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**CHAPTER - I**  
**MANPOWER PLANNING**

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## 1.1 Introduction:

The prosperity of a nation depends upon a number of factors and the quality of the available manpower is one amongst them. Many countries have proved that loyalty and continuous efforts of citizens lead to excellent achievement, inspite of adverse natural and other conditions. Prevailing geographical and natural conditions in Great Britain and Japan are the instances in this point. These countries are so small so far as geographical area is concerned. They are unable to grow sufficient food grains for their population. But with marked improvement in technique of production, Britain became the first advanced, leading country in the world upto 1914, i.e. First World War, when it was the most powerful world creditor country. Even at present, it has successfully maintained its influential position. Japan is the largest producer in the world of television sets, radios, cameras, ships and sewing machines, motor cars and among the leading manufacturers of steel and automobiles also. It has conquered the world market, surpassing even the United States of America. Almost 60 per cent of the national income originates from world trade in both Britain and Japan.

"All this development is not at all due to the abundance of the natural resources. It is people's creation. The skill and discipline of its labour force have played a decisive role in the saga of economic development. Japan has shown that rapid economic development is possible by peaceful democratic means".<sup>1</sup>

Within a short span of forty years of Independence India has made impressive progress in various fields such as irrigation, transportation, communication, sciences, technology, etc. Through 'Green Revolution', self-sufficiency is achieved in the case of foodgrains proportion. Considerable progress has been achieved in the field of industrialization. India ranks as the fourth industrial giant in the world. In British era, India was in 'de-industrialised' stage. The scene has been completely changed within a short span of period. Now, India has entered into the age of robotisation. Public sector has played an important role in this respect. Though encouraging progress has been achieved on various fronts, the nation is far behind on the front of 'manpower' planning. Broadly speaking, manpower refers to an investment in people. Since Independence, very little attention has been paid to the problem of manpower planning. Discussions and talks about the manpower planning are going on continuously, but there is no manpower planning as such in India. We have only some projections and forecasts regarding manpower planning. In this regard, V.V.Giri says that, "The manpower resources of India are no doubt a great national asset but at the same time, they are a crushing liability".<sup>2</sup>

But for the betterment of masses, optimum utilization of the available manpower and to ensure an overall economic development, manpower planning is a must. It is an extreme and urgent need of the nation. Taking into consideration the importance of the manpower planning, a new Ministry has been established by

the Government of India, known as 'Ministry of Human Resources and Development'. Before we elaborate in detail the concept of manpower planning, let us explain the meaning and nature of the term 'manpower planning'.

**1.2 Manpower Planning:  
(Micro, Macro Concepts).**

The term 'manpower planning' has been explained at two different levels, i.e.

- i) Macro level manpower planning,
- ii) Micro level manpower planning.

**Macro Level Manpower Planning:**

"Broadly speaking, manpower planning refers to an investment in people. It comprises of a broad spectrum of activities such as education and educational institutions, scientific, technical and vocational institutions, public health, employment, the employment potential of labour and employment facilities or what Haribosch and others have called activities that affect the quality of human resources, which to them, comprise the wealth of nations".<sup>3</sup>

It is concerned with the use of the total manpower available in a nation, its utilization and development. It consists of the areas such as employment, education, integration, cultural background, etc. The concept of macro level manpower planning should be explained in the context of various economic systems prevailing in various countries. In Communist countries, the slogan propounded is 'efforts from each according to his ability, goods to

each according to his needs'. Distribution of the consumer goods is based on needs and not on efficiency. Manpower planning in such countries is so rigidly accurate and planned that people's energy is not wasted in vain as happens in capitalistic countries. Manpower planning in USSR and China from material point of welfare have proved desirable, though there is some element of compulsion in choosing one's occupation. Manpower planning in these countries has changed their conditions so immensely that they became world powers, economically potentially long term manpower planning is one of the important features of these countries of Communist Block.

For explaining the macro manpower planning in a better way, here is a narration regarding such term from the 'Dictionary of Modern Economics'. The narration is as below:

"Manpower Policy - An attempt to improve the functioning of the labour market, and, if possible, the trade off between unemployment and inflation. Two main forms of manpower policy may be distinguished. The first accepts the existing characteristics of supply and demand and aims for better 'matches' between workers and jobs by improving placement efforts and by counselling workers looking for jobs and employers looking for workers. Programmes of this kind may also include schemes for increasing the mobility of the workers. The second form attempts to influence the pattern of the supply of labour by upgrading skills and abilities. There is also a third form, which seeks to influence the composition of demand by establishing measures to increase the number of employment opportunities".<sup>4</sup>

In laissez-faire economic system, there is least manpower planning. Maximum economic autonomy granted to the masses. But such economic system is nowhere in the world. Government interference is inevitable in economic affairs of a country.

In India, a new ministry has been established recently in this connection. Before that stress was given on the national integration, education, vocationalisation of education and such related issues. India adopted macro-level manpower planning since independence. It is not feasible and possible for India to adopt such micro-level manpower policy. Again, it is against the democratic values of people. Now-a-days stress has been laid down on all fronts of manpower planning and development.

#### Micro Level Manpower Planning:

This type of manpower planning is concerned with a single industrial unit only. Management experts give trace to this type of conceptualization. Following definitions will become useful for better understanding of the term 'manpower planning' at micro level.

James J.Lynch defines, "Manpower planning is the integration of manpower policies, practices and procedures so as to achieve the right numbers of the right people in the right jobs at the right time".<sup>5</sup> Wendell French explained the term as, "Personnel management is the recruitment selection, development, utilization of, and accomodation to, human resources by organization".<sup>6</sup> Edwin Flipp defined as, "Personnel management is the planning, organising, directing and controlling of the procurement, development, compensation, integration and maintenance of people for the purpose of contributing to organizational, individual and societal goals".<sup>7</sup>

Similarly, Prof.Lawrence Appley defined the

term in the following words, "It is a function of guiding human resources into a dynamic organization that attains its objectives with a high degree of morale and to the satisfaction of those concerned, it is concerned with getting results through people".<sup>8</sup>

According to Narayanrao, V.S., the term 'human resource planning' can be studied at various levels, i.e.

- i) At the national level,
- ii) At the sector level,
- iii) At the industry level,
- iv) At the level of individual unit.<sup>9</sup>

First two of these relate to macro-level planning whereas the latter two relate to micro-level planning.

Manpower planning can be studied by taking into account the chronological order of plans in the following manner:-

Short-term Manpower Planning:

It is done for the period of one year or less. It is an integral part of five year plan. It should be integrated with each other and should be considered as ingredients of a medium-term plan.

Medium-term Manpower Planning:

Any plan of the period ranging from two to five years is generally considered as medium term plan. At national level, such plans are prepared as a part of the financial planning. At micro-level, such plans think much of training and development of employees.

### Long-term Manpower Planning:

Planning which is done for 10 to 15 years is known as long term manpower planning. It is generally done at the national level. Whenever there is a huge capital expenditure, it should be done at micro-level also.

### **1.3 Importance of Manpower Planning:**

Labour is a distinct and distinguished factor amongst other factors of production such as land, capital, entrepreneur, etc. Its effectiveness depends upon not only physical factors like pay, incentive, wages, bonus, etc. but also on psychological and emotional things. Motivating the available manpower and getting things done through them is a challenging task. We cannot establish casual relationship between motivating the people and remedies for improvement in it. Therefore, it is aptly said that successful leadership calls for the highest qualities of head and heart. Optimum utilization of available human resources is a challenging task. F.W.Taylor and Gilbreth contributed in this context through time and motion study, but it was a systematic approach rather than human aspect. Hawthorne studies would be the first literature in respect of human aspect of management. Maslow, McGregor, Likert, Herzberg, Mary Parker Follets are the contributors in connection with the human aspect. Much stress has been laid on motivating the people in an industry.

McGregor derived Theory X and Theory Y for motivating employees. Maslow explained the hierarchy of human wants, Likert studied communication process and concluded that there were



marked discrepancies in perceptions of subordinates and supervisors about the effectiveness of the communication. Frederick Herzberg evolved the management-hygiene theory of motivating workers. According to him, there are maintenance and motivational factors which must be attended to by the management. Industrial psychology is one of the aspects amongst others in manpower planning. It facilitates maximum utilization of human resources in a factory for the personnel manager. It studies human behaviour in industries. Principles of psychology are applied to cover all the aspects of human behaviour at work, especially in industries. Industrial psychology investigates work, worker, group dynamics, leadership attitudes, morale, motivation, fatigue, safety and related phases such as consumer psychology and industrial relations.

#### **Need for Human Resource Planning:**

1. Each industrial unit has to perform a particular task of production in a specific manner. It requires a labourforce of a particular qualifications, skills, knowledge, work experience and aptitude for work. Job specification and job description are the two techniques to determine the required quality of the labour force. Through manpower planning, the required labour force can be obtained.
2. Existing labour force reduces due to retirement, death, dismissal, physical and mental ailments, etc. It happens frequently so there is a constant need of replacing such personnel. Replacement of personnel is done by proper manpower planning.

3. Labour turnover is a unique feature of the industrial field. Though it is desirable and welcomed at some times by an industrial unit. Measures should be taken to reduce the rate of labour turnover. Labour turnover at a considerable rate affects adversely on the flow of work of an industrial unit. Labour turnover at a large extent causes to increase the production cost, cost of training, development of employees and ultimately the productivity and efficiency of an industrial unit goes down at a considerable rate. It has undesirable effects such as adjustment problems, instability and resentment. Labour turnover involves additional cost. Hiring and training of new employees, loss of production and cost of excess wages, under-utilization of capacity and poor performance leads to the financial losses. Labour turnover can be minimised by proper manpower planning programme.

4. For expansion programme, it needs additional labour force. Due to technological improvements and increasing the volume of production need for additional skilled labour force is increasing. Employing new production techniques, reducing cost of production by adopting modified production methods and for framing out quality control programmes, it requires proper manpower planning.

5. The nature of the present workforce in relation to its changing needs also necessitates the recruitment of new labour. For tackling the new challenges created by scientific progress, existing employees need to be trained or new blood injected in an organization.

6. Sometimes, in a particular department, there are more people while in other Department, there is dearth of skilled personnel. Such type of imbalances adversely affect the flow of work in an organization. It is a chronic as well as a frequently arising issue. It is more serious in Government departments, administrative offices, corporations, etc. The 'Zero-based Budget' project was introduced to rectify the imbalance of personnel in Government departments. Through proper manpower planning, if there is a surplus, it can be redeployed and if there is a shortage, it may be made good.

For getting a concrete idea regarding manpower planning, it will be beneficial to see the functional areas of personnel management.

#### **Functional Areas of Personnel Management:**

Below mentioned functional areas facilitate to recognise the nature of personnel management:-

- 1) Organization Planning, Development and Task Specialisation;
- 2) Staffing and Employment;
- 3) Training and Development;
- 4) Compensation, Wages and Salary Administration;
- 5) Motivation Incentives;
- 6) Employee Services and Benefits;
- 7) Employee Records;
- 8) Labour or Industrial Relations;
- 9) Personnel Research and Personnel Audit.

## 1) Organization Planning, Development

### and Task Specialization:

It consists of the job description, job specialization, assigning tasks, delegation of authority and integration of various activities. First of all, need of skilled personnel is assessed. It determines that what sort of skilled labour force is required, when it is required, etc. For fulfilling the given objectives utilization of advanced technology is essential, it covers the areas such as industrial engineering, industrial psychology and mechanical engineering. Another phase of this aspect is assigning of task, dividing the total labour force (department-wise) and delegation of authority. Creation of a healthy and fruitful interpersonal relationship and the formation of a homogenous, cohesive and effectively interacting informal group is one of the aspect of organizational planning and development. Establishing 'quality circle' is one of the progressive step in this regard.

## 2) Staffing and Employment:

Staffing and employment is a crucial aspect of manpower planning. It is a comprehensive form. It includes manpower planning, authorization for planning, developing sources of applicants, evaluation of applicants, employment decisions (selection), offers (placement), induction and orientation, transfers, demotions, promotions and separations (retirement, lay-off, discharge, resignation, disability and death).

### i) Manpower Planning:

In this process, future manpower requirement is anticipated taking into consideration present labour force. Employees

which are getting promotions in future, those retiring from service are also taken into consideration. Internal adjustments such as transfer, promotion, demotion, lay-off, separations, are made first and then decision is made regarding filling up the vacancies. Creation of positions is within the jurisdiction of the chief executive whose authorization is necessary for filling in vacancies. The chief executive chalks out standard procedure for filling up vacancies. Recruiting is a challenging as well as an important task in an organization. F.W.Taylor had also advocated for scientific selection of employees.

**ii) Recruitment:**

It is concerned with the process of attracting qualified and competent personnel for different jobs. Effective recruitment plan facilitates for better selection of employees. For making recruitment, successful one must tap the labour market, the development of new sources and the need for attracting a large number of potential applicants. Sources of recruitment can be internal or external. Internal sources contain employees and their relatives and friends. Internal recruitment can be quick, cheap and suitable. If certain conditions are fulfilled, it is the best source. External sources can be tapped through advertisements, employment exchanges, students, applicants at the gate and those employed in other companies are also valuable sources. When internal sources do not supply suitable candidates, external sources may be tapped. The personnel manager must make long term plans to develop such sources. Recruitment policy and function should be evaluated.

### iii) Selection Process:

It is the corner stone in the long process of manpower planning. Qualities of available labour force and its development largely depends upon the prevailing policy of employees' selection. It is a negative process, as very few candidates are selected from among the applicants. Taking into account the importance of selection process, many large and medium size industrial organizations adopt the scientific selection techniques. Selection process consists of following steps:

- a) Preliminary interview is arranged to make the first analysis.
- b) Application forms serve to obtain basic information on the applicant; it can be permanent record for reference. Information included in applications generally contains all personal data, inclusive of education and work experience. References should be checked before interview.
- c) With the help of various psychological tests, experience, achievement and behaviour are measured to predict job performance abilities. Tests must be valid, reliable and should be designed for the company concerned on the basis of the job study. They should be administered and particularly, evaluated by qualified persons. They serve a useful purpose when used in combination with other methods of selection.
- d) Selection interview - This is the most widely used method to assess the suitability of candidates. Interviews would be useful if adequate preparation is made, interviewers should be trained and their limitations are appreciated.
- e) Physical/Medical Examination is conducted to finally determine

the acceptability of the candidates for the vacancies to be filled in.

For matching an employee with his job and work group, induction programme is conducted. After induction, placement of selected candidates is made according to the need of an industrial unit. Placement is the last but not least step of a selection process. Evaluation of employee selection process is done continuously throughout the year.

For selecting employees two different approaches are put forward, i.e. (i) successive hurdles, and (ii) compensatory approaches. Majority of industrial organizations follow the successive hurdles approach instead of the compensatory approaches. It minimises the complexity and cost of selection procedure.

### 3) Training and Development:

For having a better quality of labour force, it requires rigid training programmes. It increases efficiency and effectiveness of personnel and organization and constitutes the best investment for mutual benefit. Employers and employees both are benefited by training programmes. Motivation, feedback, reinforcement and practice are the four major principles of training. Though various methods are followed for training employees below mentioned methods are used by many industrial organizations:

- i) On-the-job training,
- ii) Vestibule training,
- iii) Apprenticeship training,
- iv) Internship training,

- v) Special courses,
- vi) Programmed instructions.

#### Executive Development:

For enhancing competency and skills of executives, development programmes must be introduced. It is obvious that training workers and development of executives are the two different things. In such development programmes, emphasis is given to knowledge, skills, personal, human and conceptual attitudes and behavioural patterns. It is a long range programme. Managers must be intermittently provided with opportunities to train themselves; training them is an exercise in self-development. Following methods are followed for executive development:-

1. On-the-job;
2. Understudy plans,
3. Position rotation;
4. Specific skill development programmes;
5. Multiple management;
6. Coaching and counselling,
7. Short term courses run by educational bodies and professional associations;
8. Managerial grid.

#### 4) Compensation, Wages and Salary Administration:

The problem of wage payment is the most delicate and frequently arising issue. Slight changes in wage policy causes industrial disputes and stoppages of production. A proper wage policy is of great importance to provide fair compensation to



workers, increase in productivity to the employer, maintenance of industrial peace, social equity and justice. So many factors determine the wage rates. The two basic systems of wage payment are the time-wage and piece-wage. Its application depends upon the nature of the production of an industrial organization. For motivating the people, merely salary does not prove useful. By adopting proper incentive scheme, available manpower can be motivated. Some of the popular incentive plans are: (i) The Halsey Premium, (ii) Hynes Plan, (iii) Bedeaux Plan, (iv) Emerson's Efficiency Plan, (v) Rowan Plan, (vi) Taylor's Differential Piece Rate System, (vii) Merrick's Multiple Piece Rate, and (viii) Gantt's Task and Bonus Plan.

There are also group incentive plans such as the Scanlon Plan, the Towne Gain Sharing Plan and the Priestman's Production Bonus Plan.

##### 5) Motivation and Incentives:

Motivating the available labour force is an important issue in human resource planning. It is a personal phenomenon. We cannot prescribe certain tablets and medicines for motivating people. There is a lot of difference between the workers who work for getting salary only and the workers who are motivated and are doing their working. MacGregor presented the Theory 'X' and Theory 'Y' in this respect. The management should try to adopt Theory 'Y' instead of Theory 'X'. Maslow's Need Hierarchy Theory based on human wants and their satisfaction. When some wants are satisfied, it leads to another wants. Below are the factors which

motivate the available labour force:-

- i) Pay,
- ii) Wage Incentive Systems,
- iii) Other financial incentives,
- iv) The work itself,
- v) Praise and punishment,
- vi) Competition,
- vii) Participation.

**6) Employee Services and Benefits:**

For maintaining the available labour force, following measures should be followed in addition to fair wages and incentive schemes:

**i) Safety Provision:**

For maintaining good health and for securing their lives, management provides such safety provisions. It contains accident prevention, prevention from all sorts of pollution and other measures as required.

**ii) Employee Counselling:**

Discussions are made on the employees' problems. It affects positively on employees' morale. Its success mainly depends upon the approach adopted by the management.

**iii) The Medical Services:**

It includes the provision of curative and preventive medical and health improvement facilities for employees, free or otherwise. A periodic medical check up of employees, training in hygienic and preventive measures are undertaken.

**iv) Recreational and Other Welfare Facilities:**

It reduces fatigue and monotony of employees. It includes film shows, sports and games. and housing, educational, transport and canteen facilities, free or at subsidised rates.

**v) Fringe Benefits and Supplementary Items;**

It includes disability benefits, pension, gratuities paid, rest priods, lunch periods, wash up time, travel time, paid vacations, profit sharing benefits, contribution to employees' provident fund, educational expenditure, etc. The intention behind providing such fringe benefits are to be provided to them social security to reduce absenteeism and labour turnover.

**7) Employee Records:**

Personnel divisions are mainly dependent upon the employee records. The records should be complete, comprehensive, accurate. It contains records relating to personal qualifications, special interests, aptitudes, results of tests and interviews, job performance, leave, promotions, rewards and punishments.

**8) Labour Relations:**

Cordial, intimate and healthy relations among employers and employees is an asset for an industrial organization. It is a comprehensive vis-a-vis dynamic concept. It includes issues such as grievance procedure, rules and regulations, labour legislations, labour welfare, collective bargaining, etc. Good labour relations minimise industrial disputes and strikes, lock outs,

gheraos and such other evils resulting from it.

**9) Personnel Research and Personnel Audit:**

Systematic inquiry into any aspect of the broad question of how to make more effective an organisation's personnel programme, etc. Data relating to wages, standard of living, industrial disputes, etc. are collected by arranging sample surveys, etc. Morale and attitude surveys are conducted also. For improving the efficiency of personnel department, such personnel research programmes and audit programmes are conducted on a large scale.

**The Role of a Personnel Manager:**

The personnel manager has to play variety of roles. He is mainly concerned with human aspect of management. He has to mobilise the efforts of the available employees towards organizational objectives. He should act as a leader of that industrial unit. He should act as a captain of a ship. He should control the speed and direction of the human activities. The role of a personnel manager is ever expanding. The basic role of the personnel manager is 'the management of manpower resources'.

He plays various miscellaneous roles in accordance with the needs of a situation such as:

- i) One of the important role of a personnel manager is to remind the management regarding moral and ethical accountability to its employees;
- ii) Employees use to come forward for discussions with the personnel manager on the problems of health, mental and physical. He is expected to guide and advise employees on such issues.

- iii) He should act as a liaison officer among employers and employees. He should try to tackle the industrial disputes peacefully. Continuous efforts should be done for healthy and cordial relations among the employers and employees.
- iv) The personnel manager must act as a spokesman of the company. He has the responsibility to communicate the objectives and programmes of the company to employees. He should try to mobilise the efforts of employees towards such objectives and programmes.
- v) He should tackle the problems which involve human aspect to a large extent. He should advise the management on overall long range organizational planning.
- vi) Whenever there is a change in technology, production techniques, marketing strategies, government policy, etc., he should introduce and implement major institutional changes. He should interpret the object behind such changes to line officers and employees. He should organize development programmes and convince the top management of their need.
- vii) He should guide line officers to solve the departmental problems which are related to inter-personal relationships. He should counsel the line officers to detect and solve the problems on their own.
- viii) The personnel manager should play a role in such cases where a particular issue cannot charge against a particular department. Line officers are reluctant to handover the responsibility for such crucial problems. In such cases, the personnel should come forward for solving the problems, because it

should be related definitely with human relations. The below given chart gives a clear idea regarding the various roles which should be played by a personnel manager.

TABLE 1.1  
The Role of a Personnel Manager.

Personnel Role	Welfare Role	Clerical Role	Fire-fighting Legal Role
a) <u>Advisory</u> - advising the management on effective use of human resources.	a) Research in personnel and organizational problems.	a) Time keeping.	a) Grievance handling,
b) <u>Manpower Planning</u> - Recruitment, Selection, etc.	b) Managing services - Canteens, Grain-shops, Transport, Co-operatives, creches, etc.	b) Salary and wage administration incentives.	b) Settlement of disputes
c) <u>Training and Development</u> of line men.	c) Group Dynamics Group counselling, Motivation, Leadership, Communication, etc.	c) Maintenance of records	c) Handling disciplinary actions.
d) Measurement of assessment of individual and group behaviour.		d) Human engineering. Man-Machine Relationship.	d) Collective bargaining.
			e) Joint consultation

Source: C.B.Mamoria, 'Personnel Management', p.19.

This is about micro-level manpower planning. Macro-level manpower planning is also important equally as micro-level manpower planning. It affects the per capita income vis-a-vis standard of living of masses. Continuous efforts are going on for deriving better policy for macro-level manpower planning. Especially, more stress has been laid on it when India adopted the concept of 'Welfare-State'. Labour is a double-edged weapon. If it is applied for constructive purposes, it leads to development and prosperity of that nation. But if it is mobilised towards

destructive acts, it will be severe than hydrogen or atomic bomb explosion. It will ruin the whole civilization and human culture. It is a delicate issue and it must be handled with utmost care. The manpower planning situation of developed countries is far different from that of under-developed or developing countries. In this respect, V.V.Giri describes,

"In India, with her unlimited supply of unskilled labour and her acute deficit of skilled, technical and scientific personnel, planning connotes optimum utilization of available resources in terms of man and material".<sup>10</sup>

In India, on one hand, surplus manpower involved in agricultural sector gives diminishing returns, while on the other hand, industrial field suffers from a dearth of skilled workers. Increasing unemployment is a severe problem for India. Employment opportunities must be increased in future at a considerable rate.

We can enumerate the problem of manpower planning in the following manner:-

- i) Diverting surplus manpower in agricultural sector towards industries. For this purpose, development and growth of labour intensive small scale industries is quite essential;
- ii) Establishing employment exchanges at district level and enhancing the effectiveness of such exchanges;
- iii) Making available skilled and trained labour force, taking into consideration the need of the industrial field.

For taking the problem of manpower planning, following ways should be followed:-

- 1) Training within Industry (TWI);
- 2) Vocationalization of Education;
- 3) Apprenticeship Training;
- 4) Setting up of technical institutes on a large extent.

For this purpose, Government and private sector should take a leading part in it. It will be the primary training for skill formation, e.g. tailoring, auto-services, television techniques, shorthand and typewriting, etc.

Following objectives can be fulfilled by such training programmes:-

- 1) Availability of the required labour force. It facilitates to increase the efficiency of labour supply and ultimately, the enhancement of industrialization;
- 2) Optimum utilization of the available manpower;
- 3) Increasing employment opportunities;
- 4) Increasing opportunities for self employment;
- 5) Achieving the required skill by the workers and increasing their mobility;
- 6) Standard of living can be increased to a greater extent through manpower planning.



#### 1.4 Vocationalisation of Education:

One of the important aspect of manpower planning, especially of skill formation, is vocationalisation of education. The main theme behind the vocationalisation of education is 'to fit for useful employment'. It is described as 'wise business investment', both for the nation and for the individual. Since Independence much debate has been done regarding our education policy. It was decided that the education system should be framed out in such a way that it would facilitate to accomplish the nation's needs. After much debate and discussion, 10+2+3 pattern was adopted. Vocationalisation of education at the Plus Two is the main feature of the new system of education. It proves important not only from economic viewpoints but also from moral and social point of view. To have a better idea regarding vocationalisation of education, we must take into account the need for vocationalisation of education.

- 1) Obtaining a degree in commerce or any other faculty creates a status symbol in the minds of younger generation. But as they have no special skills, there are no job opportunities for them. They are unable for self employment also.
- 2) In India, there is a dearth for skilled personnel, which is required for many industrial units. Industrial units require diversified, advanced technical knowledge but such skill providing institutes are not available in India. It leads to more complex situation.
- 3) A majority of such courses the Commission

recommended, should be terminal in the sense that highr secondary education also is terminal for many students.

4) While framing the pattern for vocational courses, need of various industrial units mut be taken into account. There should be a link between needs of the industrial units and the existing pattern of the vocational courses. A period of about ten years may be kept in view for manpower preparation as longer duration may distort the whole estimation and thus render it unreliable and useless.

5) In India, there is no 'normal' or 'evolutionary' economic development; economic development of 100 years or more of some countries is being packed in 20 or 30 years in India. Hence, there is a tremendous need for skill formation and the problem assumes a huge proportion when a country speeds up economic development.

6) Another issue of this problem is shifting of millions of people from rural to urban areas. They have no specialised knowledge and skill. Obviously, they are rejected by the industrial field. The result is frustration.

Hence, a few words regarding programme planning. While planning for vocationalisation of education, two things should be remembered, i.e. the curriculum should be based on labour market information, the second thing is that the curriculum should be based on occupational analysis.

For determining vocational courses, present situation of labour market, potential labour supply and the mobility of the labour should be considered. Requirements of industrial units should also be considered. It involves the possibility of change in production techniques, probability of expansion, requirements for future period, etc., training potential of the available labour force should be subtracted from the probable demand for labour force.

While programme planning, following items should be taken into account:-

**1. Information:**

Information regarding the labour market should be collected carefully. The information should be correct and reliable. It should consider the exact occupational area where such labour force is required. A survey should be conducted for this purpose.

**2. Guidance and Counselling:**

After collecting the statistical information, it should be translated into job opportunities. Job seekers may be benefitted by such guidance and counselling. It would facilitate for job seekers to make up their minds in this respect.

**3. Probable Changes in Occupational Areas:**

If there is a possibility of changes in production techniques, required skills, quantum of raw materials, entrepreneurs should realise in this regard. There should not

be any gap between the introduction of the new technology and the supply of such skilled labour force. Training programmes should be arranged in this manner.

**4. Research:**

There is a much wider scope for research, especially in labour market situation. The information collected through research should be reliable, accurate and comprehensive enough. The research should cover current and projected occupational requirements.

**5. Illiteracy and Poverty:**

Illiteracy and poverty are the two sides of a coin. Inadequate education inhibits training programmes vis-a-vis introduction of vocational courses. For acquiring a particular occupational skill, it requires general education upto some extent. Each individual should be given a thorough general education as a basis for acquiring the necessary specific occupational skills.

**6. Vocational Education (Training and Retraining):**

There should be a proper balance between occupational demand and the training imparted to employees. To fill up such gaps, parallel programmes should be arranged for retraining the available labour force.

**7. Apprenticeships:**

Public and private sector should take a lead in apprenticeship training. It satisfies the future need of

skilled personnel. Vocational courses should provide pre-apprenticeship education and related instruction for apprentices.

**8. Placement:**

Placement plays a dominant role in the optimum utilization of the available manpower. It lessens the gap between job seekers and entrepreneurs. Employment opportunities should be increased by such placement services.

After deciding the occupational areas where vocational courses should be introduced, the curriculum should be framed. While framing the curricula for various vocational courses, the need, objectives and key-factors of that particular occupation should be taken into account. It is a continuous and frequently arising issue. Hence, some principles which should be considered while framing curricula for vocational courses, are given below:-

- 1) It should be introduced at Eleventh and Twelfth Standards. It should occur as close to the time of application as possible.
- 2) After completion of a particular vocation course, the candidate should handle the job efficiently. He should be competent to deal with all the complex phenomena of that occupation.
- 3) There should be a combination of vocational and general education. Attempts should be made in such a manner

that general education can be developed to a greater extent. Vocational education should be based on a sound basis of general education. For example, a candidate completing the vocational course, say in office management, should speak fluent English, he should have a thorough knowledge of the principles of management, legal knowledge, communication skills; then only he can do his job competently.

- 4) There should be sufficient diversity so that individual needs can be settled. As well as the curriculum should be flexible enough.
- 5) All the phases of an occupation cannot be brought into the curriculum. It will become so complex, rigid and monotonous that nobody will be attracted towards such occupations. But all the key-factors should be included in the curriculum so that the candidate should enter the occupation with ease.
- 6) The curriculum of vocational courses should be framed in such a manner that it should shoulder the responsibility of the occupation of today and tomorrow.

Another important aspect of vocationalisation of education is the teaching techniques for vocational courses and general education. The teacher should consider the objectives, occupational structure and the operational patterns of the vocational education. The candidate should be motivated in that way. Recognition of occupational skills, its utility, purpose and the areas

of study is the first and basic element of vocational education process. The teachers must be well equipped with special occupational skills and practical experience in this regard.

The students need training to enter an occupation. Teachers must be able to provide not only group instruction but individual instruction, to create interest in their study and to attract the students towards a particular occupation, the teacher should know how to use a variety of techniques. The teacher should communicate the new trends, technologies, market situation regarding a particular occupation. The usual teaching techniques should be applied for vocational education also. A teacher's success lies not only in delivering lectures or imparting knowledge, but how he uses to motivate the students for further study. The teacher must be able to demonstrate a variety of skills on an individual and group basis, he must be skilful in the use of individual and group conferences, he must know how to develop the students' appreciation of good workmanship and safe work habits.

Taking into account the above mentioned principles, basic needs and the activities and teaching techniques, we can chalk out a plan for various vocational courses. Various occupations have newly been introduced in the vocational curricula. Vocationalisation of education is not a new concept. Many advanced as well as developing countries have introduced the vocationalisation of education as a new phase of educational pattern. U.S.A., U.K., Japan, Denmark, Philippines, New Zealand, Australia, U.S.S.R., Thailand, Malaysia, Singapore, are some of the countries which

have framed the pattern of 'vocationalisation of education'.

In India, many States such as Andhra Pradesh, Maharashtra, Karnataka, Kerala, Chandigarh, Punjab, Pondicherry, Tamil Nadu, Assam, Tripura, Orissa have implemented the pattern of vocationalisation of education.

#### **Vocationalisation of Education in Maharashtra.**

In accordance with the recommendations of Kothari Commission, the Government of Maharashtra adopted a uniform pattern of general education (10+2+3) from the year 1972 and as a component of this general education, vocational education at the higher secondary level has been introduced from the year 1979-80. The object behind the vocational education is to find wage employment or self employment after completion of their higher secondary education. The Department of Technical Training selected the subjects for vocational courses with the approval of the Government.

The Government of Maharashtra adopted bi-focal concept. The field for higher education to capable students is kept open. The student passing vocational subjects at higher secondary level and having merit and means will be definitely going for higher education in the particular stream with the vocational bias and they will be getting preference for getting admission for university education. Experience states that few vocational students are getting admission for the professional higher education. Experiment of Special Vocationalised Education Training scheme has not proved so useful in Maharashtra.



The Director of Training is the overall controlling officer of all types of technical and vocational institutes in the State and he is assisted by the Deputy Director of Technical Education with some supporting staff. At the regional levels, the Deputy Director of Technical Education of the regions are carrying out the work of supervision and administration with the help of the District Vocational Education Officers in the region. At the head office level, one post of a Deputy Director of Technical Education (Voc.) is created and he is assisting the State Director of Training in the administrative and training matters.

It is experienced that the teachers with appropriate qualifications and experience are not available. Training programmes should be arranged in this regard. Running the various vocational courses is matter of considerable expenditure. the Government of Maharashtra has given the permission to open the vocational courses on no-grant-in-aid basis to the various institutes. They are finding it difficult to run the courses for want of finances. For the present, there are 23 vocational courses introduced under the six faculties/groups:-

- 1) **Technical Group:**
  1. Electrical Maintenance,
  2. Mechanical Maintenance,
  3. Scooter and Motor-cycle Servicing,
  4. General Civil Engineering,
  5. Electronics,
  6. Chemical Plant Operation.
- 2) **Commercial Group:**
  7. Banking,
  8. Insurance,

9. Marketing and Salesmanship,
  10. Office Management,
  11. Small Industries and Self-Employment,
  12. Elementary Industrial Management,
- 3) **Agricultural Group:**
13. Animal Science and Dairying,
  14. Farm Mechanics,
  15. Horticulture,
  16. Crop Science.
- 4) **Food Technology Group:**
17. Bakery and Confectionary,
  18. Food Preservation,
  19. Cookery.
- 5) **Fishery Group:**
20. Fish Processing Technology,
  21. Fresh Water Fish Culture.
- 6) **Para-Medical Group:**
22. Multi-purpose Health Workers Course,
  23. Elementary Laboratory Technology.

Though a considerable number of courses have been introduced, there is much scope for further expansion. Taking into account the requirements of various industrial units, there is vast field of operation where such courses may be introduced. Stenography and typewriting is one of them.

#### 1.5 Economics of Education and Manpower Planning:

As has been mentioned earlier, the manpower planning is an investment in people. One of the important aspect of the manpower planning is the economics of education and manpower planning. While evaluating the economic progress of India, two sectors have been neglected. It does not mean that it has been

completely neglected but sufficient attention has not been paid to these sectors. One of the sectors is 'population' and another is 'manpower planning'. The issue of manpower planning was not consistently considered.

While planning the economic growth, development of manpower is most essential. These two processes must proceed simultaneously. There should be a direct relation between the economic growth and education, training and skill. It is now considered that human beings can be considered as capital that can be developed through investment in schooling and specialised training. In this regard, Harbison says, "as a form of capital, developed through schooling and specialised training and utilised together with co-operant factors in the production of goods and services".<sup>11</sup>

American economists give much stress on manpower planning as a general theory of capital. The process of manpower planning can be divided in five steps, i.e.

1. Manpower requirements,
2. Manpower available,
3. Manpower utilization,
4. Manpower development, and
5. Manpower control.

The first two steps of this process are related to demand and supply of human capital. Though systematic study was conducted on this issue, it is not free from discrepancies. The major weakness in considering manpower planning is estimating future economic growth. The economic growth is based on so many

complicated things, we cannot segregate the various items involved in the economic growth. Moreover, manpower demand and supply projections over long runs involving 8-10 years period tend to distort the planning, particularly in view of the unrealistic assumptions of the fixed co-efficients and linear relationships between the change in productivity and time.

#### Education and Manpower Planning in India:

Manpower planning is a challenging task in India. It is a highly populated country with diversity in castes, religions, culture, etc. As a result, manpower planning issue was discussed at various levels and so many views were expressed in this regard. Educational development took place to a large extent, too many Commissions have been appointed. Taking into view the quantity of education, we have made much progress. But as regards the quality of education, discouraging results have come out. Fear has been expressed that the total education system may become futile and obsolete in future. Here is an outlook of various educational Commissions and thoughts regarding the education policy:

- 1) The basic education programme advocated by Mahatma Gandhi under Wardha Scheme in 1937;
- 2) Radhakrishnan Commission on University education in 1949;
- 3) Mudliyar Commission on Secondary Education in 1953;
- 4) Engineering Personnel Committee of 1956;

- 5) Kothari Commission on Education in 1964;
- 6) Central Advisory Board on Education;
- 7) N.C.E.R.T. - 'Navodaya Vidyalaya'.

So many Commissions were appointed and attempts were made sincerely on the educational front. But we cannot reconcile the need of industrial units and supply by the educational institutes. There is a much wider scope in this regard. After studying the various concepts and the importance of the term 'manpower planning', we shall proceed further to the issue of 'Skill Formation in India'. The research study is restricted to 'Macro-level Manpower Planning' only.

#### 1.6 Skill Formation in India:

Skill formation plays an important role in increasing the efficiency of an industrial unit. Skilled and trained labour force is the asset of that particular industrial unit. It is not only useful in performing the various operations in

a desirable fashion. Following privileges can be obtained by skill formation also:-

- i) Increase in the quality of the work performed;
- ii) Less supervision cost;
- iii) Chances for exporting the goods may be enhanced;
- iv) Proper maintenance of machines can be possible, reduction in spoilage and wastage of labour, material can be reduced to a large extent;
- v) Recognition of the objectives and policies of the industrial unit, which leads to productivity consciousness among the employees;
- vi) Cordial relations among the workers can be established;
- vii) Industrial relations can be improved;
- viii) It results in the reduction of cost per unit, increases the volume of profit and ultimately gets better position in the market;
- ix) Mobility of the workers can be increased as the skilled workers get additional earnings than the unskilled.

The term 'skill formation' has two aspects, one of them is increasing the efficiency in industrial field and the other is to improve the standard of administrative work. Application of labour saving devices is the main attribute of modern office. Labour saving devices facilitate the office operations in a systematic manner. In many offices, computers have been set up. Setting up of a computer is not feasible for medium and small scale offices. But there are many labour saving devices which are commonly used in modern business offices such as typewriting machines, cyclostyling

machines, billing machine, dictating machine, pay roll machine, coin handling machines, calculators, machines used in mailing department, etc:-

Following advantages can be obtained by such labour saving devices:-

- 1) Employees get relief from monotonous work;
- 2) Accuracy can be achieved in administrative operations;
- 3) Employees get relief from monotonous work;
- 4) Reduction in labour and ultimately fatigue resulting from it;
- 5) Employees get relief from routine, complex, monotonous work and can be utilised for facing challenging task;
- 6) Administrative overhead can be reduced to a larger extent;
- 7) Standardization of machines, manual work can be obtained;
- 8) Efficiency in the administrative operations can be achieved.

The above mentioned office equipments are advantageous and it leads to improvement in the efficiency of administrative work. But for operating these machines, skill is required. For example, there is no use of typewriting machines unless the employees get the required skill for operating them. If an employee passes the G.C.C. examination in English or Marathi typewriting, he can make the best use of typewriting machines and improve the quality of administrative work. For operating various labour saving devices, the particular skill is required. Computer operating is a highly skilled job. Though this skill can be obtained by the methods such as training within industry, apprenticeship training, ad hoc training programmes, etc., but it will be an expensive

matter. Small and medium size business offices cannot conduct such type of training programmes. It is an overhead expenditure, it does not prove useful directly in increasing the volume of production. Entrepreneurs are reluctant to invest huge amount in such type of training programmes. Another aspect of this problem is entrepreneurs cannot get the required number of skilled and trained labour force easily. Prevailing technical institutes provide such skill to job seekers, instead of running the training programmes for formulating skill among employees. Various technical institutes play dominant role in this regard. Priority is given in selection of those candidates who have got the required technical skill. Such candidates prove more useful for performing the office work efficiently.

Though the technical institutes are providing required skill among the job seekers, the institutes do not take into account the exact requirements of the skilled labourforce for industrial and administrative fields. Against, there is a gap between the demand and supply of the required skilled force. It should be lessened through employment exchanges. Employment exchanges should link the requirements of skilled labour force and supply of such a force by technical institutes under the guidance of the Ministry of Human Resources and Development. It will reduce the quantum and severity of employment problem. It is, therefore, desirable to have manpower planning in developing countries.



## Section - II

### Research Methodology

#### A) Selection of the Topic:

Manpower planning is an important aspect in advanced as well as the developing countries. The standard of living depends upon the soundness of manpower planning. Its main feature is that it cannot be computerised. It can be studied at micro and macro-levels also. Communist and socialist countries give much stress to such manpower planning. Capitalist countries cannot neglect this issue either. In India, the urgency for manpower planning is so acute that a special Ministry known as 'Ministry of Human Resources and Development' has been established by the Government. Manpower planning is a challenging task. In India, there are various castes, religions, culture, languages, traditions,

etc. There are so many political parties, isms, ideologies. In such a critical situation, maintaining national integration is a giant task. Attempts are going on continuously for maintaining the national integration. Broadly speaking, manpower planning refers to an investment in people. It consists of the areas such as employment, education, integration, cultural background, etc. Its importance is not at macro-level only. Manpower planning at micro-level is also a challenging task. Many management thinkers give stress on this issue. Optimum utilization of the available manpower is a highly skilled task. It requires the highest qualities of head and heart. Manpower planning contains a number of activities. It begins with the estimation of required labourforce and extended upto the retirement benefits granted to them. Skill formation is one of the important aspect of the manpower planning. Skill can be acquired by conducting training programmes vis-a-vis by establishing various technical institutes. Various technical institutes play a dominant role in skill formation and ultimately, in manpower planning at micro and macro level.

Taking into consideration the importance of skill formation and especially, the role of the technical institutes in it, I have taken it as a subject for research. I am going to study the role of typewriting institutes in providing skilled labourforce for business field. For this purpose, I have taken the six registered typewriting institutes in Kankavali Taluka. Within a span of five years, how far skill is provided by these institutes, how far the skill proved useful in getting a job, for performing administrative work, for self-employment, etc.

are some of the main highlights of my research work. I hope that it will be quite an interesting and useful study for research work.

**B) Title:**

"A STUDY OF MANPOWER PLANNING - ROLE OF TYPEWRITING INSTITUTES IN PROVIDING SKILLED LABOURFORCE FOR BUSINESS FIELD (AN ANALYTICAL STUDY IN KANKAVALI TALUKA).

**C) Definitions of the 'Manpower Planning':**

The term 'manpower planning' has been defined by various authorities at both the macro and micro levels. For better understanding of the research subject, hence, two definitions consisting of micro and macro have been stated,

"Manpower planning is the integration of manpower policies, practices and procedures, so as to achieve the right numbers of the right people in the right jobs at the right time".

... James J.Lynch.

"Broadly speaking, manpower planning refers to an investment in people. It comprises of a broad spectrum of activities such as education and educational institutions, scientific, technical and vocational institutions, public health, employment, the employment potential of labour and employment facilities or what Harbison and others have called activities that affect the quality of human resources which to comprise the wealth of nations".

... Prem P.Gandhi.

In spite of the above mentioned two definitions, a definition from 'The Dictionary of Modern Economics' is taken for better understanding of the research subject, which runs as:

"Manpower Policy - An attempt to improve the functioning of the labour market, and, if possible, the trade off between unemployment and inflation. The first accepts the existing characteristics of supply and demand and aims for better 'matches' between workers and jobs by improving placement efforts and by counselling workers look for jobs and employers looking for workers. Programmes of this kind may also include schemes for increasing the mobility of the workers. The second form attempts to influence the pattern of the supply of labour by upgrading skills and abilities. There is also a third form, which seems to influence the composition of demand by establishing measures to increase the number of employment opportunities".

**D) Objectives of the Study:**

The following are some of the objectives of the study of the manpower planning:-

- 1) To study the issue of manpower at macro and micro level especially regarding the skill formation in India;
- 2) To study the evolution of the art of typewriting. It includes the mechanism of ancient typewriters, improvements in earlier period and such relevant information;
- 3) To get information about the various models of typewriting machines and their special peculiarities;
- 4) Information regarding the various parts of a typewriter and how these parts are useful in performing the job systematically and neatly;

- 5) Information about the curriculum, syllabi, lessons to be practiced during the particular period, administration of Government Commercial Certificate (GCC) examinations, etc.;
- 6) Role of typewriting institutes in Kankavali Taluka in providing skilled labourforce for business field. (In this context, information is to be collected by filling up interview schedules by the proprietors of the typewriting institutes, to know the recent trends about the G.C.C.examinations. Various tables and charts should be presented in this regard to know the factual information about the field of typewriting);
- 7) To collect information about how the art of typewriting is useful in performing the administrative job efficiently and systematically. How it is useful for getting jobs and self-employment. Such type of information is collected by filling up questionnaires from the candidates who are appearing for the G.C.C.examinations;
- 8) For collecting information, samples are to be selected from the candidates who have passed the examination since 1982. For better understanding of the role of typewriting institutes in Kankavali Taluka, this information proves useful.

**E) Coverage and Location:**

The research study is limited up to the Typewriting institutes in Kankavali Taluka only. In the first phase, interviews of the proprietors of the typewriting institutes in Kankavali

Taluka have been conducted and the role of such institutes has been stated. In the second phase, questionnaires have been filled up from the selected samples. Samples are to be drawn from the candidates who passed the various G.C.C. examinations since October 1982. Approximately 100 to 110 samples are to be drawn (10% of total population) by applying stratified sampling method. The sample drawn represents the whole population.

**F) Methods of Data Collection:**

For completing the research project, normative survey method has been applied along with discussions and bibliographical method.

**i) Direct Method:**

Interview schedule has been used for conducting interviews of the proprietors of the typewriting institutes in Kankavali Taluka. It is the first phase of the research project. In the second phase, questionnaire has been framed and data is collected from various respondents by normative survey method. Direct method is used for Chapters III, IV and V only.

**ii) Indirect Method:**

For preparing Chapters I and II, 'bibliographical method' has been applied. Various books, periodicals, newspapers have been referred for collecting information for Chapters I and II. Circulars from the Bureau of Government Commercial Certificate Examination have also been applied for collecting technical information.

### G) Sampling Method:

Sampling method is used in many research projects instead of the Census method. It reduces labour and time of the researcher. Accuracy can be maintained in sampling method also. Many times, application of the Census method for data collection results in rigidity, complexity and ultimately, monotony in data collection. In addition to this, it requires huge expenditure and time for conducting such type of surveys. While applying sampling methods, samples can be drawn by using various methods, such as:

- i) Random sampling,
- ii) Stratified sampling,
- iii) Systematic sampling,
- iv) Quota or Cluster sampling.

For fulfilling the requirements of this research work, stratified sampling method has been used for obtaining the below mentioned advantages:-

- 1) It is free from personal bias and, therefore, not affected by choice of the researcher;
- 2) Representation can be made from each 'class' or 'strata'. Hence, we have ten per cent sample units from each typewriting institute. There is no such fear that the selected samples exclude samples from a particular unit or units;
- 3) It saves labour and time to a larger extent. It results in accuracy and efficiency in research work;
- 4) It is very simple. The researcher need not exercise brain in deciding whether a particular unit can be representative or not;

For the research purpose, approximately 145 samples have been selected from the universe of 1450 candidates who have passed the G.C.C. examinations, by using stratified random sampling method.

#### H) Problems in Data Collection:

In this project, the data has to be collected in three phases. At first phase, interviews have been conducted of the proprietors of the typewriting institutes in Kankavali Taluka. Cordial co-operation has been granted by all the proprietors. Another phase of this project is to obtain the names, addresses and the results of the candidates who have passed the G.C.C. examinations from the typewriting institutes from Kankavali Taluka. It was a gigantic and complex task. Writing down such information from the institutes' record was a time-consuming job. For this work also, the proprietors extended their kind co-operation.

In the third phase, we had to cope up with some difficulties. First, the sample candidates were spread all over the Taluka. It was quite time-consuming job to tap every sample candidate at his leisure. Second, many of the sample candidates had passed just the S.S.C. examination and they could not understand the questionnaire framed in English language. Much efforts had to be taken for arousing the interest of the respondents in this issue. Third, some sample candidates had got jobs and gone elsewhere. Finding out their present addresses was a difficult task. But it is quite noteworthy that I could get excellent response from the candidates.



### I) Analysis and Interpretation:

I have collected the information upto 20th November 1988. Analysis of such collected information has been made by tabulating the same. Graphs and pictorial representations have been used for interpretation of such information. The questionnaires 'A' and 'B' were so simple that there was no need to prepare a Master-Sheet in respect of the information collected from the proprietors of the typewriting institutes. After collecting this information, it was shown to the Research Guide for further instructions. Finally, the collected information is presented in Tables, Charts, Graphs, etc. We have started the main job, i.e. 'report writing'.

### J) Report Writing:

The report writing is an important and fundamental and concluding stage of the research work. The arrangement of the Chapters is made according to the following order:-

- Chapter I : Manpower Planning,  
Research Methodology,
- Chapter II : The Art of Typewriting,
- Chapter III : Role of Typewriting Institutes  
in Kankavali Taluka,
- Chapter IV : Analysis and Interpretation,
- Chapter V : Observations and Conclusions.

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