

An Approach Towards Total Quality Management at Star Paper Mills Limited, Saharanpur

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ABSTRACT: During Eighties the Company was surrounded with multifarious problems and reached to a collapsing stage. The entire credit for bringing the Company out of sickness and attain its present prestigious position goes to the Total Quality Management adapted in the mill. Improved product quality, productivity and process efficiency could be achieved through "Committed work force" and "Team concept". In this paper, an attempt has been made to describe various challenges faced, approach adapted and experiences gained during redesigning the work structure for taking the Company out of claws of sickness and to get the market reputation.

INTRODUCTION

The concept of Total Quality Management (TQM) was conceived by W.A. Shewart, H.F. Dodge and H.G. Roming of Bell Telephone Laboratory U.S.A., in 1920. As they could not implement their philosophy in U.S.A., they selected Japan to do so where the concept was widely accepted and has taken the present shape. Later Dr. W.A. Deming added several new demensions to the concept.

WAHT IS TOTAL QUALITY MANAGEMENT?

Total Quality Management is a revolutionary concept in thought and a process where every one in every discipline of the company must participate in all the interlinked activities. Quality means satisfying the customer at a price which he can afford. It is not just meeting the product standards or cutting down the cost.

TQM was not widely spread in Indian industries largely because of low level of competition in most of the sectors. Industries were able to get away with the production of goods and services that they liked to produce and deliver rather than to understand what actually the customers desired. But the scenario has changed now. Pressure from out side such as threat of super 301 status, acceptance of GATT, depreciation of Rupee value etc. have compelled the Indian Industries to improve the product quality and cost to survive in globally competitive market existing at present. The TQM has picked up momentum in pulp and paper manufacturing process also and leads to the path of continuous improvement.

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THE CONTEXT

Star Paper Mills Ltd (SPM) is among the pioneers in the Paper Industry in the country. It commenced its production activities way back in 1938 with 480 Tonnes monthly production of writing and printing paper at Saharanpur in the foot-hills of Sivalik Range of Western U.P. The unabated journey with ups and downs continued all these years and it has attained its present prestigious position by producing the best quality.

During 80's, SPM witnessed many adverse situations surrounded with multifarious problems including prolonged industrial unrest coupled with impeding financial conditions of high magnitude and reached a stage where the General Reserve of the Company which were Rs. 350 lacs during 1981-82 were substantially eroded by 1985-86 and the accumulated losses mounted to Rs. 165 lacs. The functioning of the Company was totally jeopardised and it virtually was at a collapsing stage. The stock of finished goods accumulated to around 9000 Tonnes (equivalent to the then three months production level). The closure in such conditions become inevitable. Fortunately, the Board of the Company was reconstituted and Management was taken over in May 1986 by Duncan Goenka Industries, a leading Industrial House in the country.

CHANGE IN MANAGEMENT - TEAM CONCEPT

The Company after initial jolts and setbacks gained

its position of glory and the reasons could be attributed to the Total Quality Management. The improved product quality, productivity and better efficiency could be achieved through a committed work force and team concept. The threats posed were accepted with a challenge when total restructuring at every stage was introduced for redressing the work culture.

The Management from the very beginning stressed the need for exploiting the potential and successfully increased the production to its optimum capacity, improved the product quality and gained the confidence of the customers and got better realisation.

The traditional predominance of the product of Kraft variety was changed to varied product - mix. Industrial varieties of papers were developed and systems were evolved and implemented with greater care to meet the user industries' needs more effectively. The company is now marching ahead with total reorientation in the competitive era.

The systems adapted and the experience during revamping the Company for better performance is discussed under the following heads:-

- Scattered work force
- Product quality
- Total Quality Management

The comparative statistics of production, productivity and profitability as projected in the Annexure-I reveal the story of growth and progress of the Com-

ANNEXURE-I FINANCIAL HIGHLIGHTS

| Year | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Installed capacity (Tonnes) | 46200 | 46200 | 46200 | 46200 | 46200 | 46200 | 46200 | 46200 | 46200 |
| Production (Tonnes) | 36037 | 42879 | 39297 | 32424 | 49103 | 51201 | 51211 | 50151 | 52551 |
| % of capacity utilisation | 78 | 93 | 85 | 70 | 106 | 111 | 111 | 109 | 114 |
| Turnover (including excise) (Rs. in lacs) | 3304 | 4549 | 4216 | 3933 | 7084 | 8390 | 9912 | 10152 | 11362 |
| Gross profit before depreciation (Rs in lacs) | (42) | (32) | (259) | (307) | 460 | 812 | 1110 | 666 | 781 |
| Net profit (Rs. in lacs) | (165) | (146) | (379) | (395) | 351 | 639 | 924 | 459 | 466 |
| Reserve & surplus (Rs. in lacs) | 86 | 72 | 69 | 62 | 23 | 23 | 490 | 829 | 1294 |
| Net worth (Rs. in lacs) | 211 | 64 | -315 | -906 | -594 | 285 | 1067 | 1466 | 1881 |

Figures given within brackets show losses.

pany which has total commitment to TQM. The all-round progress of the Company, though a matter of satisfaction its introspection to consolidate its position in the liberalised global economy is very essential. Steps are afoot in this direction for further revision in philosophies to sustain and improve upon the working levels.

SCATTERED WORK FORCE

The major task was to reunite the scattered work force and form a 'Committed group' and to infuse the principle of 'Team concept' and "Team Work among the assorted workmen". The motto behind this was to bring the complete Workforce on the path of progress and create belongingness among them. To achieve this motivation and reorientation job was taken up. Workmen were explained the importance of team work, power delegation, product quality, productivity, methodology to improve efficiency and safety etc. through regular job oriented training programmes. Through constant motivation and self education, self confidence was developed among the workmen and they started adapting the principles of mutual working, discharging functional responsibilities, preparing subordinates to take greater responsibilities, and this has resulted in increased efficiency, productivity, job satisfaction, product quality improvement and above all sense of belongingness to the organisation. Linking of the annual bonus with productivity linked bonus and a committed promotional policy with well worked out channels infused a higher motivation among the workmen. The scientists, engineers, technicians, commercial and administrative personnel worked shoulder to shoulder and have come out from the traditional control oriented management philosophy to a TQM based philosophy. Thus, the Company has regained its prestigious position in the market and confidence among consumers and thus has come out from the claws of sickness well ahead of the stipulated period prescribed by BFIR.

PRODUCT QUALITY

Profitability of the improved quality was analysed and new product qualities were introduced to improve the profitability. For manufacturing better products many of the old and obsolete machineries were

replaced by new and efficient ones. New varieties of papers were introduced based on thorough market analysis and R & D findings. A marketing net work has been developed and SPM has the pride to supply its paper to the consumers which has not even lost the warmth of manufacturing process. The marketing philosophy adopted by SPM is working so effeciently that hardly any paper is left in the godown and thorough planning is done so that a consumer does not have to wait for its sudden demand till such paper is manufactured. Constant monitoring of process and quality has brought-down the production cost and improved the product quality. A very efficient after - sales - service has gained the confidence of consumers in the company and the over all profitability has improved.

TOTAL QUALITY MANAGEMENT

Believing the fact that quality can not be stamped on the product at its final stage of manufacture but it has to be built in the first and intermediate stages of the process itself, Process inputs are checked at each and every stage to make the intermediate product acceptable to the next stage of the process. Here the philosophy of "Every unit operation is complete in itself" is adopted and incoming, intermediate and out going materials are thoroughly checked to conform to the laid down standards. The desired properties are incorporated into down standards. The desired properties are incorporated into the final product at various stages and the consistency in quality is ensured all through. The responsibility of quality assurance does not lie with the quality control department only, but all concerned process sections work for the same. A well defined team of TQM is established to control, evaluate, implement and improve quality aspects at each and every stage of the process. Upkeep of equipments, working place and working environment is constantly done to achieve the goal.

CONCLUSION

The reconstituted management practiced Total Quality Management Technique to rejuvenate a sick industry and put it back on the rails of progress. The techniques adopted for the revival of the industry were:

- * Improved productivity
- * Improved product quality

- * Improved process efficiency
- * Effective Communication
- * Team concept
- * Consumer's satisfaction

The associated benefits of TQM are:

- * Less rework
- * Minimum time loss due to miscommunication
- * Trust between Managers and Workers
- * Market reputation

Our experience shows that the principles of TQM may bring a sea change in the working of an organisation. Even a sick unit like ours could be revived because TQM was adopted whole heartedly.

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