

# Part I

## Introduction and Objectives

### 1.1 Introduction

In overall economic development, a critically important role is played by micro, small and medium enterprises in the developing world. The vast majority of countries rely on the dynamism, resourcefulness and risk-taking of private enterprises (to which most small scale manufacturing enterprises belong) to trigger, sustain the process, and form the base for private sector led economic growth. In this regard, *small scale manufacturing industries* are playing an ever-increasing role in the manufacturing industrial structure of the country. Expansion and development of the sector increases agricultural productivity through providing agricultural inputs and creating demand for agricultural outputs. Furthermore, small scale manufacturing industries play a key role in stimulating other sectors of the economy such as trade, construction and services and in reducing unemployment. Basic data on manufacturing output, input, employment, fixed assets, investment and capacity are of paramount importance for designing and formulating industrial development programs, strategies and policies.

Owing to this fact, and in an effort to provide comprehensive, accurate, reliable and timely data on a regular basis on the country's manufacturing sector the Central Statistical Agency /CSA/ has conducted for the fourth time in 2001 E.F.Y. (2008/09) a survey on *small scale manufacturing industries*.

Manufacturing is defined here according to International Standard Industrial Classification (ISIC Revision -3.1) 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.” For this survey grain milling services are also considered as manufacturing activities.

The surveys of manufacturing activities are designed to provide basic information on the characteristics, structure and performance of Cottage and Handicraft, Small, Medium and Large Scale Manufacturing Industries. To attain these objectives, manufacturing establishments are divided into three major groups. These are: -

- a) Large and Medium Scale Manufacturing Establishments, engaging 10 or more persons and using power -driven machinery.
- b) Small Scale Manufacturing Establishments engaging less than 10 persons and use power -driven machinery.
- c) Cottage/Handicraft Manufacturing Establishments performing their activities by hand (i.e., using non -power driven machinery).

This bulletin presents results of Small Scale Manufacturing Industries survey for the reference period 2007/08 (2000 E.F.Y.). The report provides information on objectives, scope, coverage and content, basic concepts and definitions, survey methodology, training of field staff, field organization and summary tables by structure and performance and problems encountered by Small Scale Manufacturing Industries. Furthermore, the questionnaire and estimation procedures for the survey are attached as an Annex.

## **1.2 Objectives**

The main objectives of Small Scale Manufacturing Industries Survey are to:

- a) Obtain basic statistical data that are essential for development policy makers, planners and researchers by manufacturing industrial group.

- b) Collect basic quantitative information on employment, volume of production and consumption of raw materials, structure and performance of the country's *small scale manufacturing industries*.
- c) Compile statistical data, which will be an input to the system of National Accounts (SNA) on *small scale manufacturing industries* as a whole and by manufacturing industrial group.
- d) Examine the interaction of the *small scale manufacturing industries* with the rest of the economy, particularly with the agricultural sector, and collect data that indicates its share in promoting export production and consumption of imported raw materials.
- e) Obtain the number of persons engaged in *small scale manufacturing industries* and find out the major problems that creates stumbling block for their activities.
- f) Fill in other statistical data gap concerning *small scale manufacturing industries*.

### 1.3 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, sawmill...etc.).
- ii. **Initial Paid-up Capital:-** is that part of the issued capital of an establishment that has been paid by the owners/shareholders to start the operation.
- iii. **Current Paid-up Capital:** - is that part of the issued capital of an establishment that has been paid by the owners/shareholders up to the survey period for operation of the establishment.
- iv. **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.
- v. **Administrative and Technical Employees:-** include salaried directors and managers, technicians, superintendents, research workers, draftsmen and engineers, chemists, architects, accountants book-keepers, office machine operators, receptionists , sales persons, delivery personnel, guards and other office staffs.
- vi. **Production workers:-** workers directly engaged in production i.e., persons engaged in fabricating, processing, assembling, maintenance, repair, janitorial, record keeping, and other associated activities.
- vii. **Apprentices:-** include both production and administrative workers, who are working to gain experience with or without payment.

- viii. **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.
- ix. **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 workers.
- x. **Number Engaged:-** includes paid employees, unpaid working proprietors, active partners, unpaid family workers and paid and unpaid apprentices.
- xi. **Wages and Salaries:-** includes all payments in cash or in kind made to employees during the reference year in connection with work done for the establishment (this excludes employee benefits).
- xii. **Employee Benefits:-** refers to the total of commissions, bonuses and cost of living allowances, medical and educational expenses, etc.. Paid by the employer.
- xiii. **Total Labour Cost:-** includes wages and salaries and employee benefits paid by the employer during the reference year.
- xiv. **Revenue from Sales:-** represents the total sales value of all products and by-products during the reference year valued at market price.
- xv. **Receipt from Industrial Services Rendered to Others:-** includes receipt from manufacturing services done to others on the raw materials supplied by customers such as grain milling services and repair and maintenance.

- xvi. **Other receipts:-** include rental income from lease of machinery and equipment, income from sales of scrap and the value of fixed assets produced by the unit for its own use.
- xvii. **Difference of Stocks in the Value of Finished and Semi-Finished Goods:-** is the net change 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 between the beginning and end of the reference period in the value of finished goods and the value of work in-progress, the value of industrial services rendered to others 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 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, electricity and other supplies consumed cost of industrial services rendered by others, cost of goods bought and resold without any transformation or processing.
- xxii. **Non -industrial Cost:** - includes payments like professional fees, postage, telephone, insurance, advertising, hired transport, rental payments, etc.(depreciation is excluded).
- xxiii. **Census Value Added (at Market Price):** - is the difference between gross value of Production and Industrial Cost. Census value Added at market price minus indirect taxes net (i.e., indirect taxes less subsidies) gives census value added at factor cost.
- xxiv. **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. To get the same indicator at factor cost indirect taxes net (i.e., indirect taxes less subsidies) are subtracted.
- 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 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. **New Capital Expenditure (Investment):** - is the cost of new or used capital equipment bought during the reference period.

- xxvii. **Operating surplus:** - is defined here as the difference between value added in national account concept at factor cost and total wages and salaries and employee benefits.
- xxviii. **An Individual Proprietor:** - is a person who owns and controls an establishment.
- xxix. **Partnership:** - is an establishment owned and operated by more than one person with unlimited liability.
- xxx. **Share Company:** - is a business organization formed by an agreement made between at least 5 or more persons with limited liability. The shares are transferable.
- xxxi. **Private Limited Company:** - is a business organization formed, by an agreement between two or more persons but not exceeding fifty, with limited liability. The shares are not transferable except with consent of 3/4th of the members.
- xxxii. **Co-operatives:**- an establishment owned and run jointly by its members with profits shared between them.
- xxxiii. **Other Forms of Ownership:** - includes legal form of organizations different from those mentioned above (28 -32), such as establishments owned by joint - venture, Government, Municipalities, etc.
- xxxiv. **Urban Dweller's Association (Kebele):**- is the lowest administrative unit in an urban center with its own jurisdiction. It is an association of urban dwellers (commonly known as Kebele) formed by the inhabitants, and usually constitutes a part of the urban center.



xxxv. **Urban Center**:- is in principle defined as a locality with 2000 or more inhabitants. However for practical purposes an urban center includes the following regardless of the number of inhabitants.

a) All administrative capitals

- i. Regional capitals
- ii. Zonal capitals not included in (i)
- iii. Wereda capitals not included in (i) and (ii)
- iv. Localities with UDAs not included in (i) - (iii)

b) Municipal towns not included in (a) above

c) All localities which are not included either in (a) or (b) above having a Population of 1000 or more persons, and whose inhabitants are primarily engaged in non -agricultural activities

## Part II

### **Survey Methodology, Data Collection and Processing**

#### 2.1 Scope and Coverage

The 2009/10 small scale manufacturing industry survey covered all rural and urban parts of the country except three zones of Affar and six zones of Somalie region. For collecting information about grain mill manufacturing industries both urban and rural part are taken into account however, information on small scale manufacturing industries other than grain mill is collected from urban parts of the country only.

In the rural part of Ethiopia all weredas are covered by the survey. Three grain mill from each wereda are sampled and covered.

Regarding urban parts of the country all kebeles are covered by the survey. In Addis Ababa three grain mills per kebele are covered where as in other urban areas one grain mill per each kebele is covered by the survey. Considering the non grain mill industries, seven from metal product industries and seven from the office furniture industries are covered by sample in each kebeles. Other small scale industries in each urban kebeles are covered fully by census. All in all 8,491 non grain mill industries and 1586 grain mill industries are covered in urban areas where as 1237 grain mills are covered in rural areas.

In this survey detailed information on number of establishments, number of persons engaged and number of employees by industrial groups, Sex, nationality and occupation, initial and current paid up capital, gross value of production, industrial and non-industrial costs, operating surplus, value added, value of fixed assets, investment, quantity of major manufactured articles and raw materials by industrial group, number of persons engaged by literacy status, highest grade

completed and type and duration of training for the country and selected items are presented.

## 2.2 Sampling frame

The list containing all small scale manufacturing industries of urban areas were prepared at the beginning of the survey and used as a frame. In the rural part list of grain mill in each wereda were compiled and used as a frame.

## 2.3 Sample Design

The sample design used for both urban and rural part is single stage stratified sample design. The stratas in urban areas are kebeles where as the stratas in rural part are weredas. Sample of small scale industries are selected from each kebele in urban areas and from each wereda in rural areas. Only grain-mills were sample and covered in rural part.

## 2.4 Sample size and selection scheme

Once the list of small scale is compiled, samples were selected by systematic sampling in the field. In urban areas sample of 7 metal industries and 7 office furniture industries were covered from each kebele. One grain mill from Addis Ababa kebeles and 3 grain mill from other region kebeles were sampled. In rural part 3 grain mill from each wereda were covered.

The survey domain is country level, i.e. basic survey results will be provided at national level.

The distribution of covered sampling units is given in appendix I and estimation procedures are given in appendix II.

## 2.5 Training of Field Staff

The training programs were carried out at two stages. In the first stage, the staff from the agency's branch statistical offices, statisticians, statistical technicians and computer experts from the head office were trained for about five days at the head office. In the second stage, enumerators and field supervisors were trained for six days by those trained in the first stage at the 25 branch statistical offices, all over the country.

## 2.6 Field Organization

All CSA branch statistical offices were involved in this survey. Accordingly, statisticians from branch statistical offices, field supervisors each supervising on the average five enumerators depending on the extent of the area to be covered and enumerators (including reserve enumerators) participated in the survey. Supervisors did the listing and data collection activity in the rural areas.

## 2.7 Data Processing

### **a. Editing, Coding and Verification**

A number of quality control steps were taken to ensure the quality of data of this survey. The first step taken in this direction was to prepare a questionnaire which was easy to check the internal consistency and edit both at field and office levels. Furthermore, in the enumerator's instruction manual field editing procedures were attached in order to help in the field editing operation. The editing and coding instruction manual was prepared in which editors and verifiers were given training. The training program given to the editors and verifiers lasted for three days. Editors/coders and verifiers performed the coding and the manual editing and verification activities. The verification was done on 100 percent basis. Finally, the edited, coded and verified questionnaires were also re-checked on 25 percent basis by statisticians of the Business Statistics Directorate.

**b. Data Entry, Cleaning and Tabulation**

Edit specifications were prepared for computer internal consistency checking purposes. The data entry and verification were done on personal computers using CSpro (Census and Survey Processing System) software. About 30 CSA data entry operators and 4 data entry supervisors (in two shifts) were assigned for this purpose for 15 working days with close supervision of the activities by one statistician and one computer programmer. Then, the data entered was cleaned by personal computer using the computer edit specification in combination with manual editing for some serious errors. Finally, the tabulation of the results of the survey was processed using the same software by one programmer with assistance from subject matter personnel.

## Part III

### Summary of Major Findings of the Survey

#### ***3.1 Structure and Performance***

Number of establishments, persons engaged, gross value of production and value added are presented in summary table 3.1. There were 43,338 small scale manufacturing establishments in Ethiopian fiscal year (E.F.Y) 2000 (2007/08). Out of the total, the largest in number, or slightly more than 23 thousand or 53.2 %, were grain mills, 8.6 thousand (19.8 %) furniture manufacturers and metal manufacturing establishments numbered 4.4 thousand or 10.1 % of the total, respectively. On the other end, very few small scale establishments were engaged in chemical, leather and footwear manufacturing, while there were none in the machinery and parts manufacturing, a possible area of focus for policy makers.

During the stated year all the establishments combined engaged 138,951 people, which is roughly a ratio of 1 to 3.2, i.e., on average 10 small scale manufacturing establishments engaged 32 people. A further look reveals that in absolute terms, grain mills employed the most: 70,023 (50.4 %), followed by furniture manufacturers, 34,718 (25.0 %) and metal manufacturers, 15,031 (11.0 %), in that order.

Gross value of production (GVP) in the stated period amounted to birr 2.79 billion, out of which grain mills contributed 1.1 billion, which is 40.0 % of the total. Furniture manufacturers' GVP reached 635.9 million, which is ahead of metal manufacturers' GVP (419.6 million). The other notable GVP was, that of food manufacturers amounting to 308.3 million birr or 11.0 %, trailed by non-metallic mineral products manufacturing 116.9 million birr (4.2 %) and wearing apparel manufacturing 115.7 million or 4.1 % of total gross value of production by small scale manufacturing establishments during the year.

The last, but not the least, or rather the most important indicator presented in summary table 3.1 is value added, which is the contribution of the small scale establishments to the gross domestic product (GDP) or the national economy during the year, derived as the difference between gross value of production and industrial and non industrial costs. In the year 2000 E.F.Y, the small scale manufacturing establishments' value added was to the tune of 1.14 billion birr, out of which again grain mills contributed the lion's share, i.e., 479.7 million birr (42.0 %). Furniture manufacturers were a distant second, with a contribution of 277.9 million birr or 24.3 %. In the third place were metal manufacturing establishments, which contributed a hefty 178.1 million birr or 15.6 % of the total value added. In the lower end were chemical manufacturing with birr 0.2 million or 0.02 %, leather and footwear manufacturing, birr 1.5 million (0.13 %) and wood and wood products manufacturing with a contribution of birr 3.1 million or 0.3 %.

Summary Table 3.1 Distribution of Establishments, Number of Persons Engaged, Gross Value of Production and Value Added by Industrial Group: 2000 E.F.Y (2007/08)

Industrial Group	Number of Establishments		Number of persons Engaged		Gross Value of Production		Value Added	
	No.	%	No.	%	Value	%	Value	%
Manufacture of Food Products Except Grain Mill Services	1,541	3.56	4,748	3.42	308,346,153	11.05	57,255,451	5.01
Grain Mill Services	23,047	53.18	70,023	50.39	1,113,873,376	39.91	479,699,504	42.02
Manufacture of Textiles	1,366	3.15	2,792	2.01	39,110,832	1.40	19,621,876	1.72
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	3,097	7.15	6,590	4.74	115,655,245	4.14	60,584,805	5.31
Manufacture of Luggage, Handbags and Footwear	46	.11	167	.12	4,370,821	.16	1,482,397	.13
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	90	.21	350	.25	7,819,873	.28	3,072,214	.27
Manufacture of Paper and Paper Products	3	.01	12	.01	103,635	-	56,424	-
Publishing, Printing and Reproduction of Recording Media	755	1.74	1,715	1.23	29,055,792	1.04	7,486,315	.66
Manufacture of Chemicals and Chemical Products	6	.01	37	.03	636,322	.02	198,287	.02
Manufacture of Other Non-Metallic Mineral Products	457	1.05	2,498	1.80	116,877,481	4.19	56,288,440	4.93
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	4,355	10.05	15,301	11.01	419,600,595	15.03	178,086,816	15.60
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	8,575	19.79	34,718	24.99	635,850,091	22.78	277,872,921	24.34
<b>Total</b>	<b>43,338</b>	<b>100.00</b>	<b>138,951</b>	<b>100.00</b>	<b>2,791,300,216</b>	<b>100.00</b>	<b>1,141,705,450</b>	<b>100.00</b>

### 3.2 Employment

Summary table 3.2 presents employment figures by industrial group. Accordingly, all the small scale manufacturing establishments, together, created employment opportunity for 138,951 people. A little more than 70.0 thousand were engaged in grain mills, close to 35.0 thousand in furniture manufacturing and 15.3 thousand in metal manufacturing. These were the most important three industrial groups in employment creation. However, wearing apparel manufacturers, food industries and non-metallic mineral manufacturers also engaged a sizable number of persons or 6.6, 4.7 and 2.5 thousand people, respectively. The least number of persons engaged were in paper and paper products manufacturing, chemicals and leather and footwear manufacturing. Furthermore, out of the total of 139 thousand, 66.8 thousand or 48.0 % were permanent employees. In absolute terms, again the largest numbers of permanent employees were in grain mills, i.e. 37.9 thousand, next in line were furniture manufacturers with 15.7 thousand and less than half of the later (6.3 thousand) in metal manufacturing. Food manufacturing, wearing apparel makers and non-metallic mineral manufacturing were the other important industrial groups in the size of number of permanent employees.

Summary Table 3.2 Permanent Employees as Percentage of Total Persons Engaged by Industrial Group: 2000 E.F.Y (2007/08)

Industrial Group	Number of Establishments	Number of persons Engaged	Permanent Employees	Permanent Employees as % of total persons engaged
Manufacture of Food Products Except Grain Mill Services	1,541	4,748	2,110	44.44
Grain Mill Services	23,047	70,023	37,852	54.06
Manufacture of Textiles	1,366	2,792	681	24.39
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	3,097	6,590	1,889	28.66
Manufacture of Luggage, Handbags and Footwear	46	167	78	46.71
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	90	350	204	58.29
Manufacture of Paper and Paper Products	3	12	7	58.33
Publishing, Printing and Reproduction of Recording Media	755	1,715	759	44.26
Manufacture of Chemicals and Chemical Products	6	37	28	75.68
Manufacture of Other Non-Metallic Mineral Products	457	2,498	1,170	46.84
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	4,355	15,301	6,253	40.87
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	8,575	34,718	15,747	45.36
<b>Total</b>	<b>43,338</b>	<b>138,951</b>	<b>66,778</b>	<b>48.06</b>



Summary Table 3.3 Number of Persons Engaged, Employees and Labor Cost per Establishment  
by Industrial Group: 2000 E.F.Y (2007/08)

Industrial Group	Number of Establishments	Number of Persons Engaged	Number of Employees	Labour Cost (in birr)	Labour Cost per Establishment
Manufacture of Food Products Except Grain Mill Services	1,541	4,748	2,471	7,485,844	4,857.78
Grain Mill Services	23,047	70,023	39,815	88,566,133	3,842.85
Manufacture of Textiles	1,366	2,792	868	3,038,516	2,224.39
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	3,097	6,590	2,326	7,693,438	2,484.16
Manufacture of Luggage, Handbags and Footwear	46	167	97	312,210	6,787.17
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	90	350	220	816,127	9,068.08
Manufacture of Paper and Paper Products	3	12	7	20,410	6,803.33
Publishing, Printing and Reproduction of Recording Media	755	1,715	786	2,709,921	3,589.30
Manufacture of Chemicals and Chemical Products	6	37	31	79,580	13,263.33
Manufacture of Other Non-Metallic Mineral Products	457	2,498	1,765	6,341,830	13,877.09
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	4,355	15,301	7,411	35,983,535	8,262.58
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	8,575	34,718	18,527	80,630,442	9,402.97
<b>Total</b>	<b>43,338</b>	<b>138,951</b>	<b>74,324</b>	<b>233,677,986</b>	<b>5,391.99</b>

Labor cost incurred and labor cost per small scale establishments are displayed in summary table 3.3. Out of the 43.3 thousand small scale establishments in the country as mentioned earlier, close to 139 thousand people were engaged and among those 74.3 were employed staff and the rest were owners, apprentices or family members engaged in the business of small scale manufacturing. A total of birr 233.7 million was spent by the establishments on the 74.3 thousand employees. Again in absolute terms the largest amount was that of grain mills (birr 88.6 million), closely followed by furniture manufacturing (birr 80.6 million) and the distant third was the amount spent by metal manufacturers, which was almost 36.0 million. However if we look at labor cost per establishment, the highest figure is birr 13.9 thousand incurred by non-metallic mineral products manufacturing industrial group and the lowest was that of textile manufacturing amounting to birr 2.2 thousand.

### ***3.3 Raw Materials and Energy Consumption***

The amount spent by small scale manufacturing establishments for raw materials reached close to birr 1.1 billion in 2000 E.F.Y. Further investigation of the figures reveals that furniture manufacturers spent the most, i.e., birr 305.5 million, followed by food manufacturing and metal manufacturing establishments, which spent 232.2 and 213.7 million on raw materials, respectively. One disturbing aspect of raw materials use by the small scale establishments is that close to one third of the total cost on raw materials is spent on imported raw materials. Given that these are small scale establishments, this proportion of imported raw material usage is alarming. The figures in summary table 3.4 further indicate that, with the exception of food and wood products manufacturing establishments, all the remaining industrial groups spent well over 10.0 % of their total raw material expenses was on imported raw materials. In this regard, paper and paper products manufacturing, printing, wearing apparel manufacturing, textile manufacturing, metal manufacturing establishments are heavily dependent on imported raw materials, as they spent more than half of their raw materials expenses on imported ones. Moreover, furniture manufacturing and footwear manufacturing establishments also spent more than a quarter of their expenditure on raw materials on imported raw materials.

Coming to energy consumption, all the establishments combined, during the reference year spent birr 323.1 million on energy, of which the substantial amount (birr 286.0 million), was understandably by grain mills given their dominant number in the composition of small scale manufacturing establishments in the country and the nature of their activity, which is energy intensive. A distant second in this was the amount spent by furniture manufacturers, which amounted to a paltry birr 15.7 million in comparison to that of grain mills. Metal manufacturers and food manufacturing establishments spent birr 9.0 and 7.3 million on energy, respectively during the reference year. Furthermore cost of energy consumed to the total industrial cost by the small scale establishments amounted to 21.0 %. As stated earlier, cost of energy consumed by grain mills in relation to total industrial cost by the same amounted

Summary Table 3.4 Cost of Raw Materials and Energy Consumed as Percentage of Total Industrial Cost and Ratio of Imported to Total Raw Materials by Industrial Group: 2000 E.F.Y (2007/08)

Industrial Group	No. of Establish.	Total Cost of Raw Materials	Cost of Imported Raw Materials	Cost of Energy Consumed	Industrial Cost	Cost of Raw Materials as % of Industrial Cost	Imported as % of Total Raw Materials Cost	Cost of Energy as % of Industrial Cost
Manufacture of Food Products Except Grain Mill Services	1,541	232,168,218	7,215,580	7,317,015	244,092,749	95.11	3.11	3.00
Grain Mill Services	23,047	211,902,453	35,117,721	285,999,885	602,792,947	35.15	16.57	47.45
Manufacture of Textiles	1,366	14,896,197	9,404,614	771,271	16,652,247	89.45	63.13	4.63
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	3,097	45,090,494	32,753,802	2,020,312	47,955,037	94.03	72.64	4.21
Manufacture of Luggage, Handbags and Footwear	46	2,662,326	601,978	44,917	2,730,254	97.51	22.61	1.65
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	90	4,137,873	288,481	261,539	4,436,767	93.26	6.97	5.89
Manufacture of Paper and Paper Products	3	21,864	20,864	4,247	28,561	76.55	95.43	14.87
Publishing, Printing and Reproduction of Recording Media	755	13,287,578	7,291,953	1,004,896	15,568,599	85.35	54.88	6.45
Manufacture of Chemicals and Chemical Products	6	364,432	67,400	37,178	402,710	90.49	18.49	9.23
Manufacture of Other Non-Metallic Mineral Products	457	52,264,324	5,736,238	984,503	56,129,465	93.11	10.98	1.75
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	4,355	213,742,974	110,974,008	8,989,342	225,383,132	94.84	51.92	3.99
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	8,575	305,505,474	94,566,780	15,708,030	327,558,986	93.27	30.95	4.80
<b>Total</b>	<b>43,338</b>	<b>1,096,044,207</b>	<b>304,039,419</b>	<b>323,143,135</b>	<b>1,543,731,454</b>	<b>71.00</b>	<b>27.74</b>	<b>20.93</b>

to 47.5 %, this is the highest, the other notable exception being that of paper and paper products manufacturing industrial group, which spent close to 15.0 % of their industrial cost on energy.

The other important indicator presented in summary table 3.4 is industrial cost. This is the sum of raw materials, energy and other costs incurred by small scale manufacturing establishments during the year. Accordingly the establishments' total industrial cost was to the tune of birr 1.5 billion, of which on average 71.0 % was spent on raw materials. Of the stated figure, the sizable amount, or birr 602.8 million, was spent by grain mills. Furniture manufacturers, food manufacturers and metal manufacturing establishments also spent a significant amount reaching birr 327.6, 244.1 and 225.4 million, respectively. In relative terms, more than three fourth of industrial cost of all industrial groups, save that of grain mills was on raw materials.

### ***3.4 Demographic Characteristics of Persons Engaged***

Earlier in this document it was stated that a total 138,954 persons were engaged in small scale manufacturing industries in the country during 2000 E.F.Y. Summary table 3.5 presents number of persons engaged by type of worker. The figures in the table show that, out of the total, 89.9 % were male. Another important feature of the composition of persons engaged is that 55.4 thousand persons or close to 40.0 % percent were unpaid family workers, 4.3 thousand or 3.1 % percent unpaid apprentices and 7.5 thousand or 5.4 % seasonal and temporary workers. Permanent paid employees constituted 48.1 % of the total. Further investigation of the figures, reveals that out of the total 14.1 thousand women who took part in the activities of small scale industries during the year 58.0 % of them were unpaid family workers, 4.1 % unpaid apprentices, 1.6 % paid apprentices and the rest 37.4 % permanent paid employees (refer to summary table 3.5).

Looking into the literacy status of persons engaged, we find that, of those whose literacy status reported, an encouraging 83.9 % were literate. The figures in summary table 3.6 also show that, 84.9 percent of male participants are literate, while the figure for females stands at 74.0 % as being literate. Furthermore, slightly more than a quarter of the female participants are illiterate, while the corresponding figure for men stands at 15.1 %.

Summary table 3.8 presents number of persons engaged by type and duration of training. Close to 107 thousand persons engaged in small scale manufacturing have had, a training of varying duration and type. Those who had a basic training for less than one year numbered 39.2 thousand or 36.6 % of the total, out of which close to 10.0 % were women, while those with training, for 1 – 2 years at technical certificate level were 25.9 thousand, again out of which 10.6 % were women. 16.7 % of those with

Summary Table 3.5 Number of Persons Engaged by Sex and Type of Workers: 2000 E.F.Y (2007/08)

Type of Worker	Sex of Worker					
	Male		Female		Both Sexes	
	No.	%	No.	%	No.	%
Unpaid Family Worker	47,337	37.90	8,013	56.98	55,350	39.83
Unpaid Apprentices	3,773	3.02	576	4.10	4,349	3.13
Paid Apprentices	4,713	3.77	218	1.55	4,931	3.55
Permanent Paid Employees	61,520	49.26	5,257	37.38	66,777	48.06
Seasonal and Temporary Workers*	7,547	6.04	-	-	7,547	5.43
<b>Total</b>	<b>124,890</b>	<b>100.00</b>	<b>14,064</b>	<b>100.00</b>	<b>138,954</b>	<b>100.00</b>

\* All Seasonal and temporary workers are taken as male

Summary Table 3.6 Number of Reported Persons Engaged by Literacy Status and Sex: 2000 E.F.Y (2007/08)

Literacy Status	Sex of Persons Engaged					
	Male		Female		Both Sexes	
	No.	%	No.	%	No.	%
Literate	92,731	84.91	8,570	73.96	101,301	83.86
Illiterate	16,479	15.09	3,017	26.04	19,496	16.14
<b>Total</b>	<b>109,210</b>	<b>100.00</b>	<b>11,587</b>	<b>100.00</b>	<b>120,797</b>	<b>100.00</b>

Summary Table 3.7 Number of Literate Persons Engaged by Sex and Highest Grade Completed: 2000 E.F.Y (2007/08)

Highest Grade Completed	Sex of Persons Engaged					
	Male		Female		Both Sexes	
	No.	%	No.	%	No.	%
Grade 1 - 3	10,486	11.31	890	10.39	11,376	11.23
Grade 4 - 6	23,696	25.55	2,043	23.84	25,739	25.41
Grade 7 - 8	18,087	19.50	1,414	16.50	19,501	19.25
Grade 9 - 12	21,654	23.35	2,452	28.61	24,106	23.80
Above Grade 12	8,500	9.17	788	9.20	9,288	9.17
Not Stated	10,310	11.12	982	11.46	11,292	11.15
<b>Total</b>	<b>92,733</b>	<b>100.00</b>	<b>8,569</b>	<b>100.00</b>	<b>101,302</b>	<b>100.00</b>

training, had, other training lasting between 1 – 2 years. On the other hand persons engaged with a diploma level training totaled 10.8 thousand or slightly more than 10.1 %, while 6.9 % of the total, which is significant, had university level training. Furthermore, 4.8 thousand (4.4 %) persons engaged reported of having informal training, while 2.1 thousand people stated of having other type of training.

Summary Table 3.8 Number of Persons Engaged by Duration of Training and Sex: 2000 E.F.Y (2007/08)

Type and Duration of Training	Sex of Persons Engaged					
	Male		Female		Both Sexes	
	No.	%	No.	%	No.	%
Basic less than one year	35,611	36.87	3,528	34.35	39,139	36.63
Technical Certificate 1 – 2 years	23,388	24.22	2,476	24.10	25,864	24.21
Other Certificate 1 – 2 years	15,590	16.14	1,687	16.42	17,277	16.17
Technical Diploma 2 years	9,720	10.06	1,111	10.82	10,831	10.14
University	6,185	6.40	753	7.33	6,938	6.49
Informal training	4,250	4.40	424	4.13	4,674	4.37
Others	1,829	1.89	293	2.85	2,122	1.99
<b>Total</b>	<b>96,573</b>	<b>100.00</b>	<b>10,272</b>	<b>100.00</b>	<b>106,845</b>	<b>100.00</b>

### 3.5 Ownership and Problems Faced

The figures in summary table 3.9 present sex composition of owners of small scale manufacturing establishments. Accordingly, 86.3 % of owners of these establishments are men, while the remaining 13.7 % are female.

Summary Table 3.9 Number of Owners of the Establishments  
by Sex: 2000 E.F.Y (2007/08)

Sex	Owners of Establishments	
	No.	%
Male	58,329	86.33
Female	9,234	13.67
Total	<b>67,563</b>	<b>100.00</b>

What are the major problems faced by small establishments during the start of their operation? The response to this question could be found in summary table 3.10. Out of the 42.6 thousand reporting establishments to this particular question, 39.6 % cited lack of sufficient capital as a first major problem faced, 5.7 % put the blame on lack of smooth supply of raw materials, while 5.4 % gave obstacles from government rules and regulation as major reason. It is worth noting here that 11.2 percent of the reporting establishments mentioned 'other reasons', while 28.2 % stated that they haven't faced problems during the start of operation.

The other important issue investigated during the survey was, why are the small scale manufacturing establishments not fully operational during the survey year? The answers are displayed in summary table 3.11. In total 23.6 thousand establishments responded to this question, which could mean these were those who were not fully operational, or they were out of those who were not operational, responding to this particular question. Thus the reasons vary widely. Close to a fifth of the reporting establishments were out of operation for part of the year due to absence of market demand, while shortage of water forced close to 13.0 % the reporting establishments not to operate the whole year. On the other hand almost similar number of establishments gave shortage of raw materials and spare parts as the major reasons, behind this performance. Shortage of electricity supply was a culprit for their below par performance for 10.4 % of the establishments, while lack of foreign exchange has strained 8.2 % of the establishments not to operate the whole year.

Summary Table 3.10 Number of Establishments by Industrial Group and Major Problem Faced at the Start of Operation: 2000 E.F.Y (2007/08)

Industrial Group	Type of Problems							No problems faced	Total	
	Lack of foreign exchange	Lack of sufficient capital	Obstacles from gov't rules & regulations	Access to credit facilities	Lack of information	Lack of smooth supply of raw materials	Absence of adequate skills			Others
Manufacture of Food Products Except Grain Mill Services	23	394	38	13	48	113	34	165	583	1,411
Grain Mill Services	278	6,251	1,332	343	774	1,044	1,295	2,792	8,640	22,749
Manufacture of Textiles	28	772	52	13	31	36	72	86	249	1,339
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	75	1,577	109	42	60	111	149	235	664	3,022
Manufacture of Luggage, Handbags and Footwear	-	28	-	2	-	5	-	7	4	46
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	1	38	9	3	-	7	1	11	14	84
Manufacture of Paper and Paper Products	-	2	-	-	1	-	-	-	-	3
Publishing, Printing and Reproduction of Recording Media	12	229	22	8	22	42	11	116	263	725
Manufacture of Chemicals and Chemical Products	-	2	-	-	-	2	-	-	1	5
Manufacture of Other Non-Metallic Mineral Products	26	145	31	3	6	112	2	51	69	445
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	88	2,360	216	64	94	221	51	545	627	4,266
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	152	5,072	470	149	118	734	133	768	869	8,465
<b>Total</b>	<b>683</b>	<b>16,870</b>	<b>2,279</b>	<b>640</b>	<b>1,154</b>	<b>2,427</b>	<b>1,748</b>	<b>4,776</b>	<b>11,983</b>	<b>42,560</b>
Percentage	<b>1.60</b>	<b>39.64</b>	<b>5.35</b>	<b>1.50</b>	<b>2.71</b>	<b>5.70</b>	<b>4.11</b>	<b>11.22</b>	<b>28.16</b>	<b>100.00</b>



Summary Table 3.11 Number of Establishments by Industrial Group and Major Reason  
for Not Being Fully Operational During: 2000 E.F.Y (2007/08)

Industrial Group	Major Reasons											Total
	Newly Established	Shortage of supply of raw materials	Shortage of supply of spare parts	Absence of market demand	Lack of working capital	Shortage of electricity	Shortage of water	Frequent machinery failure	Obstacles from gov. rules & regulations	Lack of foreign exchange	Others	
Manufacture of Food Products Except Grain Mill Services	304	139	8	140	23	84	33	4	20	104	-	859
Grain Mill Services	1,493	1,278	2,610	2,342	221	1,249	2,880	49	209	998	-	13,329
Manufacture of Textiles	135	23	5	163	43	53	5	4	62	70	-	563
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	223	68	11	416	140	106	13	8	127	168	-	1,280
Manufacture of Luggage, Handbags and Footwear	11	5	-	8	2	2	-	-	6	2	-	36
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	21	8	-	7	6	4	1	2	-	7	-	56
Manufacture of Paper and Paper Products	1	-	-	-	-	-	-	-	-	-	-	1
Publishing, Printing and Reproduction of Recording Media	156	6	10	32	19	61	7	-	12	27	-	330
Manufacture of Chemicals and Chemical Products	2	1	-	2	-	-	-	-	-	-	-	5
Manufacture of Other Non-Metallic Mineral Products	74	160	1	30	16	24	-	2	-	6	-	313
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	701	282	19	586	186	307	26	10	41	170	-	2,328
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	1,342	771	55	723	424	564	101	104	72	373	-	4,529
<b>Total</b>	<b>4,463</b>	<b>2,741</b>	<b>2,719</b>	<b>4,449</b>	<b>1,080</b>	<b>2,454</b>	<b>3,066</b>	<b>183</b>	<b>549</b>	<b>1,925</b>	<b>-</b>	<b>23,629</b>
Percentage	<b>18.89</b>	<b>11.60</b>	<b>11.51</b>	<b>18.83</b>	<b>4.57</b>	<b>10.39</b>	<b>12.98</b>	<b>.77</b>	<b>2.32</b>	<b>8.15</b>	<b>-</b>	<b>100.00</b>

Summary Table 3.12 Number of Establishments by Industrial Group and Major Reason for Not Working at Full Capacity: 2000 E.F.Y (2007/08)

Industrial Group	Major 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 skill	Lack of working premises	Others	
Manufacture of Food Products Except Grain Mill Services	279	29	621	12	3	7	48	212	1,211
Grain Mill Services	2,467	3,829	9,858	139	6	209	194	3,478	20,180
Manufacture of Textiles	209	20	697	62	2	20	91	127	1,220
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	301	22	1,262	122	6	48	305	388	2,454
Manufacture of Luggage, Handbags and Footwear	7	1	16	3	-	-	11	6	44
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	14	3	26	6	-	2	10	18	79
Manufacture of Paper and Paper Products	-	-	3	-	-	-	-	-	3
Publishing, Printing and Reproduction of Recording Media	113	32	254	10	2	6	41	147	605
Manufacture of Chemicals and Chemical Products	3	-	-	-	-	-	2	-	5
Manufacture of Other Non-Metallic Mineral Products	242	2	78	12	-	-	32	46	412
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	848	52	1,661	240	17	23	423	548	3,812
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	2,154	222	2,289	569	9	78	792	1,126	7,239
<b>Total</b>	<b>6,637</b>	<b>4,212</b>	<b>16,765</b>	<b>1,175</b>	<b>45</b>	<b>393</b>	<b>1,949</b>	<b>6,096</b>	<b>37,272</b>
Percentage	<b>17.81</b>	<b>11.30</b>	<b>44.98</b>	<b>3.15</b>	<b>.12</b>	<b>1.05</b>	<b>5.23</b>	<b>16.36</b>	<b>100.00</b>

Results of capacity utilization by the small scale manufacturing establishments are displayed in summary table 3.12. Absence of market demand was reported as a major reason behind below-capacity performance by 45.0 % of the establishments. Shortage of raw materials (17.8 %) and supply of spare parts (11.3 %) respectively were also mentioned as the major reasons, for under capacity performance by these establishments. Lack of working premises, adequate capital or foreign exchange was mentioned as a major reason for low capacity performance by very few establishments. Finally, “other reason” was given by 16.4 % of the establishments.

Earlier in the report we discussed about the problems faced by small scale establishments, now let us look at the problems faced by the establishments during the survey period. The responses by the establishments are summarized in summary table 3.13. The majority of the establishments responded to this particular question. Out of those who responded to this particular question, absence of market demand for their products was cited as a major problem by 28.3 % of the establishments, and 14.8 % of them talked about shortage of raw material, close to 14.0 % blamed electric supply, and 9.0 % pointed out working capital as a major concern to them, during the survey period. The other notable reasons given by the establishments were, 6.2 % referred to shortage of spare parts, 5.9 % lack of working premises, and 4.9 % frequency of machinery failure, respectively.

The other area investigated during the survey, was whether there were administrative issues related to the government, hampering a smooth running of a small scale establishment. The results are presented in summary table 3.14. Very few of the establishments responded to this question, I.e., only 5.2 thousand of them. The figures in the table show that out of these 5.2 thousand, 43.1 % mentioned lack of working premises as a major problem, followed by lengthy process to get a license (30.6 %) and 12.2 % brought up absence of tax exemption as a major problem, respectively.

Business, be it large or small can fail, or get into trouble or face a bumpy road due to number of reasons, and lack of information among them, if not a major one. During the survey, establishments were asked whether they faced this kind of problem, and their responses are encapsulated in summary table 3.15. Again as in the previous table, very few responses were recorded for this question, only 4.9 thousand responses, out of 43.3 thousand or 11.3 %. Nevertheless, 27.4 % of those who responded to this question, cited lack of sufficient market information as a major problem, while a fifth of them (20.7 %) revealed lack of information to decide which type of activity to engage in as a major problem, and 14.2 % brought up lack of information about suitable technology to their activity as a culprit. Worth noting here is also that, 10.2 % mentioned lack of information, where to get appropriate training, while 6.6 % put the blame on lack of information as to where to get machinery.

Summary Table 3.13 Number of Establishments by Industrial Group and Major Reason Faced During the Survey Period: 2000 E.F.Y (2007/08)

Industrial Group	Major Reasons											Total
	No problems faced	Shortage of supply of raw materials	Shortage of supply of spare parts	Absence of Market demand	Lack of working capital	Frequent machinery failure	Lack of working premises	Problems with employees	Obstacles form gov. rules and regulations	Shortage of electricity	Others	
Manufacture of Food Products Except Grain Mill Services	125	213	20	505	84	15	69	11	8	284	86	1,420
Grain Mill Services	2,765	2,513	2,356	6,662	788	1,918	709	272	134	3,033	1,649	22,799
Manufacture of Textiles	63	181	26	566	196	4	102	3	15	153	48	1,357
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	266	283	26	1,050	481	18	280	21	28	488	117	3,058
Manufacture of Luggage, Handbags and Footwear	1	8	1	20	6	3	6	1	-	-	-	46
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	1	17	4	19	15	-	10	1	2	14	2	85
Manufacture of Paper and Paper Products	-	-	-	2	1	-	-	-	-	-	-	3
Publishing, Printing and Reproduction of Recording Media	36	146	12	202	44	9	33	-	1	232	31	746
Manufacture of Chemicals and Chemical Products	-	3	-	-	2	-	-	-	-	-	-	5
Manufacture of Other Non-Metallic Mineral Products	13	177	3	92	29	3	53	5	8	42	28	453
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	211	796	60	1,220	665	20	393	19	52	640	172	4,248
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	451	1,972	148	1,725	1,520	100	847	66	160	<b>1,067</b>	291	8,347
<b>Total</b>	<b>3,932</b>	<b>6,309</b>	2,656	<b>12,063</b>	<b>3,831</b>	<b>2,090</b>	<b>2,502</b>	<b>399</b>	<b>408</b>	<b>5,953</b>	<b>2,424</b>	<b>42,567</b>
Percentage	<b>9.24</b>	<b>14.82</b>	<b>6.24</b>	<b>28.34</b>	<b>9.00</b>	<b>4.91</b>	<b>5.88</b>	<b>.94</b>	<b>.96</b>	<b>13.99</b>	<b>5.69</b>	<b>100.00</b>

Summary Table 3.14 Number of Establishments by Industrial Group and Type of Government Influence: 2000 E.F.Y (2007/08)

Industrial Group	Type of Government Influence				Total
	Getting license requires long time	Lack of working premises	Absence of tax exemption	Others	
Manufacture of Food Products Except Grain Mill Services	24	34	9	10	77
Grain Mill Services	799	944	327	344	2,414
Manufacture of Textiles	28	74	29	9	140
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	55	151	67	92	365
Manufacture of Luggage, Handbags and Footwear	-	1	-	1	2
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	1	7	4	1	13
Manufacture of Paper and Paper Products	-	-	-	-	-
Publishing, Printing and Reproduction of Recording Media	5	32	10	9	56
Manufacture of Chemicals and Chemical Products	-	-	-	-	-
Manufacture of Other Non-Metallic Mineral Products	13	27	13	18	71
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	122	347	70	63	602
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	556	640	109	190	1,495
Total	<b>1,603</b>	<b>2,257</b>	<b>638</b>	<b>737</b>	<b>5,235</b>
Percentage	<b>30.62</b>	<b>43.11</b>	<b>12.19</b>	<b>14.08</b>	<b>100.00</b>

Summary Table 3.15 Number of Establishments by Industrial Group  
and First Major Information Problem: 2000 E.F.Y (2007/08)

Industrial Group	Lack of information to decide type of activity	Lack of information about appropriate machinery	Lack of information where to get machinery	Lack of information where to get appropriate training	Lack of sufficient market information	Lack of information where to get license	others	Total
Manufacture of Food Products Except Grain Mill Services	46	13	12	15	50	2	32	170
Grain Mill Services	439	400	151	187	621	44	369	2,211
Manufacture of Textiles	45	8	13	18	58	-	27	169
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	69	33	16	53	86	-	110	367
Manufacture of Luggage, Handbags and Footwear	-	-	-	-	4	-	1	5
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	3	-	-	-	3	-	3	9
Manufacture of Paper and Paper Products	1	-	-	-	1	-	-	2
Publishing, Printing and Reproduction of Recording Media	39	7	12	5	22	-	21	106
Manufacture of Chemicals and Chemical Products	-	-	-	-	-	-	-	-
Manufacture of Other Non-Metallic Mineral Products	6	8	6	5	13	-	9	47
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	114	59	33	50	195	15	140	606
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	258	171	80	169	297	41	217	1,233
<b>Total</b>	<b>1,020</b>	<b>699</b>	<b>323</b>	<b>502</b>	<b>1,350</b>	<b>102</b>	<b>929</b>	<b>4,925</b>
	<b>20.71</b>	<b>14.19</b>	<b>6.56</b>	<b>10.19</b>	<b>27.41</b>	<b>2.07</b>	<b>18.86</b>	<b>100.00</b>

Summary Table 3.16 Number of Establishments by Industrial Group  
and Main Reason for Not Solving Problem of Shortage  
of Working Capital: 2000 E.F.Y (2007/08)

Industrial Group	Main Reason						Total
	Permitted Loan was insufficient	Unable to provide collateral	High interest rate	Loan repayment time was short	Loan process takes long time	Others	
Manufacture of Food Products Except Grain Mill Services	9	8	2	2	10	4	35
Grain Mill Services	78	68	35	64	28	50	323
Manufacture of Textiles	21	16	7	8	11	6	69
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	61	35	9	9	62	14	190
Manufacture of Luggage, Handbags and Footwear	3	3	-	-	1	-	7
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	3	6	2	-	2	3	16
Manufacture of Paper and Paper Products	-	-	-	-	-	-	-
Publishing, Printing and Reproduction of Recording Media	6	7	1	1	5	2	22
Manufacture of Chemicals and Chemical Products	-	-	-	-	-	-	-
Manufacture of Other Non-Metallic Mineral Products	10	4	2	2	3	8	29
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	118	155	20	12	65	31	401
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	313	300	47	97	199	60	1,016
Total	<b>622</b>	<b>602</b>	<b>125</b>	<b>195</b>	<b>386</b>	<b>178</b>	<b>2,108</b>
Percentage	<b>29.51</b>	<b>28.56</b>	<b>5.93</b>	<b>9.25</b>	<b>18.31</b>	<b>8.44</b>	<b>100.00</b>

Summary Table 3.17 Number of Establishments by Industrial Group  
and Cause of Lack of Market: 2000 E.F.Y (2007/08)

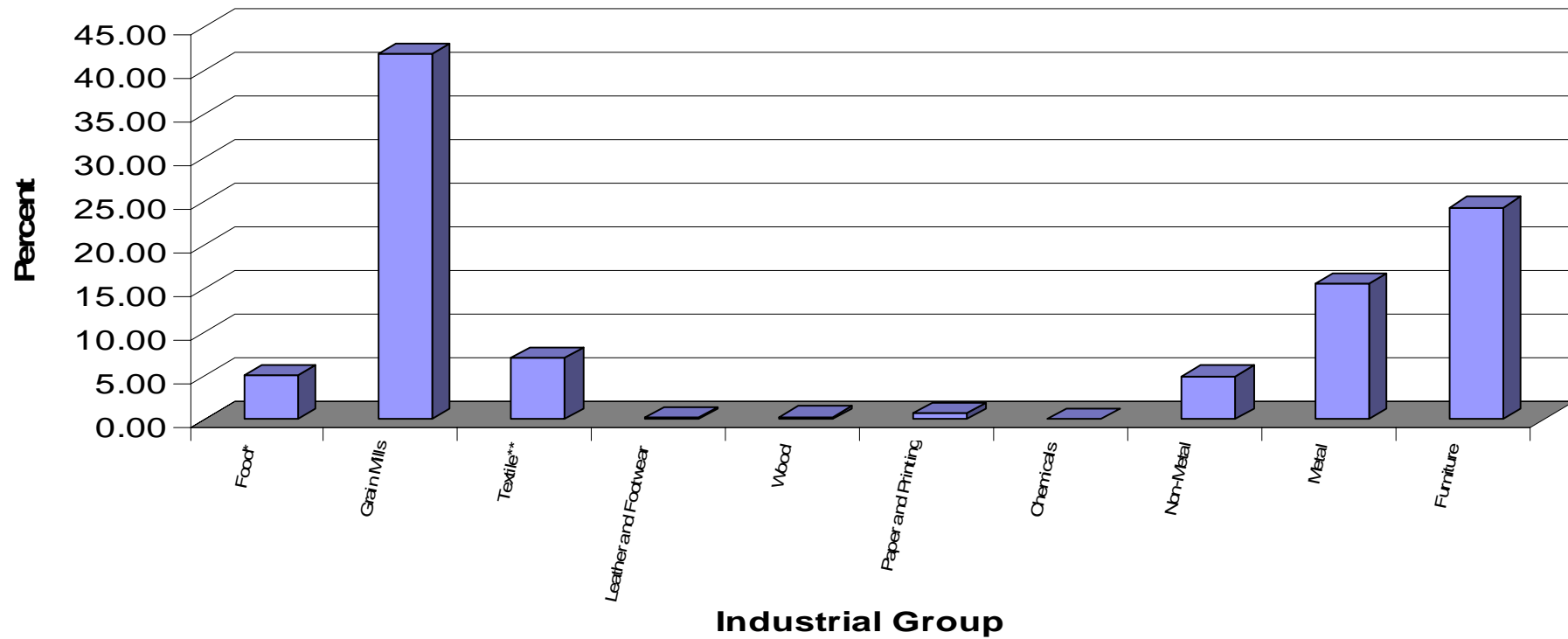
Industrial Group	Cause of Lack of Market					Total
	Unable to compete foreign product in	Unable to compete foreign product in	Unable to compete local product in	Unable to compete local product I price	Others	
Manufacture of Food Products Except Grain Mill Services	9	101	42	123	492	767
Grain Mill Services	102	137	401	1,628	9,161	11,429
Manufacture of Textiles	64	94	64	184	445	851
Manufacture of Wearing Apparel, Dressing and Dyeing of Fur	160	253	257	384	660	1,714
Manufacture of Luggage, Handbags and Footwear	3	4	1	17	8	33
Manufacture of Wood and Products of Wood and Cork, Except Furniture; Manufacture of Articles of Straw and Plaiting Materials	-	2	4	8	29	43
Manufacture of Paper and Paper Products	-	-	-	-	2	2
Publishing, Printing and Reproduction of Recording Media	10	20	35	66	252	383
Manufacture of Chemicals and Chemical Products	-	-	-	-	-	-
Manufacture of Other Non-Metallic Mineral Products	13	4	24	52	115	208
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	100	121	184	727	1,041	2,173
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	-	-	-	-	-	-
Manufacture of Furniture; Manufacturing N.E.C.	96	357	424	1,093	1,697	3,667
<b>Total</b>	<b>557</b> <b>2.62</b>	<b>1,093</b> <b>5.14</b>	<b>1,436</b> <b>6.75</b>	<b>4,282</b> <b>20.13</b>	<b>13,902</b> <b>65.36</b>	<b>21,270</b> <b>100.00</b>



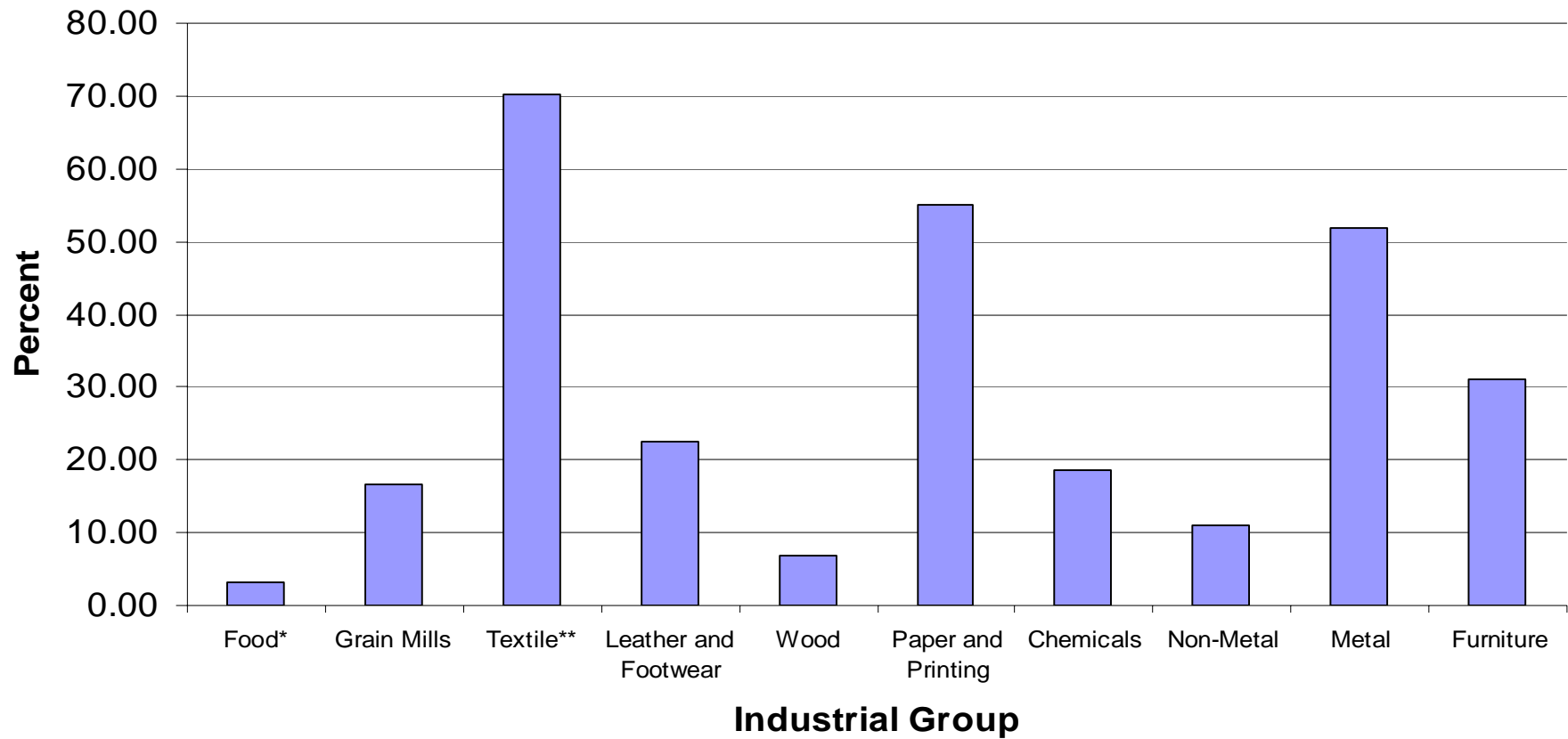
Summary table 3.16 displays number of establishments by a major reason for not solving the problem of shortage of capital. Earlier in summary table 3.13, during the question about the major problem faced during the survey period, 3.8 thousand or 9.0 % put their problem on lack of working capital. Now only 2.1 thousand responded to the reasons as to why they haven't solved the problem of working capital. Close to 30.0 % said the loan permitted was not sufficient, pretty close to this size or 28.7 % talked about their inability of providing collateral and 18.3 % of them complained about the lengthy time it takes to process a loan. There was a complaint about the time required to repay a loan by 9.3 % and high interest rate was mentioned as a problem by 5.9 % of the small scale establishments.

Finally, an attempt was made to investigate the reasons behind the lack of market mentioned as a major problem faced during the survey period, and the responses are presented in summary table 3.17. Their inability to compete in the local market in prices was mentioned by a fifth of the establishments, followed by in-ability to compete with local products in quality (6.8 %) and in-ability to compete with imported products in price (5.1 %), respectively.

**Fig. 1 Percentage Distribution of Value Added\* by Industrial Group - 2000 E.F.Y (2007/08)**



**Fig. 2 Percentage of Imported to Total Raw Material Cost by Industrial Group: 2000 E.F.Y (2007/08)**



## Appendix I

### Number of covered grain mill industries in rural areas

<i>Region</i>	<i>Region code</i>	<i>Covered grain mills</i>
Tigray	01	88
Affar	02	23
Amhara	03	330
Oromiya	04	468
Somalie	05	27
Benishangul-gumuz	06	49
SNNPR	07	219
Gambela	12	11
Hareri	13	20
Addis Ababa	14	
Dire dawa	15	2
Total		1,237

### Number of covered grain mill and non grain mill industries in Urban areas

<i>Region</i>	<i>Region code</i>	<i>Covered non grain mill industries</i>	<i>Covered grain mills</i>
Tigray	01	918	97
Affar	02	101	41
Amhara	03	1,889	336
Oromiya	04	2,289	494
Somalie	05	108	21
Benishangul-gumuz	06	86	30
SNNPR	07	1,028	253
Gambela	12	36	13
Hareri	13	136	17
Addis Ababa	14	1,823	270
Dire dawa	15	77	14
Total		8,491	1,586

## Appendix II

### Estimation procedures of total, ratio and sampling errors

1. Estimate of total  $\hat{Y}$  for small scale manufacturing industries other than

grain mills is given by:

$$\hat{Y} = \sum_{h=1}^m \sum_{i=1}^{h_h} w_h y_{hi} \text{-----(1)}$$

Where  $w_h = \frac{H_h}{h_h}$  is the basic sampling weight.

$H_h$  = Total number of small scale manufacturing industry in kebele h

obtained from a fresh listing of industries.

$h_h$  = Number of successfully covered small scale manufacturing industry in kebele h.

$y_{hi}$  = The observed value of a characteristics y for small scale manufacturing industry i in kebele h.

m = Total number of covered kebeles in the country

2. Estimate of total  $\hat{Y}$  for grain mill industries is given by:

$$\hat{Y} = \hat{Y}_{urban} + \hat{Y}_{rural} \text{-----(2)}$$

$\hat{Y}_{Urban}$  is calculated using the formula given in equation (1)

$$\hat{Y}_{Rural} = \sum_{h=1}^{n_h} \sum_{i=1}^{h_h} w_h y_{hi}$$

Where  $w_h = \frac{H_h}{h_h}$  is the basic sampling weight.

$H_h$  = Total number of grain mills in wereda h obtained from a fresh listing

$h_h$  = Number of grain mills covered in wereda h

$y_{hi}$  = The observed value of characteristics y for grain mill industry i in

wereda h.

m= Total number of covered weredas in the country.

### 3. Sampling variance of the estimates

$$v(\hat{Y}) = \frac{m}{m-1} \left[ \sum_{h=1}^m (\hat{Y}_h - \frac{\hat{Y}}{m})^2 \right] \text{-----(3)}$$

$$\hat{Y}_h = \sum_{i=1}^{h_h} w_h y_{hi} = \text{kebele/wereda estimate}$$

$$SE(\hat{Y}) = \sqrt{\text{var}(\hat{Y})} \text{-----(4)}$$

### 4. Coefficient of variation and confidence interval

The following formulas were used to calculate coefficient of variation and confidence interval of the domain (reporting level) total.

The coefficient of variation (CV) of domain total in percentage is:

$$CV(\hat{Y}) = \frac{SE(\hat{Y})}{\hat{Y}} \times 100 \text{-----(5)}$$

And ninety five percent confidence interval (CI) of domain total is:

$$\hat{Y} \pm 1.96 \times SE(\hat{Y}) \text{-----(6)}$$

### 5. Ratio estimates

$$\hat{R} = \frac{\hat{Y}}{\hat{X}} \text{-----(7)}$$

Where the numerator and the denominator are estimates of domain totals of characteristic y and x, respectively.

$$\text{Var}(\hat{R}) = \frac{1}{\hat{X}^2} \left[ \text{Var}(\hat{Y}) + \hat{R}^2 \text{Var}(\hat{X}) - 2\hat{R} \text{Cov}(\hat{Y}, \hat{X}) \right]$$