

## CHAPTER V

CRAFTSMEN TRAINING SCHEME AND  
APPRENTICESHIP IN INDIA

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During the British rule, the State hardly paid any serious attention to vocational education and training in India. After Independence, when free India started its Five-Year Plans, there was abundance of unskilled manpower and an acute shortage of trained and skilled personnel. The prosperity of a nation depends upon the effective utilisation of human and material resources available in the country. The Government gave first priority to the development of technical education. In fact, the rapid development of technical education has been one of the major achievements of the post-Independence period. But while adequate facilities had been provided for the training of technicians, engineers and scientists in Engineering Colleges, Polytechnic Institutions and advanced educational institutions, there was no nationally

organised and recognised programme for the training of craftsmen, who actually formed the main productive power on the shop floor. The need for skilled craftsmen with the necessary technical know-how was felt all the more with the impetus given to rapid industrialisation. Hence a high priority was given to the training of skilled craftsmen. Obviously, proper and effective vocational training at all levels and for various fields of activities is an essential or rather an indispensable element of economic growth because vocational training prepares people with the requisite skill to enable them to contribute to the material well-being of the country. Undoubtedly, only the skilled workers of India can be the backbone of her strong industrial base. Today, fortunately, the Government of India and the people recognise the vital role of vocational education and training in stepping up production for improving the standard of living. Today, more serious attention has been paid to provide vocational training through systematic Apprenticeship Training programme and the Craftsmen Training Scheme.

Training of Craftsmen in the Industrial Training Institutes (I.T.Is) :

The Ministry of Labour and Employment has set-up a network of training Centres - the Industrial Training Institutes

(I.T.Is.) for giving semi-skilled and skilled training in a wide variety of craft trades. These training centres had their origins in the training programmes started during the period of the Second World War. But after Independence, the institutional training in India has undergone substantial expansion over the last fifteen years. The following table shows the expansion facilities under the Craftsmen Training during the first, second and third Five Year Plans in India:<sup>1</sup>

TABLE 79

Plan Period	: Seats at the end of : the Plan	: No. of Institutes
1951-56	10,534	59
1956-61	42,685	163
1961-66	1,13,622	357

The Table speaks for itself the enormous expansion in training facilities during the three Five Year Plans. For the expansion of the Craftsmen Training Scheme, 21,026 additional seats were introduced at the existing industrial training institutes/centres during April 1966 to January 1967 bringing the total training capacity to 1,34,648 as on 31st January 1967. By the end of 1971, the target was to

<sup>1</sup>Ministry of Labour, Employment and Rehabilitation: The Report 1966-67, Vol.II (Employment and Training), Government of India, 1967, p.20.

establish some 430 institutes in all the parts of India and to raise their total capacity to approximately 200,000 persons. By the end of 1970, the total seating capacity exceeded 1,50,000, and training was provided to 1,53,740 youngsters. Instead of expansion, now the tendency is consolidation and improvement of the training programme. (The details of the Statewise distribution of the seats as on 31-12-69 are given in Appendix III).

Age, Educational Qualification for Admission and duration of Training

Training is provided to youths who are between the ages of 15 and 25 years, in 30 engineering and 22 non-engineering trades in the Industrial Training Institutes which are located in different parts of the country. The period of training for engineering trades which was hitherto 18 months institutional training followed by 6 months' inplant training in the industry, has been revised since August 1966 to one year for 13 engineering and 22 non-engineering trades and 2 years in other 17 engineering trades. The qualifications for admission to these trades and the syllabuses, and the lists of tools and equipments have also been revised because of the reorganisation of the craftsmen training scheme. The revised nomenclature, educational qualifications for admission and duration of training under the reorganised craftsmen training schemes are given in Appendix IV

### Analysis of Educational Qualifications of Applicants

The minimum qualification required for admission to many of the trades under the Craftsmen Training Scheme is two classes below matriculation, while for some trades like Electrician, Instrument Mechanic, Draughtsman, etc. the minimum qualification required is matriculation. the table on the next page gives the educational background of the candidates who applied for admission to the various Industrial Training Institutes during 1966.

The Table indicates that -

- Out of 2,69,459 applications received for engineering trades 42.8% were from matriculates, 6.9% were from higher secondary passed or intermediates and 0.1 percent from graduates, the rest (52.2%) being from non-matriculates.
- Out of 13,680 applications received for non-engineering trades, 44.8 percent were matriculates, 26.9 percent higher secondary passed or intermediates and about 3.4 percent graduates, the rest (24.9 percent) were non-matriculates.
- The actual percentage of matriculates who joined the institutes is somewhat lower than the percentage of applicants, as these candidates are reluctant to join trades like carpentry, blacksmithy, etc. and it was not possible to accommodate all applicants in subjects of their choice.
- It is encouraging that the number of young people with higher qualifications seeking admission to these craft courses is on the increase.

TABLE 80

Table showing Educational Qualifications received and the Numbers of Persons admitted under the Craftsmen Training Scheme in I.T.Is. during the year 1966<sup>1</sup>

Craftsmen Training Schemes	Session	No. of Applicants by Educational Qualifications				No. of persons admitted by Edu- cational Qualifications					
		Below matric	Matric	Higher second- ary includ- ing Interme- diate	Gradu- ates	Total	Below Matric	Matric	Higher second- ary inc- luding Interme- diate	Gradu- ates	Total
Engineer- ing Trades	Commenced in August 1966	135337 (50.2)	115214 (42.8)	18720 (6.9)	188 (0.1)	269459 (100.00)	38143 (52.1)	31508 (43.0)	3589 (4.9)	24	73264 (100.00)
Non- Engineer- ing Trades	-do-	3402 (24.9)	6132 (44.8)	3675 (26.9)	471 (3.4)	13680 (100.00)	2065 (39.8)	2040 (39.3)	937 (18.0)	151 (2.9)	5193 (100.00)

Figures in the Brackets indicate percentage)

<sup>1</sup>Source: Ministry of Labour, Employment and Rehabilitation, 'Report 1966-67, Vol. II, Employment and Training, Government of India, New Delhi, 1967, p.40.

- The table also shows that out of 269459 applicants who applied for admission in Engineering courses only 73264 i.e. 27% were admitted. It means that there is a much higher demand on the part of the trainees for training and hence the Government should try to start still more centres to cope up with the rush.

Similarly out of 13680 applicants only 5193 i.e. 37.8% were admitted in non-engineering trades

#### Administration and Financial Responsibilities

Till 1968, all expenditure on Craftsmen Training Scheme was shared between the Central and the State Governments on the ratio of 60:40. But from 1-4-1969, the entire financial control of the Craftsmen Training Scheme has been transferred to the respective State Governments. The Central assistance is now given in block-grants and loans. Yet vocational training is considered a joint responsibility of the Central and the State Governments. The day-to-day administration of Craftsmen Training Scheme and allied programmes is looked after by the State Governments while the Central Government is responsible for the laying down of policies and training standards, training of instructors, trade tests and award of certificates.

#### Stipends and Other Facilities

Training is free and in addition some concessions like free workshop clothing, sports and medical facilities are also

provided. 33½ percent of the trainees are given a stipend of Rs. 25/- p.m. Some seats are reserved for Scheduled Caste and Scheduled Tribe candidates and all such trainees are paid stipend of Rs. 45/- per month.

### Trade Certificates

At the end of the institutional training, the trainees (both in engineering and non-engineering trades) appear in the All India Trade Tests conducted on behalf of the National Council for Training in Vocational Trades. Those passing this test are awarded the National Trade Certificate. This is a recognised qualification for recruitment to subordinate posts in all Governmental Organisations.<sup>1</sup>

### Efforts for Improvement in the Quality of Training

In order to improve the quality of training, Trade Manuals have been written for various trades for guidance of the Instructors. These have been printed for the trades of Fitter, Plumber, Turner, Machinist, Draughtsman (Mechanical), and those for the trades of carpenter, Draughtsman (Civil), Electrician, Moulder, Sheet Metal Worker, Welder, Wireless Operator, Wireman and Cutting and Tailoring. Now manuals for trades of Motor Mechanics, Radio Mechanic, Instrument Mechanic,

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<sup>1</sup>Ministry of Labour, Employment and Rehabilitation. 'Report 1969-70, Vol.II', Government of India, New Delhi, 1970, p.24.



Blacksmith, Surveyor, Pattern Maker and Building constructor are also finalised.

As an incentive to the trainees to improve their performance, skill competitions for trainees in the industrial training institute are held in the trades of fitter, turner, mechanist, electrician, welder and moulder at the Institute and State levels. The All India Skills Competition for the best trainees in these trades from each State was conducted at the Central Training Institute, Calcutta and Madras in August 1966. Medals and prizes were awarded to the best trainees. During the year 1969-70, three more trades, namely, Mechanic (Motor Vehicle), Instrument Mechanic and Cutting and Tailoring (for women) were included for the All India Skills Competition for Craftsmen. In 1969, the Sixth competition was conducted at the Central Training Institutes at Calcutta, Madras, Bombay and New Delhi.

#### Advisory Council

To make the training programme more purposeful, the Government of India has set up National Council for Training in Vocational Trades to advise the Government on training programmes. The Council advises on training policies, standards to be attained, course content in practical and

theoretical instructions and standardisation of tools and equipment for each trade in which training is imparted. It consists of representatives of Central and State Governments, Industry and Labour. The Director of Training in the Directorate General of Employment and Training is an ex-officio Secretary of this Council while The Union Minister for Labour and Rehabilitation is the Chairman.

#### Aptitude Tests for Selection of Trainees

The Directorate General of Employment and Training sometimes also make use of aptitude tests in the selection of trainees who apply for admission to the Industrial Training Institutes. The aptitude tests are conducted only in those trades and institutes where the number of applicants for admission is about three times the number of seats available or more. During the recruitment tests held in July 1966, the aptitude tests were conducted in 15 trades in a number of I.T.Is in different parts of the country.

#### Some Short-Comings

Some experts feel that I.T.Is' training is a typical institutional trade training and it is difficult to create an industrial atmosphere in an institute. It is also felt that the standard of skill of the trainees is lower than that required by many employers. Sometimes the location of the institutes does not always coincide with the location of

industry. It is also found that a substantial proportion of trainees fail to follow their trades after training. Sometimes, it becomes difficult to adjust the trades for which training is provided to meet the changing requirements of industry. Some people also argue that the training is expensive in terms of the skill levels attained. In spite of some of the shortcomings, It can safely be said that I.T.I. has provided valuable contribution in the training system of the country and all efforts are being made to overcome some of the shortcomings mentioned above.

#### Scope for Future Expansion

It should be clearly noted that the expansion of facilities in the I.T.Is. depend entirely on the capacity of industries to absorb the craftsmen trained by these Institutions. It costs more than Rs.1000/- per annum to train one student in the I.T.I. Therefore, unless employment is more or less assured to their products, it would be futile to increase the intake capacity of I.T.Is. Attempts should also be made to reorient the training programme towards self-employment.

The Education Commission (1964-66) has recommended that the age of admission to the I.T.Is may be reduced to 14 and that it should provide some more general education. The Commission has also pointed out that even for courses where only a middle pass is required a large percentage of applicants are in fact

who matriculates and, in the competition for places, naturally stand a better chance. This militates against a larger diversification of pupils into vocational education after full primary education.<sup>1</sup> Hence, the Education Commission also recommended that the possibility of a still further expansion of facilities in I.T.Is. should be explored and if possible, the available places should be more than doubled in the Fourth Plan and particular efforts be made to attract boys after the primary school.

#### Recommendations of the National Labour Commission

The Government of India had appointed the National Commission on Labour in 1966. It submitted its report in 1969. The following are some of the useful recommendations made by the Commission for improving the training programme :

1. To enable the I.T.I. boys to gain experience, they should be put as stipendiary apprentices in industries.
2. Facilities should be provided by the plant to retrain the surplus hands to cover the shortage of workers in new industries.
3. The system of granting study leave to a worker to equip himself with improvements in skills should be made more common in industrial and commercial establishments.

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<sup>1</sup>Report of the Education Commission (1964-66), p.371.

4. The establishments having large requirements of trained personnel should have suitable 'tie-up' with the I.T.Is.
5. To make the I.T.I. trainees acceptable in all parts of the country, uniformity should be maintained in the quality of performance.
6. Like the Central Government, the State Governments should also have the organisations responsible for preparation of man-power requirements and its quality and the scheme for maximum utilisation of trained man-power.

#### Part-Time Classes for Industrial Workers

This scheme is intended to impart theoretical knowledge to industrial workers who have not had the benefit of such training. Instruction is provided in trade theory, workshop calculations, and drawing pertaining to the trade. The period of training is two years and the workers are charged a nominal fee of Rs.2/- (two) p.m. Classes are held in the evenings thrice a week and these are arranged at the I.T.Is, or in the industrial establishment for the convenience of workers. At the end of September 1969, 4,715 seats had been introduced under this scheme but only 1,983 trainees were undergoing training in 34 centres. It may be noted that by the end of 1966, some 2,665 trainees were undergoing training in these 34 centres when the allocation of seats was less i.e. 4,230. This shows that the scheme has not become very popular. Actually the number of trainees has decreased.

## APPRENTICESHIP TRAINING IN INDIA

Apprenticeship training has existed in this country for many years and it can also be said that the standard of the best apprenticeship compares favourably with similar training in other parts of the world.<sup>1</sup> Two large Indian organisations which have long provided this type of training are the Indian Railways and the Ordnance Factories. Moreover, recently a number of modern industries, such as the petroleum, machine-tool and aircraft industries, have established apprenticeship schemes of a high standard. However, these are only few exceptions and not a rule. Even today, the great bulk of industry, both large and small, make no adequate provision for systematic apprenticeship training.

In the past for many years, the apprenticeship training was most unsystematic. It had little relationship to the needs of the youth or of their employers. At its lowest level, it was used for the exploitation of young boys who received neither pay nor training but who could expect in time to be offered employment as a reward for several years of unpaid labour. The position was unsatisfactory when in the middle of 1950s, the Government of India determined to expand apprenticeship into a national scheme. The Government wanted the apprentices to be trained from the start in an industrial atmosphere.

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<sup>1</sup>Pidgeon, F.J. 'Apprentice Training on a Continental Scale: 'India', in the Journal of 'Training for Progress,' I.L.O., Geneva, No.1, Vol.5, 1966, p.8.

### Apprentices Act of 1961

The Government of India's first move was to try to encourage industry to train apprentices on a voluntary basis. But the voluntary schemes did not succeed in training large number of apprentices because of the unwillingness on the part of many employers to train apprentices voluntarily. An effort to pay even subsidy to an employer who accepted apprentices <sup>not</sup> for training to compensate him did bring desired results.

Following the recommendations of several bodies like International Labour Conference (1951), Shiva Rao Committee (1954), Technical Training Committee of Small-Scale Industries Board (1956), Special Apprenticeship Committee (1958), National Council for Training in Vocational Trades (1959), and Working Group of Technical Education and Vocational Training (1959), the Apprenticeship Training Programme in the industry was made statutory by the enactment of the Apprentices Act, 1961.

By 1958, it was clear that some measures of compulsion were necessary for apprenticeship training and work was started on the drafting of a new apprenticeship law. The first draft of the new legislation was prepared which covered some of the following points :

- designation of suitable trades as apprenticeable trades;
- qualifications for admission to apprenticeship - age, education and physical fitness;

- the apprenticeship contract, its requirements, registration and enforcement;
- the period of apprenticeship; inspection and control of training;
- the number of apprentices to be engaged by an employer in relation to his labour force;
- provision for the basic training and related instruction for the apprentices;
- obligations of the apprentices and the employers;
- pay of apprentices, hours of work, leave etc.
- compensation in the event of injury;
- employers' obligation to keep records of apprentices under training;
- settlement of disputes between apprentices and employers;
- proficiency tests and granting of certificates;
- establishment of National and State Apprenticeship Councils;
- penalties for infringing the Act, etc.

A special feature of the Bill was a provision that regulations would be issued from time to time which would enable the Ministry of Labour to determine various matters such as the appropriate duration of apprenticeship for the different trades, number of apprentices to be trained etc. This provision makes the Act reasonably flexible.

Here it is worthy to note that during the first decade that followed independence, the major shortage for the industries was of machines and materials, but by the time of Apprenticeship



Bill was being drafted, there was a considerable shortage of skilled workers and the Bill was welcomed by many employers, particularly those who were already training apprentices and were the heaviest losers from the poaching of skilled workers practiced by employers who had no training scheme.

The Apprentices Act of 1961 has the following objectives :

1. To regulate the programme of training of apprentices in the industry in such a way as to conform to the standards, syllabus, period of training, etc. prescribed by the Central Apprenticeship Council; and
2. To utilise fully the facilities available in industry for imparting practical training.

Under the Act, all the industries which have been notified, have to undertake the training of a certain number of apprentices based on the number of skilled workers in the trades designated for this purpose under the Act. The implementation of this Act started from January 1963.

The duration of the training under the Apprentices Act ranges from three years in most of the trades to four years in some trades. The training consists of one year's basic training followed by two (or three) years' trade training.

The programme includes practical training and theoretical instruction in trade theory, engineering drawing, workshop calculations and science related to the trade. The subject of

social studies is common to all the trades.

At the end of the training, the candidates are tested on behalf of the National Council for Training in Vocational Trades. The National Apprenticeship Certificates are awarded to those who are successful in the tests. The apprentices who pass out of these trade tests are generally absorbed in the industry as skilled craftsmen.

During the training, each apprentice is entitled to the minimum stipend prescribed in the Apprenticeship Rules as shown below :<sup>1</sup>

Period of Training	In establishments located within the cities of Bombay, Calcutta and Madras	In establishments located at places other than the cities of Calcutta, Bombay and Madras
During the first 5 months of the training.	Rs. 50/- p.m.	Rs. 40/- p.m.
During the next 6 months of the training	Rs. 60/- p.m.	Rs. 50/- p.m.
During the second year of training.	Rs. 70/- p.m.	Rs. 60/- p.m.
During the third year of training	Rs. 80/- p.m.	Rs. 70/- p.m.
During the fourth year of training.	Amount equal to wages as skilled workers paid by the employer to a person who has completed 3 years apprenticeship on a designated trade or Rs.90/- p.m. whichever is higher.	.. do .. of Rs.80/- p.m. whichever is higher

<sup>1</sup> Ministry of Labour, Employment and Rehabilitation, 'Report 1966-67, Vol.II. (Employment and Training)', 'Government of India, New Delhi, 1967, p.25.

No deduction may be made with respect to casual leave or medical leave. The stipend for a particular month must normally be paid within the first ten days of the month.

An apprentice may not work more than eight hours a day, or more than 45 hours a week (including related instruction). He shall not work or receive his training between the hours of 10-0 p.m. and 6-0 a.m., unless the apprenticeship adviser approves such hours as being in the interest of the training of the apprentice or in the public interest.<sup>1</sup>

#### Leave

Three types of leave are admissible for apprentices:

1. Casual leave : 12 days per year ( exclusive of public holidays); may not be accumulated;
2. Medical leave: Maximum of 15 days per year - may be accumulated upto a maximum of 40 days;
3. Extra-ordinary leave; Maximum of 10 days in a year; unpaid; granted at the discretion of the employer.

#### Records and Returns

The employers are required to maintain registration, attendance and progress of both full term and short term apprentices. The prescribed forms should be used for such reporting.

The employer who fails to carry out the terms and conditions of the contract must compensate the apprentice according to the following set rates :

<sup>1</sup>The Gazettee of India, New Delhi, No.83, Tuesday, 28, Aug.1962, pp.464-474).

- termination upto 12 months from date of contract..Rs.300/-.
- termination upto 12 to 24 months from date of contract  
Rs.400/-
- termination after 24 months from date of contract.. Rs.500/-.

#### The Central Apprenticeship Council

The Government of India set up the Central Apprenticeship Council for advising the Government in apprenticeship training programmes. This Central Apprenticeship Council is a statutory body constituted under the Apprentice Act. It is comprised of representatives of the Government of India, State Governments, industry, labour and persons with special knowledge of industry and labour. The Director of Training in the Directorate General of Employment and Training is an ex-officio Secretary of the Central Apprenticeship Council and the Union Minister for Labour and Rehabilitation is the Chairman.

#### International and Foreign Aids

The passing of the Apprenticeship Act marked the beginning of a new phase in the Government's apprentice training programme. It coincided with the expansion of International Labour Organisation (I.L.O) technical assistance to India in this field. From 1957 to 1960, experts had been provided under the United Nations Expanded Programme of Technical Assistance but in December 1961, assistance started under a United Nations Special Fund Project. Its aim was to provide the services of several experts who would assist both at Ministry of Labour head quarters, in the Directorate-General of

Employment and Training, and also at State level. At various times eight I.L.O. experts have assisted the development and implementation of the apprenticeship programme in India.

#### Trade Committees

From the past experience it was thought advisable to concentrate the new trade committees to major industrial cities and also the majority of its members were appointed from the area. The Mechanical Engineering Trade Committee met in Calcutta, the Electrical Trade Committee in Bombay, and the Automotive Trades Committee in Madras. This system worked well and the committees produced syllabi for the designated trades.

#### Expansion of Apprentice Number

There is a continuous effort on the part of all concerned to improve the level of training and at the same time expand the number of apprentices under training. It is encouraging to note that the standard of training has gradually been raised and so has been the number of apprentices. By the end of 1965, approximately 20,000 apprentices were being trained under the provisions of the Act. By the end of 1966, the number of apprentices under training rose to 30,326. This training was given in 26 trades designated for full term and short term apprentices in 2108 establishments. By the end of 1969, 37,653 apprentices were undergoing training in various trades in 3,313 establishments. The Government had set a target of 100,000 apprentices to be under training by 1971 but even half the target is not achieved. This

shows that more vigorous efforts are still needed.

### Apprenticeable Trades

Thirteen new industries and fourteen new trades were brought under the purview of the Apprentices Act during the year 1966. The total number of industries specified and trades designated under the Act were then 140 and 40 respectively. Diversification of the Apprenticeship Training Programme has been started with the designation of Printing, Textile, Chemical and other trades. In 1970, 195 industries have been specified under the Act. (See Appendix No. V ). The list of the designated trades along with admission qualifications ratio and period of training is given at Appendix VI . Again, to intensify and diversify the Apprenticeship Training Programme during the Fourth Five Year Plan period and to meet the requirements of trained workers in all types of industries, Study Groups, composed of representatives of industries, Employers' Organisation and Workers' Associations etc. have been constituted to advise the Government and the Central Apprenticeship Council.

### Efforts for Improvement in the Apprenticeship Training Programme

- It has now been decided to administer aptitude tests for the selection of apprenticeship trainees. Two training courses were conducted by the end of 1969 to impart training to the personnel from industry in the techniques of administration of aptitude tests and interpretation of test results.

- An All-India Apprentices Competition in the trades of Fitter, Turner and Machinist (Miller) is held for apprentices in order to promote healthy competition among them. This competition is held at the Local Centre, Regional and National Levels. The 4th All-India Competition was held by the end of 1969.
- To improve the standard of related instructions to the apprentices, the use of audio-visual aids is developed at the Central Technical Services. These Technical Services also organise courses for the training of officers, apprenticeship advisers, surveyors etc. They also prepare teaching materials for the apprentices.

Assistance of United Nations Development Programme (U.N.D.P.) and International Labour Organisation (I.L.O.) have proved very valuable in these improvements of training programmes.

- Regional Directorates of Apprenticeship Training are set up. Their jurisdiction and functions are shown below :

<u>Region</u>	<u>Headquarters</u>	<u>Jurisdiction</u>
Western Region	Bombay-70	States of Maharashtra, Gujarat and M.P. and Union Territories of Goa, Daman and Diu.
Northern Region	Kanpur-6	States of Rajasthan, Punjab, Haryana, U.P. and Jammu and Kashmir and Union Territories of Delhi, H.P., and Chandigarh.
Eastern Region	Calcutta-20	States of W. Bengal, Assam, Bihar, Orissa, Nagaland and Union Territories of Andaman and Nicobar Islands, Tripura, Manipur and NEFA.
Southern Region	Madras-32	States of Madras, Andhra Pradesh, Mysore, Kerala, and Union Territories of Pondicherry and Lacadive Maldiva Amindivi Islands.

The Regional Directors will be responsible for all duties and functions concerning apprenticeship programme, including the following duties, in the respective jurisdictions :

- (a) Assistance to State Directors in the development of basic training programmes and facilities for Related Instruction for all trades which are already designated or are prepared to be designated.
- (b) Supervision of the work of apprentices in the Public Sector Industries within the Region.
- (c) Assistance and advice to State Apprenticeship Advisers and Private Sectors Industries within the Region to control and regulate the practical training programme of the apprentices on the shop-floor.
- (d) Work relating to trade testing and trade certification in respect of apprentices in the Public Sector industries within the Region.
- (e) Operation of mobile training units, duly equipped with teaching materials and audio-visual aids, in outlying areas.
- (f) Assistance and advice to State Apprenticeship Advisers and small scale industry within the region to set up and develop Group Training Scheme.
- (g) Study and project the technological development in industry in respect of products, processes, machine and other tools, handling of materials, inspection techniques and the like and report to Headquarters, D.G.E. & T. and others as directed by Headquarters.



In spite of all these efforts for the improvement of apprenticeship training programme in this country, on 24-12-70 Mr.D. Sanjivayya, then the Union Labour and Rehabilitation Minister, speaking at the meeting of the Central Apprenticeship Council regretted that the Central Training Scheme of apprentices in the industry did not function well because sufficient attention had not been paid to it by the management. Many people would like to agree with him when he pointed out that the Central Government had received good co-operation from majority of the employers in the implementation of the programme, quite a sizable number of them did not pay sufficient attention to this national programme.

Co-Ordination Between Apprenticeship Training and Industrial Training Institutes

Both systems, the Industrial Training Institutes and Apprentice training, have their own advantages and disadvantages, but it is essential that the end product in each case should be a skilled worker trained upto uniform standards accepted throughout the country. This objective had led to evolving a pattern of training taking advantage of the good points of both systems and side stepping their disadvantages.

The basic training of the apprentices has been brought into line with the first year's training of the I.T.I. and the syllabi of the latter have been revised. In the case of a Trade

for which I.T.I. training lasts one year and full apprenticeship 18 months, for instance, it is now possible for the I.T.I. graduate to go straight into employment in his trade for the remaining six months, either as a worker with comparatively less skill or as an apprentice. If the I.T.I. course is of two years' duration the trainee may, on completion of the first year, either transfer into the second year of an apprenticeship or (if no apprenticeship is available that year) continue in the second year of the I.T.I. and only transfer into an apprenticeship thereafter.

The apprentice training syllabi have been currently revised to make the theoretical instruction given to apprentices correspond to that given to the I.T.I. trainees.

The basic objective of these measures is the best possible and most economic utilisation of the limited training resources available. They will also provide industry with a supply of potential apprentices who have already had sufficient basic training to enable them to contribute to production almost immediately.

#### Training of Craft Instructors and Supervisors

The Director General runs 7 Central Training Institutes for Instructors at Calcutta, Bombay, Madras, Kanpur, Hyderabad, Ludhiana and New Delhi for training the craft instructors needed in the Industrial Training Institutes and apprenticeship

training establishments. Only women instructors are trained at the Central Training Institutes (C.T.I.) New Delhi. In these Institutes, the Instructor trainees are trained in modern methods of instructions on shop floor as well as in the class room. The training also includes upgrading of the skill level of the Instructor trainees. The Institutes at Calcutta, Madras, Hyderabad, Kanpur and Ludhiana, have been set up in collaboration with the I.L.O. whereas the one at Bombay has been set up with the collaboration of United States Agency for International Development.

In 1967, the total introduced training capacity of the Central Training Institutes for Instructors was 2,396. The duration of the period of training has been revised to one year from the session starting from 1st August 1966. In 1967, 1783 Instructor trainees passed out from the Central Training Institutes bringing the total number of instructors passed out to 13,006. In 1970, this number increased to 15,301. A programme of training of Supervisors to meet the specific requirements of individual industrial undertaking has been started on an All-India basis by the Directorate General of Employment and Training. In 1969, 2 courses of Supervisory Training were conducted in Punjab.

### New Programmes for Training and Research

1. The Central Staff Training and Research Institute has been set up at Calcutta in 1968, with the assistance of Federal Republic of Germany for providing training to officers and staff and for conducting research in training techniques.
2. The Advanced Training Institute has been set up at Madras in 1968, with the assistance of United Nations Development Programme (Special Fund) for the training of highly skilled master Craftsmen with a seating capacity of 162.
3. The Foreman Training Institute has been set up at Bangalore in 1970 with the assistance of the Federal Republic of Germany with a seating capacity of 200 for training of Foremen.

### Chronological Evolution of Vocational Training Scheme in India

It will not be considered out of place to give here chronological evolution of vocational training schemes in India from 1941 to 1970.<sup>1</sup>

- 1941 : War Technician Training Scheme
- 1945 : Training Scheme for Ex-Service Men
- 1948 : Training Scheme for Craft Instructors
- 1950 : Craftsmen Training Scheme
- 1958 : Evening Classes for Industrial Workers.
- 1959 : National Apprenticeship Scheme (Voluntary) (Now discontinued).
- 1961 : Apprentices Act, 1961 (Passed by Parliament).
- 1963 : Implementation of the Apprentices Act.

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<sup>1</sup>Ministry of Labour, Employment and Rehabilitation. 'Report 1969-70, Vol.II,' Government of India, New Delhi, 1970, p.63.

- 1963 : Supervisory Training Scheme
- 1964 : National Skills Competition (I.T.Is.).
- 1965 : Mine Mechanisation Training Scheme.
- 1967 : Part-time Training of Industrial Workers(Modified).
- 1968 : National Apprentices Skill Competition.
- 1968 : Advanced Training Institute.
- 1968 : Staff Training and Research Institute.
- 1970 : Foremen Training Scheme.

#### Youth Vocational Centres in India

The Government of India, with the assistance of the United Nations Children's Fund (UNICEF) and the International Labour Organisation (I.L.O) and in consultation and co-operation with State Governments has started a pilot scheme for Youth Vocational Centres. The aim of these centres is to provide general education combined with pre-vocational training for children between 11 and 14 (middle-school period). Vocational orientation and guidance are part of the programme.

The scheme is being run by the Central Ministry of Education. But the Directorate General of Employment and Training (Ministry of Labour) provides advice and assistance and is responsible for co-ordination. These centres are attached to educational institutions like middle schools, secondary schools and multi-purpose schools. 65 centres were set up during the period of the Third Five Year Plan. The first five centres were opened in February 1964 and the remainder were

opened at the rate of 20 every six months.

Part-time and full-time courses were planned but in the beginning the full time courses of 3 years' duration were adopted. The courses included :

- (a) General Education subjects like Regional Language and English/Hindi; Elementary Mathematics and Science; Social Studies etc. In rural areas special stress will be given on agriculture and animal husbandry. These subjects will keep up two hours a day in full-time courses and 1 hour in the part-time courses.<sup>1</sup>
- (b) Pre-Vocational Training in basic fitting/turning, sheet-metal work, gas welding (Low Pressure), Smithy, moulding, Carpentry etc.

Obviously rural centres and those in semi-urban areas will concentrate on agriculture, animal husbandry and rural industries. It has also been suggested that model farms and agricultural demonstration farms should be attached to such centres.

The staff of each centre consists of 4 instructors for pre-vocational training, 2 teachers for general education subjects and one career master. The career master will exercise all the usual functions of a youth vocational guidance counsellor. He must be a graduate teacher with at least 3 years' experience or have a diploma in education and vocational guidance and one year's teaching experience.

<sup>1</sup>Mehta, H.P. Youth Vocational Centres. 'In the Journal of Guidance Review', Delhi, Vol.2, No.4, Oct. 1964, pp.121-129.

The training of instructors was carried out at the First Five Centres - known as Regional Training Centres - established in February 1964. The career masters were trained at the Secunderabad Regional Training Centre. The Scheme also augurs well for the development of guidance service. This is the first time it has been extended to children below secondary school level.

#### Employment Service and Its Programmes in India

The Directorate General of Employment and Training is in charge of the development and administration of programmes relating to Employment and Vocational Training on a national basis. The National Employment Service caters to the needs of a highly complex labour market which is a natural corollary to rapid industrial growth. Through its programmes of occupational research and study, the service has been able to meet the challenge of identifying and locating workers with new types of skills and experience required for meeting the changing demands of industry more effectively. It collects and disseminates Employment Market Information which provides the necessary factual base for manpower planning and development of human resources. The vocational guidance and employment counselling programme of the service, assists the job seekers in entering vocations best suited to their aptitudes and qualifications.

### Employment Exchanges

In 1970, the total number of Employment Exchanges in the country was 461. This number includes 45 University Employment Information and Guidance Bureaux, 15 Professional and Executive Employment Offices, 8 Project Employment Exchanges, 9 Exchanges for the Physically Handicapped and 1 more.

At the end of 1969, there were 34.2 lakhs applicants on the Live Register of Employment Exchanges. During the same period there were 15.26 lakhs of educated persons (educational level of Matriculation and above) seeking jobs through Employment Exchanges as against 8.42 lakhs at the end of December 1965. Nearly 2.15 lakhs of these educated applicants were either graduates or post-graduates. During the year, 1966, the number of placements effected by the Employment Service in respect of educated persons was about 1,71,000 of which 26,300 related to graduates (including post-graduates.)

The number of Scheduled Castes Tribe applicants on the Live Register of Employment Exchanges at the end of December 1966 was 3.52 lakhs, it rose to 4.64 lakhs at the end of 1969. 66,658 placements in respect of Scheduled Castes and Scheduled Tribes respectively were effected by Employment Exchanges during the year 1969.

Out of a total of 34.2 lakhs of job seekers on the registers of Employment Exchanges at the end of 1969, about 4.15 lakhs were women. During April 1969, December 1969,



38,676 placements in respect of women job seekers were effected by Employment Exchanges.

Unemployment in India (1969)

TABLE 81

Applicants on the Live Register of Employment  
Exchanges (by Occupational Groups)

Occupational Group	Number on 31-12-69	Percentage to the total
Professional, technical and related workers	2,87,619	8.4
Administrative, executive and managerial workers	6,773	0.2
Clerical, Sales and related workers	1,51,816	4.4
Agricultural dairy and related workers	14,276	0.1
Miners, quarrymen and related workers	4,342	0.4
Workers in transport and communication occupation	91,089	2.7
Craftsmen and production process workers	221,803	3.6
Labourers with work experience not elsewhere classified	1,13,040	3.3
Persons without professional or vocational training or previous work experience, of whom	24,03,079	70.2
- (a) Below Matric(including illiterates)	12,38,113	36.2
(b) Matriculates and above but below graduates	10,10,989	29.5
(c) Graduates and above	1,53,977	4.5
Grand Total	34,23,885	100.0

(Source: 'India 1970', Ministry of Information and Broadcasting, Government of India, 1970).

The employment exchange statistics cover mainly urban areas ;

Registration with the employment exchange being voluntary, only a portion of the unemployed register themselves with the exchanges;

Some of the registrants are already employed but have registered for seeking better jobs.

Yet on the whole <sup>these</sup> ~~the~~ statistics give an idea of the level of unemployment in the country.

#### Employment Market Information Programme

The programme for collection of employment market information, which was introduced in India during the Second Five Year Plan provides an appraisal of the level and trend of employment, the relationship between demand and supply of workers, the occupational and industrial disposition of the labour force and the types of personnel that are persistently in short supply. All this information is used by the authorities concerned with planning and development of human resources, technical and vocational training and vocational guidance. The employment situation is analysed on the basis of information collected through the net work of Employment Exchanges in different parts of the country. The programme covers 56 thousand establishments in the public sector and 87 thousand establishments in the private sectors. While information from all establishments in the public sector, and those employing

25 or more persons in the private sector is collected on a statutory basis under the provisions of Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 and Rules 1960, information from 51 thousand small establishments in the private sector, employing 10-24 persons, is collected purely on a voluntary basis.

#### Analysis of Employment Trends

Employment in the organised sector of economy increased from 120.90 lakhs at the beginning of the Third Five Year Plan to 154.60 lakhs at the end of the plan. This represented an increase of 33.7 lakhs or 27.9 percent during the five years' period 1961-66 which gives an average annual growth rate 5.6%.

The number of civilian employers in the public sector increased from 70.50 lakhs in March 1961 to 93.64 lakhs in March 1966 an increase of 23.14 lakhs or 32.8 percent.

The following table gives employment growth in different branches of the public sector during the Third Plan Period.<sup>1</sup>

TABLE 82

Branch of Public Sector	No. of the Persons employed at the end of March (in lakhs)	
	1961	1966
Central Government	20.90	26.32
State Governments	30.14	37.27
Quasi Government	7.73	13.16
Local Bodies	11.73	16.89
<u>Total</u>	<u>70.50</u>	<u>93.64</u>

<sup>1</sup>Report 1966-67' Vol.II (Employment and Training), Government of India, Ministry of Labour, Employment and Rehabilitation, New Delhi, 1967, p.7.

In the private sector, employment statistics relate to all the 35,000 larger establishments which employ 25 or more persons. The number of persons employed in these establishments increased from 50.40 lakhs in March 1961 to 60.94 lakhs in March 1966 - an increase of 10.59 lakhs or 21.0 percent.

#### Manpower Shortages

Analysis of information received from employers as well as the experience of Employment Exchanges indicated that side by side with the existence of surpluses in clerical and unskilled categories a large number of vacancies remained unfilled with employers due to manpower shortages. These shortages related mainly to professional and technical workers and craftsmen and production process workers. Among professional and technical personnel, persistent shortages were reported particularly among engineers, medical and para-medical personnel, university and secondary school (trained) teachers particularly in Science subjects and Accountants. So far as the Craftsmen are concerned, shortages were experienced among others for fitters, turners, electricians and moulders. Employers also reported shortages for stenographers. These shortages varied in their intensity from region to region and from one industry to another.

### Vocational Guidance and Employment Counselling

Separate sectors to provide guidance and counselling facilities have been set up at 180 exchanges. Vocational Guidance work in each State is co-ordinated and supervised by Vocational Guidance Unit at State Directorates of Employment. The following figures relate to vocational guidance activities of Vocational Guidance Sections at Employment Exchanges during the period April to December 1969.

Number of applicants guided in groups	- 4,87,466
Number of applicants who were given occupational information	- 1,75,533
Number of applicants guided individually.	- 22,711
Guided applicants placed in jobs	- 1,281

Moreover, vocational guidance to university students is rendered through Employment Information Guidance Bureaux which are set up at 45 universities. The following figures summarise the activities of the University Employment Information and Guidance Bureaux during the period April-December 1969 :

Number of applicants (students) guided individually	: 10,105
Number of applicants given occupational information.	43,471
Number of applicants who received guidance at the time of registration.	13,476
Number of persons registered for employment	18,179
Number of persons placed in employment	2,038

### Structure of the Labour Force

In 1961, the labour force was estimated at 189 million, or 45 percent of the total population. Their occupational distribution was as follows:<sup>1</sup>

TABLE 83

Occupations	Number in Millions	
	Males (Millions)	Females (Millions)
Cultivator	66	33
Agricultural Labour	17	14
Mining, quarrying, forestry, hunting, fishing, stock-raising and fruit-growing.	4	2
Cottage Industry	7	5
Other manufacturing	7	0.8
Construction	2	0.2
Trade and Commerce	7	0.8
Transport and Communications	3	0.07
Other Service Occupations	15	4

Agriculture and small industry occupies 80 percent of the labour force, commerce and transport almost 7 percent, Government services just under 3 percent and the professions and liberal arts 4.5 percent.

Almost 10 million members of the labour force (7 million agricultural and 2.7 million non-agricultural workers) had a secondary means of livelihood in addition to their primary sector.

<sup>1</sup>Mukherjee, N. 'Manpower Planning and Employment Policies', in the Journal of A.I.C.C. Economic Review, New Delhi, Vol.17, No.24, 1st July 1966, pp.19-26.

Precise figures of unemployment are almost impossible to obtain in India. Statistics published in 1965 estimated unemployment at 2.5 million on the basis of applicants on the Live Employment Exchange Registers.

Underemployment and disguised unemployment are major problems, typical of the former is the high proportion of agricultural labourers (84%) who are unemployed, on an average, 82 days in the year. Cases of disguised unemployed are the people whose employment fails to utilise fully the skills and knowledge they possess. Both problems are instrumental in lowering output.

There is lack of mobility between occupations and between rural and urban areas. Mobility is further hampered by inequality as regards level of training and wages.

#### Problems of Unemployment among Educated People

Among the educated persons in India those who have completed secondary school (i.e. matriculation) but have not completed university training are the easy victims of unemployment. According to the Indian National Sample Survey (1958-59), the percentage of unemployed among matriculates in the labour force in urban areas was 7.2 for men and 20 for women. The problem is aggravated by the rapid rise in the number of secondary school leavers. 240,000 in 1950-51, 600,000 in 1960-61 and an almost 900,000 in 1965-66.<sup>1</sup> In 1969, there were 910,000

<sup>1</sup> Directorate General of Employment and Training, 'Employment of Matriculate (A Case Study)', New Delhi, Government of India, Ministry of Labour and Employment, 1963.9 P (Mimeographed).

matriculates, 401,000 undergraduates and 215,000 graduates and post-graduates who had applied for jobs in Employment Exchanges.

Most of the matriculates (approximately 50 percent) like to serve in clerical occupations - clerks, stenographers, typists, accountants, cashiers, computer and punch-card operators. The next largest group prefer professional and technical occupations - chiefly employed as teachers, draughtsmen, laboratory assistants, technicians. Women are generally employed as teachers or nurses.

#### Working Force in Rural India

The report (No.114) published in 1967 by The National Sample Survey reveals that the working force in rural India constitutes 41.88 percent of the total population of whom those gainfully employed form 40.26 percent while persons unemployed but available for work constitute 1.62 percent. A large segment of the working population (72.68%) work for all the seven days in the week. Among males and females separately the proportion is 73.07 percent and 71.82 percent respectively. However, persons working for four days or less and upto one day form 11.17 percent of the total population.



Percentage Distribution of Rural Population by  
Activity and Sex in India

TABLE 84

Activity	Male	Female	All Persons
Working Population	54.23	25.92	40.26
Persons not working but available for work	1.44	1.80	1.62
Persons in labour force	55.67	27.72	41.88
Student	10.47	3.99	7.27
Houseworker	0.98	28.60	14.50
Too old too young	29.83	35.29	32.53
Retired and Pensioners	0.18	0.39	0.28
Others not in labour force	2.83	3.55	3.14
Persons not in labour force	44.09	71.82	57.77
Not recorded	0.24	0.46	0.35

Percentage Distribution of Working Population by  
Industry Group and Sex in India

TABLE 85

Agriculture, livestock, forestry, fishing and hunting.	80.32	86.25	82.21
Mining and quarrying	0.65	0.35	0.56
Manufacturing	6.50	6.19	6.40
Construction	1.67	0.75	1.38
Electricity, gas, water and Sanitary Services	00.11	0.16	0.12
Trade and Commerce	3.87	1.66	3.16
Transport, storage and Communication services	1.38	0.46	1.10
Services	5.03	3.74	4.62
Activity not adequately specified	0.43	0.41	0.42
Not recorded	0.04	0.03	0.03
Total	100.00	100.00	100.00

(Source: 'India 1970', Ministry of Information and Broadcasting, Government of India, New Delhi, 1970).