress, job content, job enrichment, industrial relations and participative management, frustration and alienation, quality of work life etc.

Further more, the review also contains some noticeable works on organisational behaviour, trade unionism etc. These works include organisational strategies and pay systems, labour-management cooperation, gain sharing structure, productivity and trade unionism, participation in decision making etc.

Some of the studies are case analysis while a majority of the studies are of a descriptive nature based on survey method. The practice of linking wages with productivity in the United States, Russia, Germany, Japan and India, the glittering performance of reputed companies like Tata Iron and Steel Company (TISCO), Larson and Tubro ( L & T), Bharat Heavy Electricals (BHEL), National Fertilisers Limited (NFL) and Nucor Steel; the trade union effect in the British Steel, etc. are a few among the case studies.

The other studies cover a large spectrum of heterogeneous respondents who include shop floor workers, supervisors, junior and senior managers, middle level executives, administrators etc. The informants are
also drawn from senior IAS officers, Directors, Managing Directors, Engineers, Technicians, bank officers, college students, school superintendents etc. representing all walks of industry - both manufacturing and service sector.

The major lacuna of the available literature is the lack of its reflection on the Kerala scenario. Hence the present study is focussed on highlighting the impact of motivational factors on the efficiency of industrial labour in Kerla - both in the selected public sector and private sector units.

Theories of Motivation

The important theories discussed in the thesis are grouped into three parts - content theories, Process theories and Others. Content theories stress on what motivates people and are concerned with identifying people's needs and their relative strengths. These theories include Maslow's hierarchy of needs model, Alderfer's need hierarchy model, Herzberg's two factor theory and Mc Clelland's achievement motivation.

Process Theories emphasise on the actual process of motivation and the relationship of variables which make up motivation and the behaviour. These theories include Expectancy model, Equity theory, and Porter-Lawler model.
Theory X and theory Y of McGregor, Theory Z of W Ouchi and A. Jaeger, Systems model of R. Likert, Goal Theory of Locke, the Attribution Theory of Heider and the Maturity-Immaturity Theory of Argyris are included in the "Other Theories" group.

Perhaps the most widely accepted theory of motivation is Abraham Maslow's hierarchy of needs. He developed a five-level hierarchy that he believed to be applicable to all people and theorised that lower, more basic needs must be met before higher needs can be satisfied. According to Maslow the sequence of needs is as follows:

1. Physiological needs
2. Safety needs
3. Social needs
4. Self-esteem needs and
5. Self-actualisation needs

Herzberg and his associates conducted extensive research relating to job satisfaction and productivity, and developed the two factor theory - Motivation-hygiene theory. They concluded that such factors as recognition, advancement, work content, possibility of growth, achievement and responsibility were motivators of employee behaviour. Hygienic factors such as status, working conditions, company policy and
administration, money, supervision, interpersonal relations and security prevent dissatisfaction.

The achievement motivation theory of David McClelland states that individuals have three basic motivational needs: affiliation, power and achievement.

Victor Vroom's expectancy theory holds that human motivation is affected by anticipated rewards and costs. His model holds great premise for predicting behaviour in organisations. It recognises the complexities of work motivation and does not take an oversimplified approach like the content models.

Porter and Lawler's expectancy model promotes the belief that performance causes satisfaction. They tried to explore the function of three important factors: motivation, abilities and role perceptions.

Alderfer's ERG model is a refined form of Maslow's Need hierarchy model, limiting the hierarchical levels into three: Existence, Relatedness and Growth (ERG). Like Maslow, he proposed satisfaction progression (as one satisfies one need, he may move to another need) as well as frustration regression indicating downward movement in the hierarchy.

Mc Gregor is credited as the initiator of one of the most widely used and highly popular classification schemes for both the acceptable and
unacceptable styles of today, known as Theory X and Theory Y. Theory X completely discounts the ideas of individual constructiveness and aggressiveness. Theory Y assumes that people are not by nature, lazy and unreliable. It proposes that people can be basically self-directed and creative at work if properly motivated.

Theory Z is a new way of viewing the essential nature of man and the factors that motivate him. The theory is originated from Japanese management Philosophy, where managers make better use of human capital.

The maturity-immaturity theory postulated by Chris Argyris is a multidimensional developmental process along with individuals in an organisation grow. He says that people in work organisation will have a tendency to grow from an infant state to a matured state.

Adam's Equity theory is one of the popular social exchange theories. It points out that people are motivated to maintain fair relationship with others and will try to rectify unfair relationships by making them fair.

The Goal theory of Locke emphasises on people's goals or intentions in determining behaviour. Goals guide people's responses and actions. People with difficult goals will perform better than people with a vague goal.
Likert's supervision models have concentrated on employee-centred supervision than on job-centred supervision for higher productivity. He has advocated a group to group supervisory pattern.

Attribution theory initiated by Heider suggests that behaviour is determined by a combination of perceived internal forces and external forces.

Profile of the sample units

Malabar Cements Limited, Walayar, Palakkad

Malabar Cements Ltd. is a company wholly owned by the Government of Kerla, incorporated in April 1978, with a capital outlay of Rs.68 crores, the paid up equity capital being Rs.26 crores. It has an installed capacity of producing 4.2 lakh tons of cement per annum. It had a record utilisation of 86% of the capacity as against the industry average of 78% during the year 1998-99. Inspite of the severe competition from private sector giants like Dalmia, Birla, Sankar, Tata etc. the company recorded a turnover exceeding Rs.103 crores, enjoying a net profit before tax of Rs.9.19 crores during the same period.

Malabar Cements Ltd., produces and markets two premium brands of cement - "Malabar super" and "Malabar Classic" in 50 kgs bags. The company has obtained the ISO-9002 certification in November 1996, as a
reflection of its commitment to customer satisfaction. About 1100 employees are working in the company, including 100 managerial employees, 860 non-managerial employees and 130 casual labourers. The company has instituted a number of welfare measures such as provision of uniform clothes, heat allowance, dust allowance, washing allowance, acting allowance, heavy duty allowance etc. It has also made arrangements for conveyance facilities for employees and school children of employees, in addition to the conveyance allowance, car allowance, scootter allowance etc. Other welfare activities include education allowance, medical facilities, contributory provident fund, gratuity, residential quarters, canteen etc. Further additions to the welfare schemes consist of employees' welfare fund, housing loan scheme and a vehicle loan scheme launched recently.

There are three registered trade unions: MCL EU, MCLEA and MCLSU with different political affiliations, still the company lost not a single day since the commencement of production in 1984, due to strikes, lay off etc. Labour related issues are discussed in a cordial atmosphere and settled then and there which testifies to the peaceful industrial relations prevailing in the company.

The **commonwealth Tiles Ltd., Feroke, Calicut**

Established in 1905 by the Basel Mission, The Commonwealth Trust Ltd., was taken over by the British Government in 1919. The company was
passed on to the Indian hands in 1977 with its registered office at Calicut. The ownership rests with the shareholders who have contributed Rs.12,50,000 equity share capital. It has an installed capacity to produce about one lakh roofing tiles per day from the two units A & B.

Though the aggregate sales (ie. the total sales of five tile factories and two textile units) have been steadily increasing over the last five years (ie. Rs.1273 lakhs in 1993-94 to Rs.2137 lakhs in 1997-98), the profit before tax has dwindled considerably during the same period and ultimately is showing a net loss of Rs.53.96 lakhs in 1997-98.

There are 505 workers in the Feroke unit, grouped in five categories as A, B, C, D and E with five distinctive pay scales. The company offers a number of welfare schemes such as provident fund, medical facility, death benefit, benevolent fund scheme, women welfare scheme etc. A canteen is functioning in the premises to provide food at concessional rates. There is an Employee Recreation Club and a Charitable Trust to employ the excess profit, if any, after paying dividend @ 15% to the shareholders.

A number of trade unions exist in the company. The multiplicity of trade unions and the industrial restlessness sometimes create uneasiness among the management, staff and employees. But in most cases attempts are always made to resolve problems well in advance through discussions with the representatives of these labour unions.
Grasim Industries Limited, Mavoor

Grasim Industries Limited was established in 1947 with the registered head office at Birlagram, Nagda (MP), as a small textile manufacturing unit. Today the company, known by name "A.V. Birla Group Companies" has developed into a multidimensional undertaking with a multiple range of products such as viscose staple fibre, rayon grade pulp, textiles, cement, sponge iron, white cement, caustic soda, computer software etc. produced from various parts of the country.

The Grasim Industries Limited, Mavoor has two divisions - a Pulp Division and a Staple Fibre Division. The pulp division, established in 1958 has an installed capacity of producing 200 tons of rayon grade pulp per day. There are 1302 workers, grouped as permanent workers and casual or badli workers.

The company provides a lot of welfare measures such as provision of uniform clothes, rain coat, umbrella, shoe, ayurvedic medicine, in addition to the medical facilities, educational facilities, transport facilities etc. There are loan schemes for the construction of houses, purchase of scootters, fans etc., recreation facilities, home travel allowance, subsidised canteen facility etc. The company also grants accident death relief, normal death relief, funeral expenses, employment to dependents etc. There is staff club for recreation purposes, an auditorium, guest house and a co-operative society.
to cater to the consumable provisions for the employees. Further, there is a mahila mandal, exclusively for the development of women and children of the staff and a society for rural and community development to conduct employment orientation programmes.

A large number of trade unions with political affiliation exist in the company. A long term memorandum of settlement is entered and signed between the management and the representatives of various unions which acts as the code of conduct of both. Though there are problems connected with water and air pollution in the locality, most of the time the employees stand united with the company.

**Motivation and Employees' Efficiency**

This chapter is framed in two parts - the first part gives a brief account of the sample profile such as age, caste, qualification, length of service, nature of job etc. and the second part deals with the analysis and interpretation of data.

**Profile of Sample**

Out of the total 192 workers, the majority are from the age group of 40 to 50 years and 62 percent belong to the OBC category. Regarding qualification, 61 percent has high school level of education and for length of service, 57% have more than 15 years of service. Majority of the sample are
doing both manual and mechanical jobs, ie. 52%. Regarding monthly income, 37 percent draw less than Rs.3000 a month and 43% of the sample get above Rs.4000 a month. Major share of the workers are of local origin, ie. 72 percent, and 83 percent reside with family while 96 percent are married. Looking in to the parental occupation, about 40 percent of the parents are agriculturists, while 29 percent are very active in politics, 31 percent are very active in trade union activities.

1. **Efficiency level of industrial workers**

   • The average efficiency level of workers in Kerala is medium.

   • There is significant variation in the efficiency level of workers among the three companies.

   • Grasim Industries Ltd. rank top in efficiency level immediately followed by MCL.

2. **Level of efficiency and antecedents of workers**

   • There is no significant relationship between the efficiency of workers and their antecedents, except for caste groups.

   • The average efficiency is highest in the case of forward caste and lowest for SC/ST group.
3. Satisfaction with work life

- The workers are only moderately satisfied with the work life as the aggregate mean satisfaction score is about 62 percent of the total satisfaction index of 85.

- The satisfaction level declines with the increase in the length of service. Level of satisfaction is highest for those with in 10 years of service.

- There is significant variation in the level of satisfaction of workers among different companies.

- There is no significant difference in the satisfaction level and antecedents of workers.

4. Factors Motivating the workers

- There is significant variation between public and private companies in the case of factors like "immediate financial improvement, future financial benefits, promotion, facilities at work site and medical facilities."

- There is no significant variation between public and private companies in factors like "participation and educational facilities for children," in motivating the workers.
5. Motivating factors and antecedents of employees

- Agewise, immediate financial improvement is the primary factor motivating the workers for better performance irrespective of the age group. However, its magnitude varies for workers in different age groups. Workers above 50 years of age give relatively more importance to this factor while workers below 40 years give less importance.

- The castewise distribution shows that the SC/ST workers allot top priority for 'immediate financial improvement', the forward caste for 'participation', 'facilities at work site' etc. and the OBC group for 'future financial benefits', 'promotion' etc.

- The qualificationwise distribution exhibits the concern of lesser educated (primary level) workers on 'immediate financial improvement' and 'educational facilities for children' as very important. Those who possess a graduation and above, consider 'promotion', 'facilities at work site' etc. to be more important.

- The length of servicewise, distribution narrates that 'immediate financial improvement' and 'facilities at work site' are treated most important by workers with more than 15 years of service. 'Promotion, medical facilities, and future financial benefits are top priorities of workers with in 10 to 15 years of service.'
• The nature of jobwise distribution stresses that workers engaged in manual labour treat 'immediate financial improvement' and 'educational facilities for children' as the highest motivators.

• The workers who are very active in trade union activities rank future financial benefits, facility at work site, promotion, participation etc. as highest motivators.

6. Companywise Analysis of Motivational Factors

• Immediate financial improvement is the highest preferred variable in all the three companies, though its magnitude varies considerably.

• Other variables are ranked more or less similarly in MCL and GIL with minor variations only.

• Workers in CTL give second preference for educational facilities for children and lesser consideration for future financial benefits.

7. Statistical significance of the mean values of motivational factors

• The value of Wilk's Lamda is seen to be significant and hence the difference in the mean values of the variables taken as a whole are meaningful.
8. **Identification of variables that cause over all differences among the three companies**

- The three companies differ at all their expectations of motivating factors except that of educational facilities for children.

9. **Level of satisfaction and Expectation of Motivating Factors**

- Immediate financial improvement alone is important in explaining variation in satisfaction. Medical facility, promotion and future financial benefits are also relatively important in that order.

10. **Companywise and aggregate dimensions of variation in satisfaction**

- The scores on the six factors show moderate variation among the three companies with MCL having relatively higher scores for most of the variables. The variation in the mean scores on satisfaction among the three companies are significant as per Wilk's statistics in the MANOVA results.

- The univariate analysis of variance suggests that the mean scores on these variables except that of "self improvement and degree of involvement" are different for the three companies and significant at 5%.
The result of multiple regression shows that in MCL, 'medical facility for family' tends to explain satisfaction of workers, in CTL, 'facilities in the working place' explain satisfaction and in GIL, 'immediate financial improvement' is important in explaining satisfaction.

CONCLUSION

From the above findings it can be concluded that the industrial workers of Kerala possess medium level of efficiency. Similarly workers are moderately satisfied with the working conditions prevailing in the organisation. The efficiency level and satisfaction in the working condition varies from company to company. Level of satisfaction is inversely related with length of service. Other background variables have no considerable influence on satisfaction. Further, the level of satisfaction depends up on different motivating factors for different companies. Also motivating factors vary with the antecedents of workers like age, caste, education, length of service etc. While immediate financial improvement gets highest preference, other expectations like facilities at work site and medical facilities for family are also important for some companies.

Results of the hypothesis testing

On the basis of the above findings and conclusion, the hypothesis set for the study have been tested and the results are as follows:
The first hypothesis that "the average efficiency level of workers in Kerala is medium" is found true and hence accepted.

The second hypothesis that "there is no significant difference in the level of efficiency of workers in the public sector and private sector units in Kerala" is found not true and rejected.

The third hypothesis that "there is no significant relationship between the level of efficiency of workers and their antecedents" is found true and accepted except in the case of castewise distribution of mean efficiency level of workers, where significant relationship exists.

The fourth hypothesis that "there is no significant difference in the workers' level of satisfaction with regard to work life over different companies" is found not true and rejected.

The fifth hypothesis that "there is no significant difference in the magnitude of factors motivating the workers for better performance over different companies" is found not true and rejected.

The sixth hypothesis that "there is no significant difference in the relationship between factors motivating workers and their antecedents" is found not true and rejected.

The seventh hypothesis that "immediate financial improvement is the most important variable in influencing the level of satisfaction" is found true and accepted.
The eighth hypothesis that "there is no significant difference in the level of satisfaction and expectation of motivational factors of workers over different companies" is found not true and rejected.

Suggestions

On the basis of the above findings and the results of testing of hypothesis, the following suggestions are made:

To improve efficiency

The organisation should establish an environment that fosters creative endeavours. All individuals possess initiative and creative talents. Monotony and frustration are to be avoided by offering challenging jobs. Job enrichment techniques can be employed to maximise job interest and better performance. More chances should be created to handle high level jobs by job rotation. Obsolete equipment and outdated knowledge can cause low productivity, poor morale and dissatisfaction. Updated information should be made available to the employees through short term orientation or refresher courses.

To increase satisfaction

Recognise the importance of money. It is still a strong motivator. Employees favour monetary incentives and believe that it can control their environment and satisfy their economic needs.
Ensure equity in the remuneration packages for workers. Employees must see equity between rewards obtained from the company and the efforts put in by them.

Concentrate on other hygienic factors also, such as safe working conditions, company policy and administration, supervision, security, status and interpersonal relations. This will not only prevent dissatisfaction but also increase satisfaction. Added emphasis on motivators will definitely result in higher satisfaction. Provision of opportunities for growth and advancement, recognition of individual achievements, involvement in decision making, assigning more responsibilities etc. can be experimented.

Recognise individual heterogenity and handle the motivational issues according to the requirements.

Offer right job to the right person and provide specific goals so that they know what they are doing and what is expected of them.

Link rewards to performance, immediately after attaining the goals. Increase the awareness of employees regarding the reward-performance relationship.

**Motivational Factors**

Reasonable pay and allowances should be given top priority among the financial incentives to the shop floor workers.
Adequate protection may be given against staggering health care costs resulting from illness or accidents. Life insurance, health insurance and pension plans can provide the necessary security.

Strive for a pleasant work environment that is conducive to workers' satisfaction and job security. Intrinsic motivators are on the job benefits. Provision of clean rest rooms, coffee breaks, safe equipments, bath rooms, proper ventilation and other facilities at the work site will create a feeling that management cares the well being of the employees.

**Fringe benefits**

Extrinsic motivators are off the job facilities. Provision of sick leave, medical plans, free legal aid, paid vacations etc. can boost the loyalty and motivation of employees. Capitalise the opportunity to recognise and appreciate the employee for a work well done as this will elevate their individual sense of worth and enhance their status. Status and recognition are major motivators regardless of age, sex, education and nature of job.

In short, it can be concluded that, with regard to individual motivation, managerial action constitutes the selection of appropriate strategies and policies to encourage motivated people to achieve organisational goals. Both financial and non-financial incentives are vital in keeping the employee in an organisation in a productive fashion throughout the tenure of his employment.