

Research and Training in Paper Industry

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India occupies one of the bottom places among other countries in consuming paper. But for a developing country, there are plenty of scopes for consuming more papers. True our per capita consumption may not be so high like other Western countries, but with development of Industries, consumption of paper will be more.

If we think in terms of practice, our productivity in Paper Industry is very poor and there is no concentrated effort to improve the matter. Productivity in its broadest sense is the quantitative relationship between what we produce and the resources, which we use. Productivity does not mean to retrench persons and get maximum work from them; but it is the most effective use of money, material, men, machine and means (processes).

So far, India's paper market was non-competitive, there was more demand and less supply. But with the coming up of new mills and having more papers, the time is approaching for competition. Therefore, it is the high time to develop our Paper Industry, to improve the processes, to increase the efficiency, to have better quality to reduce the cost of production and ultimately to increase our productivity.

Almost all the mills may have some problems, namely, poor yield, inferior quality, low recovery, etc. We will have to solve our problems. We should not rely on other countries to solve our particular problems. So research is very essential. Its sole purpose is to increase general scientific knowledge and through research matter can be

investigated and problem may be solved. The benefits of research can be obtained in the following cases:

- (1) Investigation and improvement of raw material sources, finding of new sources of raw materials or substitute and practicability of their uses. Considering the expansion of our Paper Industry and shortage of raw material, every effort should be given to this point.
- (2) Improvement of processes and thereby increasing the yield.
- (3) To find out and eliminate the causes of variability and thus improve the quality.
- (4) Standardisation of the use of chemicals including loading, sizing, etc.
- (5) Undertaking of any problem that affects productivity.

But all the mills may not afford to have research department well equipped with modern apparatuses and equipments. So it should be better, if Indian Pulp and Paper Technical Association have their own Research Centre, where problems of any mill may be undertaken.

To form this Research Centre contribution from all the member mills may be taken and also help from the Government of India, may be sought. So long as IPPTA are not having their own Research Centre, help

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from Cellulose and Paper Branch, Forest Research Institute and College, Dehra Dun may be taken in order that IPPTA can go ahead right now with their aims and objects. If it so happens, Forest Research Institute and College, Dehra Dun may be the Research Centre for IPPTA too. All the problems and research works should be published in IPPTA publication, so that all the member mills may be aware of the happenings and developments done by IPPTA.

In India more men work in Pulp and Paper Mills, as compared with other countries, but our productivity is extremely poor as stated before. So what is the reason? Do we lack in technical personnel? Or qualified Engineers? Are we inefficient? Are we short of money? Are we short of equipments? I think that the only answer is inefficiency in the Management. Because in these days, unless we think in terms of scientific management, we will not be able to improve our efficiency. True, we have got qualified personnel, Engineers, etc. but unless their knowledge and intelligence are applied and used properly, we cannot improve ourselves. One's education is complete, only when one can apply his knowledge up to maximum. So unless all of our personnel from workers to top executives are trained in such a way that every one of them (at least the majority of them) can utilise his knowledge fully, we cannot increase our productivity. Therefore, training at various levels, namely for workers, apprentices, supervisors and executives should be given the top most priority.

Training of Workers

To increase efficiency there should be the most effective use of workers. By the words "the most effective use" are not meant only deriving maximum amount of work but getting their loyalty or sincerity, in exchange of improving their working conditions and offering incentives. To get their loyalty, or sincerity or interest in the work training is

most essential. Training is a means for achieving greater competency. The trained worker is on the road to becoming more efficient. True it is difficult to get the loyalty or sincerity of the workers, but why should we not try to achieve it?

First, workers are to be selected and placed properly. Then training is to be carried out on a systematic plan. The training will be given to workers of both operation and maintenance departments. Proper training will require competent instructors. The instructors should be thoroughly conversant with the entire job to be learnt by the workers. They should know how to tackle the minor problem that may arise during the training.

Training Programme

Before training is begun, a job analysis is to be made of all the work of the Departments. The training is thereby made quite specific to the job or jobs done, in connection with the processes characteristics of the department. This job analysis is to be carried out along with the Foreman concerned, so that the programme of the training can be done in the best way.

Method of Training

First, the worker will be given some theoretical training and then he will be given practical training. He should be attached to an experienced co-worker from whom he would learn many practical aspects. During the whole period of training, he will expect all sorts of co-operation from the persons with whom he will work.

Progress of learning

Persons to be trained may be of various nature, the learning also may vary at different rates. But periodical checking should be done, test should be made and progress record should be maintained. If found un-

successful within a limited period the worker should be withdrawn from training.

Training of Apprentices

Training of apprentices is equally important. Hence, again apprentices are to be selected, training programme is to be made. Theoretical lectures will be given. Practical works will be learnt. In order to see the progress of training, periodical examination will be taken or some problems will be given.

After completion of the training, the apprentices will be provided with suitable jobs and thus they will be better help to the Management.

Training of Supervisors/Foreman and Departmental Head

To improve the quality of supervision, training of Supervisors|Foremen is necessary. Foreman's qualification should be of technical nature, so by training nothing better can be done for him than to refresh his knowledge or keep him up-to-date. This is very much desirable in our country, when both science and technical achievements are advancing. In our country, Foreman may be qualified and experienced, but his knowledge may not be up-to-date. A Foreman should also know some basic principles of Management. He will be able to do his job better, if he has an understanding of his company's system of control, its policies and procedures, costs and their components, raw material and so forth. Whatever his status, he is always the medium through whom the policies are interpreted and orders given so he should be fully conversant with all proceedings.

The training programme will be made in such a way that in one hand he can improve his technical knowledge and on the other hand he may be familiar with the basic principles of Management in order that he can have good idea about planning his work, capacity to organise, ability to direct his

subordinates, knowledge of co-ordinating and controlling and command over communication. By training he can develop many of his personal qualities like personality, initiative, tolerance, sense of justice, etc., and above all leadership. The training of Foreman will be particularly directed towards those aspects, where he is weak.

Here again theoretical training will be given in classes (rooms). Periodic meetings and conferences will be held, case studies will be put forward so that the Foreman can express his ideas and thinking, knowledge and intelligence. Sometimes visit to other mills helps quite a lot. The Foreman can see the other's products, processes and machineries, etc. and understand the difference with his place of working.

The differences lead the Foreman to compare and contrast and compel him to think whether he is on the maintenance or operation side ; it may give him some stimulation and ultimately benefit may be expected.

The training of Departmental Heads should be carried out in the same way with the exception that they have more responsibility. Additionally, they should know efficient planning of work, handling the problem, have the ability to investigate into matters, etc. Amongst other qualities they should have money sense, time sense, quality sense, sense of self-respect and respect to others, personality, etc. These qualities also can be obtained or compared by training.

Training of Managers

The training of Manager is equally important as training of Supervisors or Foremen. A Manager should possess certain qualities. He is to meet challenges, must know his job, make sound decisions and direct the work of other people. This requires imagination and courage.

The most important quality which a

Manager should have is leadership. He must be a leader of men. He manages through people. Consequently he must be able to inspire all those who seek to lead and manage.

He should have a sense of judgment and confidence of the persons whom he manages. Self-control is another important quality which he should have.

All these qualities can be obtained by training. It is true that experience counts some value, but training facilitates developing the qualities. The explanation is given below.

A Manager is to face problems. These are solved by trial and error but this process can be wasteful of time and effort. Could be that trial and error efforts require some content of imagination and intelligence, but Management training helps to find means and shows ways of solutions. Observation provides facts on which one's intelligence works to observe successfully, one must train one self to give attention to details, considering all aspects.

To be imaginative means often to be original and yet complete originality does not exist. Firstly, there is the regular, the routine on which a Manager must be expert and by directed thought reach out forward improvement.

Directed thought, analytical thinking can be taught. Experience is not wisdom, but material for thinking with. It prompts the alert man to ask questions. Directed thought is the process of asking these questions in a logical manner, in a sequential order, which enables the questioner to arrive quickly at the root of a problem.

A Manager is to make decisions after analysing problems. Every decision carries with it an element of risk. Every Manager must have the courage to take that risk.

There is no power on earth which can teach courage, but the ability to assess facts and reach decisions, based upon fact, can be taught.

The awareness and alertness to problems and their possible solution can also be taught. In the training period, the opportunity to meet and discuss with others, creates an interchange of experience which increases a man's alertness

Judgment and confidence are closely allied to imagination and courage and the training given in the two latter fields achieves an increased efficiency in the areas of judgment and confidence.

Control is largely a matter of self-discipline. A Manager who desires to be successful must pay the disciplinary costs involved. This means restraint, control, moderation, wherever these are necessary to achieve the ends, he seeks.

If a Manager can have all or some of the above qualities, he will also acquire the quality of leadership.

Therefore the training of Manager is very essential. Effort should be devoted to produce a syllabus which aims at developing and expanding a man's ability to manage, rather than devoting a big course to teach the details of management. He should have knowledge about basic principles of Management like planning, directing, organising, co-ordinating, controlling and work study too.

A proper training will make a Manager successful in the position. It helps to develop the characteristics like forethought in the interests of the employees, fairness and impartiality, willingness to listen to complaints and suggestions, liberality in giving credit where it is due, honesty in living up to promises. The study of the technique and principles of Management and the practical application develops an "attitude of

mind" to problems and analytical approach. This approach, if practised, gives a man the ability to think straight, to think to some purpose, to think logically.

Management training in individual firms should be directly related to the specific problems of Management within these firms and where executive development during a planned career is the policy, the training at each stage of a man's career should be devoted to fit him for the next stage.

Therefore, the Management training should have as its basic aim the developing of personal qualities, required in business, namely, an objective personality by which a man is enabled to work well with others, an accounting aptitude, creative imagination, structural visualisation, reasoning ability, the power of observation and above all a desire to do things.

Conclusion

Therefore, it can be summarised that to increase productivity, there should be the most effective use of money, material, men, machines and means (processes) as stated before. So what is mostly needed among the personnel (at all levels) is the interest in the work. To have interest in one's work or to create interest in his work one should see some prospect before him, and this can be possible when he is given responsibility and better wages. The extra responsibility can be given to one only when he is capable of being responsible. This demands discipline; training under pressure in a group is the finest discipline in the world.

Thus when a worker is trained, he should be familiar with his job, he can take part of the responsibility from his supervisor or supervisor may need not to supervise the

workers at all times, and he can save some time for other jobs. Similarly, when a supervisor is trained properly, he can help the Foreman thus giving the Foreman some opportunity for some other work. Again when Foreman is trained properly, he can help the Departmental Head similarly. Thus the Departmental Head can devote more time in planning his work, handling problems of operation or maintenance, job analysis, manning strength, work study, quality control, cost control, etc. and in this way he can offer his best services to the Manager.

Finally, when a Manager is trained properly and if he gets the service from the Departmental Head as stated above, the Manager will be able to execute his job in the best possible way and help the Management maximum.

To start with, Management may have to spend some money for training but if the benefit of the training is utilised properly, it will really help the Management in improving productivity.

India is a developing country. Economy of a country depends upon her national productivity. To improve national productivity is to increase productivity of each individual industry. Therefore, Research and Training are very important and essential to increase the productivity in our Paper Industry thus contributing to national productivity and prosperity.

Reference :

The notes about Training of Manager have been based on the article "The Manager in the Making" by R. S. Bumstead, Principal Lecturer in Management Studies REME Officer's School—England.