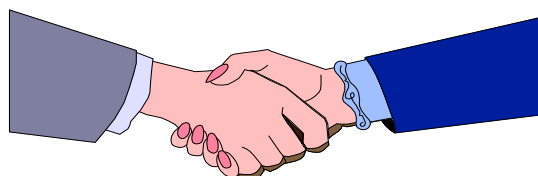


GOVERNMENT OF INDIA

**OCCUPATIONAL-EDUCATIONAL
PATTERN OF EMPLOYEES
IN INDIA**

PRIVATE SECTOR-2003



DIRECTORATE GENERAL OF EMPLOYMENT & TRAINING

MINISTRY OF LABOUR & EMPLOYMENT

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RAFI MARG, NEW DELHI

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PREFACE

The Employment Market Information Programme of Directorate General of Employment & Training continues to serve as a major source of time series data on employment pertaining to the organized sector of economy (all establishments in the public sector and non-agricultural establishments in the private sector employing 10 or more persons). As a part of this Programme “Occupational – Educational Profile Studies” are conducted in Public and Private Sectors in alternate years. This enquiry covering Private Sector is the 27th in this series. Attempts have been made in the report to present a comprehensive study of data on the occupational pattern of employees. It is hoped that information contained in this report will strengthen the data base for the use of manpower planners and functionaries in the fields of education, training, vocational guidance, career planning, occupational research, etc.

2. I am thankful to the State Directorates of Employment, specially, EMI Units at Employment Exchanges in various States/UTs for their cooperation and active involvement in collecting, compiling and furnishing occupational returns for the study to the Directorate General of Employment & Training. However, we need to collect and compile this data on real time basis for the best and most meaningful use.

3. I place on record my sincere appreciation of the work done by Directorate of Employment under the overall supervision and guidance of Smt. Amarjeet Kaur, Dy. Director General (Employment) for presenting occupational educational pattern of employees in the organized sector of economy.

(SHARDA PRASAD)

Director General of Employment & Training/Joint Secretary

New Delhi,

Dated: 3 October 2008

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HIGHLIGHTS

This report presents occupational pattern, its analysis and educational profile of employees in the private sector as on 30th September, 2003. It is based on data collected through the occupational and educational pattern enquiry in respect of private sector establishments coming under purview of the Employment Market Information (EMI) Programme. Of the 112670 private sector establishments borne on the Employers Register of Employment Exchanges in different States and Union Territories, 67032 i.e. nearly 59.5 percent had responded to this occupational pattern enquiry. Some salient features of the occupational pattern and structure of educational qualifications of employees of the responding establishments as observed from this enquiry are as follows:-

- (i) Of 50.63 lakh employees in private sector, 23.04 lakhs (45.5 percent) were production and related workers, transport equipment operators and labourers. They constituted the single largest occupational category. It is noticed that the professional, technical and related workers, clerical and related workers, and farmers, fishermen, hunters, loggers and related workers had accounted varied proportions (21.0, 14.5 and 8.6 percent respectively) in the overall occupational structure of the private sector at the end of September 2003. (Table 2.1)
- (ii) Among professional, technical and related workers, 64.6 percent were classified as teachers and about 13.7 percent as engineering personnel. (Table 2.2)
- (iii) The largest proportion (49.4percent) of managerial personnel was employed in mining and quarrying, construction and manufacturing followed by financing and business activities (16.9 percent), other services (14.9 percent) and wholesale and retail trade (4.2 percent). The percentage of managerial personnel was insignificant (1.1 percent) in transport, storage and communications. (Table 2.6)
- (iv) Employment of women in private sector between 1999 and 2003 reflected constant increase but a slight decrease in 1983, 1985 and 2003. Women employment constituted about 24.4 and 23.2 percent of total employment in private sector in 1999 and 2003 respectively. (Table 3.1)
- (v) Of 11.74 lakh women employees, 43.2 percent were in occupational division comprising production and related workers, transport equipment operators and labourers, and 18.2 percent were employed as farmers, fishermen, hunters, loggers and related workers. Women professional, technical and related workers constituted 27.3 percent of their total employment. (Table 3.2)

- (vi) Nurse, Higher Secondary and Secondary School teachers, middle school teachers, primary school teachers, plantation labourer, food preserver and canner, Tea, Coffee & Cocoa preparers and bidi maker/tobacco preparer and tailor & dress maker were some of the main occupations in which women employment was centric (Table 3.9)
- (vii) Educational details were available in respect of 36.84 lakh employees out of a total of 50.63 lakh employees, especially for crucial occupational categories of (a) professional, technical and related workers, (b) administrative, executive and managerial workers, and (c) production and related workers, special features of which have been analysed in chapter IV. (Table 4.1)
- (viii) Educational analysis revealed that 6.5 percent of production and related workers were below matric and nearly 1 percent of managerial workers were matric and above but below graduates, whereas 5.3 percent of Arts, Commerce, Law Graduates were in managerial positions. It is, further, seen that 48.1 percent of professional and technical workers were either holding diploma or were graduates and post-graduates and 77.3 percent of administrative, executive and managerial workers were either graduates and postgraduates or holding diplomas. (Table 4.2)
- (ix) Of 85242 engineering personnel, 41.1 percent were holding degrees in engineering subjects, 21.6 percent were diploma holders and 2.7 percent possessed certificates in engineering trades. Among Electrical/Electronics, 53.4 percent were degree holders. This was largest proportion of degree holders among engineers of different disciplines. (Table 4.3)
- (x) Only 10.5 percent of production and related workers (craftsmen and other skilled workers) were found to possess degree or diploma in engineering/technology or certificate in engineering trade, whereas 69.3 percent of them were holding other type of educational and technical qualifications. This indicates that worker's skill levels are of variable nature and quality in different establishments. However, bulk number of such workers whose education details were not specified may be holding certificates only in either of engineering trades. (Table 4.8)

- (xi) The distribution of employees according to broad industry divisions revealed that out of 50.63 lakh workers, 27.36 lakh were employed in manufacturing 9.39 lakh in Education and 4.71 lakh in agriculture, hunting and forestry. Employment was sparsely distributed in other industries. The proportionate distribution of workers in different industry divisions has shown different occupational structure in accordance with the type of functions and operations in each industry. For example, 87.3 percent of workers in agriculture, hunting and forestry industries were farmers, hunters, loggers and related workers. Similarly, 41.1 percent of workers in transport, storage and communication, 64.9 percent in Financial intermediation and 70 percent in real estate, renting and business activities were clerical and related workers. Employees in mining, manufacturing, construction and in electricity, gas & water industries were predominantly production workers. (Table 5.1 & 5.2)
- (xii) As per categories of establishments by their larger and smaller size-class of employees engaged therein, it is observed that of 50.63 lakh employees, 10.5 percent were in smaller size-class and 89.5 percent were in larger size-class. It is seen that 93.1 percent of production workers were employed in the larger size-class. Employment of production workers was merely 6.9 percent in the smaller size-class. (Table 6.1)

Limitations

No attempt has been made to estimate characteristics for non-responding establishments. However, since non-responding establishments are distributed at random occupational composition of non-responding establishments would not be different from that of responding establishments.

(Para 1.8)

CHAPTER – I

INTRODUCTION

Background

1.1 Employment Exchanges have been collecting information on employment market pattern/trend in the country from different industries and occupations in a systematic manner. This system of collection of information is known as Employment Market Information (EMI) Programme which covers organised sector of the economy i.e. all establishments in the public sector and non-agricultural establishments in private sector employing 10 or more persons. In so far as Occupational-Educational Profile enquiries are concerned, data/information is collected from public and private sectors in alternate years for the purpose of studying occupational pattern of employees. With the expansion of education the need for data on educational pattern of employees has grown. The DGE&T under the Ministry of labour & Employment has therefore, been bringing out, at national level, reports on occupational and educational pattern of employees based on occupational details collected under the EMI programme. The present report relates to the private sector enquiry ended September 2003. The information contained in this Report is likely to prove useful to manpower planners, educational authorities, employment services, vocational guidance officers, career counsellors, training institutes, job-seekers, trade unions and employers of various industrial establishments.

Objectives of the study

1.2 The occupational pattern study accounts for first hand data on persons employed in different occupations which require specific education, training or experience to perform specific jobs. However, primary focus of the occupational pattern study is as follows:

- (a) - Study proportion of employment in each category of occupations.
- (b) - Identify occupational pattern of individual industry and services.
- (c) - Study profile of educational and technical qualifications of employees in each occupation.

Concept of occupation

1.3 An occupation may be defined as combination of duties, tasks and functions performed by an individual, regardless of industrial sector or economic activity in which individual may be employed. These occupational pattern studies provide data on occupational distribution of white-collar and blue-collar workers as well as of owners, proprietors, working partners or directors of firms found to have been engaged on full-time basis. It does not cover self employed, part-time employees and establishments employing less than 10 workers.

System of classification used:

1.4 It is necessary to elaborate the concepts of occupation and industry. The concept of occupation is related to what an individual is doing. The concept of industry is concerned with what all individuals in an establishment are collectively doing. The study has followed two classifications and their code structures namely National Classification of Occupations (NCO), 1968 and National Industrial Classification (NIC) 1998.

Method of data collection

1.5 The field survey was conducted by State Directorates of Employment through their network of EMI Units at Employment Exchanges who mailed a circular, alongwith a blank ER-II Form (Appendix-1), to the private sector establishments coming within the jurisdiction of the respective EMI areas, and collected details for the study.

Data processing

1.6 After scrutiny and coding by Employment Exchanges, filled in ER-II returns were received in DGE&T, through various State Directorates of Employment. In order to ensure uniformity and accuracy in data presented at national level, scrutiny of ER-II returns was further undertaken by EMI (OP) Unit in the DGE&T. The processing and tabulation of data was done through the Data Processing Unit of DGE&T.

Coverage and response

1.7 According to Employers' Register, there were 112670 private sector establishments in responding States/UTs at the end of September, 2003. Of these 52781 were Act establishments and 59889 Non Act establishments. These establishments were addressed by Employment Exchanges to furnish ER-II returns, indicating occupational and educational details about their employees. In spite of vigorous follow-up and expediency observed in the field work ER-II returns were, however, received from only 67032 establishments, recording 59.5 percent response to this study. Table 1.1 given below indicates the degree of response achieved from Act and Non-Act establishments and employment reflected therein at the end of September, 2003.

TABLE 1.1
Coverage & degree of response

Sl. No.	Item	Classification of establishments		
		Act	Non-Act	Total
1	2	3	4	5
1.	Number of establishments on employer's register	52781	59889	112670
2.	Number of establishments responded	32708	34324	67032
3.	Percentage response	62.0	57.3	59.5
4.	Employment in responding establishments (in lakh)	45.32	5.31	50.63

It is observed from above table that response was 62% & 57.3% from the Act (larger) and Non-Act (smaller) establishments respectively. In order to make a detailed evaluation of analysis based on this rate of response, a statement indicating number of establishments addressed and responded in different States/Union Territories covering EMI Programme has been given at Appendix-II.

Limitations

1.8 The readers may like to utilise and evaluate the results of this study keeping in view limitations in the coverage and system of maintaining Employers' Register at Employment Exchanges. It may be noted that 59.5 percent of private sector establishments had responded to 2003 enquiry and actual employment in the responding establishments was 50.63 lakh in 2003 as compared with 52.54 lakh covered in the responding establishments of 1999 enquiry. In view of this variation in response, it was not strictly possible to compare occupational pattern of employment between 1999 and 2003. **No attempt has been made to estimate characteristics for the non-responding establishments. However, since the non-responding establishments are distributed at random occupational composition of the non-responding establishments would not be different from that of the responding establishments.**

CHAPTER-II OCCUPATIONAL PATTERN OF EMPLOYEES

2.1 The data emanating from this study reflects the occupational pattern of employees in private sector at the end of September, 2003. These occupational data are available in respect of 50.63 lakh employees in private sector. Appendix IV presents a detailed distribution of employees by occupations classified according to one, two and three digit codes of the National Classification of Occupations. The pattern of private sector employment in 2003 by occupational divisions shows that 45.5 percent of the total employment was of production and related workers, transport equipment operators and labourers. The three occupational divisions of professional, technical and related workers, clerical and related workers and farmers, fishermen, hunters, loggers and related workers constituted 21,14.5 & 8.6 percent respectively. Other occupational divisions such as administrative, executive and managerial workers, sales workers and service workers relatively had insignificant proportions, say less than 5 percent of private sector employment.

Employment by broad occupational divisions

2.2 The employment in private sector establishments for which occupational data were made available fluctuated mainly due to varying rates of response to occupational pattern enquiries for years 1999 & 2003. Table 2.1 presents comparative employment by occupational divisions in private sector.

TABLE 2.1
Employment in private sector by broad occupational divisions (1999 & 2003)

Sl. No.	NCO Code	Occupational Division	Employment (in lakh)	
			1999	2003
1	2	3	4	5
1.	0 & 1	Professional, technical and related workers.	11.33 (21.6)	10.65 (21.0)
2.	2	Administrative, executive and managerial workers	2.32 (4.4)	2.26 (4.5)
3.	3	Clerical and related workers	8.27 (15.7)	7.36 (14.5)
4.	4	Sales workers	0.47 (0.9)	0.43 (0.9)
5.	5	Service workers	2.60 (5.0)	2.53 (5.0)
6.	6	Farmers, fishermen, hunters loggers and related workers	4.52 (8.6)	4.36 (8.6)
7.	7, 8 & 9	Production and related workers, transport equipment operators and labourers	23.03 (43.8)	23.04 (45.5)
Total			52.54 (100.0)	50.63 (100.0)

Note: Figures in brackets are percentages to total against all occupations.

The trend revealed by occupational pattern of employment over these years as follows:

The percentage of production and related workers including transport equipment operators and labourers which still constituted a major part of employment increased from 43.8% in 1999 to 45.5% in 2003. Whereas share of professional, technical and related workers in total employment declined slightly from 21.6 percent in 1999 to 21% in 2003. There had been decline of about one percent share under clerical and related workers divisions, service workers and sales workers had been about 5% and 0.9% share respectively under reference period.

Analysis of distribution of employees in occupational groups within broad occupational divisions is attempted in subsequent paragraphs.

Professional, technical and related workers

2.3 Table 2.2 presents the distribution of principal categories of professional, technical and related workers in private sector during 2003.

Table 2.2

Distribution of professional, technical & related workers by different categories

Sl. No.	Occupational category	No. of employees (in thousands)	% to Total
1	2	3	4
1.	Accountants and auditors	43.5	4.0
2.	Engineering personnel	145.6	13.7
3.	Life scientists & life science technicians	17.8	1.7
4.	Medical personnel	73.2	6.9
5.	Physical scientists and physical science technicians	23.0	2.1
6.	Social scientists and related workers	19.3	1.8
7.	Teachers	687.6	64.6
8.	Others	55.0	5.2
	Total	1065.0	100.0

Of 1065 thousand employees classified as professional, technical and related workers, 64.6 percent (687.6 thousand) were teachers. Almost 7 out of 100 professionals were medical personnel and 13.7% were accounted as engineering personnel. A micro-analysis of these categories of occupations is further made in next paragraphs.

Engineering personnel

2.3.1 Though engineers and engineering technicians are two distinct levels yet they are designated as engineering personnel. The distribution of engineering personnel by disciplines is given in Table 2.3

TABLE 2.3

Distribution of engineering personnel by disciplines

Sl. No.	Engineering discipline	No. of employees (in thousands)		Percentage to Total	
		Engineers	Technicians	Engineers	Technicians
1	2	3	4	5	6
1.	Chemical	4.1	3.6	4.8	5.9
2.	Civil	5.7	5.7	6.7	9.5
3.	Electrical & Electronics	19.3	14.8	22.6	24.6
4.	Mechanical	34.6	17.7	40.6	29.4
5.	Matallurgical	0.6	0.5	0.7	0.9
6.	Mining	1.1	0.4	1.3	0.6
7.	Others (Architects, Technologists Surveyors etc.)	19.8	17.6	23.3	29.1
Total		85.2	60.3	100.0	100.0

Mechanical engineers and technicians dominated the scene by capturing almost 52% share followed by others 37% and Electrical and Electronics 34%. Metallurgical engineers had a very little proportion to contribute.

Medical, para-medical personnel and health technicians

2.3.2 Table 2.4 gives distribution of medical and para-medical personnel and their corresponding proportions in private sector during 2003.

TABLE 2.4**Distribution of medical, para-medical personnel and health technicians**

Sl. No.	Category of personnel	No. of employees (in thousands)	% distribution
1	2	3	4
1.	Midwife & health visitor	5.1	7.0
2.	Nurse	23.2	31.7
3.	Pharmacist	7.4	10.2
4.	Physician & surgeon (allopathic)	12.3	16.8
5.	Physician & surgeon (ayurvedic)	0.8	1.1
6.	Vaccinator	2.7	3.6
7.	Veterinarian	0.7	1.0
8.	Veterinary assistant	0.6	0.8
9.	X-ray technician	1.5	2.1
10.	Others (Dental Surgeon, Dietician Physiotherapist, Medical and health technician)	18.8	25.7
Total		73.1	100.0

Employees in occupations as above are engaged in hospitals and such establishments which provide medical and health services. Of 73.1 thousand employees, 31.7 percent were nurses, others 25.7%, 16.8 percent allopathic physicians and surgeons, 10.2 percent pharmacists and 7 percent mid-wives and health visitors.

Teachers

2.3.3 In 2003, there were 687.6 thousand teachers in private sector and their proportionate distribution according to level of teaching institution as follows:

TABLE 2.5

Distribution of teachers according to level of teaching institutions

Sl. No.	Level	No. of employees (in thousands)	% age to total
1	2	3	4
1.	University and college teachers	118.2	17.2
2.	<i>Higher secondary/ secondary school teachers</i>	381.0	55.4
3.	Primary and middle school teachers	160.7	23.4
4.	Pre-primary teachers	4.3	0.6
5.	Craft teachers	14.6	2.1
6.	Others	8.8	1.3
Total		687.6	100.0

From the table, it is observed that 3.81 lakh (55%) teachers were engaged as higher secondary and secondary school teachers. 1.61 lakh (23%) teachers were in primary and middle schools and 1.18 lakh (17%) in universities and colleges. Remaining share gone to craft teachers, others and pre-primary teachers.

Accountants and auditors

2.3.4 Among professional workers there were approximately 43.5 thousand accountants and auditors in private sector as on the 30th September 2003 say 4.1 percent of total professional technical and related workers.

Life scientists and technicians

2.3.5 The number of life scientists and life science technicians was 17.8 thousand in 2003. This technical group had been 1.7 percent to total professionals & technical workers and agricultural scientists, botanists and agronomists who engaged in research in related areas.

Physical scientists and technicians

2.3.6 Constituting just 2.2 percent of total professional & technical workers 23 thousand physical scientists and physical science technicians were found employed in 2003 primarily with some research assignments in the private sector.

Social Scientists and related workers

2.3.7 This professional group engaged nearly 19.3 thousand workers in private sector in 2003. They accounted for just 1.8 percent of total professionals & technical workers.

Other professional workers

2.3.8 In 2003 there were about 55 thousand residual professional & technical workers. They constituted 5.2 percent of total employment in this division. Journalists, poets, authors, physical training instructors, laboratory attendants were major residual category of workers.

Administrative, executive and managerial workers

2.4 Among white-collar occupational groups, managerial workers category recently acquired an important place in occupational structure of private sector establishments. Distribution of managerial workers in various industry groups is given in next table.

TABLE 2.6

Distribution of managerial personnel

Sl. No.	Working proprietor, director and manager	No. of employees (in thousands)	% to total
1	2	3	4
1.	Wholesale and retail trade	9.5	4.2
2.	<i>Financial institutions</i>	38.1	16.9
3.	Mining, construction, manufacturing and related activities	111.5	49.4
4.	Transport, storage & communication	2.5	1.1
5.	Other services	33.8	14.9
6.	Others (n.e.c.)	30.5	13.5
Total		225.9	100.0

It is observed from data in above table that the largest proportion (49.4 %) of managerial personnel was employed in the mining, construction, manufacturing and related activities, followed by financial institutions (16.%), other services (14.9 %), others (13.5%) and wholesale and retail trade (4.2 %). The percentage of managerial personnel in transport, storage and communications was lowest (1.1 %).

Clerical and related workers

2.5 Approximately 7.36lakh employees were classified as clerical and related workers in private sector in 2003. Their distribution by broad occupational categories was as follows:

TABLE 2.7

Distribution of clerical and related workers

Sl. No.	Occupational category	<i>No. of persons</i> (in thousands)	% to total
1	2	3	4
1.	Clerical supervisor, superintendent head clerk, office assistant	116.3	15.8
2.	Stenographer, typist, card & tape punching machine operator	35.4	4.8
3.	Book keeper, cashier & related worker	78.5	10.7
4.	Computing machine operator	6.7	0.9
5.	Clerical & related workers (Misc.)	256.6	34.9
6.	Transport & communication supervisor, conductor, distributor	11.2	1.5
7.	Telephone operator	6.1	0.8
8.	Office attendant (peon, daftry etc.)	225.1	30.6
	Total	735.9	100.0

It may be observed from table nearly 34.9 percent accounted as miscellaneous category of clerical workers, 30.6 percent as office attendants (peons, daftries etc.). Nearly 15.8 percent were found as clerical supervisors, superintendents, head clerks and office assistants and about 10.7 percent were book keepers, cashiers and related workers.

Sales workers

2.6 As is evident from data in Table 2.1 employment of sales workers in private sector is 0.9 percent of total employment in 1999 & 2003. No detailed occupational analysis of sales workers is, therefore, attempted.

Service workers

2.7 In 2003 the service workers division in private sector accounted for about 5 percent of total employment. The proportionate distribution of service workers, as reflected by this study was as follows:

TABLE 2.8
Occupational distribution of service workers

Sl. No.	Occupational category	<i>No. of persons</i> (in thousands)	% to total
1	2	3	4
1.	Building caretakers, cleaners & related workers	69.4	27.4
2.	Cooks, waiters, bartenders & related workers (domestic and institutional)	49.0	19.3
3.	Hair dressers, barbers, beauticians & related workers	0.2	0.1
4.	Hotels & restaurant keepers	1.5	0.6
5.	House keepers, matrons & stewards (Domestic and Institutional)	5.7	2.2
6.	Launderers, dry cleaners and pressers	3.0	1.2
7.	Maids and house-keeping service workers (n.e.c.)	7.4	2.9
8.	Protective service workers	116.7	46.1
9.	Service workers (n.e.c.)	0.4	0.2
Total		253.3	100.0

It may be seen from the above table that 46.1 percent of total service workers were protective service workers followed by 27.4 percent in the category of building caretakers, cleaners and related workers, 19.3 percent as cooks, waiters, bartenders and related workers and residual proportion gone to remaining category of workers.

Farmers, fishermen, hunters, loggers and related workers

2.8 Occupational distribution of farm and related workers in private sector in 2003 was as follows:

Table 2.9

Occupational distribution of farm and related workers

Sl. No.	Occupational category	<i>No. of employees</i> (in thousands)	% to total
1	2	3	4
1.	Agricultural labourers	6.2	1.4
2.	Cultivators	0.4	0.1
3.	Farm, plantation, dairy and other managers and supervisors	11.5	2.6
4.	Farmers other than cultivators	0.3	0.1
5.	Fishermen and related workers	1.2	0.3
6.	Forestry workers	1.8	0.4
7.	Plantation labourers and related workers	398.7	91.5
8.	Other farm workers	15.7	3.6
	Total	435.8	100.0

Of total 435.8 thousand farm and related workers, about 91.5 percent were engaged as plantation labourers and related workers covered under organised sector and the residual workers were distributed in other remaining occupational categories as shown in the above Table.

Production and related workers, transport equipment operators and labourers

2.9 In all 23.04 lakh employees belonged to production workers (craftsmen & operators) including transport equipment operators and labourers. Out of this total 20.6 percent were labourers (unskilled workers) numbering 4.74 lakh who were also included in this total of production workers. The distribution of some major occupational groups (craftsmen and operatives) were as shown in next Table:

Table 2.10
Distribution of production workers (craftsmen and operatives)

Sl. No.	<i>Occupational category</i>	<i>No. of employees (in thousands)</i>	% to total
1	2	3	4
1.	Blacksmiths, tool makers and machine tool operators	167.0	7.2
2.	Bricklayers and other construction workers	13.5	0.6
3.	Chemical processors and related workers	78.4	3.4
4.	Electrical fitters and related electrical and electronic workers	102.6	4.4
5.	Food and beverage processors	134.8	5.9
6.	Glass formers, potters and related workers	35.8	1.5
7.	Machinery fitters, machine assemblers and precision instrument makers (except electrical)	179.5	7.8
8.	Material handling and related equipment operators, loaders and unloaders	43.3	1.9
9.	Metal processors	60.4	2.6
10.	Miners, quarrymen, well drillers and related workers	14.5	0.6
11.	Plumbers, welders, sheet metal and structural metal preparers and erectors	35.0	1.5
12.	Printers and related workers	16.3	0.7
13.	Production and related workers not elsewhere classified	23.1	1.0
14.	Rubber and plastic product makers	53.0	2.3
15.	Spinners, weavers, knitters and related workers.	314.0	13.6
16.	Stationary engines and related equipment operators, oilers and greasers	43.0	1.9
17.	Tobacco preparers and tobacco makers.	337.8	14.7
18.	Tailors, dress makers, sewers, upholsters	42.8	1.9
19.	Transport equipment operators	49.0	2.1
20.	Wood preparation workers and paper makers.	26.9	1.2
21.	Other workers	59.1	2.6
22.	Labourers (n.e.c)	473.9	20.6
Total		2303.7	100.0

There were 337.8 thousand (14.7%) tobacco preparers and tobacco makers followed by 314 thousand (13.6%) spinners, weavers, knitters and related workers, 179.5 thousand (7.8%) machinery fitters, machine assemblers and precision instrument makers (except electrical), 167 thousand (7.2%) blacksmiths, tool makers and machine tool operators, 134.8 thousand (5.9%) food and beverage processors and 102.6 thousand (4.4%) electrical fitters and related electrical and electronic workers. Residual categories of workers shared the remaining proportions.

CHAPTER – III

OCCUPATIONAL PATTERN OF WOMEN EMPLOYEES

3.1 A brief review of employment of women from occupational pattern enquiries seems that women employment has been gaining momentum in recent years. The employment of women in private sector as on 30th September of years 1967 to 2003 as revealed from the occupational pattern enquiries is presented in the following Table.

TABLE 3.1

**Employment of women in private pector
(as on 30th September 1967-2003)**

Year	No. of women employees (in lakh)	Percent change over previous year	Percentage of women employees to total
1	2	3	4
1967	8.17	-	-
1969	9.01	10.3	17.4
1971	9.04	0.3	17.5
1973	9.07	0.3	17.7
1977	9.87	8.8	19.2
1979	9.89	0.3	19.7
1983	9.22	-6.8	18.1
1985	8.22	-10.9	17.8
1991	10.25	24.7	20.0
1999	12.81	25.0	24.4
2003	11.74	-8.4	23.2

Accordingly employment of women in the private sector reflecting an increasing trend except for the year 1983, 1985 and 2003 whereas overall share of women in total employment in private sector remained around 18% which implies the establishments approach to accept women for jobs suiting to them. Different rates of responses as observed in these years in private sector establishments perhaps restrict scope for drawing valid comparisons and conclusions on factual trend of women employment.

Women's employment by broad occupational division

3.2 Appendix IV presents details of occupational distribution of women employees classified as per NCO at two and three digits. The broad occupational composition of women employees in private sector at occupational division level is presented in next table:

TABLE 3.2
Occupational pattern of women employees

Sl. No.	NCO Code	Occupational Division	No. of women ('000s)	Total employment ('000s)	% to total	Percent women to total
1	2	3	4	5	6	7
1.	0&1	Professional, technical and related workers	320.5	1065.0	27.3	30.1
2.	2	Administrative, executive & managerial workers	10.8	225.9	0.9	4.8
3.	3	Clerical and related workers	84.0	735.9	7.2	11.4
4.	4	Sales workers	2.6	43.2	0.2	6.0
5.	5	Service workers	35.1	253.3	3.0	13.9
6.	6	Farmers, fishermen, hunters and related workers	213.3	435.8	18.2	48.9
7.	7,8&9	Production and related workers, transport equipment operators and labourers	507.2	2303.7	43.2	22.0
All occupations			1173.5	5062.8	100.0	23.2

As may be seen from the above table, maximum number of women employees (5.07 lakh or 22 percent) were found in occupational division comprising production and related workers, transport equipment operators and labourers. Of 11.74 lakh women employees, 3.21 lakh as professional, technical and related workers, 2.13 lakh were classified as farmers, fishermen, hunters and related workers. The proportion of women employees in occupational divisions of service workers and clerical and related workers was 13.9 percent and 11.4 percent respectively. Women formed nearly half of total farmers and related workers and nearly 30.1 percent of all professional, technical and related workers and 22 percent of production and related workers. The proportions of women employees among sales workers and administrative, executive & managerial workers and was around 6 percent and 4.8 percent respectively.

Professional technical and related workers

3.3 The distribution of women employees among professional, technical and related workers is presented in Table 3.3. In this occupational division, women teacher employees were prominent as 79.5 percent were engaged as teachers and 12.2 percent as medical & para medical personnel. Presence of women in other professional and technical occupation was relatively insignificant. The percentage of women workers to total workers in this occupational division was as high as 30.1 percent.

TABLE 3.3
Women employees in professional & technical occupations

Sl. No.	<i>Occupational category</i>	<i>No. of women employees</i>	Percentage to total (women)
1	2	3	4
1.	<i>Engineering personnel</i>	5862	1.8
2.	Medical personnel	39230	12.2
3.	Physical scientists & physical science technicians	1507	0.5
4.	Social scientists	3855	1.2
5.	Teachers	254769	79.5
6.	Others	15289	4.8
Total		320512	100.0

Teachers

3.3.1 As a far greater percentage of women employees was accounted for teachers in professional workers division, it would be interesting to identify their teaching levels:

TABLE 3.4
Women teachers by teaching levels

Sl. No.	<i>Teaching level</i>	No. of women teachers	Percentage distribution
1	2	3	4
1.	Craft teachers	4404	1.7
2.	Pre-primary school teachers	2333	0.9
3.	Primary & middle school teachers	87017	34.2
4.	Higher secondary/secondary school teachers	128553	50.5
5.	University & college teachers	28868	11.3
6.	Others	3594	1.4
Total		254769	100.0

Data in above table reveals that 50.5 percent were higher secondary and secondary school teachers followed by 34.2 percent women were engaged in the primary and middle schools, and 11.3 percent were engaged in universities and colleges. In other category of teachers women shared places but not in substantial numbers.

Medical personnel

3.3.2 Table 3.5 shows distribution of women employees according to medical and para-medical occupations.

TABLE 3.5
Women employees in medical & para-medical occupations

Sl. No.	Occupational category	<i>No. of women employees</i>	Percentage distribution
1	2	3	4
1.	Mid-wives and health visitors	4423	11.3
2.	Nurse	20239	51.6
3.	Physician & surgeon (allopathic)	3938	10.0
4.	Other (Dietician, Physician & other surgeon, Pharmacists, Physio-therapist, medical & health technician)	10630	27.1
Total		39230	100.0

Of 39230 women workers in medical & para-medical occupations, 51.6 percent were employed as nurses, 11.3 percent as mid-wives and health visitors and 10 percent as physicians and surgeons (allopathic). Other workers category (composed of such personnel as dietician, physician & other surgeon, pharmacists, physiotherapists, medical and health technicians) constituted 27.1 percent of total employment of women in medical and health service occupations.

Engineering and other professional workers

3.3.3 The analysis of data on distribution of women professional and technical workers reflects that a small number merely 1.8 percent of women engineers were employed in private sector. During the course of 2003 enquiry, only 5862 women were enumerated as civil, electrical & electronics, chemical and mechanical engineers etc. Likewise, number of social scientists (3855) and physical scientists (1507) was rather smaller representation in total employment in such occupational groups.

Administrative, executive & managerial workers

3.4 There were 10848 women workers in administrative, executive and managerial occupations in private sector. Relatively lower proportion of women were engaged as directors, managers, administrative and personnel officers including proprietors, who have not penetrated yet in sufficient enough numbers in financial, manufacturing, and services sector and in other establishments in private sector.

Clerical & related workers

3.5 Data in Table 3.6 shows that clerical and related workers (miscellaneous) made up 31.7 percent of total women employed in clerical workers category. While 27.4 percent were office attendants, 14.9 percent book-keeping related workers, 12.1 percent were clerical supervisors and 10.9 percent stenographers, typists, card and tape punching machine operators, computing machine operators.

TABLE 3.6

Women clerical workers

Sl. No.	Occupational category	<i>No. of women employees</i>	Percentage distribution
1	2	3	4
1.	Book keepers, cashiers and related workers	12541	14.9
2.	Clerical supervisors, superintendents, head clerks, office assistants	10177	12.1
3.	Clerical and related workers (miscellaneous)	26639	31.7
4.	Office attendants	22975	27.4
5.	Stenographers, typists, card and tape punching machine operators, computing machine operators	9157	10.9
6.	Telephone operators	1137	1.4
7.	Others	1369	1.6
	Total	83995	100.0

Sales workers

3.6 The occupational division of sales workers comprising 2639 women was relatively small in relation to the total employment in this category in private sector. The reason for small size of women employees seems to be that far greater proportion of sales workers are engaged on commission basis towards sales promotions.

Service workers

3.7 It is not surprising to observe high proportion of women (35096) were engaged in services sector, which traditionally remains a preferred source for women employment. But increasing number of women have found their way into other occupations as would be seen from the table 3.7. Of 35096 women service workers, 68.1 percent were found engaged in building caretaker and related workers category, 10.1 percent as protective service workers, 9.6 percent as maids and house keeping employees and. Cooks, waiters, bartenders and related workers accounted for 5.9 percent of total women service workers.

TABLE 3.7**Women service workers**

Sl. No.	Occupational category	<i>No. of women employees</i>	Percentage distribution
1	2	3	4
1.	Building caretakers and related workers	23897	68.1
2.	Cooks, waiters, bartenders and related workers	2072	5.9
3.	Maids and related house keeping service workers (not elsewhere classified)	3354	9.6
4.	Protective service workers	3551	10.1
5.	Others	2222	6.3
	Total	35096	100.0

Farm and related workers

3.8 In all 2.13 lakh women farmers, fishermen, hunters and related workers were enumerated in 2003, out of which 2.08 lakh were employed in plantation and related operations. Agricultural workers, forestry workers, dairy managers and supervisors, fishery workers, etc. were found in negligible proportions in overall occupational pattern of private sector establishments.

Production and related workers

3.9 It has observed that out of 5.07 lakh women workers in 2003 classified as production and related workers, transport equipment operators and labourers, 4.64 lakh women employees (exclusive of unskilled labourers) were included in occupational groups of production and related workers. Table 3.8 presents detailed distribution of women workers.

TABLE 3.8**Distribution of women production and related workers**

Sl. No.	Occupational category	<i>No. of women employees</i>	Percentage distribution
1	2	3	4
1.	Blacksmiths, tool makers and machine tool operators	5517	1.1
2.	Bricklayers & other construction workers	603	0.1
3.	Chemical processors and related workers	4562	0.9
4.	Electrical fitters and related electrical and electronic workers	9678	1.9
5.	Food and beverage processors	56568	11.2
6.	Glass formers, potters and related workers	3256	0.6
7.	Machinery fitters, machine assemblers and precision instrument makers	8537	1.7
8.	Material handling, related equipment operators, loaders & unloaders	9522	1.9
9.	Spinners, weavers, knitters, dyers and related workers	42050	8.3
10.	Tailors, dress makers, sewers, upholsterers and related workers	23846	4.7
11.	Tabacco preparers and tobacco makers	268349	52.9
12.	Miners, quarrymen, well drillers & related workers	1049	0.2
13.	Jewellery & precision workers	281	0.1
14.	Production & related workers	9362	1.8
15.	Labourers n.e.c.	43567	8.6
16.	Wood preparation workers and paper makers, carpenters & related workers	1922	0.4
17.	Others	18503	3.6
	Total	507172	100.0

As far as relative proportions of significant occupational groups were concerned, of 5.07 lakh women workers (including labourers), tobacco preparers and tobacco makers 52.9 percent, food and beverage processors accounted for 11.2 percent and spinners, weavers, knitters, dyers and related workers 8.3 percent of the total women workers included in the production and related workers category. Approximately 19 percent of the women workers were found employed in the remaining occupational groups excluding labourers.

3.10 Major occupations in which women were found to had been engaged in the private sector in large numbers exceeding 5000 or more are listed below in Table 3.9 showing against each their total employment indicating against each proportion of women to total number of employees in specified occupations:

TABLE 3.9

Share of women in selected major occupations

Sl. No.	Occupational category	<i>No. of women (In 000's)</i>	Proportion of women in occupational category
1	2	3	4
1.	Nurses	20.2	87.3
2.	Health technicians (n.e.c.)	7.2	43.3
3.	Teachers (university/college)	28.9	24.4
4.	Teachers (higher secondary/secondary school)	128.6	33.7
5.	Teachers (middle school)	54.3	60.3
6.	Teachers (primary school)	32.7	46.3
7.	Ministerial & office assistants	6.7	11.5
8.	Book-keepers & accounts clerk	11.2	17.1
9.	Clerks (general)	22.3	10.2
10.	Office attendant (peon/daftary)	23.0	10.2
11.	Safai karmcharis	23.2	35.3
12.	Plantation labourers	178.3	53.1
13.	Tappers (Palm, Rubber Trees, etc).	8.8	38.3
14.	Plantation workers n.e.c.	20.8	52.4
15.	Spinners & winders	21.3	12.1
16.	Weavers & related workers	7.0	17.8
17.	Carpet makers & finishers	5.6	74.3
18.	Food preservers & Canners	24.4	82.7
19.	Tea, coffee & cocoa preparers	27.3	73.7
20.	Bidi makers/tobacco preparers	266.2	81.1
21.	Tailors & dress makers	17.7	63.3
22.	Shoe cutters & related workers	6.3	49.6
23.	Production & related workers (n.e.c.)	8.5	56.6
24.	Packers, labellers & related workers	5.4	27.6
25.	Labourers (n.e.c.)	43.6	9.2

Major occupational categories in which women engaged in large numbers were bidi makers/tobacco preparers (266.2 thousand), plantation labourers (178.3 thousand, higher secondary and secondary school teachers (128.6 thousand) and middle school teachers (54.3 thousand).

3.11 Besides, a large number of occupations having more than 2000 and less than 5000 women workers were also identified. A list of these occupations reveals certain areas for women employment in bulk numbers viz. life science technicians, physician and surgeons (allopathic), midwives & health visitors, accountants and auditors, librarians, archivists and curators, teachers (pre-primary), teachers (craft), teachers (n.e.c.), athletes, sportsmen & related workers, professional workers n.e.c. directors & managers bank, working proprietors, directors & managers (manufacturing), clerical supervisors (office supdt.), head clerk & section head, stenographers and steno-typists, typists, ayahs, nurses, maids, watchmen, chowkidars & gate keepers, agricultural labourers, chemical processors and related workers (n.e.c.), fibre preparers, sewers & embroiders, leather cutter, lasters & sewers & related workers n.e.c. machine tool operators, watch clock & precision instrument makers (except elect.) machinery fitters & machine assemblers, electrical and electronic equipment assemblers, checkers, tester, sorters and weighers & counters.

CHAPTER-IV

EDUCATIONAL STRUCTURE OF EMPLOYEES

4.1 Engineers, technologists, scientists, teachers, managers, doctors and dentists, engineering technicians, nurses and health technicians and craftsmen are widely employed in several private sector establishments. However, educational qualification of workers, in these occupations vary widely. A brief analysis is presented in this chapter to show the structure of education of employees. Information on educational, professional and technical qualification of employees in varied nature of fields and in different organisations is considered very useful in developing future plans of education, training, and employment for manpower planning. Keeping this in view, educational profiles of employees are collected from industrial establishments operating in private sector. Sampled establishments were asked to furnish educational details about their employees.

Processing of educational data

4.2 Agriculture, engineering, technology, medicine, veterinary science, architecture, science, arts, crafts, management are major educational and professional streams which are of importance to many industrial establishments. The educational data were processed through a system of alphabetic codes. The details have been coded according to highest professional, technical and general educational qualification of employees in each occupation. The code structure of educational qualifications may be seen at Appendix III.

Table 4.1

Response in respect of educational details

Sl. No.	Occupational category	No. of employees (in lakh) whose educational qualifications			Percentage of Col. 3 to Col. 5
		Specified	Unspecified	Total	
1	2	3	4	5	6
1.	Professional, technical and related workers	5.57	5.08	10.65	52.3
2.	Administrative, executive & managerial workers	1.77	0.49	2.26	78.3
3.	Production process workers	18.39	4.65	23.04	79.8
4.	Other workers	11.11	3.57	14.68	75.7
TOTAL		36.84	13.79	50.63	72.8

Educational details from all establishments employing 100 or more workers were collected on census basis whereas the establishments employing less than 100 workers were asked to furnish the educational details on sample basis. The picture that emerges from Table 4.1 is indicative of the fact that out of 50.63 lakh employees covered under the study, educational details could be obtained in respect of 36.84 lakh employees.

Professional workers by educational levels

4.3 Occupation-specific educational composition, as reflected by the present study, would be meaningful, particularly, for strategic occupational groups. The following table presents percentage distribution of professional & technical workers, administrative, executive & managerial workers and those of production & related workers according to their educational levels.

TABLE 4.2
Educational profile of occupational categories

Sl. No.	Educational Qualifications	Educational Code	Percentage distribution in each occupational category		
			Professional technical & related workers	Administrative, executive & managerial	Production & related workers
1	2	3	4	5	6
I. Graduate & Post Graduates in technical & professional fields					
1.	Engineering & Technology	M	4.8	13.4	0.2
2.	Medicine	N	2.0	2.4	-
3.	Veterinary Science	IN	0.1	0.1	-
4.	Agriculture	Q	6.8	0.1	-
5.	Education (Teaching)	P	9.0	0.6	-
6.	Management (Business Admn./Personnel Management etc.)	R	0.3	0.4	-
7.	Chartered/Cost Accountants/Company Secretaries	S	0.1	3.9	-
8.	Other Technical/_Professional Fields (Excluding Law & Commerce)	IS	0.8	2.3	0.2
II. Diploma holders in Technical/Professional fields					
9.	Engineering & Technology	T	3.4	1.6	0.5
10.	Medicine	U	0.7	5.4	-
11.	Veterinary Science	IU	-	0.2	-
12.	Agriculture	IQ	0.5	-	-
13.	Education (Teaching)	Y	3.3	0.1	-
14.	Management	W	1.0	0.4	0.1
15.	I.T.I. Certificates/Apprentices	Z	0.4	0.2	0.9
16.	Nursing/Midwifery	2U	2.3	1.3	-
17.	Other Certificates/Diplomas	IZ	0.8	1.9	9.1
III. Others (those with general qualifications only)					
18.	Post Graduates in Science	K	3.2	8.9	0.2
19.	Other Post Graduates (including Law & Commerce)	J	2.9	20.6	1.2
20.	Graduates in Science	G	3.2	8.2	12.6
21.	Other Graduates (including Law & Commerce)	H	2.5	5.3	3.8
22.	Matric & above but below graduates	F	2.6	1.0	44.5
23.	Below Matric including illiterates	E	1.6	-	6.5
24.	Education not specified		47.7	21.7	20.2
Total			100.0	100.0	100.0
Number of employees			1065019	225870	2303753

4.4 The analysis made in subsequent paragraphs traces proportions of technical and high-level occupational groups which are usually considered among most representative of occupational constellation because of specialised education and prolonged training required for entry into job market. The occupations which required professional and technical or high level of specialization include engineers, engineering technicians, physicians, surgeons, teachers, supporting medical personnel, directors, managers and production workers.

Engineers by educational levels

4.5 The following table gives distribution of engineers according to their educational, professional and technical qualifications, separately for chemical, civil, electrical/electronics, mechanical and industrial engineering disciplines. As is obvious, majority of engineers in popular disciplines were holding degree in engineering qualifications followed by diploma in relevant engineering fields. Further, engineering posts were also held by persons in sizeable numbers having obtained either graduation or post-graduation in upcoming technical streams such as electronics, industrial and chemical fields. It is noteworthy that in respect of 18.8 percent of engineers educational details were not specified by their responding establishments.

Table 4.3

Engineers by educational levels

Sl. No.	Educational Qualifications	Civil	Chemical	Electrical/ Electronics	Industrial	Mechanical	Others	Total
1	2	3	4	5	6	7	8	9
1.	Degree in Engineering	2866 (50.1)	2077 (50.9)	10288 (53.4)	1563 (44.5)	14754 (42.6)	3502 (19.4)	35050 (41.1)
2.	Diploma in Engineering	1422 (24.8)	457 (11.2)	3341 (17.3)	895 (25.5)	8715 (25.2)	3553 (19.7)	18423 (21.6)
3.	Graduate and Post Graduate	591 (10.3)	438 (10.7)	1449 (7.5)	448 (12.7)	1733 (5.0)	2238 (12.4)	6857 (8.1)
4.	Certificate in Engineering trade	136 (2.4)	417 (10.2)	530 (2.8)	107 (3.0)	664 (1.9)	473 (2.6)	2327 (2.7)
5.	Others	186 (3.2)	255 (6.2)	1361 (7.1)	144 (4.1)	1654 (4.8)	2987 (16.6)	6587 (7.7)
6.	Education not specified	525 (9.2)	440 (10.8)	2301 (11.9)	359 (10.2)	7096 (20.5)	5277 (29.3)	15998 (18.8)
	Total	5726 (100.0)	4084 (100.0)	19270 (100.0)	3516 (100.0)	34616 (100.0)	18030 (100.0)	85242 (100.0)

Note: Figures in brackets denote percentages.

Engineering technicians by educational levels

4.6 Of 60314 engineering technicians, 28.4 percent were diploma holders, 17.2 percent certificate holders and 11.6 percent degree holders. The distribution of the engineering technicians by the level of educational qualifications is shown below:

TABLE 4.4
Engineering technicians by educational levels

Sl. No.	Educational Qualifications	No. of engineering technicians	Percentage to total
1	2	3	4
1.	Degree in Engineering	7004	11.6
2.	Diploma in Engineering	17125	28.4
3.	Certificate in Engineering Trade	10387	17.2
4.	Others	16450	27.3
5.	Education not specified	9348	15.5
TOTAL		60314	100.0

Further it is seen from the above table that 27.3 percent of the engineering technicians were possessing other types of educational qualifications such as graduate and post-graduate in science, or matric or higher-secondary. In respect of 15.5% of engineering technicians educational details were not specified by their establishments.

Medical and health workers by educational levels

4.7 Physicians, surgeons, dentists, veterinarians, pharmacists, nurses, mid-wives, x-ray technicians, optometrists, etc. are some of the prominent medical and health workers who possess different types of educational, professional or technical qualifications. Table 4.5 presents distribution of medical workers and health technicians by their educational qualifications.

TABLE 4.5
Medical and health technicians by educational levels

Sl. No.	Educational Qualifications	No. of employees	Percentage to total
1	2	3	4
1.	Degree (Graduate and Post Graduate) in Medical branches	6174	8.4
2.	Diploma in Medical branches	25547	34.9
3.	Recognised Certificate	6579	9.0
4.	Below Matric	3718	5.1
5.	Matric and above but below Graduate	8405	11.5
6.	Graduate and Post Graduate in Arts, Commerce, Science	9342	12.8
7.	Others (including education not specified)	13385	18.3
Total		73150	100.0

It is observed from data in above table that 34.9 percent held diploma in other medical branches and 8.4 percent of medical & health personnel possessed medical graduation & post-graduation qualifications.

Teachers by educational levels

4.8 The distribution of teachers at various levels of teaching profession is shown in Table 4.6.

TABLE 4.6
Distribution of teachers by educational qualifications

Sl. No.	Educational Qualifications	No. of teachers at each level of teaching			Other Teachers	Total
		Primary/ Middle	High School/ Higher Secondary	College/ University		
1	2	3	4	5	6	7
1.	Graduate and Post-Graduate in Education	319 (0.2)	68834 (18.1)	25258 (21.4)	1103 (4.0)	95514 (13.9)
2.	Graduate and Post-Graduate in Engineering, Agriculture, Medicine	-	705 (0.2)	13830 (11.7)	-	14535 (2.1)
3.	Diploma/Certificate in Education	46319 (28.8)	9669 (2.5)	8270 (7.0)	6148 (22.2)	70406 (10.2)
4.	Graduate and Post-Graduate (Arts & Commerce)	1787 (1.1)	22939 (6.0)	1569 (1.3)	668 (2.4)	26963 (3.9)
5.	Graduate and Post-Graduate (Science)	2752 (1.7)	23268 (6.1)	13855 (11.7)	1047 (3.8)	40922 (6.0)
7.	Non-Graduates	1257 (0.8)	- -	-	626 (2.3)	1883 (0.3)
8.	Education not specified	108293 (67.4)	255560 (67.1)	55466 (46.9)	18092 (65.3)	437411 (63.6)
Total		160727 (100.0)	380975 (100.0)	118248 (100.0)	27684 (100.0)	687634 (100.0)

Note : Figures in brackets denote percentages.

It is interesting to observe from above data that out of a total of 6.88 lakh teachers, nearly 1.61 lakh teachers were found engaged in primary and middle level school-teaching, 3.81 lakh at higher secondary levels, 1.18 lakh at university & college levels and remaining 0.28 lakh were in other nature of teaching institutions. Merely for the reason that educational qualifications of bulk proportion of teachers 63.6% having not been specified, it is unwise to derive an inference that only 24% of teachers possessed a diploma or degree qualification in education particularly so when it happens to be pre-requisite for either of teaching jobs in primarily, middle, high school & higher secondary school levels.

Administrative, executive & managerial workers

4.9 The following table shows educational structure of administrative, executive and managerial workers employed in wholesale and retail trade, financial institutions, mining, construction, manufacturing, transport and communication and other services.

TABLE 4.7

Administrative, executive and managerial workers by educational levels

Sl. No.	Educational Qualifications	No. of administrative, executive and managerial workers in					Total
		Wholesale & Retail Trade	Financial Institutions	Mining, Construction & Manufacturing	Transport, Storage & Communication	Other Services	
1	2	3	4	5	6	7	8
1.	Degree/Diploma in Business Administration/Personnel Management	67 (0.7)	369 (1.0)	1075 (1.0)	45 (1.8)	245 (0.4)	1801 (0.8)
2.	Chartered/Cost Accountancy Degree	235 (2.5)	479 (1.3)	5440 (4.9)	9 (0.4)	2680 (4.2)	8843 (3.9)
3.	Degree in Engineering	395 (4.2)	362 (0.9)	26245 (23.5)	13 (0.5)	3301 (5.1)	30316 (13.4)
4.	Graduate and Post-Graduate in other disciplines	4672 (49.2)	25583 (67.1)	42164 (37.8)	1120 (44.5)	25113 (39.1)	98652 (43.7)
5.	Others	654 (6.9)	3286 (8.6)	20113 (18.0)	295 (11.7)	12820 (20.0)	37168 (16.5)
6.	Education not specified	3465 (36.5)	8039 (21.1)	16482 (14.8)	1034 (41.1)	20070 (31.2)	49090 (21.7)
	Total	9488 (100.0)	38118 (100.0)	111519 (100.0)	2516 (100.0)	64229 (100.0)	225870 (100.0)

Note : Figures in brackets denote percentages.

It will be seen from data in above Table that out of a total 2.26 lakh administrative, executive & managerial workers, in respect of 21.7 percent of these workers educational details were not specified by their responding establishments. Further, of these 2.26 lakh managerial workers, 1.12 lakh were employed in mining or manufacturing industries and 0.38 lakh in financial institutions of private sector. Majority of such personnel reportedly possessed graduate and post graduate degree in other disciplines.

Production workers by educational levels

4.10 The table 4.8 presents distribution of production workers according to their educational qualifications.

TABLE 4.8**Production workers by educational levels**

Sl. No.	Educational Qualifications	No. of production workers	Percentage to total
1	2	3	4
1.	Degree in engineering	5636	0.2
2.	Diploma in engineering/technology	5869	0.3
3.	Certificate in engineering trade	231182	10.0
4.	Others	1596316	69.3
5.	Education not specified	464750	20.2
TOTAL		2303753	100.0

The distribution of production workers according to educational levels reveals that 69.3 percent of workers were holding other types of educational qualifications. This shows that on-the-job training might be main channel of developing skills of production workers such as technicians, craftsmen and operatives. Workers' traits and skill levels, as is generally specified by employing organisations, are of variable standards and quality. This is evident from data in above table where only 10 percent of production workers were possessing certificate in either of engineering trades. However, this proportion may factually be much more as in respect of almost all 20.2% of production workers for whom education was not specified may be in possession of either of the certificates in engineering trades.

An analysis of educational pattern of 11.74 lakh women employees is presented in table 4.9. However, for 26.2 percent of women employees educational profiles were not specified by responding establishments.

TABLE 4.9
Distribution of women employees by educational levels.

Sl. No.	Educational Qualifications	Percentage of women employees
1	2	3
	1. Graduate & Post Graduates in <u>technical & professional fields</u>	
1.	Engineering & Technology	0.4
2.	Medicine	0.2
3.	Veterinary Science	-
4.	Agriculture	0.1
5.	Education Teaching	3.6
6.	Management (Business Admn./Personnel Management etc.)	-
7.	Chartered/Cost Accountants/Company Secretaries	0.1
8.	Other Technical/Professional Fields excluding Law & Commerce)	0.1
	II. Diploma holders in Technical/ <u>Professional Subjects</u>	
9.	Engineering & Technology	0.3
10.	Medicine	0.1
11.	Veterinary Science	-
12.	Agriculture	-
13.	Education (Teaching)	2.4
14.	Management	-
15.	I.T.I. Certificates/Apprentices	0.2
16.	Nursing/Midwifery	1.7
17.	Other Certificates/Diplomas	0.8
	III. Others (those with general <u>qualifications only</u>)	
18.	Post Graduates in Science	0.7
19.	Other Post Graduates including Law & Commerce	2.4
20.	Graduates in Science	8.7
21.	Other Graduates including Law & Commerce	5.1
22.	Matric & above but below graduates	41.5
23.	Below Matric including illiterates	5.4
24.	Educational qualification not specified	26.2
	Total	100.0
	No. of employees	1173549

CHAPTER – V

OCCUPATIONAL PATTERN IN INDUSTRIES

5.1 One of the significant features of system of data collection under EMI Programme is that occupational composition of employees in various industries can be studied. The advantages of this kind of study of occupational composition of employees are:

- (i) The educational and vocational training schemes may be tailored to meet manpower requirements of various industries employing spectrum of skills.
- (ii) The educated youth may be guided to production-oriented employment and self-employment.
- Appropriate measures may be taken to introduce programmes for job-training in order to develop the requisite skills and experience in demand in labour market.
- (iii) Vocational guidance officers and career counsellors may motivate job seekers to select those growing occupations in which there is manpower shortage and to dissuade them from selecting out-fashioned and decaying occupations.
- (iv) Prospective entrepreneurs may formulate manpower schemes for establishing their new enterprises on the basis of occupational composition (staffing structure) of similar types of industrial units already in operation.
- (v) Technological innovations in specific industrial fields may be expanded in view of available manpower employed.

In this chapter, an attempt has been made to study distribution of employees classified according to National Industrial Classifications (NIC). 1998. The proportions illustrated in different Tables in this Chapter indicate a distinct pattern of occupations prevailing in each industry.

Industry – wise occupational employment

5.2 As per present study, employment in the private sector establishments, which had responded, was of the order of 50.63 lakh employees. Table 5.1 gives the distribution of occupational employment in major industries.

TABLE 5.1
Industry – wise employment

Sl. No.	Tabulation category of Industry	Description of industry	Employment (in lakh)	Percentage
1	2	3	4	5
1.	A.	Agriculture, hunting and forestry	4.71	9.3
2.	B.	Fishing	0.02	-
3.	C.	Mining and quarrying	1.24	2.4
4.	D.	Manufacturing	27.36	54.0
5.	E.	Electricity, gas and water supply	0.27	0.5
6.	F.	Construction	0.70	1.4
7.	G.	Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods.	1.16	2.3
8.	H.	Hotels and restaurants	0.82	1.6
9.	I.	Transport, storage and communication	0.59	1.2
10.	J.	Financial intermediation	2.33	4.6
11.	K.	Real estate, renting and business activities.	0.90	1.8
12.	M.	Education	9.39	18.6
13.	N.	Health and social work	1.10	2.2
14.	O.	Other community, social and personal service activities.	0.04	0.1
Total			50.63	100.0

As is evident from statistics indicated in above table, more than half of total employment was in manufacturing industries followed by 18.6% in education, 9.3% in agriculture, hunting and forestry, 4.6% in financial intermediation and remaining in rest of the industries.

Occupational pattern in major industries

5.3 Appendix V gives details of occupational distribution of employees in different industries classified at one digit level. The broad occupational pattern of employees in different industries based on occupational details in respect of 50.63 lakh employees in private sector is presented in Table 4.2.

TABLE 5.2
Occupational pattern in industries (Percentage distribution)

Sl. No.	Occupational division	Agriculture, hunting, forestry	Fishing	Mining and quarrying	Manufacturing	Electricity, gas and water supply	Construction
1	2	3	4	5	6	7	8
1	Professional, technical & related workers	2.6	5.9	12.7	6.3	17.8	14.1
2	Administrative, executive & managerial workers	0.2	0.3	5.1	5.1	2.6	3.3
3	Clerical & related workers	3.9	27.2	11.7	8.4	13.4	21.5
4	Sales workers	-	-	0.1	0.6	-	-
5	Service workers	1.4	4.4	4.1	3.0	9.2	14.7
6	Farmers, fishermen, hunters, loggers and related workers	87.3	53.6	-	0.7	0.2	-
7	Production and related workers, transport equipment operators and labourers	4.6	8.6	66.3	75.9	56.8	46.4
Total		100.0	100.0	100.0	100.0	100.0	100.0
No. of employees (in lakh)		4.71	0.02	1.24	27.36	0.27	0.70

Cont....

Sl. No.	Wholesale and retail trade, Repair of motor vehicles, Motorcycles and personal and household goods.	Hotels and restaurants	Transport, storage and communication	Financial intermediation	Real estate, renting and business activities.	Education	Health and social work	Other Community, social and personal service activities.	Total
	9	10	11	12	13	14	15	16	17
1	5.8	3.2	7.3	8.0	12.6	79.2	55.3	18.1	21.0
2	13.7	6.8	6.3	18.2	1.9	0.2	2.6	66.0	4.5
3	33.9	13.3	41.1	64.9	70.0	15.7	16.2	4.7	14.5
4	21.2	0.6	0.2	0.2	0.4	-	-	-	0.9
5	7.7	70.5	8.2	6.6	10.9	3.4	17.5	3.9	5.0
6	-	0.7	0.1	-	-	0.3	0.8	-	8.6
7	17.7	4.9	36.8	2.1	4.2	1.2	7.6	7.3	45.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of employees (in lakhs)	1.16	0.82	0.59	2.33	0.90	9.39	1.10	0.04	50.63

Proportions in above table reveal that each industry had promoted a different occupational pattern, depending upon nature of activities of industrial establishments. The percentages have been derived with a view to identifying concentration of occupational categories in each industry segment.

Employment of important occupations in industries

5.4 The industry-occupation matrix as presented in Appendix-V exhibit a distinct occupational pattern of employees in different industries. It is found that there is high concentration of employees in certain occupational groups in each industry. For example, in agriculture, hunting and forestry, 87.3 percent of employment is accounted for by farmers, fishermen, hunters, loggers and related workers. This kind of occupational pattern implies that various farming operations and agricultural services and allied areas tend to have employed a high ratio of agricultural workers and related operatives. For an industry that is characterised by multiplicity of production and service activities, employment of different occupations is dependent on a set of factors or influences. An attempt has been made in the following paragraphs to analyse proportionate distribution of workers belonging to selected occupational categories/groups.

5.5 Engineers and technologists are employed to design and execute various production plans in industrial establishments. It is seen from data in the following table that manufacturing sector of industries in private sector had employed 79 percent of engineers & technologists and 72.7 percent of engineering technicians. The proportions of employment of these important technical personnel in other industry segments were nominal, mainly because of different nature of activities undertaken by industrial units.

TABLE 5.3
Distribution of engineers, technologists and engineering technicians in major industries

Sl. No.	Tabulation category of Industry	Description of industry	Percentage of workers in occupational groups	
			Engineers, technologists surveyors	Engineering technicians
1	2	3	4	5
1	A.	Agriculture, hunting and forestry	0.4	0.5
2	B.	Fishing	-	-
3	C.	Mining and quarrying	9.7	3.6
4	D.	Manufacturing	79.0	72.7
5	E.	Electricity, Gas and water supply	2.6	3.2
6	F.	Construction	3.3	8.2
7	G.	Wholesale and retail trade, Repair of motor vehicles, Motorcycles and personal and household goods.	1.2	1.1
8	H.	Hotels and restaurants	0.2	0.7
9	I.	Transport, storage and communication	0.6	0.5
10	J.	Financial intermediation	2.5	2.6
11	K.	Real estate, renting and business activities.	0.4	1.0
12	M.	Education	0.1	4.9
13	N.	Health and social work	-	1.0
14	O.	Other Community, social and personal service activities.	-	-
All industries			100.0	100.0
No. of employees			85242	60314

5.6 As may be seen from the following table, 76 percent of nursing and other medical and health technicians and 54.8 percent of physicians and surgeons (including veterinary surgeons) were employed in Health and Social Work comprising such industrial establishments as hospitals and maternity centres, health clinics and veterinary service centres. It may be noted that about 26.9 percent of the total physicians and surgeons were employed in the manufacturing industry division and 6 percent share each is occupied by physicians and surgeons and also by nursing and health technicians in agriculture, hunting and forestry. In view of great emphasis on prevention of occupational diseases, many of establishments employ medical and health personnel. It is revealed from data presented in the following table that there is not much variation in broad pattern of employment of physicians, surgeons and medical & health technicians in private sector.

TABLE 5.4
Distribution of physicians, nursing and health technicians in major industries

Sl. No.	Tabulation category of Industry	Description of industry	Percentage distribution of workers in occupational groups	
			Physicians and Surgeons	Nursing, other medical and health technicians
1	2	3	4	5
1	A.	Agriculture, hunting and forestry	6.0	6.0
2	B.	Fishing	-	-
3	C.	Mining and quarrying	1.9	0.3
4	D.	Manufacturing	26.9	4.3
5	E.	Electricity, Gas and water supply	0.2	0.2
6	F.	Construction	0.2	0.4
7	G.	Wholesale and retail trade, Repair of motor vehicles, Motorcycles and personal and household goods.	0.8	0.2
8	H.	Hotels and restaurants	-	-
9	I.	Transport, storage and communication	1.0	2.5
10	J.	Financial intermediation	0.4	0.6
11	K.	Real estate, renting and business activities.	0.4	0.2
12	M.	Education	7.4	9.3
13	N.	Health and social work	54.8	76.0
14	O.	Other Community, social and personal service activities.	-	-
All industries			100.0	100.0
No. of employees			22585	50565

5.7 Manufacturing industries division made up about 35.8 percent of total employment of accountants, auditors and related workers. The proportions of this occupational group in financial intermediation, real estate, renting and business activities and wholesale and retail trade repair of motor vehicles, motorcycles and personal and household goods were 19.3 percent, 17.3 and 9.6 percent respectively. In other industries proportion of these important accounting functionaries was insignificant.

TABLE 5.5
Distribution of accountants and auditors in major Industries

Sl. No.	Tabulation category of Industry	Description of industry	No. of accountants, auditors & related workers	Percentage distribution
1	2	3	4	5
1	A.	Agriculture, hunting and forestry	612	1.4
2	B.	Fishing	9	-
3	C.	Mining and quarrying	1308	3.0
4	D.	Manufacturing	15595	35.8
5	E.	Electricity, Gas and water supply	197	0.5
6	F.	Construction	1182	2.7
7	G.	Wholesale and retail trade, Repair of motor vehicles, Motorcycles and personal and household goods.	4175	9.6
8	H.	Hotels and restaurants	1163	2.7
9	I.	Transport, storage and communication	710	1.6
10	J.	Financial intermediation	8404	19.3
11	K.	Real estate, renting and business activities.	7535	17.3
12	M.	Education	1743	4.0
13	N.	Health and social work	875	2.0
14	O.	Other Community, social and personal service activities.	34	0.1
All industries			43542	100.0

5.8 The largest component among clerical occupations, as reflected by data in Table 5.6 was that of the category of clerical and related workers. Other workers were employed in specialised and sophisticated clerical occupations such as computing machine operators and supervisors. The distribution of employment in clerical occupations in different industries however, varied. The manufacturing industry division had largest proportions of all clerical workers except book-keepers and cashiers, who had dominated the occupational pattern significantly in Financial intermediation. In view of need for clerks, stenographers and typists as supporting personnel to professional and managerial workers, distribution reveals that clerical occupations were employed in all other industry segments, with varying proportions.

TABLE 5.6
Distribution of clerks, stenographers, assistants in major Industries

Sl. No.	Tabulation category of Industry	Description of industry	Percentage of workers in clerical occupational groups				
			Clerical & other supervisors	Stenographers & typists	Book keepers & cashier	Computing machine operators	Clerical & related workers
1	2	3	4	5	6	7	8
1	A.	Agriculture, hunting and forestry	2.4	1.2	0.3	1.0	3.0
2	B.	Fishing	-	-	-	-	0.1
3	C.	Mining and quarrying	1.9	1.7	0.8	6.1	2.2
4	D.	Manufacturing	43.8	39.0	8.7	41.5	31.5
5	E.	Electricity, Gas and water supply	0.5	0.7	0.1	0.1	0.6
6	F.	Construction	2.4	2.8	1.0	2.6	2.1
7	G.	Wholesale and retail trade, Repair of motor vehicles, Motorcycles and personal and household goods.	5.3	6.1	9.5	5.6	4.7
8	H.	Hotels and restaurants	0.9	1.5	2.3	1.2	1.5
9	I.	Transport, storage and communication	2.3	1.8	0.9	5.4	2.3
10	J.	Financial intermediation	11.6	15.8	70.9	15.5	15.6
11	K.	Real estate, renting and business activities.	10.0	12.8	3.5	12.0	8.8
12	M.	Education	16.6	10.7	0.9	7.1	25.1
13	N.	Health and social work	2.3	5.9	1.1	1.8	2.5
14	O.	Other Community, social and personal service activities.	-	-	-	0.1	-
All industries			100.0	100.0	100.0	100.0	100.0
No. Of employees			116336	35378	78322	6659	481835

5.9 Reflecting personal nature of much the work performed, service workers accounted for varying proportions in different industry divisions. Cooks, waiters and bartenders were largest service occupations, as revealed by data given in table 5.7. Restaurants, hotels and other lodging places employed a sizeable number of service workers. The occupational structure shows that service workers had concentrated in Hotels and restaurants and with varying proportions in other industry segments.

TABLE 5.7

Distribution of service workers in major industries

Sl. No.	Tabulation category of Industry	Description of industry	Percentage of workers in occupational groups			
			House keepers	Cooks waiters	Maids, house keeping service workers	Building caretakers
1	2	3	4	5	6	7
1	A.	Agriculture, hunting and forestry	-	0.2	0.8	1.7
2	B.	Fishing	-	-	-	-
3	C.	Mining and quarrying	0.7	0.5	0.4	2.0
4	D.	Manufacturing	7.3	11.6	3.8	26.0
5	E.	Electricity, gas and water supply	-	0.1	-	0.7
6	F.	Construction	-	7.9	2.5	2.0
7	G.	Wholesale and retail trade, Repair of motor vehicles, Motorcycles and personal and household goods.	-	1.8	1.5	6.7
8	H.	Hotels and restaurants	81.9	67.5	46.7	13.5
9	I.	Transport, storage and communication	-	0.6	4.8	1.6
10	J.	Financial intermediation	-	1.8	0.7	8.2
11	K.	Real estate, renting and business activities.	-	1.4	0.5	6.0
12	M.	Education	7.1	5.2	32.0	17.7
13	N.	Health and social work	3.0	1.4	6.3	13.9
14	O.	Other community, social and personal service activities.	-	-	-	-
All industries			100.0	100.0	100.0	100.0
No. Of employees			5658	48972	7369	69397

5.10 Manufacturing industry contained highest proportion of production workers as compared to other industries. The explanation for this high concentration of production workers lies in nature of production processes. The vast majority of production workers were craftsmen and operatives. The private sector employed significant numbers of processors, mechanics and repairmen because of growing use of complex machines and instruments. It was imperative to employ a substantial number of production processors and mechanics to assist engineers and technicians in designing installation and maintenance of machines and equipment. Table 5.8 presents distribution of selected categories of production processors and craftsmen in each industry.

TABLE 5.8**Distribution of production workers in major industries**

Sl. No.	Tabulation category of Industry	Description of industry	Percentage of workers in occupational groups							
			Metal processors	Chemical processors & related workers	Spinners, weavers knitting dyers and related workers	Food and beverage processors	Blacksmiths, tool makers and machine tool operators	Machinery fitters, machine assemblers	Electrical fitters	Rubber and plastic products makers
1	2	3	4	5	6	7	8	9	10	11
1	A.	Agriculture, hunting and forestry	-	-	-	-	0.3	0.9	0.7	-
2	B.	Fishing	-	-	-	-	-	-	-	-
3	C.	Mining and quarrying	0.4	0.6	-	-	1.2	3.3	5.1	-
4	D.	Manufacturing	98.9	99.3	100.0	100.0	96.9	86.7	79.6	100.0
5	E.	Electricity, Gas and water supply	0.6	0.1	-	-	0.3	0.9	4.9	-
6	F.	Construction	0.1	-	-	-	0.4	1.9	2.4	-
7	G.	Wholesale and retail trade, Repair of motor vehicles, Motorcycles and personal and household goods.	-	-	-	-	0.4	1.9	0.9	-
8	H.	Hotels and restaurants	-	-	-	-	-	0.2	0.5	-
9	I.	Transport, storage and communication	-	-	-	-	0.5	1.9	1.6	-
10	J.	Financial intermediation	-	-	-	-	-	0.3	1.0	-
11	K.	Real estate, renting and business activities.	-	-	-	-	-	0.1	0.4	-
12	M.	Education	-	-	-	-	-	1.0	2.2	-
13	N.	Health and social work	-	-	-	-	-	0.9	0.7	-
14	O.	Other Community, social and personal service activities.	-	-	-	-	-	-	-	-
All industries			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. Of employees			60420	78386	313972	134814	166972	179452	102605	52962

It is seen from above data that manufacturing was the largest single industry in which production/manufacturing workers had constituted about equal occupational proportions ranging between 79.6% to 100%. Other type of industries shared a very meager share.

CHAPTER – VI

OCCUPATIONAL PATTERN BY EMPLOYMENT SIZE CLASS

6.1 The industrial establishments employing a wide range of occupational skills may be classified into distinct groups by economic characteristics such as total investment, line of production, and number of workers employed. The data emanating from 2003 occupational enquiry are analysed here according to size of employment of establishments. This has been made through a study of occupational pattern of employees in establishments in Smaller Size Class (10 to 24 employees) and Larger Size Class (employing 25 or more employees).

6.2 The occupational distribution of 50.63 lakh employees in industrial establishments according to two broad size-classes is shown in Table 6.1 & 6.2. Of 50.63 lakh employees, 10.5 percent were engaged in smaller size-class and 89.5 percent in larger size-class. Keeping in view distribution of all occupations in these two size-classes, an analysis of occupational employment by two size-classes has also been attempted as may be seen in Table 6.1.

TABLE 6.1
Percentage distribution of occupational employment by size-class

Sl. No.	NCO Division	Description of Occupational Division	Percentage distribution of occupational employment in		
			Larger establishments	Smaller establishments	Total
1	2	3	4	5	6
1	0 & 1	Professional, technical & related workers	82.8	17.2	100.0
2	2	Administrative, executive and managerial workers	90.7	9.3	100.0
3	3	Clerical and related workers	86.3	13.7	100.0
4	4	Sales workers	72.3	27.7	100.0
5	5	Service workers	82.0	18.0	100.0
6	6	Farmers, fishermen, hunters, loggers & related workers	97.9	2.1	100.0
7	7,8 &9	Production and related workers, transport equipment operators and labourers	93.1	6.9	100.0
		All occupations	89.5	10.5	100.0
		No. of employees (in lakh)	45.32	5.31	50.63

The data in Table 6.1 reveals the following distinct features of distribution of occupational employment:

- (i) Despite the fact that larger size-class had a large band employees, 82.8 percent of professional, technical and related workers were employed in that size-class. Professional and technical workers in smaller size-classes were 17.2 percent.
- (ii) A similar pattern is seen in case of clerical and related workers and service workers in smaller-size-class which was 13.7% and 18% respectively. This type of occupational pattern shows that proportion of these occupational skills were necessarily required in greater numbers in larger size class establishments being 86.3% and 82% respectively. The bigger the size-class of establishments, higher was relative proportion of workers engaged in each occupational division without any exception.
- (iii) The smaller size-class establishments employed 9.3% of administrative, executive and managerial workers, whereas employment of such workers in larger size-class establishments was noticed 90.7%.
- (iv) The employment of sales workers in larger size class was 72.3% and 27.7% in smaller size class.
- (v) Smaller sized establishments employed a fewer number of farmers, fishermen, hunters, loggers and related workers, and production and related workers say merely 2.1% and 6.9% in these two occupational categories. The establishments in larger size-class employed 97.9 percent of farmers and related workers and 93.1 percent of production workers.

6.3 The above features offer significant insight into distribution of occupational employment in two size-classes of industrial establishments in private sector. It will be interesting to study whether occupational pattern of establishments by size-classes run parallel to that of the overall feature. Table 6.2 presents this important aspect of occupational analysis:

TABLE 6.2
Occupational pattern by employment size-class

Sl. No.	NCO Division	Description of Occupational Division	<u>Employment (in lakh) in establishments in</u>		
			Smaller Size Class	Larger Size Class	Total
1	2	3	4	5	6
1	0 & 1	Professional, technical & related workers	1.83 (34.4)	8.82 (19.5)	10.65 (21.0)
2	2	Administrative, executive and managerial workers	0.21 (4.0)	2.05 (4.5)	2.26 (4.5)
3	3	Clerical and related workers	1.01 (19.0)	6.35 (14.0)	7.36 (14.5)
4	4	Sales workers	0.12 (2.2)	0.31 (0.7)	0.43 (0.9)
5	5	Service workers	0.45 (8.6)	2.08 (4.6)	2.53 (5.0)
6	6	Farmers, fishermen, hunters, loggers & related workers	0.09 (1.7)	4.27 (9.4)	4.36 (8.6)
7	7,8 &9	Production and related workers, transport equipment Operators and labourers	1.60 (30.1)	21.44 (47.3)	23.04 (45.5)
ALL OCCUPATIONS			5.31	45.32	50.63
			100.0	(100.0)	(100.0)

Note: Figures in brackets denote percentages
Totals may not tally due to rounding off.

As is evident from overall occupational distribution pattern in above table, only 45.5 percent of employees were in production workers category. This sort of concentration is also reflected in two size-classes 30.1% in smaller size-class and 47.3% in larger size-class. Administrative and managerial workers had smaller proportions of 4% & 4.5% in both size-classes. Clerical workers were 19% and 14% in two size-classes. The professional and technical workers constituted 34.4 percent and 19.5 percent respectively in smaller & larger size-classes respectively.

FORM-ER-II

Occupational return to be submitted to the Local Employment Exchange once in two years (on a date to be specified by notification in the Official Gazette).
(Wide Employment Exchange (Compulsory Notification of Vacancies) Rules, 1960)

Name and address of the employer _____

Nature of business _____

(Please describe what the establishment makes or does as its principal activity.)

1. Total number of persons on the pay rolls of the establishment on (specified date) _____
(This figure should include every person whose wages or salary is paid by the establishment.)
2. Occupational classification of all employees as given in item-I above. (please give the number of employees in each occupation separately.)

Occupation	No. of employees		
	Men	Women	Total
Use exact terms such as Engineer (Mechanical), Teacher (Domestic/Science), Officer on special Duty (Actuary), Assistant Director (Metallurgist), Scientific Asstt. (Chemist), Research Officer (Economist), Instructor (Carpenter), Supervisor (Tailor), Fitter (Internal Combustion Engine), Inspector (Sanitary), Superintendent (Office), Apprentice (Electrician), etc.			

Please give as far as possible approximate number of vacancies in each occupation you are likely to fill during the next calendar year due to retirement expansion or reorganization

Total: _____

Dated: _____

Signature of Employer

To
The Employment Exchange
(Please fill in here the address of your local Employment Exchange)

Note: Total of Col..(4) under item 2 should correspond to the figure given against item 1.

APPENDIX-II

STATEWISE NUMBER OF ESTABLISHMENTS ADDRESSED AND RESPONDED

Sl. No.	State/Union Territory	Number of establishments addressed	Number of establishments responded	Percentage response
1	2	3	4	5
1	Andhra Pradesh	8879	4217	47.5
2	Assam	1709	866	50.7
3	Bihar	531	154	29.0
4	Chhatisgarh	475	436	91.8
5	Goa	515	146	28.3
6	Gujarat	19425	7333	37.8
7	Haryana	3429	3194	93.1
8	Himachal Pradesh	368	341	92.7
9	Jharkhand	285	89	31.2
10	Karnataka	8459	5111	60.4
11	Kerala	10592	8784	82.9
12	Madhya Pradesh	1948	1443	74.1
13	Maharashtra	12200	8704	71.3
14	Manipur	83	59	71.1
15	Nagaland	161	80	49.7
16	Orissa	850	279	32.8
17	Punjab	3391	2737	80.7
18	Rajasthan	5175	5130	99.1
19	Tamil Nadu	9383	8654	92.2
20	Uttar Pradesh	11520	6599	57.3
21	Uttranchal	515	429	83.3
22	West Bengal	5684	1413	24.9
23	Chandigarh	710	434	61.1
24	Delhi	6281	311	5.0
25	Pondichery	102	89	87.3
	Total	112670	67032	59.5

CODE STRUCTURE OF EDUCATIONAL QUALIFICATIONS OF EMPLOYEES

Educational Code mnk	Description of Educational qualification
I. Graduates and Post –Graduates in Technical/Professional subjects	
M	Engineering & Technology
N	Medicine
IN	Veterinary Science
Q	Agriculture
P	Education (Teaching)
R	Management (Business Admn./Personal Management etc.)
S	Chartered/Cost Accountants/Company Secretaries
IS	Other Technical/Professional Fields (excluding Law and Commerce)
II. Diploma Holders in Technical /Professional Subjects	
T	Engineering & Technology
U	Medicine
IU	Veterinary Science
IQ	Agriculture
Y	Education (Teaching)
W	Management
Z	I.T.I. Certificates/Apprentices
2U	Nursing Midwifery
IZ	Other Certificates/Diplomas
III. Others (Those with General qualifications only)	
K	Post-Graduates in Science
J	Other Post-Graduates (including Law and Commerce)
G	Graduates in Science
H	Other Graduates (including Law and Commerce)
F	Matric and above but below Graduate
E	Below Matric including illiterates
