INDUSTRY AND HUMAN RESOURCE DEVELOPMENT

4.01 Introduction

The new industrial policy intends to promote growth through technological upgradation in the era of global competition. However, upgradation of technology would increase output by improving the efficiency of capital. The labour so displaced would lead to rise in unemployment. Efforts to create and maintain employment have not met with significant success (Nath, G.B., 1992). The structural reforms adopted in India have resulted in making certain jobs redundant in the short-run. During the transition these jobs have become uncoupled with economic and technological progress. During this period of redundancy problems arise for the workers as well as the firms. Options for providing the safety net are also available to the firms either by training, re-training, reskilling, etc. This chapter deals with issues related to the industrial labour and the problems of labour arising during the process of structural reforms. This chapter is divided into seven sections. Section I deals with recruitment of manpower. Section II deals with wages and earnings of the workers. Section III examines absenteeism. Section IV deals with on-the job training. Section V deals with accident at the work place and safety measures adopted by the firms. Section VI deals with working conditions of the workers and section seven examines trade unionism.

Section-I

EMPLOYMENT IN VAPI CHEMICAL INDUSTRY

4.02 Mode of Recruitment

There are various modes of recruitment of employees in Vapi chemical industry depending on the job and size of industry.

Table 4.01
Mode of recruitment

No.	Mode of recruitment.	%
1.	Employment exchange	60
2.	Jobber/Contractor	53
3.	Advertisement	60
4.	Gate recruitment	49
5.	Personal contacts	20

The sources of manpower supply are many and varied and the industry has to know what and where they are in order to satisfy its needs. Managerial staff is recruited through employment exchange (60%) and advertisement (60%). Unskilled workers are selected through jobber/contractor (53%) gate recruitment (49%) and personal contacts (20%).

4.03 Difficulties in Recruiting Workers

An important striking feature of the Indian labour market is the apparent abundance of labour and high rates of educated unemployed.

Table 4.02
Difficulties in recruiting workers

No.	Difficulty in recruiting workers.	%
1.	Unskilled workers	3
2.	Skilled workers	29
3.	Technicians	1

Yet, industry feels that the right type of labour is not too easy to find. The above table shows that 29% of the industrial units have difficulty in recruiting skilled workers, 3% of the industrial units have difficulty in recruiting unskilled workers while 1% of the industrial units find difficulty in recruiting technicians. The right manpower for the right type of job is difficult to get.

4.04 Criteria of Employment

Since changes are taking place in industry on several fronts, traditional mode of employment have also undergone a change.

Table 4.03
Criteria of employment of skilled manpower

No.	Criteria	%
1.	Having formal education	15
2.	With technical education and skill	36
3.	Experienced in other factories	43
4.	Recruit fresh and train them as per your requirement.	80

Above table (4.03) shows that 80% of the industrial units prefer to recruit fresh workers and train them as per their requirements. According to the respondents, training has always been an essential ingredient of industrial efforts for recruitment and effectively employ them in the production process. Particularly because they have not always been able to recruit and properly assign employees whose knowledge, attitudes, skills, perfectly match the requirements of the job. Training, therefore, has been viewed as a means of closing this gap. 43% of the units prefer workers who are experienced in other factories, 36% prefer workers with technical education and skill, while 15% prefer workers with at least formal education.

4.05 Employment Scenario in Vapi Chemical Industry

For the past few years the employment scene in India has been deteriorating. As was also anticipated that at least in the short run, the employment in industry would decline. This has also been seen in the Vapi chemical industry, which shows a decline over the entire decade of 1990s (Table 4.04).

Table 4.04 Employment in Vapi Chemical Industry

Category/Years	1990-91 '	1991-92		. 1995-96		1999-2000		1990/91- 1999-00
	Average Employment	Average Employment	Annual Growth rate	Average Employment	Annual Growth rate	Average Employment	Annual Growth rate	Annual Growth rate
Managerial	5 84	5.78	-1 04	5 24	-1 94	481	-1.70	-1 92
Professional	6 79	6 89	1 45	6 94	0.14	7.23	0.82	0.63
Technical	8 89	8 86	-0.34	8.43	-0 99	9 64	2 72	0.81
Clerical	4.74	4.68	-1 28	4.15	-2.38	3 98	-0 83	-1 73
Supervisors	7 99	7 97	-0.25	7.08	-2 34	6 43	-191	-2.15
Workers								
Skilled Male	131 57	132 35	0.58	135.72	0 50	141.57	0.85	0.75
Female	0 23	0.23	0.0	0.19	-3.75	0.19	0.0	-1 89
Semı skilled Male	30 59	30 84	0 81	31 17	021	24 59	-4.63	-2 16
Female	0.45	0.46	2.17	0.57	4.38	0 50	-2.59	1 60
Unskilled Male	41 86	40 73	-2 77	33 21	-4 00	25.47	-5.17	-4.85
Female	2 50	2 49	-0.40	2 53	0.23	2 93	2 98	1.60
Total Employment	241.45	241.28	-0 07	235,23	-0 51	227 34	-0.68	0 60

Initially, the rate of decline was lower but gradually the rate of decrease in employment has been high. Over the entire period from 1990-91 to 1999-00, the total employment has declined at the rate of 0.60% per annum. The highest decline is in the employment of unskilled workers followed by semi-skilled. The employment of the female's vis-à-vis males is extremely low (almost negligible) in Vapi chemical industry. Women are employed only in the lower paid jobs. There are no women employed as managers, technicians and supervisors.

Within the category of workers the employment of unskilled and semi-skilled workers has declined, on the other hand that of the skilled workers has increased. On an average the employment of skilled workers has increased at a rate of 0.75% per annum during 1991-2000. The rate of increase was initially slow. During 1991-92 to 1995-96 it increased at a rate of 0.5% but during 1995-96 to 1999-2000 it has increased at a rate of 0.85% per annum. On the contrary, the employment of semi-skilled and unskilled workers has declined. This shows an improvement in the job prospects for skilled workers and declining demand for unskilled workers in the industry.

The employment of professionals and technicians has witnessed a contradictory trend. The employment in both these categories has increased. On the other hand the demand for clerical and supervisory jobs has declined. The demand for supervisory jobs has declined at a higher rate compared to the clerical jobs. Majority of the respondents were of the view that redundancy of the workers is unavoidable in the changing industrial scenario. They feel that for cost efficiency and for enhancing competitiveness for the time being downsizing of labour is essential. Downsizing is also due to decline in the overall performance of the industry.

Regarding alternatives to a direct reduction of employed labour, the respondents feel that best options available to them are reduction in working hours, freeze on fresh recruitment, training and retraining of the existing employees, restriction on over-time and wage reduction.

Section-II

WAGES AND EARNINGS

4.06 Mode of Payment

There are separate methods of wage payment for temporary and permanent employees.

Table 4.05 Mode of payment

No.	Mode of payment.	%
1.	Daily	11
2.	Weekly	93
3.	Fortnightly	3
4.	Monthly	99

Temporary employees are paid daily, weekly or fortnightly wages based on a wage negotiation between employer or employer's representative, and the representative of the employees. In some cases it was found that daily and the weekly rate is fixed by the employer. Permanent employees are, however, paid monthly income.

This income of the permanent workers varies because it is based on criterion such as age, seniority, qualification, experience and performance.

4.07 Determination of Wages in Factories

As competition has increased in the industry so is the uncertainty whether the industry will be able to survive through excessive competition or not in spite of making changes. Due to this, hiring of temporary and part time workers has increased more particularly at the lower end of job ladder. The reason is, if industry is not able to survive the competition, not all workers would be needed and hence it would be convenient for the firms to retrench them and have no trade union problems. However, they feel that demand for permanent and experienced labour would not fluctuate much. It is argued that liberalisation leads to an increase in employment of temporary, casual and contract labour. The increase takes place not only in absolute terms but also in relation to total employment that implies

substitution of permanent unionised labour by non-unionised labour category (Standing, G., 1989).

Table 4.06

How are the wages of the employees fixed?

No.	Employee's wages are fixed -	%
1.	According to the respondents feel is appropriate	20
2.	According to their qualification, skill, experience and ability etc.	93

In 20% of the industrial units wages are determined according to what the respondent feels is appropriate. However, this random determination of wages can lead to exploitation of the workers according to those who do not prefer it. This is especially the case of some small-scale industries. While in 93% cases wages are determined according to their qualification, skill, experience, ability etc.

4.08 Incentive Scheme

The study group on 'Productivity and Incentives' appointed by National Commission on labour also observed that incentive was a device of increasing productivity and of equitably sharing its gain. Incentive is concerned with more effective utilisation of manpower, which is the cheapest, quickest and surest means of increasing productivity (National Labour Commission, 1968).

Global competition is posing a difficult challenge for this industry. Human resources managers in these industrial units are continuously trying to develop human resource programs that would ultimately improve productivity and enhance industrial effectiveness and also give a boost to industry to survive in a competitive environment. This will ensure competitiveness in the national market and internationally too.

To enhance productivity of the employees, performance is linked to rewards through incentive pays. Incentive is gaining greater acceptance in Vapi chemical industry so as to motivate employees for better performance and long-term industrial relations. In some of the large-scale industries where profits are not declining there are incentives provided to the workers in the form of cash other than bonus. In all other units including these, employees are paid bonus as per the law. In large scale units employees are provided with interest free loan for the purchase of consumer durable items and housing loans at an interest rate lower than bank. An interesting change that has taken place in the recent times is that initially for instance if there where several production units or sister concerns of a large firm all the workers under the management would get bonus as determined by the management irrespective of the financial position of the production unit or concern. Now this bonus is tied with the performance of individual production unit or concern.

80% of industrial units provide incentives to their workers. 20% of the industrial units are either loss making or low profit making units. The workers are not paid even the bonus in these units.

4.09 Benefit and Allowances

Every industrial unit should aim at developing and sustaining a favourable employee attitude and obtaining through contribution from the employees through stable employment, adequate compensation, safe

working conditions and job satisfaction. For creating a congenial atmosphere for living and working and also for mental and emotional well being of an employee, employee's welfare has to be given due emphasis.

Table 4.07
Benefits, allowances and other facilities to workers

No.	Benefits and allowances.	Number of units	%
1.	Housing (Rent)	84	86.6
2.	Canteen (Subsidy)	62	63.9
3.	Transport benefits	72	74.2
4.	Co-operative society	46	47.4
5.	Education Allowance	8	8.2
6.	Retirement Benefits	97	97.0
7.	Transport allowance	12	12.4

Above table (4.07) shows that 89 industries provide some or the other above mentioned benefits and allowances. While 11 industries do not provide any benefit and allowance. These are small-scale loss making units. Various benefit and allowances and facilities provided to the workers are housing rent (86.6%), canteen subsidy (63.9%), co-operative society (47.4%), education allowance (8.2%), retirement benefits (97.0%), transport benefits (12.4%), transport allowance (74.2%), Those industrial units that do not provide transport benefits do provide transport allowance to their employees. Those who provide these benefits and allowances feel that with the increasing competition and ever changing environment it has acquired added importance. The management of these industries have realised the importance of their role in providing these extra amenities. Not only this, they also feel that workers tend to pay more attention towards their work thus leading to enhanced efficiency and output. Large-scale industrial units were of the view that these benefits and allowances also seem to attract more experienced workers from the competing firm.

4.10 Health Facilities Provided to Workers by Industry

An industrial worker on an average spends minimum of 8 hours per day in the industrial environment, this is excluding the overtime worker might put in. This shows that a worker spends 33.3% of his/her time in the in the industrial setting. Efficiency in work is possible only when an employee is healthy. But chemical industry is an industry that exposes him/her to certain hazards, which may affect his/her health.

In Vapi, almost all large and medium industries provide health facility to serve the well being of employees. The extent to which these facilities are offered can usually be determined by the number of workers the industry employs and the type of work involved. The larger the industrial unit, better the health facilities. The small-scale industries provide health facility under ESI scheme.

Human resources departments of the firms take greater responsibility in this matter but small-scale industrial units are not able to conduct health programs or maintain the records of health of the workers. Industries have started treating employees as a valuable asset instead of replaceable assets and according to them ensuring the physical well being of employees at the work place is the responsibility of the management. Awareness and consciousness of the management towards the health of its employees has increased in the recent times. Firms were of the view that in this era of competition protecting the well being of employees at the work place is to protect not only the industry's most valuable resource but also to avoid the negative public image of the firm associated with it among other competitors.

Table 4.08
Health facilities provided to workers by firms

No.	Health facilities.	%
1.	Periodical medical examination.	37
2.	Follow-up medical examination.	20
3.	Medical examination at the time of transfer, promotion	32
4.	Referral examination.	34
5.	Industrial hygiene survey by the doctor	55
6.	Health education.	94
7.	ESI scheme	100
8.	Canteen inspection	53
9.	Full medical treatment including hospitalisation	34
10.	Medical allowance and full reimbursement	56
11.	Free medicine	52

Above table shows that 37% of the industrial units provide periodical medical examination so as to ensure employees a good health and also to advise workers and managerial staff on certain remedial measures in case of ailment or diseases detected among the employees. 20% of the firms go in for follow-up medical examination monthly or sometimes-weekly check-up of the employees resuming duty after long leave due to sickness or accidents. 32% of the industrial units provide transfer, promotion or development examination to ensure suitability of employees for the new job. 34% of the firms provide referral examination and treatment of the employees is carried out at the request of the department the employee belongs to. 55% of the industrial units conduct industrial hygienic survey along with safety officer for surveying the work place from the point of view of the environmental hazards and making suitable recommendation regarding corrective measures. 94% of the firms provide health education,

which is conducted by the doctor or doctor appointed by the factory or called from outside, through personal conversation or discussion in groups with employees. 53% of the industrial units conduct inspection of the canteen regularly to ensure cleanliness and other hygienic conditions. 34% of the industrial units provide full medical treatment including hospitalisation for their workers in case of emergency while, 56% of the firms provide medical allowance and full reimbursement. 52% of the industrial units provide free medicines to their workers.

<u>Section - III</u> ABSENTEEISM

4.11 Absenteeism Among Workers

The processes of production in the industrial units are inter-related with each other and absence of one single worker can affect the productivity of other workers. Sometimes a number of workers have to work in team and absence of one does affect the others. It is therefore in the interest of the industry that absenteeism among employees remains low and declines.

Table 4.09
Percentage of workers remaining absent

No.	Year	Percentage of Workers		
		0 – 10	11 - 20	
1.	1990-91	59	41	
2.	1991-92	53	47	
3.	1995-96	82	18	
4.	1999-2000	74	26	

Over a period of time in Vapi chemical industry, absenteeism has declined. According to the respondents possible reason for this can be that the unemployment is on rise in the recent times and because of fear of retrenchment, workers do not remain much absent. The jobs are not as secured as they were earlier.

Absenteeism in theory has been attributed to lack of "commitment" on the part of the workforce. Accordingly, commitment varies with the degree of a country's industrial growth or maturity and absenteeism is inversely related to the industrial advancement of a society. As Kerr (1960) says: "the worker in the process of early stage of industrialization is more prone to absenteeism". There are others who disagree with this argument. According to them, high commitment and high absenteeism can go together and that the two need not be tied up in a relationship of opposition in every work situation. In Vapi chemical industry, the respondents feel that though workers are more committed to their work today than they were a decade ago, as they fear job loss, but inspite of rising unemployment, absenteeism is not completely ruled out.

4.12 Steps Taken Against Overstay of Leave

If it appears that worker has the habit of keeping oneself absent without permission from the authority and overlooks the employer, action is taken against the employee and is warned. Despite warning if the employee continues to remain absent from the work, memo is issued. The employee can be dismissed for major misconduct if he/she continues to remain absent inspite of memo. Unauthorised absence continuing for many days is treated as serious misconduct and action against the employee is taken by terminating his/her services. In 2% of the industrial units workers were suspended for overstay of leave. In all other units workers were only warned. The firms generally do not prefer to suspend or terminate their employees. The reason for this is there is no real substitute for a specifically skilled worker to attend to costly equipments. In case of unskilled worker remaining absent either some other worker doing similar work is asked to

perform extra duty and extra payment is made or badli worker is absorbed.

4.13 Reasons for Absenteeism.

Though absenteeism according to the respondents on an average is low in the industry and is also declining but it is higher among the unskilled casual workers vis -a- vis the skilled workers and office staff.

There are two main reasons viz., namely sickness/medical and personal reasons responsible for absenteeism. The personal reasons are many. For instance, an unskilled worker may be offered higher wages for a job outside the industry, which may be for a couple of days. This is quite common among unskilled workers. One interesting reason mentioned in this regard was that these workers go to Daman, a union territory near Vapi where liquor is not prohibited while Vapi comes under dry region. Majority of the unskilled workers do not come for work immediately following the payday. Another very common reason is that a large part of the unskilled labour is drawn from the nearby rural areas and majority of the unskilled workers are migrants. It is believed that, the workforce has problems of adjusting to the urban-industrial environment and continuous and monotonous work-routine in the factory. As a result, migrant workers trend to go back to their native place frequently. Also these workers frequently go home to fulfil family obligations such as marriage, socio-cultural festivals in the village or for agriculture purpose.

Section-IV

ON-THE-JOB TRAINING

4.14 Changing Industrial Scenario and Training

Change, induced by industry through technology and intense global competition demands rapid worker adjustment and it renders obsolete, products and processes, skills and attitude and with them job and men.

Meeting this challenge of change is a necessary responsibility of every industry (Beardwell, I. and Holden, L., 1995). These challenges faced by the management are met by manpower training offered in an industry. A decade ago training was not emphasised much, but now it is felt that industrial environment is changing so fast that without continuous training many of the employees will be rendered obsolete. There is a need for every industry to conduct their own programs and an increasing number of firms are recognising the training needs and are sponsoring a variety of programs to meet these needs. The essential purpose of training is to develop knowledge, skills and attitudes, which contribute to the welfare of the company and employees (Beardwell, I. and Holden, L., 1995).

"If our chemical industry is to remain relatively prosperous one of the policy must be considerable investment in training of the manpower" as one of the respondents mentioned. All the industrial units provide training facilities for their employees. Two major reasons for this are: one, technological development and industrial changes have gradually led industry to the realisation that success relies on the skill and abilities of their employees and this means considerable and continuous investment in training and development. Two, the industry faces competition domestically and also internationally. Hence, to meet these challenges of the competition the industry has to keep it self upgraded.

Respondents were of the view that the training provides for an effective adaptation to the change induced by an industrial environment and its ability to accomplish its goals and to survive in the new environment. They were of the view that training activities in their units are designed in such a way that it covers every aspect of industrial requirement i.e. it is based on study of prospective business situation and probable situations in this competitive era.

Advanced economies of the future will not be based on a cheap and unskilled workforce, in other words industry is no longer drawn to the comparative advantage of abundant natural resources, but instead to pools of human skills. The future organisation is a learning organisation as future employee is one who is continually seeking to develop himself (Thurow, L., 1992).

4.15 Opinion About Training

Competitive conditions facing an industry can lead to changes in the working practices, habits, culture and redesigning of work. To prepare employees for such an eventuality, one can resort to training with the emphasis on development to maintain or enhance the quality of work operations and output.

Table 4.10 Opinion about training

No.	Opinion about training.	%
1.	An instrument of change	21
2.	An instrument of desired change	35
3.	An instrument to better performance in terms of productivity	43
4.	Maximising profits	1
	Total	100

The above table shows that training is an instrument for bringing about desired change. For 43% of the industrial units, it is an instrument to improve performance in terms of productivity, for 21% it is an instrument of change, while for 1% training is to maximise benefit.

4.16 Purpose of Training

In this changing environment to ensure satisfactory job performance training is must through out the employee's career and also in preparing him for new tasks. So training not only helps in achieving desirable goals but it also improves employee's job performance. It is only through training the employees can be expected to accept changes being adopted by industry (Kenney, J.P. and Donnelly, E.L., 1972).

Table 4.11 Purpose of training

No.	Purpose of training.	%
1.	Help an employee to acquire the capabilities to perform his present job better.	25
2.	Prepare an employee to perform new functions he has not handled so far.	68
3.	To help an individual to upgrade his general capabilities so that he can achieve higher position.	7
	Total	100

For 68% of the industrial units the purpose of training is to prepare an employee to perform new functions he has not handled so far. This way industry prepares the employee to face new work opportunities within the firm and to an environment, which he/she was never exposed earlier. 25% of the respondents feel that it helps an employee to acquire the capabilities to perform his present job better; hence, the industry also prepares the employee to perform better on the present job, which would prove to be beneficial to both the employer and the employee. 7% of the respondents were of the view that it helps an individual to upgrade his general capabilities so that he can achieve higher position, that is, promotion of the employee through his improved performance during the lifetime.

4.17 Type of Training Facilities for Workers

Almost all the respondents were of the view that systematic training of employees is necessary if they are to do their job effectively. This is a requirement regardless of how carefully employees are selected and no matter how much experience they may have for the job assigned for.

Training practice in industries under survey is found to vary widely with respect to method, content, quality. These differences are influenced strongly by the size of the industry and the awareness of management.

All large and medium-scale industrial units for providing adequate and right type of training conduct an analysis of the employee's aptitude and performance level and compare it with the job requirement. The need for training is thus to bridge this gap between existing performance ability and desired performances.

The respondents were of the view that the best technology and sound financial base alone cannot yield expected results. "The way employees think and act makes all the difference". In today's competitive industrial environment any new venture or expansion of industrial units has to ensure a greater degree of customer satisfaction in terms of availability of quality products at an attractive price. This they feel can be achieved only through a committed trained group of employees who are to be made aware of changing industrial environment and a close linkage between training, prosperity, productivity and profitability is equally important.

Table 4.12
Type of training facilities for workers

No.	Type of training facility.	%
1.	Pre-employment training	28
2.	On-the -job training	97
3.	Off-the-job training	12

In majority of the cases (65%) training is specific rather than general. Industrial units mainly provide three types of training facilities "preemployment training", "on-the-job training", and "off-the-job training". The most common approach to training is on-the-job training (97%) and it can range from relatively unsophisticated 'observe and copy' methods to highly structured courses built into workshop practices. 28% of the units provide pre-employment training for their workers before they are appointed. While 12% of the industrial units provide off-the job training. They were of the view that this type of training is sometimes considered necessary to get employees away from the work environment to a place where bustle of work is eliminated. This enables the trainee to get theoretical knowledge and also exposed to new innovative ideas.

Majority of the respondents feel that workers should be considered as long-term assets. The only solution to protect employees in the firm in the ever-changing environment is through continuous training process. HRD department assumes added responsibilities in this regard. There is higher investment in training by the industrial units now because they have realised the economic benefits in doing so. Hence, the challenge before the HRD department in the industry is to make training and development not only a success but also an ongoing process.

As far as the type of training is concerned, in majority of the cases, it is formal training while in others it is informal. Various aspects related to

industry and industrial growth are covered such as safety and security, productivity, time management, house keeping, health, personality development, promotion, motivation, communication, etc. are covered during the training.

Table 4.13
Training over a period of time has increased

No.	Type of training.	Years			
		1990-91	1991-92	1995-96	1999-00
		%	%	%	%
1.	Pre-employment training	2	3	8	28
2.	On-the job training.	54	56	72	97
3.	Off-the-job training.	1	9	8	12

94% of the units provide on-the-job training. There are very few industrial units providing off-the-job training (12%). It is interesting to know that the number of units providing training (whether pre-employment training. on-the-job training or off-the-job training) has increased over the years. In fact, it has been mentioned that during the era of change, the entire firm is under training.

4.18 Criteria of Selecting the Workers for Training

Training is given by the foreman or supervisor (in case of small-scale industries) responsible for the job. However, management of the medium and large-scale units is finding it worthwhile to use 'specialists'/ 'trainers' in training. Training specialists in some case do not necessarily provide training directly, but instead set up the procedure so that best-qualified person of the department can conduct training programme. He provides instructions and other details related to training program and supervise the activity. In some cases training specialists are appointed specifically to

conduct training.

Table 4.14
Criteria of selecting the workers for training

No.	Criteria for selecting the workers.	%
1.	Merit	44
2.	Qualification	56
3.	Seniority	60

Above table shows criteria for selecting workers for training. 60% of the industrial units select workers on the basis of seniority, 56% on the basis of qualification while 44% on the basis of merit. They were of the view that selecting employees for training is an important decision for both the industry and the worker chosen. For industry, providing the right training will help in maintaining a well-trained and stable workforce, which is must as the firm is investing on employee undergoing training. "Providing training for workers who do not have potential or lack interest will simply prove to be a waste of time, efforts and money on the part of firm. One small mistake made while selecting the employee for training can prove to be very costly".

4.19 Means of Assessing Returns on Training Investment

According to 51% of industrial units, to ensure proper returns on training, the industry expects its employees to perform better. 38% of the industrial units assess the training report while some firms (11%) organise seminar where employees are asked to give suggestions and action plan for better performance and functioning of the firm.

Table 4.15
How organizations ensure to get returns on training investment

No.	Means of assessing returns on training investment.	%
1.	Assess the training reports.	51
2.	Expect the employees to improve.	38
3.	Organizing training related seminar.	11
	Total	100

During these seminars practical problems are posed to the employees and they are asked by the management to provide solutions.

4.20 Methods Used to Make Training Programme Need Based

The purpose of training assessment is to provide an objective analysis of the industrial training requirement. This enables senior management to draw up a training policy so that training resources are used effectively to develop manpower for present and future requirements (Nadler, L., 1971).

The first step of vital importance in human resources development is the identification of needed skills. For training to be effective it is necessary for the management to find out the training needs. Identification of training needs is important from the employee as well as the industry point of view. This is because they feel that training which is given without identification of needs will not fulfil the purpose. But the training, which is provided after assessing the needs of employees, their strengths and weaknesses, the area requiring change, will go a long way in the development of the employees.

In large and medium-scale industrial units the committee studies the procedures by which the training efforts are continuously evaluated and modified wherever necessary. The industry assesses their present training system, keeping in mind the ever-changing industrial environment that are

likely to affect their plan which was not the case earlier. They always consider the fact that the past or present training may not be valid for the future. They therefore are aware that they will have to continuously invest in training and re-training programmes.

Table 4.16

Methods used to make training programme need based

No.	Method used to make training programmes need based.	%
1.	Evaluation of past programs.	32
2.	Questionnaire to employees	13
3.	Decision by the department	56

In 56% of the industrial units to make training programmes need based decisions are taken by the respective department what type of training has to be given to the employee, in case of 32% evaluation of past programmes is done, to find out the strength and weaknesses of employees and arrange for the training programmes accordingly. Some of the units (13%) circulate questionnaire among the employees who have undergone training to seek an evaluation of the training in the past.

This clearly indicates that not only does the department take the decisions to make training programmes need based but at the same time evaluation of past programmes is also undertaken.

4.21 Evaluation of Employees undergoing training

An important aspect of training strategy is evaluation of employees who have undergone training in order to know the limitations and potentials of the trainees.

Table 4.17

Modes of evaluating training

No.	Modes of evaluating training.	%
1.	Personal observation.	33
2.	Job performance and evaluation	50
3.	Work output	17

The above table shows that, 50% of the industrial units try to evaluate the trainee through manager/trainer or supervisors who in turn evaluate either their job performance or personal observation.

4.22 Evaluation of the Training Programmes

Table 4.18
The methods used for evaluation of training programmes

No.	Evaluation of training programmes.	Number of units	%
1.	Lack of finance for training	12	22.6
2.	Lack of appreciation for training.	21	39.6
3.	Imitation of other organisations rather then evolving one	6	13.2
4.	Lack of personal trainer	7	3.8
5.	Absence of appraisal discussion	5	9.4
6.	No feedback	2	11.3
	Total	53	100

Not only do the firms try to evaluate the impact of training on their employees, but they also evaluate the training programmes and try to know the limitations of these programmes. The proportion of such firms is more than 50%. Two important limitations of these programmes mentioned are lack of finance and awareness among the workers and hence no appreciation from the group for which these programmes are held.

Workers who have lived in a protected industrial environment are suddenly exposed to a competitive environment and therefore are finding it difficult to adjust. Since they don't appreciate change, they don't appreciate training too. Some of the respondents were of the view that their simply imitated others rather then evolving a training programme, which is based on their requirement. These industrial units were of the view that though training programmes are must in this changing environment it has also become a matter of prestige to provide variety of training programmes on the lines of their competitors. In the process everybody just ends-up imitating each other rather then evolving ones' own programme, which has to be need, based.

4.23 Impact of Training on Workers

Industrial units under survey were of the view that training of human resource in an industry has been recognised as an important tool for the achievement of desirable motives. Training serves as an important means for the development of effective work habits and methods of work and there by improves job performance like less wastage of raw-materials (53%), improvement in quality (85%), time saving (4%), high competitive spirit (55%), more confidence in doing work (72%), less strikes (2%), better able to cope with changing environment (52%) and less supervision (42%) etc.

These chemical units are searching for global markets for which they have adopted changes in technology and will probably change to another in future. This will have certain implications for the workers.

Table 4.19 Impact of training on workers

No.	Impact of training on workers.	%
1.	Less wastage of raw-materials	53
2.	Less supervision.	42
3.	Improvement in quality	85
4.	Time saving	4
5.	High competitive spirit	55
6.	More confident in doing work	72
7.	Less strikes	2
8.	Better able to cope with changing environment	52

There will be higher demand for skilled workers and the industry will have to understand, use and develop talent to be able to succeed in the global context. "Though there is no scarcity of unskilled labour but the manpower that this industry requires is in short supply" as many have said. The existing labour is getting redundant. Therefore, the industry has to spend time and money to develop employees by providing training continuously, to be able to retain and develop talent.

Section - V ACCIDENTS AND SAFETY

4.24 Accidents at Work place

As industry adopts more automation, it has a greater opportunity to reduce accidents as much of the hazardous operation is carried out by machines than by employees (Marland, K.S., Aaron, J.E., Bohn, R.C. and Eales, J.R., 1964).

"In case of chemical industry, progress has been achieved in the matters of industrial accidents during the last one decade owing to the new industrial policy of 1991 that initiated technological change. Had it not been

so, the number of accidents would have been many times larger", as some respondents say. According to the management main reasons for accidents taking place in the plant is lack of personal care by the workers. But they feel that the accidents can be prevented mainly by giving practical knowledge to the workers about the operation of the machinery and providing safety equipments.

All the industrial units under survey have reduced their injury rate to a fraction. Efforts are made by the management, regardless of size of the firm, or financial condition to eliminate its accidents.

Accident prevention is a major goal of safety management. Every industry ought to keep a check on accidents occurring at the place of work. Accident investigation and measurement can supply useful data for developing effective safety programs and improving working conditions. The immediate supervisor of the worker, more than anybody else is the man in the accident prevention if the industry seeks seriously to reduce accidents.

In Vapi chemical industry an inquiry for an accident is conducted so as to prevent accident in future. The main purpose of the accident investigator is to get information about the cause of the accident. They do this, first, by finding out the nature of the accident. Second, they try to collect maximum information from the witnesses. Third, the accident investigator examines the physical environment in which the worker was working. Four, factors like the unsafe mechanical or physical condition, the unsafe act, the unsafe personal factor, are inquired into.

4.25 Safety Measures Adopted by Industries

The respondents were of the view that quality of work environment is an essential pre-requisite for quality of work life. Such an environment demands continuous, committed and concerted safety provisions and improvement in welfare amenities. HRD efforts should not only be concerned with ensuring usage of safety appliances should also act as powerful HRD mechanism for strengthening the involvement of employees in fostering or performing safe work.

Various safety measures are adopted in Vapi chemical industry like safety education and safety equipments (69%), safety rules followed (99%), proper lay out of the plant (92%), systematic plant inspection (98%), factory doctor (32%) and ambulance facility (12%). Workers are provided with protective equipments like uniform (75%), gloves (72%), mask (55%) and boots (55%) where necessary.

Section - VI WORKING CONDITIONS

4.26 Working Conditions

Physical environment and working conditions contribute a great deal to the causes for accidents. Working environment has a great effect on body and mind of the worker like too high or too low temperature, defective ventilation, improper lighting, and unhygienic working condition causes discomfort. This leads to fatigue of the body and lethargy of mind and also brings down moral, reduces promptness, and makes the worker easily vulnerable to accident.

Table 4.20
Working conditions provided by the industry to the workers

No.	Working Conditions.	%
l.	Cleanliness	97
2.	Proper disposal of waste	89
3.	Proper light and ventilation	82
4.	Proper temperature and humidity	31
5.	Latrine and urinals	83
6.	Safe drinking water	95
7.	Spittoons	34
8.	Excuse fans to take care of dust and fumes	46
9.	Proper space between machinery	96

Various facilities are provided by industrial units like cleanliness (97%), proper disposal of waste (89%), proper light and ventilation (82%), proper temperature and humidity (31%), latrine and urinals (83%), safe drinking water (95%), spittoons (34%), exhaust fan (46%), proper space between machinery (96%) for safe working conditions.

The restructuring of the workplace for better quality of work life and to provide greater job satisfaction is necessary under the changing industrial environment. Therefore, it becomes the responsibility of industrial units to provide adequate working conditions for the employees. This is an area in which continuous improvement have to be insured since it has a direct bearing on the satisfaction level of employees.

Section-VII

TRADE UNION

4.27 Trade Union Membership

Before the introduction of new industrial policy, trade unions were confidant, able to mobilise workers' power in strikes. But today the scenario is quite different; their strength is declining and are uncertain of their future. Trade union movement is hardly equipped to meet the totally new challenges thrown by structural reforms- changing patterns of industrial organisation as well as changing labour market conditions. Management is engaged in introduction of new labour management practices, which is throwing a direct challenge to the role that the trade unions have played traditionally. Union needs to adapt themselves to meet the challenges of the increasingly integrated global economy and its consequential phenomenon—structural reforms, flexibility, competitiveness, closure, redundancy, unemployment, etc.

Out of 100 industries under survey 74 industries have only one trade union.

Table 4.21
Union Membership increased or decreased over a period of time

No.	Union Membership	%
1.	Increased	2
2.	Decreased	42
3.	Remain the same	30
	Total	70

More than 40% of the respondents say that trade union membership

has decreased. This is mainly because technological, structural and other changes taking place in the industry has left the union with little membership. Some respondents feel that changing composition of the labour force as well as the flexibility in the labour force have resulted in declining unionisation, the direct interaction between the management and the workers is encouraged in the changed industrial environment. Also, there is a growing trend towards the employment of more contracted workers and less of permanent workers especially at the lower end and these contracted workers do not participate in trade union activities because these contract workers are scared to loose their jobs. The management feels that direct interaction between the employer and employee should be encouraged in the changed industrial environment and in this way workers will avoid indulging into activities organised by trade union.

4.28 Conclusions

The exposure of previously protected industrial units to international competition are trying to adjust to new industrial environment. They have apprehension about their very existence in the long run due to decline in the overall performance of the industry. Due to this there is downsizing of labour and this downsizing is concentrated among the unskilled workers. On the other hand the demand for skilled workers have increased. To help the workers to adjust to changing industrial environment and technology they are provided with various training and retraining programmes. Not only this, firms have started treating workers as long term assets and have realised the importance of providing the amenities like health facilities, working conditions, benefits and allowances, etc. Market performance, international efficiency and cost effectiveness. commitment competition. participation of workers are some of the features of new work environment and this has struck blow to labour union movement. Their membership is on decline. This is posing a direct challenge to the role that the trade unions

have played in the past.

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