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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 of 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 5th time in 2006 E.F.Y. (2013/14) 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 2013/14 (2006 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 values 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 2006 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 2013/14 (2006 E.C) Small scale manufacturing industry Survey was conducted covering those industries producing their goods and services using power driven machine with man power less than 10 persons. The scope of this study is those manufacturing industries:

- Ministry of trade,
- Ethiopian revenue and custom authority
- Federal micro and small enterprises development agency MSE profile directory
- Regional bureau of trade and industry and
- Having EEPCO service number for business establishments/enterprises.

However, those establishments, which were not registered on the above listed organizations, were not included in the study.

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 sampling frame for the study was generated and constructed based on the Business frame obtained from

- CSA had collected grain mill service establishments from each wereda trade office of the entire country,
- EPECO, which is collected by EEPKO Power Gauge readers in collaboration with CSA focusing on business enterprises having EPECO service number,
- Ministry of trade,
- Ethiopian revenue and custom authority
- Federal micro and small enterprises development agency and
- Regional bureau of trade and industry

The business frame generated was inadequate enough specially to identify those enterprises, which are really categories as large and small scale manufacturing industries as well as other non-manufacturing establishments. However, due to effort was exerted to identify and select among them those manufacturing establishments having less than ten person engaged (if available) as much as possible.

Finally, around 118,000 establishments as a sampling frame for conducting the 2013/14 (2006 E.C) small-scale manufacturing industries study were identified and being ready for use.

2.3 Sample Design

The study employed a single stage stratified systematic random sampling design. In order to do such sampling scheme, the sampling frames were grouped into six main and priorities sectors of manufacturing categories namely: Textile and garment, Metal work, Wood work, Leather and leather products, Other manufacturing sector and Grain mills industries and stratified by region, where, regions are reporting levels. From each region, systematically random sample of establishments in each group were selected.

However, due to inadequacy of area particulars, lack of reliable measure of size, and lack of good information on distribution of enterprises within and among regions related to economic activity classification particularly for the main five categories (. This makes difficult statistically for determining the effective sample size need for the survey in each categories and regions. Therefore, in order to cope this situation and to secure eligible

number of industries for the study and taking into account the expected high prevalence of non-response rate. It's then decided take sample of 20% to 25% for each categories mentioned above among regions respectively. In addition, the sample distribution among the regions described below:

Table 1. Number of Sampled Establishment by Priority Manufacturing Sector and by Region

Sr. no	Branch	Small Scale Manufacturing Industry No. of sampled by priority industry sector Establishment and by Region						
		<i>Textile</i>	<i>Wood</i>	<i>Metal</i>	<i>Leather</i>	<i>Flour mills</i>	<i>Others</i>	<i>Total for Small scale</i>
1	Tigray	638	16	326	14	102	503	1599
2	Afar			9		17	11	37
3	Amhara	628	15	222	39	923	1390	3217
4	Oromia	154	29	310	17	1231	1330	3071
5	Somali	3	0	4	0	28	12	47
6	Benishangul Gumuz	1	0	5	0	30	8	44
7	SNNPR	101	2	90	16	251	692	1152
8	Gambela	4	0	1	0	0	10	15
9	Harari	1	0	6	0	0	11	18
10	Addis Ababa	754	24	340	54	163	693	2028
11	Dire Dawa	13	0	6	2	23	35	79
	Total	2297	86	1319	142	2768	4695	11307

2.5 Training of Field Staff

The training programs were carried out at two stages. In the first stage, the staffs from the agency's branch statistical offices, statisticians, statistical technicians and computer experts from the head office were trained for about seven 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 selected 10-branch statistics training center, 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 three enumerators depending on the extent of the area to be covered and enumerators (including reserve enumerators) participated in the survey.

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 Capo (Census and Survey Processing System) software. About 30 CSA data entry operators and 4 data entry one statistician and one computer programmer assigned supervisors (in two shifts) for

this purpose for 15 working days with close supervision of the activities. Then, the data entered was cleaned by personal computer using the computer edit specification in combination with manual editing for some serious errors. Finally, one programmer with assistance from subject matter personnel processed the tabulation of the results of the survey using the same software.

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 116,604 small-scale manufacturing establishments in Ethiopian fiscal year (E.F.Y) 2006 (2013/14). Out of the total, the largest in number, or slightly more than 35 thousand or 30.39 %, were grain mills, 25.4 thousand (21.81 %) manufacturer of food products except grain mill service and manufacturing OF wearing apparel, dressing & dyeing of fur establishments numbered 18.12 thousand or 15.61 % 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 1,743,470 people, which is roughly a ratio of 1 to 14.95, i.e., on average 10 small scale manufacturing establishments engaged 150 people. A further look reveals that in absolute terms, grain mills employed the most: 540,339 (30.99 %), followed by manufacture of food products except grain mill services, 373,171 (21.40 %) and manufacture of furniture, 289,853 (16.63 %), in that order.

Gross value of production (GVP) in the stated period amounted to birr 26.2billion, out of which Food product manufacturers except grain mills contributed 7.71 billion, which is 29.46 % of the total. Metal manufacturers amounting to 4.85 billion birr, which is ahead of Manufacturers of grain mills GVP reached 4.58 billion. The other notable GVP was, manufacturer of parts and accessories for motor vehicles & their engines' GVP (3.48 million) that of trailed by manufacture of chemicals & chemical products and machinery

& equipment manufacturing 16.66 million birr or 0.06% 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 2006 E.F.Y, the small scale manufacturing establishments' value added was to the tune of 10.88 billion birr, out of which again grain mills contributed the lion's share, i.e., 2.4 billion birr (22.2 %). Food product manufacturers were a distant second, with a contribution of 2.18 billion birr or 20.01 %. In the third place were manufacture of fabricated metal products except machinery & equipment, which contributed a hefty 1.97 billion birr or 18.08 % of the total value, added. In the lower end were parts & accessories for motor vehicles & their engine manufacturing with birr 1.53 million or 0.01 %, chemical & chemical products manufacturing, birr 5.92 million (0.05 %) and publishing printing & reproduction of recorded manufacturing with a contribution of birr 8.64 million or 0.08 %.

SUMMARY TABLE 3.1 DISTRIBUTION OF NUMBER OF ESTABLISHMENTS, NUMBER OF PERSONS ENGAGED , GROSS VALUE OF PRODUCTION AND VALUE ADDED BY INDUSTRIAL GROUP: 2013/2014 (2006 E.F.Y)

INDUSTRIAL GROUP	Number of Establishments		Number of Persons Engaged		Gross Value of Production		Value Added	
	Number	%	Number	%	Value	%	Value	%
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	25,430	21.81	373,171	21.40	7,709,583,946	29.46	4,176,740,413	20.01
MANUFACTURE OF GRAIN MILL SERVICES	35,430	30.39	540,339	30.99	4,583,568,294	17.51	2,414,845,427	22.20
MANUFACTURE OF TEXTILES ...	3,416	2.93	49,280	2.83	540,887,939	2.07	320,149,307	2.94
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	18,199	15.61	246,062	14.11	1,788,873,860	6.83	916,796,765	8.43
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	1,113	0.95	16,182	0.93	239,643,908	0.92	171,041,133	1.57
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS	843	0.72	13,348	0.77	1,063,902,494	4.06	602,362,400	5.54
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	96	0.08	1,526	0.09	14,885,923	0.06	8,643,178	0.08
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	38	0.03	509	0.03	8,914,752	0.03	5,916,413	0.05
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	1,709	1.47	29,155	1.67	914,357,846	3.49	383,064,547	3.52
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	12,531	10.75	182,115	10.45	4,850,365,952	18.53	1,967,037,662	18.08
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	58	0.05	941	0.05	16,656,288	0.06	14,592,845	0.13
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	48	0.04	989	0.06	3,477,322	0.01	1,530,403	0.01
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	17,693	15.17	289,853	16.63	4,437,175,507	16.95	1,897,278,931	17.44
TOTAL	116,604	100.00	1,743,470	100.00	26,172,294,030	100.00	10,879,999,423	100.00

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 1,743,470 people. A little more than 540.3 thousand were engaged in grain mills, close to 373.2 thousand in manufacture of food products except grain mill services and 289.9 thousand in furniture manufacturing. These were the most important three industrial groups in employment creation. However, wearing apparel manufacturers, manufacture of fabricated metal products except machinery & equipment and textiles manufacturers also engaged a sizable number of persons or 246.1, 182.1 and 49.3 thousand people, respectively. The least number of persons engaged were in chemicals, manufacture of machinery & equipment and parts & accessories for motor vehicles & their engines manufacturing. Furthermore, out of the 1.7 million, 661.3 thousand or 37.93 % were permanent employees. In absolute terms, again the largest numbers of permanent employees were in grain mills, i.e. 189.1 thousand, next in line were food products except grain mill services manufacturers with 154.9 thousand and in the 3rd high contribution is in manufacture of furniture which is 100.9 thousand permanent workers engaged. Wearing apparel, dressing & dying of fur manufacturing, manufacture of fabricated metal products machinery & equipment and wearing apparel 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: 2006 E.F.Y (2013/14)

INDUSTRIAL GROUP	No. OF ESTAB.	NUMBER OF PERSONS ENGAGED	PERMANENT EMPLOYEES	PERMANENT EMP. AS % TOTAL PERSONS ENGAGED
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	25,430	373,171	154,886	41.51
MANUFACTURE OF GRAIN MILL SERVICES...	35,430	540,339	189,082	34.99
MANUFACTURE OF TEXTILES ...	3,416	49,280	23,346	47.37
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	18,199	246,062	99,690	40.51
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	1,113	16,182	7,080	43.75
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS....	843	13,348	5,116	38.33
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	96	1,526	643	42.14
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	38	509	182	35.85
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	1,709	29,155	11,318	38.82
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	12,531	182,115	68,410	37.56
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	58	941	298	31.63
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	48	989	365	36.89
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	17,693	289,853	100,934	34.82
TOTAL	116,604	1,743,470	661,349	37.93

Summary Table 3.3 Number of Persons Engaged, Employees and Labor Cost per Establishment
by Industrial Group: 2006 E.F.Y (2013/14)

INDUSTRIAL GROUP	No. OF ESTAB.	NUMBER OF PERSONS ENGAGED	NUMBER OF EMPLOYEES	LABOUR COST (IN BIRR)	LABOUR COST PER ESTAB.
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	25,430	373,171	164,056	239,463,034	9,416
MANUFACTURE OF GRAIN MILL SERVICES	35,430	540,339	197,051	389,390,182	10,990
MANUFACTURE OF TEXTILES ...	3,416	49,280	23,759	10,440,141	3,056
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	18,199	246,062	102,652	99,628,902	5,474
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	1,113	16,182	7,238	9,590,029	8,614
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS	843	13,348	6,129	21,340,088	25,320
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	96	1,526	674	1,499,520	15,620
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	38	509	182	86,400	2,250
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	1,709	29,155	14,306	53,836,358	31,505
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	12,531	182,115	74,062	246,897,220	19,704
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	58	941	302	2,313,984	40,173
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	48	989	369	770,112	16,044
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	17,693	289,853	110,532	382,139,491	21,599
TOTAL	116,604	1,743,470	701,312	1,457,395,461	12,499

Labor cost incurred and labor cost per small scale establishments are displayed in summary table 3.3. Out of the 116.6 thousand small scale establishments in the country as mentioned earlier, close to 1.7 million people were engaged and among those 701.3 were employed staff and the rest were owners, apprentices or family members engaged in the business of small scale manufacturing. A total of birr 1.46 billion was spent by the establishments on the 701.3 thousand employees. Again in absolute terms the largest amount was that of grain mills (birr 389.4 million), distantly followed by furniture manufacturing (birr 382.1 million) and the distant third was the amount spent by metal manufacturers, which was almost 246.9 million. However if we look at labor cost per establishment, the highest figure is birr 40.2 thousand incurred by machinery and equipment products manufacturing industrial group and the lowest was that of chemicals & chemical products manufacturing amounting to birr 2.3 thousand.

3.3 Raw Materials and Energy Consumption

The amount spent by small scale manufacturing establishments for raw materials reached close to birr 12.4 billion in 2006 E.F.Y. Further investigation of the figures reveals that manufacture of food products except grain mill services spent the most, i.e., birr 4.9 billion, followed by manufacture of fabricated metal products except machinery & equipment and furniture manufacturing establishments, which spent 2.6 and 2.2 billion on raw materials, respectively. One disturbing aspect of raw materials use by the small scale establishments is that close to 11.23% 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, most of the industrial groups spent well over 10.0 % of their total raw material expenses was on imported raw materials. In this regard, publishing printing & reproduction of recorded media, manufacture of chemicals & chemical product and manufacture of parts & accessories for motor vehicles & there engines establishments are heavily dependent on imported raw materials, as they spent more than half of their raw materials expenses on imported ones.

Coming to energy consumption, all the establishments combined, during the reference year spent birr 859.4 million on energy, of which the substantial amount (birr 532.3 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 food product manufacturers, which amounted to a paltry birr 201.6 million in comparison to that of grain mills. Furniture manufacturers and metal manufacturing establishments spent birr 51.8 and 43.5 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 6.06 %. 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: 2006 E.F.Y (2013/14)

INDUSTRIAL GROUP	No. OF ESTAB.	TOTAL COST OF RAW MATERIALS	IMPORTED RAW MATERIALS COST	COST OF ENERGY CONSUMED	INDUSTRIAL COST	COST OF RAW MATER. AS % OF INDU. COST	IMPORTED AS % OF TOTAL RAW MATERIALS COST	COST OF ENERGY AS % OF INDU. COST
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	25,430	4,987,052,371	115,249,267	201,592,426	5,286,510,365	94.34	2.31	3.81
MANUFACTURE OF GRAIN MILL SERVICES	35,430	791,790,950	226,751,450	532,349,286	1,975,558,054	40.08	28.64	26.95
MANUFACTURE OF TEXTILES ...	3,416	189,336,314	85,548,173	1,914,672	196,248,834	96.48	45.18	0.98
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	18,199	687,763,359	232,544,493	16,362,748	744,283,931	92.41	33.81	2.20
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	1,113	59,181,808	8,726,100	891,165	62,223,665	95.11	14.74	1.43
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS	843	441,691,498	2,592,394	2,760,248	445,697,630	99.10	0.59	0.62
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	96	3,034,320	1,972,032	82,224	4,298,400	70.59	64.99	1.91
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	38	1,414,262	884,525	25,920	2,403,494	58.84	62.54	1.08
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	1,709	469,355,347	4,269,600	7,693,421	490,485,869	95.69	0.91	1.57
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	12,531	2,599,546,446	296,464,220	43,468,333	2,682,081,743	96.92	11.40	1.62
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	58	1,293,350	96,000	211,296	1,563,782	82.71	7.42	13.51
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	48	1,179,648	649,824	228,576	1,428,442	82.58	55.09	16.00
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	17,693	2,187,113,414	419,049,878	51,784,234	2,278,116,806	96.01	19.16	2.27
TOTAL	116,604	12,419,753,089	1,394,797,957	859,364,548	14,170,901,016	87.64	11.23	6.06

to 26.9 %, this is the highest, the other notable exception being that of parts & accessories for motor vehicles & their engines manufacturing industrial group, which spent close to 16 % 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 14.2billion, of which on average 84.64 % was spent on raw materials. Of the stated figure, the sizable amount, or birr 5.3 billion, was spent by manufacture of food. Fabricated metal products except machinery & equipment industry, Grain mill services and furniture manufacturing establishments also spent a significant amount reaching birr 2.7, 2.0 and 2.3 billion, respectively. In relative terms, more than three fourth of industrial cost of all industrial groups, save that of food industry was on raw materials.

3.4 Demographic Characteristics of Persons Engaged

Earlier in this document it was stated that a total 1,743,470 persons were engaged in small scale manufacturing industries in the country during 2006 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, 52.34 % were male. Another important feature of the composition of persons engaged is that 661 thousand persons or close to 37.9 percent were permanent paid employees, 388 thousand or 22.23 percent paid Apprentices and 338.7 thousand or 19.41 % unpaid Apprentices workers. unpaid family constituted 18.15 % of the total. Further investigation of the figures, reveals that out of the total 47.66 percent women who took part in the activities of small scale industries during the year 35.82 % of them were permanent paid employees, 25.47 % paid apprentice worker, 20.99 % unpaid apprentices and the rest 17.72 % unpaid family worker (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 87.30 % were literate. The figures in summary table 3.6 also show that, 89.90 percent of male participants are literate, while the figure for females stands at 79.30 % as being literate. Furthermore, slightly more than 20.70% of the female participants are illiterate, while the corresponding figure for men stands at 10.10 %.

Summary Table 3.5 Number of Persons Engaged by Sex and Type of Workers: 2006 E.F.Y (2013/14)

Type of worker	MALE		FEMALE		BOTH SEX	
	NUMBER	%	NUMBER	%	NUMBER	%
Unpaid Family Worker	169,363	18.55	147,344	17.72	316,707	18.15
Unpaid Apprentices	164,160	17.98	174,520	20.99	338,681	19.41
Paid Apprentices	176,102	19.29	211,744	25.47	387,846	22.23
Permanent Paid Employees	363,484	39.81	297,865	35.82	661,349	37.91
Seasonal and Temporary Workers*	40,027	4.38	-	-	40,027	2.29
TOTAL	913,136	100.00	831,473	100.00	1,744,609	100.00

Summary Table 3.6 Number of Reported Persons Engaged by Literacy Status and Sex: 2006 E.F.Y (2013/14)

LITERACY STATUS	MALE		FEMALE		BOTH SEX	
	NUMBER	%	NUMBER	%	NUMBER	%
LITERATE	230,086	89.90	64,807	79.30	294,893	87.30
ILLITERATE	25,890	10.10	16,928	20.70	42,818	12.70
TOTAL	255,976	100.00	81,735	100.00	337,711	100.00

Summary Table 3.7 Number of Literate Persons Engaged by Sex and Highest Grade Completed: 2006 E.F.Y (2013/14)

HIGHEST GRADE COMPLETED	MALE		FEMALE		BOTH SEX	
	NUMBER	%	NUMBER	%	NUMBER	%
Grade 1-3	16,721	7.30	4,857	7.50	21,578	7.40
Grade 4-6	48,505	21.30	13,494	21.00	61,999	21.20
Grade 7-8	47,139	20.70	12,527	19.50	59,666	20.40
Grade 9-12	46,916	20.60	14,535	22.60	61,451	21.00
Above 12	37,528	16.50	10,152	15.80	47,679	16.30
Not Stated	31,198	13.70	8,817	13.70	40,015	13.70
TOTAL	228,007	100.00	64,380	100.00	292,387	100.00

3.5 Ownership and Problems Faced

The figures in summary table 3.8 present sex compositions of owners of small scale manufacturing establishments. Accordingly, 66.60 % of owners of these establishments are men, while the remaining 33.40 % are female.

Summary Table 3.8 Number of Owners of the Establishments
by Sex: 2006 E.F.Y (2013/14)

SEX	OWNERS OF ESTABLISHMENT		PERMANENT EMPLOYEES	
	NUMBER	%	NUMBER	%
MALE	157,407	66.60	363,484	54.96
FEMALE	78,955	33.40	297,865	45.04
TOTAL	236,362	100.00	661,349	100.00

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 3.9. Out of the 115.5 thousand reporting establishments to this particular question, 42.7% cited lack of sufficient capital as a first major problem faced, 22.0 % put the blame on no problem faced, while 13.00 % gave other problem as major reason. It is worth noting here that 1.60 percent of the reporting establishments mentioned ‘access to credit facilities, while 1.8 % stated that lack of foreign exchange during 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 3.10. In total 46.4 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 twenty five of the reporting establishments were out of operation for part of the year due to shortage of electricity and water, while absence of market demand were forced close to 19.4 % the reporting establishments not to operate the whole year. On the other hand 15.30 %, 10.40 % of establishments gave other problem and shortage of supply of raw material as the major reasons, behind this performance. Because of newly established has strained 9.9 % of the establishments not to operate the whole year.

Results of capacity utilization by the small scale manufacturing establishments are displayed in summary table 3.11. Absence of market demand was reported as a major reason behind below-capacity performance by 39.4 % of the establishments. Other problem and shortage of supply of raw material were 24.90%,16.5% respectively were also mentioned as the major reasons, for under capacity performance by these establishments. Shortage of foreign, lack of adequate skill, absence of credit facility and shortage supply of spare part was mentioned as a major reason for low capacity performance by very few establishments. Finally, “lack of working premises” was given by 10.10 % of the establishments.

Summary Table 3.90 Number of Establishments by Industrial Group and Major Problem Faced at the Start of Operation: 2006 E.F.Y (2013/14)

INDUSTRIAL GROUP	TYPE OF PROBLEMS									
	LACK OF FOREIGN EXCHANGE	LACK OF SUFFICIENT INITIAL CAPITAL	OBSTACLES FROM GOV. RULES AND REGULATIONS	ACCESS TO CREDIT FACILITIES	LACK OF INFORMATION	LACK OF SMOOTH SUPPLY OF RAW MATR.	ABSENCE OF ADEQUATE SKILLS	OTHERS	NO PROBLEMS FACED	TOTAL NUMBER OF ESTAB.
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	394	10,627	1,296	269	768	2,966	595	2,150	6,202	25,267
MANUFACTURE OF GRAIN MILL SERVICES	410	9,229	3,059	474	717	1,357	1,242	6,618	11,891	34,995
MANUFACTURE OF TEXTILES ...	38	1,647	113	38	94	301	207	245	696	3,378
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	508	9,363	1,157	301	329	593	1,063	1,741	2,945	18,001
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	24	455	78	24	71	149	39	94	165	1,098
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS	10	323	88	29	39	69	20	108	147	833
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	-	58	-	-	10	-	10	-	19	96
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	-	10	10	-	10	-	-	10	-	38
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	58	672	115	77	96	154	48	240	221	1,680
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	200	6,745	760	238	523	637	181	1,663	1,473	12,417
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	10	48	-	-	-	-	-	-	-	58
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	10	19	-	-	-	-	10	-	10	48
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	384	10,061	1,027	374	442	1,181	307	2,141	1,632	17,549
TOTAL	2,043	49,256	7,704	1,823	3,097	7,406	3,721	15,008	25,400	115,458
Percentages	1.8	42.70	6.70	1.60	2.70	6.40	3.20	13.00	22.00	100.00

Summary Table 3.10 Number of Establishments by Industrial Group and Major Reason
for Not Being Fully Operational During: 2006 E.F.Y (2013/14)

INDUSTRIAL GROUP	Major Reasons										
	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.	Lack of foreign	Total
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	1,334	1,872	86	1,651	422	595	48	163	336	1,450	7,958
MANUFACTURE OF GRAIN MILL SERVICES	422	845	1,690	1,920	269	7,718	1,971	141	256	1,958	17,190
MANUFACTURE OF TEXTILES ...	85	132	9	263	104	66	9	28	66	245	1,007
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	602	414	47	1,590	518	452	28	113	734	1,647	6,145
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	86	63	-	165	31	39	-	8	39	47	478
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS	39	98	10	59	29	49	10	10	10	59	372
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	-	-	-	10	-	10	-	-	10	-	29
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	-	10	-	10	-	-	-	-	-	10	29
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	86	86	19	221	67	288	10	29	38	96	941
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	827	380	48	1,387	399	884	67	133	276	675	5,073
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	-	-	-	10	-	10	-	-	-	-	19
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	-	-	10	10	-	-	-	-	-	19	38
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	1,104	922	96	1,699	509	1,373	115	163	259	902	7,142
TOTAL	4,586	4,821	2,015	8,994	2,348	11,483	2,258	788	2,024	7,107	46,422
Percentages	9.9	10.40	4.30	19.40	5.10	24.70	4.90	1.70	4.40	15.30	100.00

Summary Table 3.11 Number of Establishments by Industrial Group and Major Reason
For not working at full capacity, 2006 E.F.Y (2013/2014).

INDUSTRIAL GROUP	TYPE OF REASONS								
	SHORTAGE OF SUPPLY OF RAW MATR.	SHORTAGE SUPPLY OF SPAREPARTS	ABSENCE OF MARKET DEMAND	ABSENCE OF CREDIT FACILITY	SHORATGE OF FOREIGN EXCHANGE	LACK OF ADEQUATE SKILL	LACK OF WORKING PREMISES	OTHERS	TOTAL NUMBER OF ESTAB.
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	5,981	211	7,728	461	10	134	1,555	2,966	19,046
MANUFACTURE OF GRAIN MILL SERVICES	2,573	2,957	11,046	307	13	486	666	13,363	31,411
MANUFACTURE OF TEXTILES ...	527	38	1,120	132	-	38	339	471	2,663
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	2,117	263	7,180	800	28	471	2,447	2,531	15,837
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	282	16	282	24	-	16	157	141	917
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS	167	-	147	59	-	20	137	118	647
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	10	-	29	-	-	-	19	10	67
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	-	-	38	-	-	-	-	-	38
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	221	29	672	106	-	10	240	259	1,536
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	1,482	171	5,054	684	29	67	1,853	1,872	11,210
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	-	-	19	-	-	10	10	19	58
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	-	10	10	-	-	10	-	10	38
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C.	2,947	192	5,549	845	58	173	2,515	2,794	15,072
TOTAL	16,306	3,886	38,874	3,416	137	1,432	9,937	24,553	98,541
Percentages	16.5	3.90	39.40	3.50	0.10	1.50	10.10	24.90	100.00

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 3.12. The majority of the establishments responded to this particular question. Out of those who responded to this particular question, blamed electric supply was cited as a major problem by 24.9 % of the establishments, and also 24.9 % of them talked about market demand for their products, shortage of raw material, close to 13.40 %, shortage of raw material and 9.40 % pointed out working capital as a major concern to them, during the survey period. The other notable reasons given by the establishments were, 0.80 % referred to problem with employees, 2.10 % frequent machinery failure, and 2.30 % shortage supply of spare parts, 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 3.13. Very few of the establishments responded to this question, i.e., only 16.5 thousand of them. The figures in the table show that out of these 6.96 thousand, 42.0 % mentioned lack of working premises as a major problem, followed by getting license 36.8 % and 10.70 % brought up others problem 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 3.14. Again as in the previous table, very few responses were recorded for this question, only 3.4 thousand responses, out of 14.4 thousand or 23.8%. Nevertheless, 33.4 % of those who responded to this question, cited lack of sufficient market information as a major problem, while a fifth of them (23.8 %) revealed lack of information to decide which type of activity to engage in as a major problem, and 13.6 % brought up lack of information about suitable technology to their activity as a culprit. Worth noting here is also that, 11.9% mentioned lack of

information, where to get appropriate training, while 8.1% put the blame on lack of information as to where to get machinery.

Summary Table 3.12 Number of Establishments by Industrial Group and Major Reason Faced During the Survey Period: 2006 E.F.Y (2013/14)

INDUSTRIAL GROUP	TYPE OF REASONS											
	NO PROBLEMS FACED	SHORTAGE OF SUPPLY OF RAW MATR.	SHORTAGE SUPPLY OF SPAREPARTS	ABSENCE OF MARKET DEMAND	LACK OF WORKING CAPITAL	FREQUENT MACHINE FAILURE	LACK OF WORKING PREMISES	PROBLEMS WITH EMPLOYEES	OBSTACLES FROM GOV. RULES AND REGULATIONS	SHORTAGE OF ELECTRICITY	OTHERS	TOTAL ESTAB.
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	2,534	7,171	230	6,211	1,565	173	2,304	317	643	2,390	1,526	25,066
MANUFACTURE OF GRAIN MILL SERVICES....	2,010	1,702	1,882	6,899	666	1,843	998	154	422	17,216	1,293	35,085
MANUFACTURE OF TEXTILES ...	405	555	47	828	499	28	395	19	66	311	226	3,378
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	1,477	1,402	132	5,731	2,522	160	2,343	94	508	2,531	1,016	17,917
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	63	204	16	306	118	16	204	16	39	39	71	1,090
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS	69	196	-	137	88	-	98	-	49	127	59	823
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	10	-	-	29	10	-	10	-	-	29	-	86
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	10	-	-	19	-	-	-	-	10	-	-	38
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	96	259	19	566	134	10	182	38	10	221	144	1,680
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	589	1,159	105	3,715	1,682	48	1,834	143	295	2,328	380	12,274
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	-	10	-	-	19	-	10	-	-	19	-	58
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	10	-	-	-	-	-	10	10	-	10	-	38
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	749	2,688	202	4,147	2,294	86	2,419	163	605	3,446	566	17,366
TOTAL	8,020	15,347	2,632	28,588	9,596	2,363	10,806	953	2,646	28,667	5,281	114,899
Percentages	7	13.40	2.30	24.90	8.40	2.10	9.40	0.80	2.30	24.90	4.60	100.00

Summary Table 3.13 Number of Establishments by Industrial Group and Type of Government Influence: 2006 E.F.Y (2013/14)

INDUSTRIAL GROUP	TYPE OF GOVERNMENT INFLUENCE				TOTAL
	GETTING LICENCE REQUIRES LONG PROCESS	LACK OF WORKING PREMISES	ABSENCE OF TAX EXEMPTION	OTHERS	
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	1133	1123	346	346	2947
MANUFACTURE OF GRAIN MILL SERVICES....	2483	1050	410	870	4813
MANUFACTURE OF TEXTILES ...	47	151	75	38	311
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	743	1449	311	169	2672
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	63	102	16	16	196
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAITING MATERIALS....	88	59	20	10	176
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	10	10	-	-	19
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	-	-	10	10	19
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	77	115	19	10	221
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	713	1017	190	162	2081
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....	730	1882	336	144	3091
TOTAL	6086	6956	1731	1773	16546
Percentages	36.8	42.00	10.50	10.70	100.00

Summary Table 3.14 Number of Establishments by Industrial Group
and First Major Information Problem: 2006 E.F.Y (2013/14).

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	845	384	192	278	1037	58	154	2947
MANUFACTURE OF GRAIN MILL SERVICES....	755	589	346	474	666	102	141	3072
MANUFACTURE OF TEXTILES ...	104	122	38	47	188	38	19	555
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	621	226	263	376	743	56	122	2409
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	39	24	24	47	55	-	16	204
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAING MATERIALS....	20	-	10	20	78	-	10	137
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	-	-	-	-	-	10	-	10
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	-	10	-	-	-	-	-	10
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	67	10	10	67	144	10	48	355
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	371	247	124	152	836	105	114	1948
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	-	-	-	10	10	-	-	19
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	-	-	-	-	-	-	-	-
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	595	346	154	240	1046	144	192	2717
TOTAL	3416	1956	1159	1711	4803	522	815	14382
Percentages	23.8	13.60	8.10	11.90	33.40	3.60	5.70	100.00

Summary Table 3.15 Number of Establishments by Industrial Group
and Main Reason for Not Solving Problem of Shortage
of Working Capital: 2006 E.F.Y (2013/14).

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	192	115	86	67	144	48	653
MANUFACTURE OF GRAIN MILL SERVICES....	243	77	38	77	64	51	550
MANUFACTURE OF TEXTILES ...	66	38	19	9	9	-	141
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	245	198	113	94	207	56	913
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	39	16	8	-	8	-	71
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAING MATERIALS	-	10	20	10	20	-	59
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	10	-	-	-	10	-	19
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	-	-	-	-	-	-	-
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	48	19	10	-	38	-	115
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	228	238	29	105	152	67	817
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	-	-	-	-	10	-	10
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	-	-	-	-	-	-	-
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	461	490	58	77	298	96	1478
TOTAL	1531	1199	380	439	959	318	4826
Percentages	31.7	24.80	7.90	9.10	19.90	6.60	100.00

Summary Table 3.16 Number of Establishments by Industrial Group
and Cause of Lack of Market: 2006 E.F.Y (2013/14)

Industrial Group	Cause of Lack of Market					Total
	Unable to compete foreign product in quality	Unable to compete foreign product in price	Unable to compete local product in quality	Unable to compete local product I price	Others	
MANUFACTURE OF FOOD PRODUCTS EXCEPT GRAIN MILL SERVICES	192	144	1584	3005	5866	10790
MANUFACTURE OF GRAIN MILL SERVICES	192	64	742	1946	11648	14,592
MANUFACTURE OF TEXTILES ...	122	216	179	423	706	9344
MANUFACTURE OF WEARING APPAREL; DRESSING AND DYING OF FUR ...	734	555	1722	2512	3820	596
MANUFACTURE OF LUGGAGE HANDBAGS AND FOOTWEAR ...	39	71	149	125	212	314
MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK EXCEPT FURNITURE; MAUFACTURE OF ARTICLES OF STREW AND PLAING MATERIALS	20	10	39	108	137	82
PUBLISHINGPRINTING AND REPRODUCTION OF RECORDED MEDIA	10	-	-	-	19	29
MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS ...	-	-	-	10	10	19
MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS ...	19	29	125	288	422	883
MANUFACTURE OF FABRICATED METAL PRODUCTS EXCEPT MACHINERY AND EQUIPMENT ...	323	371	827	2204	2936	6660
MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C ...	-	-	-	-	10	10
MANUFACTURE OF PARTS AND ACCESSORIES FOR MOTOR VEHICLES AND THEIR ENGINES ...	-	-	-	-	-	-
MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C. ...	384	403	1142	2784	3197	7910
TOTAL	2035	1862	6509	13405	28,982	52,793
Percentages	3.9	3.50	12.30	25.40	54.90	100.00

Summary table 3.15 displays number of establishments by a major reason for not solving the problem of shortage of capital. Earlier in summary table 3.12, during the question about the major problem faced during the survey period, 10.8 thousand or 9.4% put their problem on lack of working capital. Now only 4.8 thousand responded to the reasons as to why they have not solved the problem of working capital. Close to 31.7 % said the loan permitted was not sufficient, pretty close to this size or 24.8 % talked about their inability of providing collateral and 19.9 % 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 9.1 % and high interest rate was mentioned as a problem by 7.9 % 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 3.16. Their inability to compete in the local market in prices was mentioned by almost 25.4% the establishments, followed by in-ability to compete with local products in quality (12.3%) and in-ability to compete with imported products in price (3.5 %), respectively.

Appendix I

Number of Sampled Establishment by Priority of Small Scale
Manufacturing Sector and by Region

Sr. no	Branch	Small Scale Manufacturing Industry No. of sampled by priority industry sector Establishment and by Region						
		<i>Textile</i>	<i>Wood</i>	<i>Metal</i>	<i>Leather</i>	<i>Flour mills</i>	<i>Others</i>	<i>Total for Small scale</i>
1	Tigray	638	16	326	14	102	503	1599
2	Afar			9		17	11	37
3	Amhara	628	15	222	39	923	1390	3217
4	Oromia	154	29	310	17	1231	1330	3071
5	Somalie	3	0	4	0	28	12	47
6	Benishangul-Gumuz	1	0	5	0	30	8	44
7	SNNPR	101	2	90	16	251	692	1152
8	Gambela	4	0	1	0	0	10	15
9	Harari	1	0	6	0	0	11	18
10	Addis Ababa	754	24	340	54	163	693	2028
11	Dire Dawa	13	0	6	2	23	35	79
	Total	2297	86	1319	142	2768	4695	11307

Estimation Procedures of Total, Ratio and Sampling Errors

The following formulas were used to estimate the required variables by reporting levels.

1. **Estimate of Total \hat{Y}_h in Major and Prior sector of manufacturing Domain (Category I) is given by**

$$\hat{Y}_h = \sum_i \frac{M_h}{M_{hin_h}} \frac{N_{hi}}{n_{hi}} \sum_j \frac{E_{hi}}{e_{hi}} \sum_k y_{hik} = \sum_i \sum_j \sum_k W_{hi} y_{hik}$$

Where,

$$W_{hij} = \frac{M_h}{M_{hin_h}} \frac{N_{hi}}{n_{hi}} \frac{E_{hi}}{e_{hi}} \text{ is the basic sampling weight}$$

**Estimate of Total \hat{Y}_h in Other than priority sector of manufacturing Domain
(Category II)**

$$\hat{Y}_h = \sum_i \frac{M_h}{M_{hin_h}} \frac{N_{hi}}{n_{hi}} \sum_j \frac{E_{hij}}{e_{hij}} \sum_k y_{hijk} = \sum_i \sum_j \sum_k W_{hij} y_{hijk}$$

Where,

$$W_{hij} = \frac{M_h}{M_{hin_h}} \frac{N_{hi}}{n_{hi}} \frac{E_{hij}}{e_{hij}} \text{ is the basic sampling weight}$$

The following notations were used in the formula:

M_h = Total number of enterprise in stratum h obtained from the sampling frame.

M_{hi} = Total number of enterprises in small scale establishments type i for major domain or in center i for other domain, stratum h obtained from the sampling frame.

E_{hi} = Total number of enterprises obtained from the survey of small scale establishments type i stratum h for major domain/in sample center of small scale establishments type i stratum h for other domain.

e_{hi} = Total number of enterprises successfully covered in small scale establishments' type i stratum h for major domain/in sample center small scale establishments type i stratum h for other domain.

n_h = Number of successfully covered by type of small scale establishments for other domain and for major domain in stratum h.

N_{hi} = Total number of small scale establishments' type i in stratum h for major /in other center stratum h obtained from the sampling frame

$n_{hi=}$ = Total number of sampled and covered small scale establishments type i in sampled small scale establishments type i for major / center in stratum h

Y_{hik} = The observed value of characteristic y for enterprises k, in small scale establishments type i, stratum h for major domain/ other domain stratum h.

Note: Estimate of total, \hat{Y} , is obtained by summing up stratum/domain total estimates.

$$\hat{Y} = \sum_h \hat{Y}_h$$

2 Sampling Variance of the Estimates:

Sampling variance of estimate of stratum total are given by the following formulas:

The variance of domain or reporting total estimate is:

$$Var(\hat{Y}_h) = \frac{n_h}{n_h - 1} \sum_{i=1}^{n_h} \left(\hat{Y}_{hi} - \frac{\hat{Y}_h}{n_h} \right)^2$$

in which

$$\hat{Y}_{hi} = \sum_j W_{hi} \sum_k y_{hik}$$

$$V(\hat{Y}) = \sum_h V(\hat{Y}_h)$$

$$SE(\hat{Y}_h) = \sqrt{Var(\hat{Y}_h)}$$

3 Coefficient of Variation (CV) and Confidence Interval (CI)

The following formulas were used to calculate CV and CI of the domain (reporting level) total.

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

$$CV(\hat{Y}_h) = \frac{\sqrt{VAR(\hat{Y}_h)}}{\hat{Y}_h} * 100$$

and Ninety-five percent confidence interval (CI) of domain total:

$$\hat{Y}_h \pm 1.96 * SE(\hat{Y}_h)$$

4 Ratio Estimates:

$$\hat{R}_h = \frac{\hat{Y}_h}{\hat{X}_h} \text{ and } \hat{R} = \frac{\hat{Y}}{\hat{X}}$$

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

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