

Contents

Page No

List of Tables.....	II
List of Figures.....	X
Abbreviations.....	X
Part I. Introduction and Objectives of the Survey	
1.1 Introduction.....	1
1.2. Objectives of the Survey.....	1
Part II. Survey Methodology Data Collection and Processing	
2.1. Scope, Coverage and Content.....	2
2.2. Basic Concepts and Definitions.....	2
2.3. Method of Data Collection and Field Organization.....	4
2.4. Data Processing.....	5
A. Editing, Coding and Verification.....	5
B. Data Entry, Cleaning and Tabulation	5
Part III. Summary of the Major Findings of the Survey	6
Part IV. Statistical Tables on Large and Medium Scale Manufacturing Industries, 1999 E.F.Y. (2006/07)	29
Part V. Statistical Tables on Time Series Data of Large and Medium Scale Manufacturing Industries, 1995-1999 E.F.Y. (2002/03- 2006/07)	181
Part VI. Statistical Tables on Electricity Industries, 1995-1999 E.F.Y. (2002/03- 2006/07)	223
Annex: Survey Questionnaire	229

List of Tables

Part III Summary of Selected Survey Results

<u>Table No.</u>	<u>Page No.</u>
Summary Table 3.1 Distribution of large and Medium Scale Manufacturing Industries by Regional States and Industrial Group- Public and Private.....	8
Summary Table 3.2 Number of Persons Engaged by Industrial Group Public- and Private.....	9
Summary Table 3.3 Number of Employees by Industrial Group Public – and private.....	10
Summary Table 3.4 Percentage Distribution of Value Added by Industrial- Group – Public and Private.....	11
Summary Table 3.5 Ratio of Imported to Total Raw Material Costs by Industrial Group –Public and Private.....	12
Summary Table 3.6 Ratio of Major Indicators-Public and private	13
Summary Table 3.7 Ratio of Cost Energy Consumed to Total Industrial Cost by Industrial Group-Public and Private.....	14
Summary Table 3.8 Ratio of Value Added to Gross Value of Production by Industrial Group-Public and Private.....	15
Summary Table 3.9 Ratio of Cost of Labor to Gross Value of Production by Industrial Group-Public and Private.....	16
Summary Table 3.10 Ratio of Operating Surplus to Gross Value of Production by Industrial Group – Public and Private.....	17

<u>Table No.</u>	<u>Page No.</u>
Summary Table 3.11	
Percentage Distribution of Establishments by First Major Reason For Not Being Fully Operational and Industrial Group – Public and Private.....	19
Summary Table 3.12	
Percentage Distribution of Establishments by First Reason for Not Working at Full Capacity and Industrial Group – Public and Private.....	20
Summary Table 3.13	
Percentage Distribution of Establishments by Type of First Major Operational Problem Faced and Industrial Group – Public and Private.....	21

Part IV. Statistical Tables on Large and Medium Scale Manufacturing Industries, 2005 / 2006 (1999 E.F.Y.)

4.1	Coverage of the Survey.....	31
4.2	Paid-Up Capital of Reporting Establishments by Source of Ownership and Industrial Group.....	33
4.3	Number of Reporting Establishments by Size of Paid-Up Capital and Industrial Group – Public and Private.....	35
4.4	Number of Reporting Establishments by size of Paid-Up Capital and Industrial Group – Private.....	37
4.5	Number of Reporting Establishments by Size of Paid-Up Capital and Industrial Group – Private.....	39
4.6	Number of Establishments by Industrial Group and Form of Ownership.....	41
4.7	Number of Owners of Private Establishments by Form of Ownership, Sex and Industrial Group	43
4.8	Number of Establishments With and Without Books of Accounts by the Calendar Year their Books of Accounts are kept and Industrial Group – Public and Private.....	45

<u>Table No.</u>	<u>Page No.</u>
4.9	Number of Establishments With and Without Books of Accounts by the Calendar Year their Books of Accounts are kept and Industrial Group – Public..... 47
4.10	Number of Establishments With and Without Books of Accounts by the Calendar Year their Books of Accounts are kept and Industrial Group-Private..... 49
4.11	Number of Persons Engaged by Sex, Nationality and Total Wages and Salaries and Industrial Group - Public and Private..... 51
4.12	Number of Persons Engaged by Sex, Nationality and Salaries and Industrial Group –Public.....53
4.13	Number of Persons Engaged by Sex, Nationality and Total Wages and Salaries Industrial Group- Private.....55
4.14	Number of Permanent Employees by Wages and Salaries Group – Public and Private.....57
4.15	Number of Production, Apprentices and Temporary Workers by Sex, Nationality and Industrial Group – Public and Private.....59
4.16	Number of Administrative, Technical, Clerical and Office workers by sex, Nationality and Industrial Group – Public and private.....61
4.17	Number of working Proprietors, Active Partners and Family Workers by Sex, Nationality and Industrial Group – Private.....63
4.18	Basic Wages and Salaries, Commission, Bonuses, Allowances, Food and Lodging and Supplements to Wages and Salaries by Industrial Group – Public and Private.....65
4.19	Basic wages and Salaries of Production Workers and Seasonal and Temporary Workers by Sex, Nationality and Industrial Group – Public and Private.....67
4.20	Basic Wages and Salaries of Administration, Technical, Clerical and Office Workers by Sex, Nationality and Industrial Group – Public and Private.....69
4.21	Number of Establishments and Number of Persons Engaged by Size of Persons Engaged and Industrial Group – Public and Private.....71
4.22	Number of Establishments and Number of Persons Engaged by Size of Persons Engaged and Industrial Group – Public.....73

<u>Table No.</u>	<u>Page No.</u>
4.23	Number of Establishments and Number of Persons Engaged by Size of Persons Engaged and Industrial Group – Private.....75
4.24	Number of Establishments, Gross Value of Production, Industrial and Non-Industrial Costs, Indirect Taxes Net and Value Added in the National Account Concept by Industrial Group - Public and Private.....77
4.25	Number of Establishments, Gross Value of Production, Industrial and Non-Industrial Costs, Indirect Taxes Net and Value Added in the National Account Concept by Industrial Group – Public.....79
4.26	Number of Establishments, Gross Value of Production, Industrial and Non-Industrial Costs, Indirect Taxes Net and Value Added in the National Account Concept by Industrial Group – Private81
4.27	Gross Value of Production in Producers’ Values by Industrial Group – Public Private.....83
4.28	Actual Value of Production as Percentage of Yearly Capacity by Industrial Group – Public and Private.....85
4.29	Actual Value of Production as Percentage of Yearly Capacity by Industrial Group – Public.....87
4.30	Actual Value of Production as Percentage of Yearly Capacity by Industrial Group – Private.....89
4.31	Gross Value of Production by Size of persons Engaged and Industrial Group – Public and Private.....91
4.32	Gross Value of Production by Size of persons Engaged and Industrial Group – Public.....93

<u>Table No.</u>	<u>Page No.</u>
4.33	Gross Value of Production by Size of persons Engaged and Industrial Group – Private 95
4.34	Value Added by Size of Persons Engaged and Industrial Group – Public and private.....97
4.35	Value Added by Size of Persons Engaged and Industrial Group – Public.....99
4.36	Value Added by Size of Persons Engaged and Industrial Group –Private..... 101
4.37	Summary of Operation of Large and Medium Scale Manufacturing Industries by Regional and Major Urban Centers, Public and Private 103
4.38	Summary of Operations of Large and Medium Scale Manufacturing Industries by Regional States and Major Urban Centers – Public.....105
4.39	Summary of Operations of Large and Medium Scale Manufacturing Industries by Regional States and Major Urban Centers – Private..... 107
4.40	Fixed Assets and New Capital Expenditure by Industrial Group and Ownership.....109
4.41	Fixed Assets of Reporting Establishments by Type and Industrial Group – public and Private.....111
4.42	Fixed Assets of Reporting Establishments by Type and Industrial Group – Public..... 113
4.43	Fixed Assets of Reporting Establishments by Type and Industrial Group –Private 115
4.44	Fixed Assets by Size of Persons Engaged and Industrial Group-Public and Private.....117
4.45	Fixed Assets by Size of Persons Engaged and Industrial Group-Public..... 119
4.46	Fixed Assets by Size of Persons Engaged and Industrial Group-Private.....121
4.47	Investment in Fixed Assets of Reporting Establishments by Source and Industrial Group – Public and Private.....123

<u>Table No.</u>	<u>Page No.</u>
4.48	Quantity of Major Raw Materials Consumed for reporting Establishments by Industrial Group – Public and Private.....124
4.49	Cost of Raw Materials, Energy Consumed and Payments for Industrial and Non-Industrial Services Rendered by Industrial Group– Public and Private.....126
4.50	Cost of Raw Materials, Energy Consumed and Payments for Industrial and Non-Industrial Services Rendered by Industrial Group– Public.....128
4.51	Cost of Raw Materials, Energy Consumed and Payments for Industrial and Non-Industrial Services Rendered by Industrial Group– Private.....130
4.52	Number of Establishments and Cost of Energy Consumed by Industrial Group- Public and Private.....132
4.53	Number of Establishments and Cost of Energy Consumed by Industrial Group- Public.....134
4.54	Number of Establishments and Cost of Energy Consumed by Industrial Group- Private.....136
4.55	Production of Major Manufactured Articles for Reporting Establishments by Industrial Group – Public and Private.....138
4.56	Number of Establishments and Total Revenue from Sales by Industrial Group – Public and Private.....140.
4.57	Revenue from Sales by Source and Industrial Group – Public and Private.....142
4.58	Revenue from Sales by Source and Industrial Group – Public144
4.59	Revenue from Sales by Source and Industrial Group – Private.....146
4.60	Advertising Expense of Reporting Establishments by Industrial Group.....148
4.61	Finished Goods Stock Holding Period By Industrial Group – Public And Private.....150

<u>Table No.</u>	<u>Page No.</u>
4.62	Finished Goods Stock Holding Period By Industrial Group – Public.....152
4.63	Finished Goods Stock Holding Period By Industrial Group – Private.....154
4.64	Work in Progress Stock Holding Period By Industrial Group – Public and Private.....156
4.65	Work in Progress Stock Holding Period By Industrial Group – Public158
4.66	Work in Progress Stock Holding Period By Industrial Group – Private.....160
4.67	Raw Material Stock Holding Period By Industrial Group – Public and Private.....162
4.68	Raw Material Stock Holding Period By Industrial Group – Public.....164
4.69	Raw Material Stock Holding Period By Industrial Group – Private.....166
4.70	Inventory Turnover Per Annum By Industrial Group- Public and Private.....168
4.71	Inventory Turnover Per Annum By Industrial Group- Public.....170
4.72	Inventory Turnover Per Annum By Industrial Group- Private.....172
4.73	Inventory Turnover in Times By Industrial Group- Private.....174
4.74	Inventory Turnover in Times By Industrial Group- Public.....176
4.75	Inventory Turnover In Times By Industrial Group- Private.....178

Part V. Time Series Data and Ratios of Major Industries on Manufacturing Industries, 2002/03 – 2006/07 (1995-1999 E.F.Y.)

<u>Table No.</u>	<u>Page No.</u>
5.1 Number of Establishments by Industrial Groups- Public and Private	183
5.2 Number of Persons Engaged by Industrial Group – Public and Private	185
5.3 Number of Employees by Industrial Group- Public and Private	187
5.4 Number of Female Employees by Industrial Group-public and Private.....	189
5.5 Wages and Salaries by Industrial Group – Public and Private	191
5.6 Gross Value of Production by Industrial Group – Public and Private.....	193
5.7 Value Added in the National Account Concept (At Market Price) by Industrial Group – Public and Private.....	195
5.8 Value Added in the National Account Concept (At Basic Price) by Industrial Group – Public and Private.....	197
5.9 Production of Major Manufactured Articles – Public and Private.....	199
5.10 Total Value of Fixed Assets by Industrial Group– Public and Private.....	201
5.11 New Capital Expenditure by Industrial Group – Public and Private.....	203
5.12 Operating Surplus by Industrial Group –Public and Private.....	205
5.13 Ratio of Imported to Consumed Total Raw Material Cost by Industrial Group-Public and Private.....	207
5.14 Percentage Distribution of Value Added by Industrial Group – Public and Private.....	209

<u>Table No.</u>	<u>Page No.</u>
5.15 Ratio of Cost of Energy Consumed to Total Industrial Costs by Industrial Group –Public and Private.....	211
5.16 Ratio of Value Added to Gross Value of Production – Public and Private.....	213
5.17 Value Added per Person engaged by Industrial Group – Public and Private	215
5.18 Ratio of Cost of Labour to Value Added by Industrial Group – Public and Private.....	217
5.19 Ratio of Cost of Labour to Gross Value of Production by Industrial Group- Public and Private.....	219
5.20 Ratio of Operating Surplus to Gross Value of Production by Industrial Group – Public and Private.....	221

**Part VI. Time Series Data on Electricity Industry
2002/03 – 2006/07 (1995-1999 E.F.Y.)**

<u>Table No.</u>	<u>Page No.</u>
6.1 Number of Employees by Occupational Group and Sex in Electricity Industry.....	225
6.2 Number of Employees by Wages and Salaries Group and Sex in Electricity Industry.....	225
6.3 Wages and Salaries Paid by Occupational Group in Electricity Industry.....	226
6.4 Installed Generating Capacity and Electricity Production.....	226
6.5 Quantity of Electricity Sold and Revenue From Sales of Electricity.....	227
6.6 Gross Revenue From Sales, Total Intermediate Cost and Value Added In the Electricity Industry.....	227
6.7 Value of Fixed Assets by Type in Electricity Industry.....	228
6.8 Investment In Fixed Assets by Type of Fixed Assets in Electricity Industry.....	228

Lists of Figures

<u>Figure No.</u>	<u>Page No.</u>
Fig. I Gross Value of Production at Current Price by Ownership, 1995-1999 E.F.Y. (2002/03 – 2005/2006.).....	22
Fig. II Value Added -Public and Private 1995-1999 E.F.Y. (2002/03 – 2005/2006.).....	23
Fig. III Percentage Distribution of Value Added by Major Industrial Group, 1999 E.F.Y (2005/2006.).....	24
Fig. IV Ratio of Value Added To Total Raw Material Cost by Industrial Group, 1995-1999 E.F.Y. (2002/03 – 2005/2006.).....	25
Fig. V Ratio of Value Added To Gross Value of Production, 1995-1999 E.F.Y. (2002/03 – 2005/2006.).....	26
Fig. VI Installed Generating Capacity of Electricity, 1995-1999 E.F.Y. (2002/03 – 2005/2006.)	27
Fig. VII Production of Electricity, 1995-1999 E.F.Y. (2002/03 – 2005/2006.).....	28

Abbreviations

CSA	- Central Statistics Agency
E.C	-Ethiopian Calendar
E .F.Y.	- Ethiopian Fiscal Year
ISIC	-International Standard Industrial Classification
Rev.3	-Economic Activities Revision 3
S.N.N.P.	- Southern Nations, Nationalities and Peoples' Region
N.E.C.	- Not Elsewhere Classified
S.N.A.	- System of National Accounts
CSPro	-Census and Survey Processing System
KW	- Kilowatt
KWH	- Kilowatt Hour

1. Introduction and Objectives of the Survey

1.1 Introduction

The presence of adequate and current statistical data in various economic sectors that are considered essential for development planning, socio-economic policy formulation and economic analysis is vital in promoting the economic development of a country. Based on this general objective, the Central Statistical Agency (CSA) has been conducting surveys of various economic activities, of which, the annual Large and Medium Scale Manufacturing Industries survey is one.

Manufacturing is defined here according to International Standard Industrial Classification (ISIC Revision-3) as “the physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand, whether it is done in a factory or in the worker’s home, and whether the products are sold at wholesale or retail. The assembly of the component parts of manufactured products is also considered as manufacturing activities.”

CSA has been publishing results of the survey of Manufacturing and Electricity Industries on annual basis since 1968 Ethiopian Calendar to provide users with reliable, comprehensive and timely statistical data on these sectors. In this respect, this survey, which is conducted on annual basis, is the principal source of industrial statistics on large and medium scale manufacturing industries in the country.

This bulletin has six parts: - Part I, deals with an introduction and objective of the survey. Part II gives an overview about the survey methodology, data collection and processing. Part III presents summary of selected survey results. Part IV presents statistical tables of the survey for the year 1999 E.F.Y (2006/07). Part V deals with time series data and various ratios for the period of five years i.e. 1995-1999 E.F.Y. (2002/03 - 2006/07) for Large and Medium Scale Manufacturing Industries. Finally part VI presents the activity and performance of the Electricity Industry which also refers to the same five years period. At the end, the survey questionnaire is attached as an appendix.

1.2 Objectives of the survey

The main objectives of the annual survey of Large and Medium Scale Manufacturing and Electricity Industries are to:-

1. Obtain basic statistical data that are essential for policy makers, planners and researchers by major industrial group.
2. Collect basic quantitative information on employment, volume of quantitative information on employment, volume of production and raw materials, structure and performance of the country’s Large and Medium Scale Manufacturing and Electricity Industries.
3. Compile statistical data which will be an input to the System of National Accounts (SNA), on Large and Medium Scale Manufacturing and Electricity establishments as a whole and by major industrial group.
4. Obtain the number of proprietors engaged in these sectors and find out the major problems that create stumbling blocks for their activities.

2. Survey Methodology, Data Collection and Processing

2.1 Scope, Coverage and Content

The scope of the Large and Medium Scale Manufacturing survey is confined to those establishments which engage ten persons and above and use power-driven machinery and covers both public and private industries in all Regions of the country, where establishments under the scope of the survey are found. With regard to electricity data, the survey covered *only* the electricity supplied by the Ethiopian Electric Power Corporation.

Like in the previous years, in the current survey an attempt was made to update the directory using as source of information - the licenses issued by the Ministry of Trade and Industry and corresponding bureaus of the Regional States of the country, for the public and private establishments. From this list, all manufacturing establishments which engaged ten persons and above, were selected and included in the directory of large and medium scale manufacturing establishments.

In this publication detailed information on number of establishments, number of persons engaged, and employees, wages and salaries paid by major industrial groups, sex, nationality and occupation, paid-up capital, gross value of production, industrial and non-industrial costs, value added, operating surplus, quantity of production and raw materials consumed, fixed assets, investment and production capacity are presented.

2.2 Basic Concepts and Definitions:-

(i) An Establishment: - is defined as the whole of the premises under the same ownership or management at a particular address. (E.g. a bakery, a saw mill, etc.)

(ii) Paid -up Capital: - is that part of the issued capital of an establishment that has been paid by the shareholders or the individual owner.

(iii) Working Proprietors, Active Partners and Family Workers: - include all unpaid working proprietors, active partners and members of their household who actively participate in the operation of the establishment.

(iv) Administrative and Technical Employees:- include salaried directors and managers, technicians, superintendents, research workers, draftsmen and designers, engineers, chemists, architects, accountants, book-keepers, office machine operators, receptionists, sales men, delivery personnel, guards and other office staff.

(v) Production Workers:- include workers directly engaged in production i.e., persons engaged in fabricating, processing, assembling, maintenance, repair, janitorial, record keeping and other associated activities.

(vi) Seasonal and Temporary Workers: - include workers who are employed for a whole or a part of the year. These workers are not regularly on the payroll of the establishment.

(vii) Number Employed: - includes all persons on the payroll whether seasonal or temporary workers. The number of seasonal and temporary workers has been adjusted to give equivalent of full-time worker.

(viii) Number Engaged: - includes paid employees and working proprietors. Active partners and unpaid family workers are also included here.

(ix) Basic Wages and Salaries: - includes all payments in cash made to employees during the reference year. It excludes commissions, bonuses, professional and hardship, allowances.

- (x) **Wages and Salaries:** - includes all payments in cash or in kind made to employees during the reference year in connection with the work done for the establishments.
- (xi) **Commissions, Bonuses, Professional and Hardship Allowances:** - refer to the total of commissions, bonuses and cost of living allowances paid in cash to employees. It excludes car allowance and per diem.
- (xii) **Supplements to Wages and Salaries of Employees:** - represents payments made by the employer to social security systems, insurance premiums, etc on behalf of his employees.
- (xiii) **Revenue from Sales:** - represents the total sales value of all products and by-products during the reference year, valued at market price.
- (xiv) **Receipt from Industrial Services Rendered to Others:** - include all contract, repair and maintenance work done to others, with raw materials and spare parts supplied by the customer.
- (xv) **Receipt of Products Bought and Resold:** - refers to revenue obtained from sales of all goods bought and resold during the reference year without any transformation or processing.
- (xvi) **Other Receipts:** - include rental income from lease of machinery and equipment, income from sales of scrap, the value of fixed assets produced by the unit for its own use and other income.
- (xvii) **Difference of Stocks in the Value of Finished Goods and Semi-Finished Goods:**-is the net change of stocks between the end and the beginning of the reference period in the value of finished and semi-finished goods.
- (xviii) **Gross Value of Production:** - includes the sales value of all products of the establishment, the net change of stocks between the beginning and end of the reference period in the value of finished goods and the value of semi finished goods, the value of industrial services rendered to others, the value of goods bought and resold without any transformation or processing, and other receipts. The valuation of Gross Value of Production is in terms of producers' values where indirect taxes are included in the value of sales of the establishment and the value of subsidies received is excluded.
- (xix) **Raw Materials:** - include all raw and auxiliary materials, parts and containers which are consumed during the reference year. The value of local raw materials is the value of locally produced raw materials and is the cost at the factory which includes the purchase price, transport charges, taxes and other incidental costs. The value of imported raw materials is the value of raw materials produced in other countries and obtained directly or from local source and is the cost at the factory which includes the purchase price, transport charges, taxes and other incidental costs.
- (xx) **Other Industrial Services Rendered by Others:** - refer to contract, repair and maintenance work done by others in the reference year on materials controlled by the establishment. Included are also the cost of all goods purchased and resold without any transformation during the reference year and the cost of water consumed.
- (xxi) **Industrial Cost:** - Includes the cost of raw materials, fuels, and other supplies consumed, cost of industrial services rendered by others, cost of goods bought and resold without any transformation or processing and cost of electricity consumed.
- (xxii) **Non-industrial Cost:** - includes payments like professional fees, postage, telephone, insurance, advertising, hired transport, rental payments, etc. (interest, amortization and depreciation are excluded).
- (xxiii) **Value Added in the National Account Concept (at Market Price):-** is defined as the difference between the gross value of production and industrial and non-industrial costs.
- (xxiv) **Value Added in the National Account Concept (at Basic Price):-**Is the difference between gross value of production and intermediate consumption which is adjusted for tax on product such as (license tax).

(xxv) Fixed Capital Assets: - are those with a productive life of one year or more which are intended for the use of the establishment including fixed assets made by the establishment's own labour force for its own use. They are valued in this report at book-value at the end of the reference year that is the net book value at the beginning, plus new capital expenditure minus those sold and disposed and depreciation during the reference year.

(xxvi) Cost of goods Sold:- (CGS) – Cost is unexpired expense. Cost of goods sold represents to the amount spent to buy raw materials, to pay the labourers and other costs incurred related to the production which is sold within the accounting period.

(xxvii) Inventory: is the amount of goods produced within the accounting period or before the accounting period but not sold at the end of the year. Inventories are classified as finished goods work in process and raw materials.

(xxviii) Raw material inventory: As it is used for inventory turnover computation only includes direct material. Thus, it excludes spare parts, stationeries and packing materials. Whereas when there is only beginning or ending inventory this figure will be taken.

(xxix) Purchase of raw material: The amount spent by the enterprise to buy direct raw material during the year.

(xxx) Inventory turnover in days: is obtained by dividing the inventory to the cost of sales and multiplied by 365 days. Manufacturing companies may have an inventory turnover ratio of 60 to 100 days, this period is likely to increase as the goods made become larger and more complex.

(xxxi) Inventory turnover p.a: is obtained by dividing the cost of sale by the inventory. An increasing multiple implies that the inventory is turning over more quickly and it is a good sign.

2.3 Methods of Data Collection and Field Organization

All CSA Statistical Branch Offices were involved in this survey. Accordingly, 20 statisticians form Branch Statistical Offices, about 139 enumerators and supervisors (100 from Addis Ababa Branch Office and 39 from other Branch Offices), and 12 statisticians form the Head Office and about 37 drivers (12 from Addis Ababa branch and 25 from the rest) were involved in the data collection activity.

In Addis Ababa Branch Statistical Office, where the majority of the establishments under the scope of the survey are located, enumerators were organized into teams and each team on the average constituted five enumerators and a field editor (a supervisor). The supervisor was provided with a four-wheel drive vehicle and a driver. At the Head Office, prior to the deployment of the teams, the list of the establishments under the scope of the survey were distributed among the teams, in accordance with their location. Then, each enumerator was assigned to collect data, on average, from 8 establishments. The data collection operation was carried out in collaboration with the concerned personnel of each establishment. Similar arrangement was in place in other branch offices. Overall, the data collection activity took 30-45 working days in most of the regions of the country.

2.4 Data Processing

2.4.1 Editing, Coding and Verification

A number of quality control steps were taken to ensure the quality of data. The first step taken in this direction was, to revise the questionnaire, to make it easier for internal consistency checking or editing, both at field and office level. Furthermore, based on this revised questionnaire, revised instruction manual with field editing procedures were prepared in Amharic for both enumerators and supervisors (field editors). Using this manual, some editing and coding were carried out by field editors during the data collection stage.

After the majority of the completed questionnaires were brought back to head office, final editing, coding and verification were performed by editors, statistical technicians and statisticians. Finally, the edited and coded questionnaires were checked and verified by other senior professionals.

2.4.2 Data Entry, Cleaning and Tabulation

The data were entered and verified on personal computers using CSpro (Census and Survey Processing System) Software. Fifteen CSA data entry staff and one data cleaner participated in this activity for fifteen days with close supervision of the activities by two professionals. Then, the data entered were cleaned hundred percent using personal computers in combination with manual cleaning for some serious errors. Finally, the tabulation of the results was processed using the same software by one programmer with technical assistance from Industry, Trade and Services Statistics Department staff.

3. Summary of the Major Findings of the Survey

The distribution of Large and Medium Scale Manufacturing Industries by Regional States and major industrial groups is shown in Summary Table 3.1. The figures in the table indicate that, the total number of large and medium scale manufacturing establishments for the country as a whole stood at 1,443 in 1999 E.F.Y. (2006/2007). It has shown an increase of 199 establishments and 16 percent compared to the year before in absolute and relative terms, respectively. For the country as a whole, establishments classified under manufacture of food products and beverages industrial group constituted the largest share accounting for 26.4 percent of the total. The output by these industries among others include: flour, bread, edible oil, soft drinks, beer and alcohol drinks. Non-metallic mineral products and furniture manufacturers, which represented 19.7 and 15.9 percent of the total number of establishments were in second and third position, respectively. That means the share of the three industrial groups combined was 61.9 percent of the total number of manufacturing industries, which indicates that, the Ethiopian Large and Medium Scale Manufacturing Industry is characterized by a high concentration of a limited range of manufacturing activities.

On the other hand, the figures in the same table reveal that, the distribution of large and medium scale manufacturing industries by regional states of the country is highly skewed. Nearly half (51.2 percent) of the total large and medium scale manufacturing industries, which were operating in the reference year, were located in Addis Ababa. Following Addis Ababa, Oromiya, Tigray, Amhara, and S.N.N.P regions covered 15.4, 10.8, 9.4 and, 8.4 percent of the total establishments, respectively.

The data shown in Summary Tables 3.2 and 3.3 refer to the total number of persons engaged and number of employees over five years period, i.e., from 1995-1999 E.F.Y. (2002/03 – 2006/07), respectively. In 1999 E.F.Y., there were 136,043 persons engaged, out of which, 134,963 were, employees in the sector. Number of persons engaged and employees during the survey period, showed an increase of 13.9 percent, compared to the preceding year. These increases in the number of persons engaged and employees could be attributed to the increase in the number of establishments covered in 1999 E.F.Y. An examination of the distribution of persons engaged and employees by major industrial groups reveals that manufacture of food and beverage and textile manufacturing industrial groups, as could be expected, accommodated the largest number of employees. These two industrial groups, alone, contributed nearly 50 percent in both number of persons engaged and number of employees throughout the period under review. The relative importance of the rest of the industrial groups in terms of employment varies between 0.13 percent in machinery and equipment manufacturers, to 8.3 percent in of non-metallic mineral products manufacturers.

The percentage distribution of value added, which indicates the contribution level of, Large and Medium Scale Manufacturing Industries, to the total value added in the manufacturing sector, by industrial groups is given in Summary Table 3.4 for the period 1995-1999 E.F.Y. The data in this table make obvious, the fact that, food and beverages manufacturing industrial group's contribution to the value added, was significantly higher than the other industrial groups, throughout the period under review. During 1999 E.F.Y., about 36.4 percent of the total manufacturing value added was generated from manufacture of food and beverage manufacturing establishments.

Following the food industries other non-metallic mineral products except machinery and equipment and manufacturers of fabricated metal products except machinery and equipment and manufacture of paper, paper products and printing contributed 22.1, 5.5 and 5.5 percent of the total value added by large and medium scale establishments, respectively.

However it is important to note here that, despite the small share in the total value added, manufacture of tobacco products, manufacture of wearing apparel except fur apparel, manufacture of paper products, manufacture of chemical and chemical products, manufacture of non-metallic mineral products, manufacture of fabricated metal products, manufacture of motor vehicles, trailers and semi- trailers increased their share of value added, while the share of the remaining eight industrial groups declined in 1999 E.F.Y. as compared to that of 1998 E.F.Y.

Furthermore, the textile manufacturing establishments, being the second most important in terms of employment creation, their share in manufacturing value added however, was ranked sixth in 1999 E.F.Y.

Summary Table 3.1: Distribution of Large and Medium Scale Manufacturing Industries by Regional States* and Major Industrial Group - Public and Private 1999 E.F.Y (2006/07)

Division of ISIC Rev. 3	Major Industrial Group	Regional States										Total	%
		Tigray	Afar	Amhara	Oromiya	Somalie	SNNP	Gambella	Harari	Addis Ababa	Dire Dawa		
		Number of manufacturing industries											
15	Manufacture of Food Products and Beverages	26	-	38	71	5	31	1	3	190	16	381	26.4
16	Manufacture of Tobacco Products	-	-	-	-	-	-	-	-	1	-	1	0.07
17	Manufacture of Textiles	3	3	5	-	-	4	1	-	24	1	41	2.84
18	Manufacture of Wearing Apparel, Except Fur Apparel	1	-	-	4	-	-	-	-	26	1	32	2.22
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	1	-	7	16	-	1	-	-	47	-	72	4.99
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	-	-	2	10	-	4	-	1	24	-	41	2.84
21 - 22	Manufacture of Paper, Paper Products and Printing	4	-	2	6	-	1	-	1	99	4	117	8.11
24	Manufacture of Chemicals and Chemical Products	1	-	-	10	-	1	-	-	52	-	64	4.44
25	Manufacture of Rubber and Plastic Products	1	-	-	17	-	-	-	-	46	-	64	4.44
26	Manufacture of Other Non-Metallic Mineral Products	75	3	33	54	-	27	-	3	88	1	284	19.68
27	Manufacture of Basic Iron and Steel	1	-	-	1	-	-	-	-	11	-	13	0.90
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	7	-	4	4	-	3	-	1	37	1	57	3.95
29	Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-	4	1	5	0.35
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	8	-	2	3	-	2	-	1	26	-	42	2.91
36	Manufacture of Furniture; Manufacturing N.E.C.	28	-	43	26	4	47	-	11	64	6	229	15.87
	Total	156	6	136	222	9	121	2	21	739	31	1,443	100.00
	%	10.81	0.42	9.42	15.38	0.62	8.39	0.14	1.46	51.21	2.15	100.00	

* The Benishangul-Gumuz Region was not covered, as there were no manufacturing establishments, that fall within the scope of the survey.

**Summary Table 3.2: Number of Persons Engaged by Major Industrial Group -
Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)**

Division of ISIC Rev. 3	Major Industrial Group	Year (E.F.Y)				
		1995	1996	1997	1998	1999
		Number of Persons Engaged				
15	Manufacture of Food Products and Beverages	30,840	31,589	32,096	35,934	46,443
16	Manufacture of Tobacco Products	792	785	697	755	799
17	Manufacture of Textiles	21,957	22,914	20,734	22,131	21,715
18	Manufacture of Wearing Apparel, Except Fur Apparel	4,312	3,840	2,643	4,128	7,621
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	7,278	7,718	7,965	7,964	8,404
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	1,694	1,639	1,579	1,798	2,037
21 - 22	Manufacture of Paper, Paper Products and Printing	6,424	6,955	7,528	8,083	8,181
24	Manufacture of Chemicals and Chemical Products	5,102	5,075	5,977	5,674	7,045
25	Manufacture of Rubber and Plastic Products	4,429	4,412	5,679	6,916	7,639
26	Manufacture of Other Non-Metallic Mineral Products	8,049	9,266	9,163	10,211	11,386
27	Manufacture of Basic Iron and Steel	1,466	1,700	1,767	2,122	1,924
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	3,488	3,516	3,913	5,903	3,547
29	Manufacture of Machinery and Equipment N.E.C.	260	267	225	410	187
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	1,021	1,132	1,234	1,457	3,173
36	Manufacture of Furniture; Manufacturing N.E.C.	5,235	5,343	8,960	5,929	5,942
	Total	102,347	106,151	110,160	119,397	136,043

The data in Summary Table 3.5 refer to the ratio of cost of imported raw materials to that of the total cost of raw materials consumed by major industrial groups for the period 1995-1999 E.F.Y. In general, the industrial groups which had the highest rates in the previous years continued to do so in this survey year as well. The steady high ratio of imported raw materials to the total cost of raw materials consumed, over the five years period, is an indication of the dependency of large and medium scale manufacturing industries in the country, on imported raw materials.

**Summary Table 3.3: Number of Employees by Major Industrial Group -
Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)**

Division of ISIC Rev. 3	Major Industrial Group	Year (E.F.Y)				
		1995	1996	1997	1998	1999
		Number of Employees				
15	Manufacture of Food Products and Beverages	30,570	31,359	31,693	35,660	46,080
16	Manufacture of Tobacco Products	792	785	697	755	799
17	Manufacture of Textiles	21,938	22,900	20,701	22,100	21,702
18	Manufacture of Wearing Apparel, Except Fur Apparel	4,278	3,806	2,606	4,099	7,604
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	7,232	7,665	7,913	7,914	8,351
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	1,669	1,616	1,563	1,759	2,010
21 - 22	Manufacture of Paper, Paper Products and Printing	6,405	6,940	7,507	8,059	8,161
24	Manufacture of Chemicals and Chemical Products	5,094	5,071	5,975	5,668	7,030
25	Manufacture of Rubber and Plastic Products	4,424	4,410	5,673	6,899	7,619
26	Manufacture of Other Non-Metallic Mineral Products	7,835	9,138	9,047	10,093	11,137
27	Manufacture of Basic Iron and Steel	1,466	1,699	1,762	2,122	1,923
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	3,412	3,453	3,828	5,796	3,517
29	Manufacture of Machinery and Equipment N.E.C.	244	256	221	400	186
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	1,019	1,130	1,232	1,456	3,131
36	Manufacture of Furniture; Manufacturing N.E.C.	5,026	5,153	8,732	5,688	5,713
	Total	101,404	105,381	109,150	118,468	134,963

The overall dependency ratio, i.e., for all industrial groups combined, showed a slight variation throughout the years under review. Manufacture of tobacco products, manufacture of basic iron and steel, manufacture of machinery and equipment, manufacture of rubber and plastic products manufacture of fabricated metal products, manufacture of chemical and chemical products and manufacture of paper, paper products and printing, consumed the highest proportion of imported raw materials, to that of the total cost of raw materials, ranging from 71.7 to 99.0 percent in 1999 E.F.Y.

As shown in Summary Table 3.6, where per capita and ratios of major manufacturing indicators are summarized, in 1999 E.F.Y., wages and salaries paid per employee, gross value of production per employee, value added per employee and operating surplus per employee, have shown an increase by 5.8, 8.4 and 17.8 percent, respectively, compared to that of 1998 E.F.Y., while value of fixed assets per employee showed a decrease of 6.3 percent in the same year.

Among the ratios presented in the table, fixed assets to gross value of production, cost of labour to gross value of production, and industrial cost to gross value of production declined, while value added to gross value of production, operating surplus to gross value of production and value added to fixed capital increased during the stated period. On the other hand, the ratio of cost of energy to gross value of production remained unchanged during the same period.

Summary Table 3.4: Percentage Distribution of Value Added* by Major Industrial Group - Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)

Division of ISIC Rev. 3	Major Industrial Group	Year (E.F.Y)				
		1995	1996	1997	1998	1999
		Value Added in Percent				
15	Manufacture of Food Products and Beverages	46.88	45	41.88	40.37	36.37
16	Manufacture of Tobacco Products	3.5	5.27	3.41	3.74	2.86
17	Manufacture of Textiles	4.15	4.23	5.8	3.36	4.22
18	Manufacture of Wearing Apparel, Except Fur Apparel	.90	.74	.53	.56	1.21
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	4.37	5.02	4.45	4.37	3.11
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	1.03	0.84	.85	.82	.66
21 - 22	Manufacture of Paper, Paper Products and Printing	5.53	6.21	7.93	5.33	5.51
24	Manufacture of Chemicals and Chemical Products	5.71	6.67	5.35	4.84	4.86
25	Manufacture of Rubber and Plastic Products	5.97	6.21	5.54	8.86	4.56
26	Manufacture of Other Non-Metallic Mineral Products	13.75	12.55	8.87	15.67	22.14
27	Manufacture of Basic Iron and Steel	2.37	3.67	7.88	3.92	2.86
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	1.93	2.72	3.38	3.03	5.47
29	Manufacture of Machinery and Equipment N.E.C.	.06	.09	.08	.32	.07
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	1.6	-1.23	.49	2.40	4.00
36	Manufacture of Furniture; Manufacturing N.E.C.	2.27	1.99	3.55	2.42	2.08
	Total	100	100	100	100	100

* In the national account concept at basic price

The ratio of cost of energy consumed to total industrial cost by major industrial groups for the period 1995-1999 E.F.Y. is presented in Summary Table 3.7. The figures in this table indicate that, non-metallic mineral products manufacturing, recorded the highest proportion of cost of energy consumed to the total industrial cost, throughout the period under review, exhibiting about 60.5 percent. This large proportion is mainly due to the high energy requirement by cement and glass and glass products manufacturing establishments.

The proportion of cost of energy to industrial cost for non-metallic industries evidenced a similar trend to the previous year. In this respect, the proportion for this industrial group alone ranged from 46.0 to 60.5 percent from 1995-1999 E.F.Y. Following non-metallic mineral products, the

highest energy consumption, compared to their industrial cost was observed in manufacture of wood and products of wood. The share for manufacture of wood and products of wood showed a 30.3 percent decline in 1999 E.F.Y. as compared to 1998 E.F.Y. The total cost of energy consumed to the industrial cost was showing ups and downs in the previous years. As a matter of this fact, in the 1999 E.F.Y. it has shown an increase of 6.0 percent as compared to the 1998 E.F.Y.

Summary Table 3.5: Ratio of Imported to Total Consumed Raw Material Costs by Major Industrial Group - Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)

Division of ISIC Rev. 3	Major Industrial Group	Year (E.F.Y)				
		1995	1996	1997	1998	1999
		Ratio of imported raw material				
15	Manufacture of Food Products and Beverages	.220	.214	.205	.206	.238
16	Manufacture of Tobacco Products	.798	.368	.433	.824	.990
17	Manufacture of Textiles	.290	.311	.396	.409	.415
18	Manufacture of Wearing Apparel, Except Fur Apparel	.257	.163	.212	.312	.527
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	.216	.184	.162	.210	.216
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	.546	.564	.484	.445	.443
21 - 22	Manufacture of Paper, Paper Products and Printing	.754	.712	.816	.789	.717
24	Manufacture of Chemicals and Chemical Products	.732	.779	.857	.831	.785
25	Manufacture of Rubber and Plastic Products	.850	.940	.977	.918	.954
26	Manufacture of Other Non-Metallic Mineral Products	.298	.170	.054	.095	.192
27	Manufacture of Basic Iron and Steel	.992	.990	.608	.672	.989
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	.890	.850	.812	.926	.875
29	Manufacture of Machinery and Equipment N.E.C.	.923	.942	.961	.997	.962
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	.934	.926	.986	.947	.850
36	Manufacture of Furniture; Manufacturing N.E.C.	.423	.442	.421	.485	.524
	Total	.437	.471	.460	.501	.583

The ratio in Summary Table 3.8 depicts the share of value added in gross value of production by major industrial groups. The share of the industrial groups like that of manufacture of food products and beverages, manufacture of textiles, manufacture of paper, paper products and printing, manufacture of chemicals and chemical products, manufacture of other non-metallic mineral products, manufacture of fabricated metal products except machinery and equipment, manufacture of machinery and equipment and manufacture of furniture showed an increase while the remaining six industrial groups declined in 1999 E.F.Y as compared to the year before. On the other hand the share of value added in gross value of production for all industrial groups combined, has increased during the survey year.

**Summary Table 3.6: Per Capita and Ratios of Major Indicators -
Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)**

Major Industrial Group	Year (E.F.Y)				
	1995	1996	1997	1998	1999
	Per Capita				
Wage and Salaries Paid Per Employee	7,913	8,268	8,571	9,237	9,777
Gross Value of Production Per Employee	88,993	103,166	112,839	127,014	137,625
Value Added* Per Employee	25,478	27,027	27,766	31,036	36,480
Operating Surplus Per Employee	17,484	18,669	19,140	21,734	26,650
Value of Fixed Asset Per Employee	64,370	61,790	60,641	59,064	55,322
	Ratio				
Fixed Assets to Gross Value of Production	.723	.599	.537	.465	.402
Cost of Labour to Gross Value of Production	.089	.080	.076	.073	.071
Industrial Costs to Gross Value of Production	.504	.513	.541	.542	.506
Cost of Energy to Gross Value of Production	.055	.055	.058	.054	.054
Value Added* to Gross Value of Production	.287	.262	.246	.244	.265
Operating Surplus to Gross Value of Production	.196	.181	.170	.171	.194
Value Added* to Total Fixed Capital	.396	.437	.458	.525	.659

* In the national account concept at factor cost

The ratio of cost of labour to gross value of production for major industrial groups, which roughly measures, labour productivity, is treated in Summary Table 3.9. It is evident from the data in this table, that, the ratio of cost of labour to gross value of production varies across major industrial groups. In 1999 E.F.Y., the highest and lowest ratios were registered in manufacture of wearing apparel and manufacture of basic iron and steel, respectively. Ratio of cost of labour to gross value of production for all manufacturing industries combined, showed a continuous decline from year to year during the period under review.

The ratio of operating surplus to gross value of production by major industrial groups and for all manufacturing industrial groups combined is presented in Summary Table 3.10. The share of seven out of fifteen major industrial groups and the overall average exhibited an increase in 1999 E.F.Y. against that of 1998 E.F.Y.

Summary Table 3.7: Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group - Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)

Division of ISIC Rev. 3	Major Industrial Group	Year (E.F.Y)				
		1995	1996	1997	1998	1999
		Ratio of cost of energy consumed				
15	Manufacture of Food Products and Beverages	.075	.108	.118	.062	.082
16	Manufacture of Tobacco Products	.008	.009	.006	.034	.026
17	Manufacture of Textiles	.104	.092	.116	.109	.108
18	Manufacture of Wearing Apparel, Except Fur Apparel	.022	.019	.018	.020	.160
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	.016	.021	.019	.027	.024
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	.221	.240	.243	.232	.178
21 - 22	Manufacture of Paper, Paper Products and Printing	.054	.054	.045	.063	.048
24	Manufacture of Chemicals and Chemical Products	.037	.040	.041	.038	.031
25	Manufacture of Rubber and Plastic Products	.083	.086	.085	.060	.064
26	Manufacture of Other Non-Metallic Mineral Products	.518	.460	.461	.581	.605
27	Manufacture of Basic Iron and Steel	.024	.014	.018	.012	.012
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	.070	.054	.037	.042	.042
29	Manufacture of Machinery and Equipment N.E.C.	.037	.022	.013	.002	.014
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	.018	.014	.032	.007	.011
36	Manufacture of Furniture; Manufacturing N.E.C.	.020	.026	.021	.019	.014
	Total	.109	.106	.107	.100	.106

Summary Table 3.8: Ratio of Value Added* to Gross Value of Production by Major Industrial Group - Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)

Division of ISIC Rev. 3	Major Industrial Group	Year (E.F.Y)				
		1995	1996	1997	1998	1999
		Ratio of value added* to gross value of production				
15	Manufacture of Food Products and Beverages	.339	.321	.287	.274	.300
16	Manufacture of Tobacco Products	.351	.411	.318	.331	.301
17	Manufacture of Textiles	.145	.127	.196	.136	.189
18	Manufacture of Wearing Apparel, Except Fur Apparel	.317	.245	.258	.257	.218
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	.143	.176	.137	.157	.126
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	.440	.416	.445	.420	.355
21 - 22	Manufacture of Paper, Paper Products and Printing	.329	.288	.308	.247	.281
24	Manufacture of Chemicals and Chemical Products	.256	.261	.206	.192	.207
25	Manufacture of Rubber and Plastic Products	.316	.317	.244	.331	.211
26	Manufacture of Other Non-Metallic Mineral Products	.347	.302	.231	.344	.434
27	Manufacture of Basic Iron and Steel	.161	.137	.220	.105	.096
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	.230	.259	.216	.211	.370
29	Manufacture of Machinery and Equipment N.E.C.	.166	.181	.175	.085	.226
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	.218	-.123	.063	.209	.159
36	Manufacture of Furniture; Manufacturing N.E.C.	.301	.336	.323	.309	.333
	Total	.287	.262	.246	.244	.265

* In the national account concept at basic price

**Summary Table 3.9: Ratio of Cost of Labour to Gross Value of Production by Major Industrial Group -
Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)**

Division of ISIC Rev. 3	Major Industrial Group	Year (E.F.Y)				
		1995	1996	1997	1998	1999
		Ratio of cost of labour				
15	Manufacture of Food Products and Beverages	.081	.076	.073	.072	.082
16	Manufacture of Tobacco Products	.053	.036	.043	.055	.056
17	Manufacture of Textiles	.153	.154	.131	.144	.122
18	Manufacture of Wearing Apparel, Except Fur Apparel	.294	.242	.207	.316	.224
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	.073	.067	.070	.072	.060
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	.175	.194	.183	.172	.184
21 - 22	Manufacture of Paper, Paper Products and Printing	.125	.099	.097	.107	.099
24	Manufacture of Chemicals and Chemical Products	.077	.064	.072	.060	.076
25	Manufacture of Rubber and Plastic Products	.072	.069	.069	.055	.059
26	Manufacture of Other Non-Metallic Mineral Products	.070	.063	.066	.059	.044
27	Manufacture of Basic Iron and Steel	.051	.028	.026	.022	.021
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	.121	.100	.072	.079	.062
29	Manufacture of Machinery and Equipment N.E.C.	.129	.084	.098	.078	.102
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	.081	.071	.073	.057	.037
36	Manufacture of Furniture; Manufacturing N.E.C.	.134	.170	.152	.122	.136
	Total	.089	.080	.076	.073	.071

Summary Table 3.10: Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group - Public and Private 1995 - 1999 E.F.Y (2002/03 - 2006/07)

Division of ISIC Rev. 3	Major Industrial Group	Year (E.F.Y)				
		1995	1996	1997	1998	1999
		Ratio of operating Surplus				
15	Manufacture of Food Products and Beverages	.257	.244	.213	.202	.218
16	Manufacture of Tobacco Products	.297	.375	.275	.275	.245
17	Manufacture of Textiles	-.011	-.028	.065	.010	.067
18	Manufacture of Wearing Apparel, Except Fur Apparel	.022	.002	.050	.060	-.007
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	.069	.109	.067	.084	.066
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	.257	.216	.261	.247	.169
21 - 22	Manufacture of Paper, Paper Products and Printing	.203	.188	.211	.139	.182
24	Manufacture of Chemicals and Chemical Products	.179	.196	.133	.131	.131
25	Manufacture of Rubber and Plastic Products	.243	.247	.174	.275	.152
26	Manufacture of Other Non-Metallic Mineral Products	.277	.239	.165	.284	.389
27	Manufacture of Basic Iron and Steel	.108	.109	.194	.082	.075
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	.106	.158	.144	.131	.308
29	Manufacture of Machinery and Equipment N.E.C.	.033	.095	.075	.007	.124
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	.136	-.198	-0.012	.151	.122
36	Manufacture of Furniture; Manufacturing N.E.C.	.165	.164	0.169	.185	.195
	Total	.196	.181	0.17	.171	.194

During the survey, establishments that worked less than 12 months during the reference period were asked to state their reasons for not working the whole year during the reference period and the results are presented in Summary Table 3.11. It can be observed that among the total establishments which operated less than 12 months, during the reference period, 32.4 percent indicated shortage of supply of raw material, while 12.9 percent of the establishments indicated major reasons for not working for the whole year, respectively.

In a similar note to the above, establishments which were not working at full capacity were asked to state their reasons for working below capacity during the reference period and the responses are displayed in Summary Table 3.12. Shortage of supply of raw materials and absence of market demand emerged as the first and second major causes for under utilization of capacity.

In a similar way, the data in Summary Table 3.13 depict the first major problems faced by establishments during the survey period. As the data in the table indicate, about 34.2 percent of the establishments reported that the first major current operating difficulty was shortage of supply of raw materials, followed by absence of market demand which were reported by about 20.9 percent of the total reporting establishments.

**Summary Table 3.11: Distribution of Establishments by First Major Reason for Not Being Fully Operational and
and Major Industrial Group - Public and Private 1999 E.F.Y (2006/07)**

Division of ISIC Rev. 3	Major Industrial Group	Type of reasons										Total
		Shortage of supply of raw materials	Shortage of supply of spare parts	Lack of foreign exchange	Absence of market demand	Lack of working capital	Shortage of electricity and water supply	Frequent machinery breakage	Obstacles from gov. laws and regulations	Others	Not stated	
		Percentage distribution of establishments										
15	Manufacture of Food Products and Beverages	42	4	-	14	6	4	8	3	23	23	127
16	Manufacture of Tobacco Products	-	-	-	-	-	-	-	-	-	-	-
17	Manufacture of Textiles	8	1	-	1	-	1	1	-	-	-	12
18	Manufacture of Wearing Apparel, Except Fur Apparel	2	-	-	1	-	-	-	-	-	1	4
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	4	1	-	7	1	1	-	-	1	8	23
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	9	-	-	-	-	-	1	-	2	-	12
21 - 22	Manufacture of Paper, Paper Products and Printing	3	1	-	1	-	-	-	-	-	2	7
24	Manufacture of Chemicals and Chemical Products	6	1	-	1	3	-	1	-	-	4	16
25	Manufacture of Rubber and Plastic Products	3	1	-	2	1	-	-	-	-	5	12
26	Manufacture of Other Non-Metallic Mineral Products	67	3	1	13	3	7	4	1	17	88	204
27	Manufacture of Basic Iron and Steel	-	-	-	-	-	-	-	-	-	1	1
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	2	-	-	5	-	-	-	-	-	1	8
29	Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-	-	-	-
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	2	-	-	3	1	-	-	-	1	2	9
36	Manufacture of Furniture; Manufacturing N.E.C.	7	-	-	13	-	1	2	-	2	13	38
	Total	155	12	1	61	15	14	17	4	46	148	473
	%	32.37	2.54	.21	12.90	3.17	2.96	3.59	.85	9.73	31.29	100.00

**Summary Table 3.12: Distribution of Establishments by First reason for not working at full capacity
and Major Industrial Group - Public and Private 1999 E.F.Y (2006/07)**

Division of ISIC Rev. 3	Major Industrial Group	Type of reasons								Total
		Shortage of supply of raw materials	Shortage of supply of spare parts	Absence of market demand	Absence of credit facility	Shortage of foreign exchange	Lack of Adequate Skills	Others	Not stated	
		number of establishments								
15	Manufacture of Food Products and Beverages	120	12	91	17	23	4	5	36	308
16	Manufacture of Tobacco Products	-	-	-	-	-	-	-	-	-
17	Manufacture of Textiles	18	5	7	3	4	-	1	2	40
18	Manufacture of Wearing Apparel, Except Fur Apparel	12	-	7	4	-	-	1	4	28
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	25	3	17	8	1	2	-	5	61
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	24	-	1	2	5	-	2	1	35
21 - 22	Manufacture of Paper, Paper Products and Printing	32	7	38	2	4	3	1	2	89
24	Manufacture of Chemicals and Chemical Products	28	2	7	8	3	-	1	5	54
25	Manufacture of Rubber and Plastic Products	18	3	17	5	1	1	-	10	55
26	Manufacture of Other Non-Metallic Mineral Products	144	6	32	8	20	3	2	51	266
27	Manufacture of Basic Iron and Steel	8	1	2	1	-	-	-	1	13
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	22	1	15	3	1	1	2	4	49
29	Manufacture of Machinery and Equipment N.E.C.	2	-	1	-	-	1	-	1	5
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	12	-	16	1	1	-	-	4	34
36	Manufacture of Furniture; Manufacturing N.E.C.	42	2	88	29	5	5	5	21	197
	Total	507	41	339	91	68	20	20	147	1234
	%	41.09	3.4	27.47	7.37	5.51	1.62	1.62	11.91	100.00

**Summary Table 3.13: Distribution of Establishments by First Major problems faced by the establishments during the survey period
and Major Industrial Group - Public and Private 1999 E.F.Y (2006/07)**

Division of ISIC Rev. 3	Major Industrial Group	Type of reasons											Total
		Shortage of supply of raw materials	Shortage of supply of spare parts	Absence of market demand	Lack of working capital	Frequent Machinery Faille	Lack of working premises	Problem with employees	Government laws and regulations	Others	No Problems faced	Not stated	
		number of establishments											
15	Manufacture of Food Products and Beverages	172	8	64	15	11	3	4	9	24	49	-	359
16	Manufacture of Tobacco Products	-	-	-	-	-	-	-	-	-	-	-	-
17	Manufacture of Textiles	18	2	8	3	1	1	1	-	-	4	-	38
18	Manufacture of Wearing Apparel, Except Fur Apparel	13	-	6	5	1	-	-	1	1	3	-	30
19	Tanning and Dressing of Leather; Manufacture of Footwear, Luggage and Handbags	22	2	16	9	2	-	2	1	7	4	-	65
20	Manufacture of Wood and Products of Wood and Cork, Except Furniture	23	-	2	4	3	1	-	1	2	3	-	39
21 - 22	Manufacture of Paper, Paper Products and Printing	34	12	33	8	2	3	3	1	3	2	-	101
24	Manufacture of Chemicals and Chemical Products	30	-	6	10	2	2	1	-	4	4	-	59
25	Manufacture of Rubber and Plastic Products	24	3	9	4	2	1	1	2	9	9	-	64
26	Manufacture of Other Non-Metallic Mineral Products	153	10	30	7	20	9	4	10	15	21	-	279
27	Manufacture of Basic Iron and Steel	7	1	2	2	-	-	-	-	1	-	-	13
28	Manufacture of Fabricated Metal Products Except Machinery and Equipment	23	-	12	9	1	2	-	2	-	5	-	54
29	Manufacture of Machinery and Equipment N.E.C.	4	-	1	-	-	-	-	-	-	-	-	5
34	Manufacture of Motor Vehicles, Trailers and Semi-Trailers	8	-	15	1	2	2	-	-	4	3	-	35
36	Manufacture of Furniture; Manufacturing N.E.C.	53	2	80	29	5	7	2	6	10	23	-	217
	Total	584	40	284	106	52	31	18	33	80	130	-	1,358
	%	34.17	2.95	20.91	7.81	3.83	2.38	1.33	2.43	5.89	9.57	-	100.00

**FIG. I Gross Value of Production at Current Price by
Ownership 1995 - 1999 E.F.Y (2002/03 - 2006/07)**

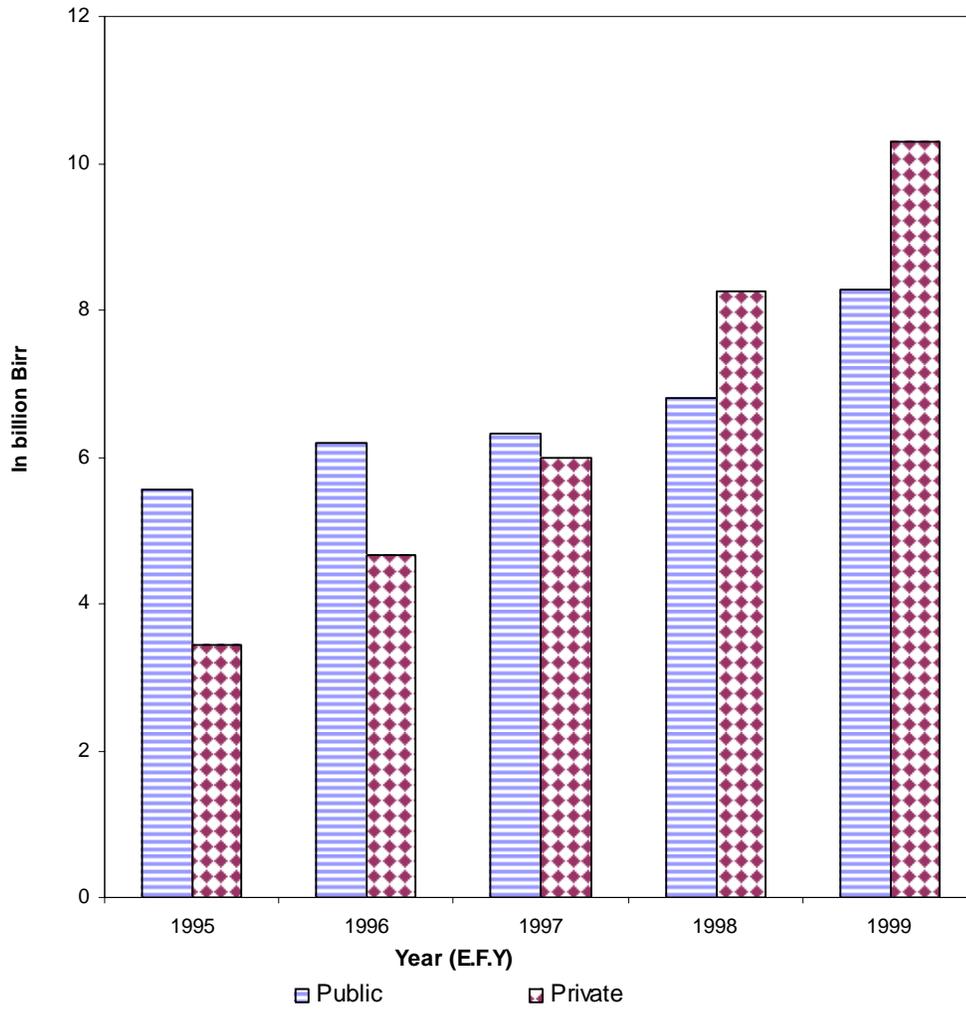
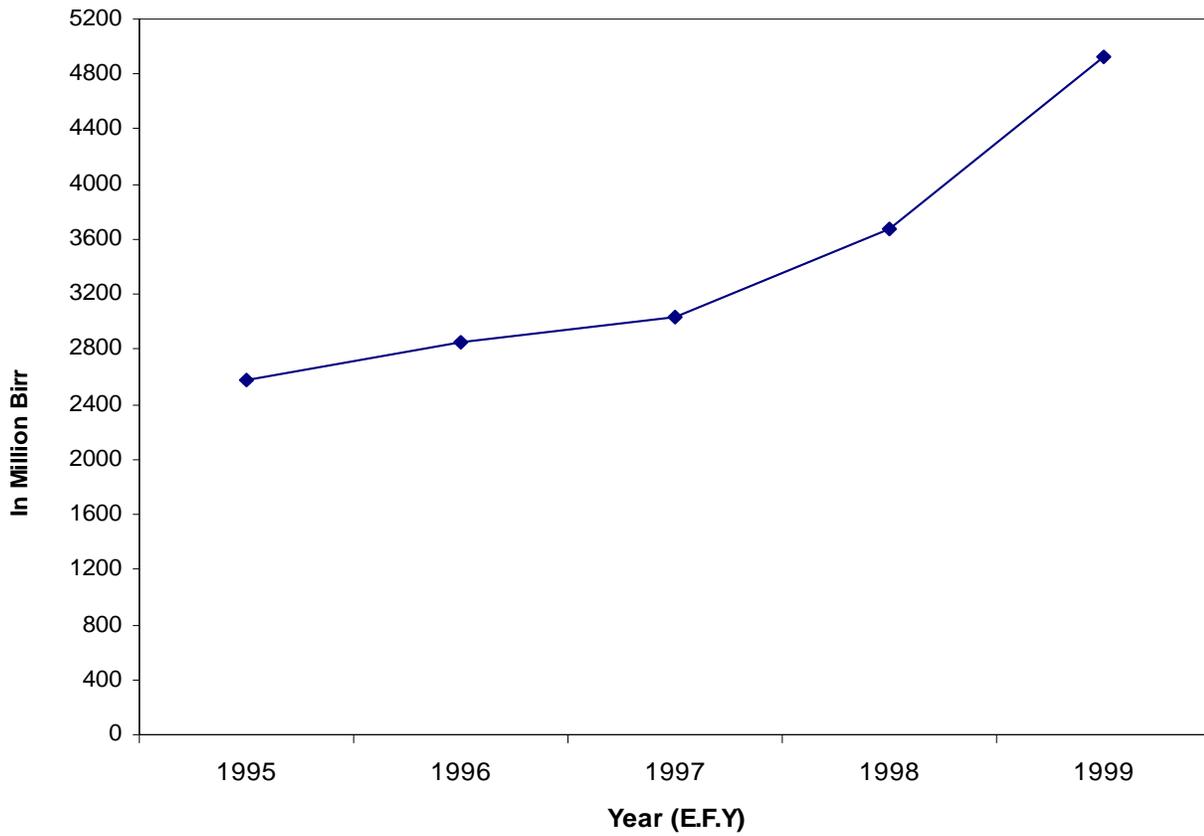
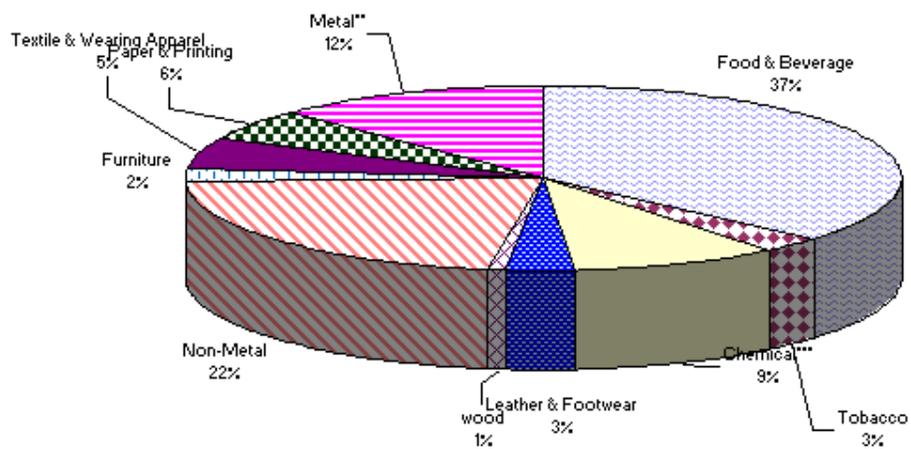


FIG. II Value Added* Puplic and Private
1995- 1999 E.F.Y (2002/03- 2006/07)



*In the National Account Concept at Basic Price

**FIG. III Percentage Distribution of Value Added*
by Major Industrial Group 1999 E.F.Y (2006/7)**



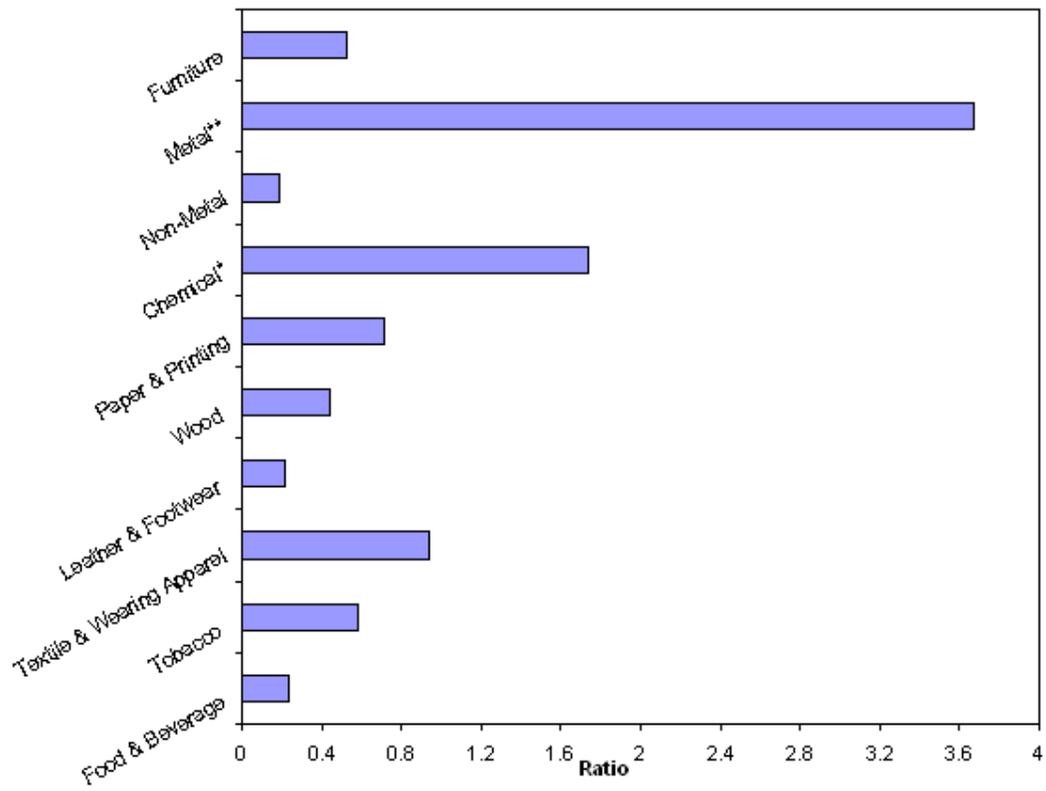
* In the National Account Concept at Basic Price

** Includes Basic Iron, Fabricated Metal, Machinery and Motor Vehicles

*** Includes Rubber and Plastic

* In the M
** Includ
*** Includ

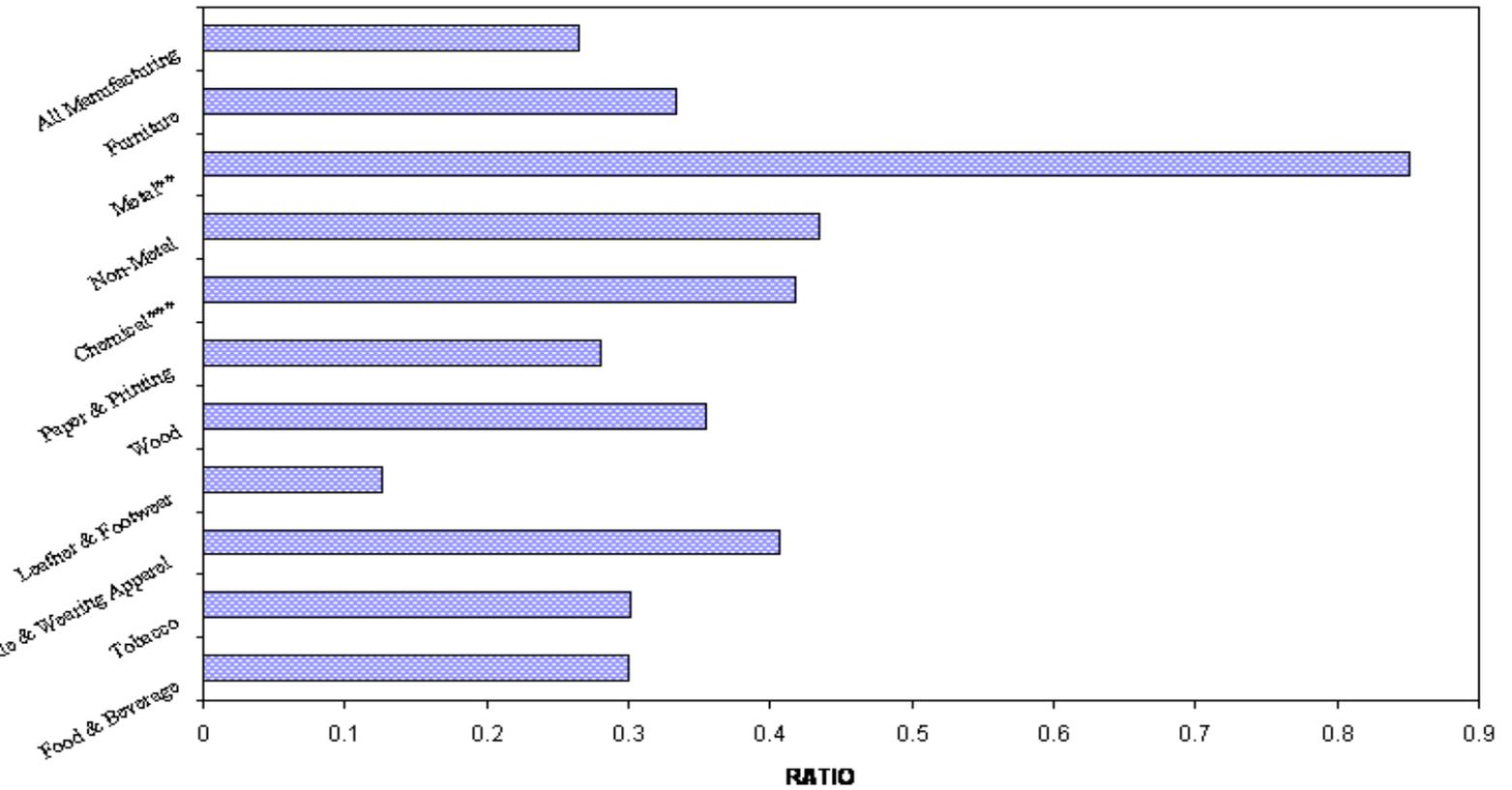
**FIG. IV Ratio of Imported to Total Raw Material Cost
by Major Industrial Group 1999E.F.Y 2006/07**



*Includes Rubber and Plastics

**Includes Basic Iron,Fabricated Metal,Machinery and Motor Vehicles

**FIG. V - Ratio of Value Added* to Gross Value of Production
1999 E.F.Y (2006/07)**



* In the National Account Concept at Basic Price

** Includes Basic Iron, Fabricated Metal, Machinery and Motor Vehicles

*** Includes Rubber and Plastic

FIG. VI - Installed Generating Capacity of Electricity
1995- 1999 E.F.Y (2002/03- 2006/07)

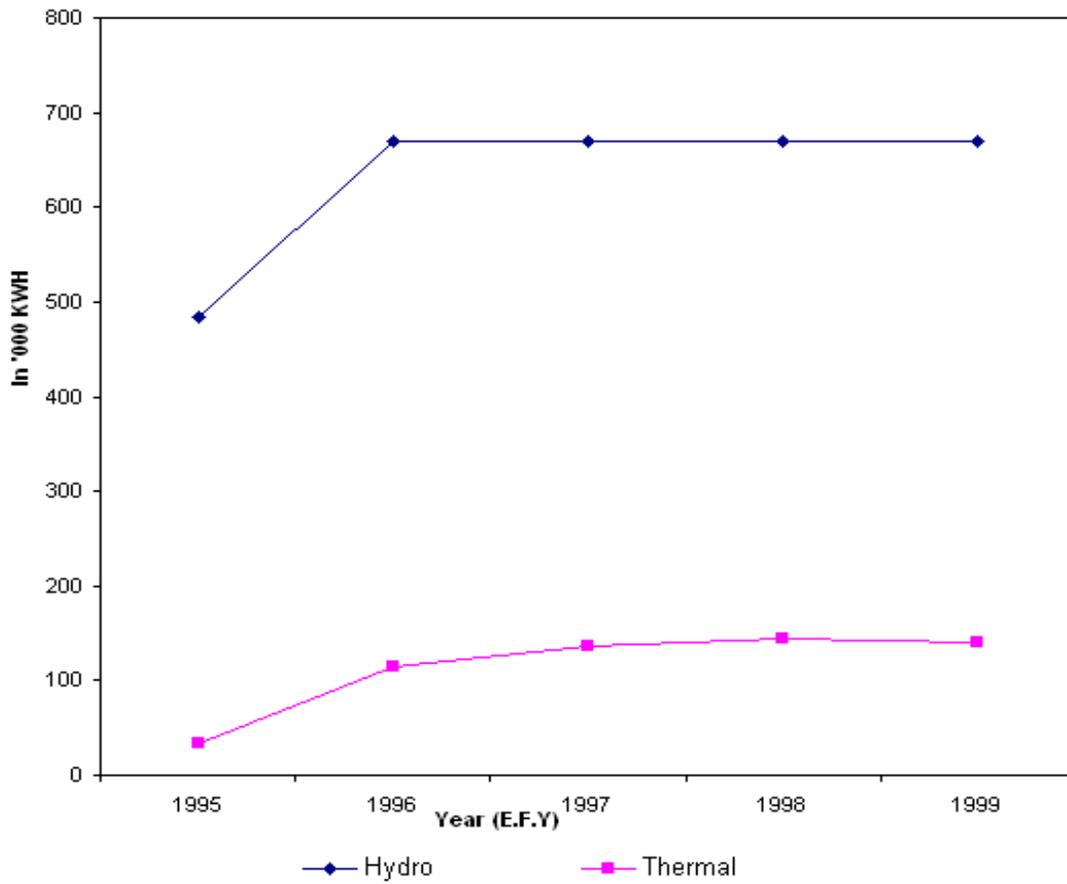


FIG. VII - Production of Electricity
1995- 1999 E.F.Y (2002/03 - 2006/07)

