

THE INDUSTRIAL SECTOR IN ETHIOPIA

Unit Objectives

After completing this unit, you will be able to:

- ❑ appreciate the role of the industrial sector for the Ethiopian economy;
- ❑ understand the different policies and strategies applied by the Imperial, Derg, and current governments; and
- ❑ analyze the performance of, identify problems of and understand the possible remedies for the Ethiopian industrial sector.

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INTRODUCTION

The national income account of Ethiopia classifies the industrial sector into these sub sectors:

- *manufacturing,*
- *mining, quarrying,*
- *construction,*
- *water and energy supply.*

Economic development cannot be achieved without the development of this sector. A developed industry is likely to boost the entire economy by making it nationally integrated, flexible, and capable of self-generated and self-sustained growth. That is why the ultimate objective of the developing nations, including Ethiopia, is industrial development.

3.1 INTRODUCTION

At the end of this section, you will be able to:

- define industrialization
- identify the main features that are the important characteristics of industrialization
- describe the historical development of the industrial sector in Ethiopia

Key Terms and Concepts



- | | |
|----------------------|------------------------|
| ➤ Linkage | ➤ Value added |
| ➤ Strategies | ➤ Industrialization |
| ➤ Gross value output | ➤ Manufacturing sector |

Do you know the definition of industrialization?

Are you familiar with the important features or characteristics of industrialization?

Historical Development of the Industrial Sector in Ethiopia

Ethiopia has a long tradition in the development of handcrafts and cottage manufacturing activities such as weaving, blacksmithing, pottery, and woodwork.

But the introduction of modern industries began at the end of the 19th century. Particularly, the following two major early 20th century events contributed to the introduction of modern manufacturing industries in Ethiopia:

- *The emergence of a strong central government, which resulted in political stability and*
- *The construction of the Ethio-Djibouti railway.*

These events gave way to the establishment and expansion of cities and the settlement of foreigners, mainly from Armenia, Greece, Italy, and India, which in turn increased the demand for imported commodities and hence created the basis for industrial development. The domestic production of manufactured goods was also necessitated by the increasing problems of transporting bulky imported commodities such as wood, clay, printing products, etc.

By 1925 there were 25 factories in the major urban centers of Addis Ababa, Dire Dawa, Asmara, and Massawa. Of these factories, private entrepreneurs established 22 factories. About 10 additional manufacturing industries were built from 1928 to 1941, of which two (the Artistic Printing Press and Ambo Mineral Water) were established before the Italian occupation. The Italians established the Dire Dawa cement and textile factories. The rest were set up by Armenian and Greek settlers. A number of manufacturing industries also came into existence between 1941 and 1955, mainly due to strong relations between Ethiopia and the governments of the United States of America and of the United Kingdom. However, it was after the 1950's that industrial development gained strong momentum due to the conscious effort exerted by the Ethiopian government. For instance, the government adopted measures like generous tax incentives and high levels of tariff protection, easy access to domestic credit on favorable terms, and it allowed foreigners to take profits out of the country, thereby helping to attract the inflow of foreign capital to the manufacturing sector.

The earliest types of industrial activities were largely confined to small-scale establishments producing wood and furniture, leather, edible oil, soap, flour, etc. But after the Second World War, the improved relationships with the governments of the USA and UK and the import-substitution industrial development strategy adopted by the government resulted in the emergence of large-scale industries in the country. These mainly foreign-owned industries started to produce different light consumer goods such as fiber products, ceramics, bottles and glasses.

The change of state to the Military government in 1974 significantly altered the ownership and management of the industrial sector. The Military government declared socialism as its principle and nationalized almost all medium- and large-scale enterprises. About 87 foreign-owned private enterprises were put under the government. The private sector was deliberately discouraged and discriminated against, which brought the dominance of the private sector in Ethiopian industry to an end.

The Military government followed the preceding regime's import-substitution industrial development strategy, but did not change the composition of output in the manufacturing sector. It was still dominated by the production of light consumer goods which heavily depended on technology, raw materials, and spare parts.

Definition of Industrialization

The United Nations Industrial Development Organization (UNIDO) defined industrialization as follows:

Industrialization is a process of economic development in which a growing part of the national resources are mobilized to develop a technically up-to-date, and diversified domestic economic structure characterized by a dynamic manufacturing sector having and producing means of production and consumer goods and capable of assuring a high rate of growth for the economy as a whole and of achieving economic and social progress.

Activity 3.1



What important characteristics do you observe in the definition of industrialization?

From the definition given above, some features can be identified as important characteristics of industrialization:

- *Industrialization is not a one-time or sudden occurrence but rather a sustained process. This means it is a continuous process taking place over a long period of time.*
- *Industrialization requires the application of modern science and technology to the production process.*

- *The manufacturing sector plays the most important and dynamic role in the industrialization process;*
- *Industrialization brings about a structural transformation of the national economy, especially in the composition of output and the pattern of employment.*



Activity 3.2

- 1 Discuss the significance of industrialization to the Ethiopian economy.
- 2 Discuss the level of industrialization in Ethiopia in relation to the characteristics of the industrialization process.

According to Sutcliff, industrialization is a process by which a non-industrialized country becomes an industrial one. Sutcliff identified three criteria for a country to be considered to be an industrialized one.

- *25% of the GDP should come from the industrial sector.*
- *At least 60% of the industrial output should originate from the manufacturing sector.*
- *At least 10% of the population should be engaged or employed in the industrial sector.*

From the above criteria, Ethiopia is one of the least industrialized nations in the world.

Content Check 3.1



- 1 “Emergence of major towns is one of the factors that contribute to the introduction of modern manufacturing in Ethiopia”. Indicate whether this statement is True/False and explain your answer.
- 2 Which of the following were not settlers in Ethiopia at the time when modern industries were introduced in Ethiopia?
 - A British
 - B Armenians
 - C Italians
 - D Indians
 - E none


- 3 Factors contributing to an increase in local demand for industrial goods in Ethiopia in the early 20th century include:
- A Shortage of supply
 - B An increase in income of the population
 - C Problems of transporting imported goods
 - D All are possible answers
- 4 The dominance of the private sector came to an end during
- | | |
|-----------------------|--------------------------|
| A The Imperial period | C The current government |
| B The Derg period | D None |


3.2 ARGUMENTS OF INDUSTRIAL SECTOR VS THE REST OF THE ECONOMIC SECTOR


At the end of this section, you will be able to:

- explain the arguments about the industrial sector versus the rest of the economic sectors.
- examine the arguments about the industrial sector versus the rest of the economic sectors.

Key Terms and Concepts

 Balance of payments

 Backward linkage

 Forward linkage

What are the arguments in favour of the industrial sector?

There are five basic arguments, development that maintain the idea that the industrial sector's development should be given priority over that of the other sectors. These arguments are:

A *The Development Argument*

One can generally observe that economic development industry goes with: the more developed nations are better industrialized, and the less developed nations are less industrialized.

B *The Employment Argument*

The industrial sector has more potential to create job opportunities for the rapidly growing urban populations of developing countries than any other sector.

C *The Balance of Payment Argument*

A developed industrial sector, in general, generates more foreign currency, compared to an agricultural sector. That is, industrialization helps developing nations to alleviate their balance-of-payments problems.

D *The Linkage Argument*

If industrial development is directed to use local raw materials, it can create strong linkages among the different sectors of the domestic economy. This is due to the dynamic nature of the industrial sector which includes positive externalities in consuming agricultural raw materials to produce consumer and producer goods for the entire economy. For instance, the industrial sector can create backward linkages with the agricultural sector for its raw materials instead of depending on imported raw materials. This gives the sector assured sources of supplies. Similarly, the sector can also create linkages with the market in order to assure market for its products. This is what is called forward linkage. In this regard, the development of modern telecommunication services is expected to be of paramount importance.

E *The Saving/Surplus Argument*

Profit margins in the industrial sector are higher than those in agriculture, and this may lead to higher levels of saving.

Activity 3.3



Do you agree with the statement that industry always goes with economic development? Justify your answer by providing practical examples.

Content Check 3.2



- 1 Identify the argument that refers to a capacity of a developed industrial sector to generate more foreign currency:
 - A Linkage argument
 - B Balance of payments argument
 - C Employment argument
 - D All of the above
- 2 The _____ argument states that profit margins in the industrialized sector are higher than those in agriculture.
- 3 The contribution of manufacturing value added to GDP is high in one of the following African countries:

A Kenya	C Egypt
B Ethiopia	D None
- 4 “Industry goes with development.” Decide whether this is True/False and explain why.
- 5 Of all the sectors in the developing countries, one of the following has more potential to create job opportunities for the urban population:

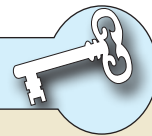
A The industrial sector	C The service sector
B The agricultural sector	D All are possible answers.

3.3 THE ROLE OF THE INDUSTRIAL SECTOR IN THE ETHIOPIAN ECONOMY

At the end of this section, you will be able to:

- identify the role and size of the industrial sector.

Key Terms and Concepts



- | | |
|--|---|
| <ul style="list-style-type: none"> Employment Labour force | <ul style="list-style-type: none"> Foreign exchange Gross value of production |
|--|---|

Is it true to say that the role being played by the industrial sector is greater than that of agriculture?

According to the International Standards for Industrial Classification (ISIC), the Ethiopian industrial sector is composed of mining and quarrying, manufacturing, electricity, water supply, and construction. During the years 1991/92 - 1997/98, large- and medium-scale manufacturing contributed 38.4% of the gross value of industrial production, while small-scale manufacturing and handcrafts contributed around 18.7%. The contributions of mining, quarrying, and electricity-supply activities were 3.9%, 15.8%, and 23.2%, respectively. From this we can conclude that the manufacturing sub-sector dominated the Ethiopian industrial sector, providing more than 57% of the sectoral output.

Since the manufacturing sub-sector is the most dominant and dynamic component of the industrial sector, and also due to availability of time series data, we will concentrate on this sub-sector as we analyze the contribution of the industrial sector to the national economy.

3.3.1 Output Contribution

According to ISIC, the manufacturing sector is characterized by the physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand, and whether it is done in a factory or in the worker's home.

The following table shows the contribution of the different industrial groups to the manufacturing sector for the year 2007/08.

Table 3.1 Gross Value of Output of Manufacturing Sector (in thousand Birr), 2007/08

Industrial group	Gross value of output	% of total
Food and beverage	8,751,377	47.9
Textiles	693,552	3.7
Leather and footwear	1,447,236	7.9
Wood and furniture	118,684	0.6
Paper and printing	1,236,481	6.7
Chemicals	1,733,378	9.4
Non-metal	3,068,948	16.8
Metals	1,203,517	6.5
Total	18,253,173	100.0

Source: Computed from CSA survey, 2007/08.

As indicated in Table 3.1, food and beverages accounted for about 48% of the gross value of output of manufacturing establishments in 2007/08, followed by non-metal and chemicals. These three industrial activities accounted for more than 74% of the entire gross value of products in large- and medium-scale manufacturing organizations during the same period.

In terms of the value added by the large- and medium-scale industry sub-sector, the food and beverage industrial group is the leading one. For example in 2007/08, the contribution of the food and beverage industrial group was 50.7%.

Looking at the data on revenue obtained from sales, the food and beverage industrial group generated around 8.3 billion Birr, which is close to 48.5% of the total revenue obtained from large and medium scale manufacturing in 2007/08.

Activity 3.4



- 1 Mention at least one manufacturing enterprise that you know in each industrial group.
- 2 List at least three important industrial groups that contributed significantly to the total gross value of output in the manufacturing sub-sector in 2007/08.

3.3.2 Employment Contribution

The industrial sector, in general, and the manufacturing sub-sector, in particular, serves as important sources of employment, especially for the rapidly growing urban population in Ethiopia. In 2007/08, there were 1,677,906 persons engaged, out of which 678,911 were employees in the industrial sector. The number of persons engaged and employees during this period showed an increase of 6.4 and 5.8 percent, compared to that of 2006/07, respectively. These increases in the number of persons engaged and employees could be attributed to the increase in the number of establishments created in 2007/08 (CSA, 2009).

When we examine the employment capacity of each industrial group in the manufacturing sector, as of 2007/08:

- *The food and beverage group employed 50%,*
- *The non-metal, and paper and printing industrial groups contributed 14% and 10.9% of the sector's employment, respectively.*

These three industrial groups, together, employed close to 75% of the total workforce in the manufacturing sub-sector for the year 2007/08.

- *The relative importance of the rest of the industrial groups, in terms of employment, varies between 2.1% in wood and furniture manufacturers to 8.8% in textile-product manufacturers. The decline in the share of employment of these sectors is mainly due to increased employment opportunities in other industrial groups such as in non-metal, paper and printing.*

Activity 3.5



What measures should be taken in order to create more jobs in the industrial sector?

3.3.3 Foreign Exchange Contribution

From the previous chapter you remember that more than 90% of the nation's foreign currency earnings come from the agricultural sector. The poorly developed industrial sector of Ethiopia contributes very little to the foreign currency earnings of the nation.

Table 3.2 shows the contributions of the different industrial groups to the total foreign exchange earnings in the manufacturing sector.

Table 3.2 The Foreign Exchange Contribution of the Industrial Sector (in thousand Birr)

Industrial group	Value of export	% of total
Food and beverage	232,481.60	32.9
Textiles	293,365.00	41.5
Leather and footwear	76,764.00	10.8
Wood and furniture	43,269.70	6.1
Paper and printing	334.40	0.04
Chemical	30,198.9	4.27
Non-metal	6,375	0.9
Metals	23,173.80	3.2
Total	705,962.4	100.0

Source: Computed from CSA Survey, 2009

Activity 3.6



What can you infer from the information given in [Table 3.2](#)?

As we can see from [Table 3.2](#), textiles generate 41.5% of the sector's foreign exchange, which is the largest contribution. Food and beverages, leather and footwear follow as the second and third with 32.9% and 10.8%, respectively. This pattern has remained almost the same in recent years. The only noticeable change is in the wood and furniture and chemical groups. The total value of wood and furniture and chemical exports in 2007/08 was Birr 43,269.7 and 30,198.9, respectively. This can be taken as an indicator of the potential the nation has in bringing in foreign currency from non-traditional commodities.

The benefits for the Ethiopian manufacturing sub-sector from preferential treatment which the developed world offers are great. In this regard, The Africa Growth and Opportunity Act (AGOA), which allows some developing countries, including Ethiopia, to have access to the US textile market without tariffs and quotas, is the most notable opportunity. European countries are also opening their markets to African manufactured products. For instance, Ethiopia can now sell its sugar products in European markets. Therefore, the nation should try its best to benefit from these and other preferential treatments which the developed world is offering to the poorest nations of Africa.

Activity 3.7



Discuss how the Ethiopian government can increase its foreign currency earnings from the manufacturing sector.

Content Check 3.3



- 1 In terms of value added to the large- and medium-scale sub-sector, which one of the following is dominant?
- | | | | |
|---|--------------------|---|-------------------|
| A | Textile | C | Food and beverage |
| B | Wood and furniture | D | Chemicals |

be shaped by policies and strategies pertinent to the manufacturing sub-sector. The main agents for the expansion of the industrial sector during this period were foreign nationals residing in Ethiopia. It was believed that the settlement of foreigners and the expansion of commercial farms would continue to give impetus to the growth and expansion of the industrial sector. Hence, development programs and government policies were formulated to pursue this objective. A number of proclamations were declared to encourage foreign investment, and the investment proclamation was revised in 1964.

A number of incentives such as tax holidays, easy financing loans, exemptions from duty payments, and effective tariff protection from foreign competition were given. However, these incentives were based on some conditions. For example, a tax holiday was for those who had an initial investment of, made more than Birr 200,000 and duty exemption was for heavy machinery.

During the later years of the Imperial era, the main strategy for industrial development was import-substitution, a process assisted by a system of import duties intended to encourage the domestic production of goods and to discourage imported goods. The government placed much faith on private foreign investment and it went to a considerable length to attract it. As a result of the existing policies and the enabling investment environment, a number of manufacturing establishments were created. There was, however, an obvious neglect of small-scale industries during that period as the investment incentives benefited only the medium- and large-scale manufacturing establishments.

Although the trend was mildly encouraging in the last few years of the Imperial government, the actual level of manufacturing activity and its employment creation was very low compared with the case in other developing countries. Although several reasons can be given to explain the poor performance of the industrial sector, poor infrastructure facilities and the level of articulated government economic policy towards the development of the sector were the main constraints. In fact, as we will discuss later on, these problems have also been inherent in other regimes.

Activity 3.8



What measures were taken by the government to attract foreign investment to Ethiopia during the Imperial period?

B *Size, Ownership and Regional Distribution of the Manufacturing Sector*

Manufacturing can be classified into different categories by using different criteria. The criteria vary from country to country. For instance, in Japan enterprises that have less than 10 million yen and that employ fewer than 300 employees are considered as small-scale industries. But for Egypt, small-scale industries are those having a fixed capital of at least USD 23,000 and employing not more than 50 employees. Ethiopia also has its own criteria.

According to the Central Statistical Authority (CSA), the Ethiopian manufacturing sector is classified into three, namely large- and medium-scale, small-scale and cottage/handcraft manufacturing. This categorization is mainly based on the number of people employed and use or non-use of power-driven machinery: Large- and medium-scale manufacturing establishments use power-driven machinery and employ 10 persons and above. Small-scale industries are those establishments that employ less than 10 persons and use power-driven machinery. Cottage/handcrafts units are those establishments that produce goods and services primarily for sale but do not use power-driven machinery in performing their main activities, regardless of the number of persons employed.

According to the Ethiopian Economic Association (EEA) report, during the Imperial period, industrialization, with an inward looking orientation based on import substitution, was pursued as a matter of government policy. As a result, a good number of manufacturing enterprises were established, including 80 factories, mostly by private businessmen of foreign origin. Only eight of these eighty establishments were fully government-owned, while another five were joint ventures where the government had over 50% ownership. By 1974, only 26 of the total number of manufacturing enterprises were either fully or partially owned by the government, and in seven of them the government's stake was less than 50%. The great majority of the manufacturing firms in Ethiopia before the 1974 revolution, especially the medium- and large-scale ones, were owned by foreigners. Out of 273 establishments, 178 or 65% were set up with the assistance of foreigners, and 101 or 40% were totally owned by foreign nationals. In short, by 1974 the industrial sector of Ethiopia was small and characterized by production for the domestic market, mainly to substitute for imports, and its enterprises were largely private and foreign owned. The role of the government in the evolution of the Ethiopian manufacturing industries prior to 1974, at least as direct producers, was very limited.

Content Check 3.4



- 1 Conscious efforts to promote industrial development started during
 A 1950's B 1970's C 1980's D 1990's
- 2 Main agents for the expansion of the industrial sector during the Imperial era were
 A Ethiopians
 B Foreign nationals, particularly Russians
 C Foreign nationals residing in Ethiopia
 D All are possible answers
- 3 Which of these factors that gave impetus to the industrial expansion?
 A Settlement of foreigners
 B Expansion of commercial farms
 C Tax holiday
 D All
- 4 "During the Imperial era the main strategy for industrial development was export promotion." Decide whether the statement is True/False (Give reasons).



3.5 INDUSTRIAL DEVELOPMENT STRATEGIES DURING THE DERG REGIME

At the end this section, you will be able to:

- examine the development strategies used during the Derg, based on strategy, size, ownership and regional distribution of the sectors.

Key Terms and Concepts



-  Capital ceiling
-  Handcrafts and small-scale Industrial Development Agency (HASIDA)

What was the objective of the ten-year perspective plan that was adopted during the Derg regime?

Development Strategies

The industrial sector underwent a radical change in the structure of ownership and management during this period. As a first step in this process, the government nationalized almost all the medium- and large-scale enterprises which were formerly owned by the private sector on December, 20, 1975. It also imposed a capital ceiling on private sector investment, limited to Birr 500,000, and investors were not allowed to have licenses for more than one line of business. This discouraged any possible revival of the private sector in medium-, large-scale and handcraft activities. The tax structure was also very harsh, with the maximum rate on personal income going as high as 89%. The interest rate was also higher for private borrowers, relative to that for public enterprises and cooperatives. These policies severely hampered the expansion of the manufacturing sector during the Military government by paralyzing the private sector.

Later on, the Ten-Year Perspective Plan (1984/85 – 1993/94) sought to promote the production of intermediate and capital goods and the expansion of small-scale industries. The state took responsibility for developing and managing the medium- and large-scale industries with wide linkages to capital-good producing industries that could be used to develop other manufacturing industries. The prevailing economic management policy created different hierarchies in the industrial sector. Putting the Ministry of Industry at the top, corporations were established to supervise the management of the grouped enterprises. The general managers had the responsibility of supervising the day-to-day operations of the industrial enterprises in accordance with the guidelines prepared by the Ministry.

The plan, however, failed to attain its goals for various reasons, and significant improvements were not witnessed in the structure and the level of development of the sub-sector. For example, government corporations decided whether these enterprises were efficient. Accordingly, producing enterprises had weak links with market forces, which did not permit them to have the necessary feedback so as to become more competitive in the market. In short, the industrial policy of the Derg stifled the speedy development of the sector by creating too much government intervention and by limiting the participation of the private sector.

To support small-scale industrial enterprises, the government established the Handicrafts and Small-Scale Industrial Development Agency (HASIDA) in 1975. But this did not help much in achieving the required pace of growth in the small-scale industrial sector. This might have been due to the lack of institutional and other supportive measures that should have been taken to boost the capacity and the efficiency of the small-scale and handicrafts enterprises.

After the collapse of socialism in Eastern Europe and, later, in the former Soviet Union, the regime tried to introduce some economic liberalization by way of introducing a mixed economic policy. A number of constraints that stood in the way of private-sector development were lifted. For instance, the capital-ceiling restriction was relaxed. However, several of these encouraging measures did not attain their goals because as the civil war reached its climax and diverted government resources towards resolving security problems.

Activity 3.9



- 1 Describe the industrial development strategies during the Derg period.
- 2 Explain briefly how the Derg restricted the participation of private investors in the industrial sector.
- 3 Discuss the drawbacks of the development strategies of the Military government.

Size, Ownership, and Regional Distribution of the Manufacturing Sector

No adequate database was available to use to analyze the growth in the number of manufacturing establishments until the CSA conducted surveys of manufacturing industries in 1995/96 for each of the industrial groupings. It is only for the 10+ group (manufacturing establishments with 10 or more employees) that time series data was available. According to this survey, the number of manufacturing establishments with 10 or more employees in 1975/76 was 430. This number declined to 402 in 1985/86, a decline of 0.82% per annum. It further declined to 273 in 1992/93, the lowest ever registered, eventually growing to 642 by the time of the survey in 1995/96.

There are several reasons that explain this decline.

- *The first is the decrease in the number of employees, owing to low capacity utilization which in turn was caused by the unfavorable government policies towards private activities to obtain foreign exchange (for raw materials, spare parts and replacements), credit and licences. Therefore, some of the establishments fell below the “10 and above” employee category. The way the number of establishments fluctuated year after year seems to prove this.*
- *The possibility was high for establishments to cease operation for the obvious reasons of the period, such as war, burdensome regulations, and lack of foreign exchange. Indeed, the economic policy of the time did not encourage the establishment of firms.*
- *The third reason the independence of Eritrea, achieved by 1991/92, which reduced the number of industries by the number of those that existed in Eritrea.*

A few surveys have been conducted on handicrafts and small-scale industries. These include the survey undertaken by HASIDA in 1989 and 1991 on private small-scale manufacturing establishments and the one conducted by CSA in 1997 on handicrafts/cottage and small-scale industries.

Table 3.3 Trend of Manufacturing Establishments (10+ group)

Year	Number	Average annual change in Employment
1975/76	430	-
1985/86	405	-0.82
1992/93	273	-4.62
1995/96	642	34.71
1975/76 – 1995/96		9.76

Source: CSO/CSA: *Results of Surveys of Manufacturing industries (1975/76 – 1995/96)*.

Definition:

According to HASIDA , private small-scale manufacturing establishments are those:

- *which use manually operated machines or motor-driven machinery;*
- *which employ at least one person (other than the owner and the owner’s families); and*
- *those with fixed assets not exceeding a million birr, excluding land and buildings.*

Given this definition, the number of private small-scale manufacturing establishments were 7,706 in 1985/86 and 7,600 in 1986/87. These numbers appeared to dramatically change as reflected in the results of the 1997 CSA survey, which registered 892,719 cottage/handicrafts and 2,731 small-scale industries. Clearly the main cause this apparent change was the change in definitions, in that the later survey included cottage and handicrafts industries which were not included in the former survey. Furthermore, a significant increase in these establishments owing to the more liberal economic policies of the new government probably contributed real changes, since these are the first categories to quickly respond to changes in policy regimes.

The contribution of 10+ manufacturing firms accounted for only 9.15% of the value added of the manufacturing sector in 1975/76, and the value has declined since then, reaching its lowest point of 3.5% in 1989/90. As in the early cases, and for similar reasons, the recovery started with the new economic policy after 1992/93.

The ownership of large- and medium-scale manufacturing enterprises has shown changes in the past few decades. During the Imperial period, this sub-sector was dominated by the public sector due to various measures taken by the government. Public or government ownership of establishments showed continuous increase during the period of the Derg, reaching a maximum of around 120% in 1991/92, with 152 out of 279 enterprises owned by the government. However, this trend has been reversed due to the economic policies adopted by the EPRDF government.

When we look at the regional distribution of manufacturing establishments, we see unbalanced distribution, with most of them concentrated in major metropolitan areas, primarily in Addis Ababa. In general, it is better to have evenly distributed manufacturing establishments, but distribution depends on several factors, including infrastructural developments, including those in roads, electricity, communication, water, proximity to input and output markets, and social services.

Activity 3.10



- 1 Why do more manufacturing enterprises exist in Addis Ababa than elsewhere in Ethiopia?
- 2 What measures should be taken to increase the number of establishments in relatively less developed regions?
- 3 Compare the participation of the private sector in the industrial development of Ethiopia during the Imperial and Derg eras.

Content Check 3.5

- 1 Which of the following is not true regarding the Derg period?
 - A Some medium and large scale enterprises were nationalized.
 - B A capital ceiling of 1,000,000 birr was imposed on public investment.
 - C Investors weren't allowed to have licences for more than one line of business.
 - D None of the above.
- 2 "Government corporations decided the efficiency of industrial enterprises during the Derg regime." True/False (Give reasons).
- 3 HASIDA was established to support:
 - A large-scale industrial development
 - B small-scale industrial development
 - C medium-scale industrial development
 - D All of the above
- 4 The concentration of manufacturing activities in food and beverages, textiles, and non-metallic mineral deposits during the Derg regime was due to
 - A Heavy dependence on local inputs
 - B Availability of domestic markets for their products
 - C Both are possible answers
 - D None of the above

3.6 INDUSTRIAL DEVELOPMENT STRATEGIES DURING THE POST-DERG PERIOD

At the end of this section, you will be able to:

- examine the development strategies used during the post-Derg era, based on strategy, size, ownership, and regional distribution of the manufacturing sector.

Key terms and Concepts



- Gross value product
- Value added at factor cost
- Structural adjustment programme
- Agricultural Development-led Industrialization

What were the major industrial development strategies during the post Derg period?

Development Strategies

After the over-throw of the socialist government and its replacement by the Ethiopian Peoples Revolutionary Democratic Front (EPRDF) in 1991, the government sought to rationalize its role in the economy while enhancing the active participation of the private sector.

Accordingly, the transitional government of Ethiopia announced an economic policy which could be described as “cautious capitalism”. Believed to be conducive for investment, the government accepted the Structural Adjustment Programs (SAPs), though with some reservations.

With respect to the industrial sector, the Transitional Government of Ethiopia (TGE) indicated that the role of the state would be limited to areas of large-scale engineering, metallurgical plants, communications, power, and pharmaceutical industries from which the private sector was bared. The government, undertook a Public-Enterprises Reform Program in August 1992, which aimed at enhancing efficiency, productivity, and competitiveness in public enterprises (most of which were manufacturing) through the granting of managerial autonomy and responsibility. This was done by dismantling the sub-sectoral corporations under the Ministry of Industry. The overall management of each manufacturing enterprise was thus put under its own board of directors and a general manager responsible for output, price, and investment decisions as well as appropriate market channels.

In general, these measures were designed with the long-term objective of raising the share of the industrial sector in the economy, both in terms of output and employment creation and of enhancing the development of strategic industries which were expected to have multiplier effects through contributing to the expansion and development of other economic activities. Laws were enacted

to give enterprises management autonomy, a more flexible labor code was proclaimed, prices were largely decontrolled, foreign trade and financial institutions, including the foreign exchange market, were particularly taken to encourage private sector participation in the economy. These include:

- *the lifting of the restrictions on private-sector investment capital and the number of business ventures;*
- *the easing of licensing requirements and regulations;*
- *the enactment of an investment code which, upon successive revisions, opened up a wider range of economic activities for both domestic and foreign investors. In addition to the investment code, investment incentives were offered in the form of tax holidays, duty-free importation of investment goods and the like designed to favour investment in selected sectors and regions; and*
- *the downward revision of taxes and tariffs from the extremely high levels that existed before the reform period. The marginal tax rate on personal income was also slashed from 89% to 40%. Business profit tax was reduced from 59% to 35%, while the maximum tariff on imports was reduced to 50% down from 240%.*

In addition to the above measures, the government introduced an overall development strategy, the Agricultural Development-Led Industrialization (ADLI) strategy. As stated in Chapter two, agriculture is the primary focus of development in the short and medium terms, and its production will be expanded through increased availability of modern inputs such as fertilizers, improved seeds, and pesticides and through improved extension services and other socio-economic infrastructures. This, of course, is expected to increase the income of rural people, which will, in turn, raise the purchasing power of the largest proportion of the population, consequently augmenting the demand for industrial goods. Agriculture would become a source of domestic market demand and a reliable raw material base. This strategy is also expected to strengthen the inter-sectoral linkage between agriculture and industry.

To sum up, several interventions have been made to enhance the development of this sector. Key among these measures is the establishment and strengthening of institutions necessary to promote industrialization. A policy goal is to create a conducive environment for industrial development by developing infrastructure and the nation's technological capability. Other goals are to promote inter- and intra-sectoral linkages, create an appropriate financial environment, encourage balanced regional industrial development and strengthen the linkage between industry and

other sectors. Also, in addition to expanding the domestic market for industrial products by increasing the income of the rural population as a result of the ADLI strategy, the government policy is also designed to promote industrial exports.

Activity 3.11



- 1 Describe the different reform measures undertaken for the industrial sector during the EPDRF.
- 2 How does the ADLI strategy bring industrial development in Ethiopia?

Size, Ownership, and Regional Distribution of the Manufacturing Sector

According to the Central Statistical Authority there were 1,930 large- and medium-scale, 43,338 small-scale, and 974,676 cottage/handicraft establishments during 2007/08 (CSA, 2003). The majority of the establishments do not use power-driven machinery, irrespective of the number of persons employed.

The sectoral structure of the manufacturing sub-sector, 2007/08 based on numbers of establishments, reveals that food and beverage establishments accounted for 52% of the total manufacturing enterprises, while textiles accounted for 22%, as indicated in [Table 3.4](#).

Table 3.4 Sectoral Structure of the Manufacturing Sub-Sector by Number of Establishments, 2007/08

Industrial Group	Large- and Medium-scale Manufacturing	Small-scale	Cottage/ Handicrafts	Total	Percent %
Food and beverage	485	1541	524,172	526,198	(52.1%)
Textiles	25	1366	221,848	223,239	(22.1%)
Leather and footwear	83	46	12,025	12,154	(1.2%)
Wood	70	90	60,462	60,622	(6.0%)
Paper and printing	143	3	197	343	(0.03%)
Chemical	80	6	1117	1203	(0.1%)
Non-metallic minerals	488	457	92,403	93,348	(9.2%)
Metals	101	4355	20,788	25,244	(2.5%)
Others	455	35,474	31,664	67,593	(6.6%)
Total	1930	43,338	964,676	1,009,944	(100%)

Source: CSA, 2003,2010.

As shown in [Table 3.4](#), food and beverage, textile and non-metallic minerals dominate the Ethiopian manufacturing sub-sector. These groups accounted for 83% of the total number of establishments during 2007/08. The concentration of Ethiopian manufacturing activities in these establishments might be due to the fact that they depend heavily on local inputs and due to the availability of domestic markets for their products.

The number of large- and medium-scale establishments reached 779 in 1998/99 from its level of 642 in 1995/96, with an annual average growth rate of 6.8%. This growth rate is not satisfactory, given the low level of manufacturing activities in the nation.

When we come to the ownership structure, small-scale and cottage/handcrafts enterprises are totally owned and managed by the private sector. The ownership of large- and medium-scale manufacturing enterprises has shown changes in the past few decades. During the Imperial period, this sub-sector was dominated by the public sector, due to various measures taken by the governments. The proportion of public-to-private establishments showed continuous increase during the period of the Derg, reaching a maximum of around 120% in 1991/92, with 152 out of 279 enterprises owned by the government. However, this trend has been reversed due to the economic policies adopted by the EPRDF government.

As you can see from [Table 3.5](#), the share of the private sector increased from 46.3% in 1995/96 to 91.5% in 2007/08. This is due to the active involvement of the private sector, the privatization program, and the withdrawal of the government from new investments in the area of large- and medium-scale manufacturing.

Table 3.5 Ownership Structure (share in %)

Indicators	1995/96		1998/99		2007/08	
	Private	Public	Private	Public	Private	Public
Number of establishments	46.3	53.7	73.7	26.3	91.5	8.4
Gross value of product (GVP)	13.6	86.4	35.8	64.2	59.5	40.4
Value added at factor cost (VAFC)	12.1	87.9	21.4	78.6	54.3	45.6
Number of persons engaged	13.7	86.2	31.4	68.6	66.3	33.6

Source: EEA, 2002; CSA, 2007/08.

However this does not mean that the private sector has the largest share in terms of output. Even though the value of output of the private sector, using both

Gross Value of Product (GVP) and Value Added at Factor Cost (VAFC), showed increments from 1995/96 to 2007/08, it is very recently that the public sector dominance in large- and medium-scale manufacturing in terms of output has been overtaken by the private sector. This is one underlying reason that the private sector employed 66.3% of the total labour force engaged in this sub-sector.

When we look at the regional distribution of the manufacturing establishments, we see unbalanced distribution. In general, it is better to have evenly distributed manufacturing establishments, but distribution depends on several factors including infrastructural developments, including those in roads, electricity, communication, water, proximity to input and output markets and social services.

Table 3.6 Distribution of Large- and Medium-Scale Manufacturing in Ethiopia in 2007/08

Region	Establishments (% of Total)	VAFC (% of Total)	Employment (% of Total)
Addis Ababa	46.4%	48.3%	48.4%
Oromia	16.7%	26.6%	24.0%
SNNPS	0.1%	2.0%	6.7%
Amhara	8.7%	5.3%	7.0%
Dire Dawa	2.0%	1.9%	3.1%
Harari	1.9%	1.4%	1.4%
Tigray	12.5%	13.5%	8.3%
Others	1.5%	0.6%	0.7%
Total	100%	100%	100%

Source: Computed from CSA Bulletin (2009)

From [Table 3.6](#), we can see that Addis Ababa has the largest number of establishments and provides the most employment in the sector: 46.4%, and 48.4%, respectively. Oromia follows Addis Ababa with 16.7% of the establishments and 24.0% of total employment in the sector. Tigray and Amhara take the 3rd and 4th place in regional distribution of the establishments. The 3rd place in value added and employment shares are taken by Tigray. In [Table 3.6](#), the category “Others” includes the four relatively less developed regions, namely

Somali, Afar, Benishangul-Gumz and Gambella, which, together, have only 1.5% of the establishments. These values indicate the unbalanced manufacturing establishment distribution. In an attempt to narrow this gap, the existing investment code of the country promises special incentives for investors who want to work in those backward regions.

Activity 3.12



- 1 What factors are responsible for the higher number of manufacturing enterprises existing in Addis Ababa and Oromia administrative region in comparison with other regions?
- 2 What measures should be taken to increase the number of establishments in the relatively less developed regions?
- 3 Discuss what the ownership structure of the manufacturing sector has looked like during the post-Derg period and mention the reasons for this structure.

Content Check 3.6



- 1 The objective of undertaking a public-enterprise reform program when the new government assumed power was to
 - A enhance efficiency
 - B increase productivity and competitiveness in private enterprises
 - C increase productivity and competitiveness in public enterprises
 - D All except C
- 2 ADLI envisaged
 - A an increase in agricultural production
 - B an increase in the demand for industrial goods
 - C making agriculture a source of domestic demand
 - D strengthening intersector linkage between agriculture and industry
 - E All of the above
- 3 “Expanding the domestic market for industrial products is the result of ADLI strategy.” *True/False (Give reasons).*





- 4 Currently, the public sector still dominates in the ____.
- A large- and medium-scale manufacturing, in terms of output
 - B small- and medium-scale manufacturing, in terms of output
 - C large-scale manufacturing, in terms of output
 - D None of the above

3.7 THE PERFORMANCE OF THE INDUSTRIAL SECTOR

At the end of this section, you will be able to:



- examine the performance of the industrial sector in terms of gross value of the manufacturing sector;
- examine the performance of the industrial sector in terms of gross value of output of the large- and medium-scale manufacturing sector; and
- examine the performance of the industrial sector in terms of the value added by the large- and medium-scale manufacturing enterprise sub sector.

Key Terms and Concepts

-  Gross value of output
-  Value added at factor cost
-  Value added at current market price
-  Gross domestic product

What different values can we use to measure the performance of the industrial sector?

The performance of the industrial sector can be measured, among other things, by:

-  *Gross value of output (GVO), which refers to the total output produced during a given period of time;*
-  *Value added at factor cost (VAFC), which is the difference between the gross value of output and the value of intermediate inputs, such as the cost of raw materials;*

$$VAFC = \text{Gross value of output} - \text{Value of intermediate inputs}$$

- Value added at current market price (VACMP), which is the sum of value added at factor cost and indirect taxes, regardless of any subsidies: $VACMP = VAFC + IBT - S$ and value added per person employed in other words, the ratio of value added generated in a given period to the number of people employed during the same period:

$$VAPPE = \frac{\text{Value Added generated in a given period}}{\text{Number of people employed during the same period}}$$

Given these definitions, we can briefly look at the contributions of the Ethiopian industrial sector to the national economy.

The available evidence indicates that the industrial sector accounted for 13.6 % of the national GDP during the period 1961-1974. This share declined to 12.2% and 10.9% in the periods spanning from 1980 - 1990 and 1991 - 1999, respectively. This implies that even if the broader definition of industry is taken (including mining and quarrying, manufacturing, electricity and water, and construction), the contribution of this sector to the national economy is not only marginal but declined over time. According to the information obtained from the national Bank of Ethiopia (NBE, 2008/09) the industry share of GDP for 1999/00 – 2008/09 was 13.1%. If we look at the GDP role of each component of the industrial sector in the national economy, we find that large- and medium-scale manufacturing accounted for 4.3%, small-scale 2.01 percent, and handcrafts 2.58 percent of the national output in the period spanning 1991-1999. The major contribution came from the large- and medium-scale manufacturing sector, as indicated in [Table 3.7](#).

Example 1: Let the gross value of output of the small - scale industry during the year 2003 be 913, 921, 346. If the value of intermediate input or cost of raw material used to produce the above state output is 3 million, what will be the value added at factor cost?

$$VAFC = 913,921,346 - 3,000,000 = 910,921,346$$

Example 2: The total industrial employment during the year 2007/08 (CSA) is 1,677,906. If the value added of the manufacturing subsector during the same period is 922,013,083, what will be the value added per person employed?

$$VAPPE = \frac{922,013,083}{1,677,906} = 549.5$$

Table 3.7 Major Components of the Industrial Sector (as % of total industrial GDP)

Type	1980 - 1990	1991 - 1999	2000-2008
Large- and medium-scale manufacturing	39.1	38.1	25.4
Small-scale and handicrafts	17.7	18.0	12.8
Construction	29.6	23.6	37.1
Other industrial subsectors	13.6	20.3	58.6

Source: Calculated from CSA Data, 1999, 2009

As indicated in [Table 3.7](#), the GDP contribution of large- and medium-scale manufacturing industries declined for the three decades of 1980 - 2008. The share of small-scale and handicrafts showed marginal increments during the last two decades of that period and then declined there after. ‘Other’ sub-sectors which, together, contributed about 20.3% and 58.6% to the total industrial GDP during the periods of 1991-1999 and 2000 -2008, respectively, include mining and quarrying, water, and electricity.

The size of 1995/96 manufacturing output shown in [Table 3.8](#) indicates that a significant proportion of the gross value of output came from a small number of large- and medium-scale manufacturing activities, followed by cottage and handicrafts.

Table 3.8 Gross Value of Output of Manufacturing Subsector of 1995/96 (in thousand Birr)

Industry Group	Gross value of out put	% share
Large- and medium-scale	5,799,104	72.2
Small-scale	187,882	2.3
Cottage/ Handicrafts	2,042,931	25.5

Source: CSA Survey, 1997.

The bulk of output, which is about 72.2%, is created by large- and medium-scale manufacturing, and the contribution of small-scale industry is insignificant. In terms of value added at factor cost, large- and medium-scale manufacturing establishments contributed a significant proportion of the total value added, followed by cottage/handicrafts. This suggests that we should have a closer look at the performance of large- and medium-scale manufacturing establishments. The following analysis will be limited to large- and medum-scale manufacturing establishments because of the availability of adequate information on these establishments and because of their greater contribution to the national economy.

The Ethiopian large and medium-scale manufacturing sub-sector is characterized by the dominance of four-consumer good producing industrial groups, namely the food and beverages, textiles, and leather and shoes groups. These groups of industries account for the bulk of the gross value of output and for the value added of the sub-sector. For instance, the four groups of industries (but substituting chemical for leather and shoes) accounted for 78% of the gross value of output during the 1980s. However, the gross value of the output of the large- and medium-scale manufacturing sub-sector declined by about 1.6 percent during the 1980s due to a sharp decline in the production of the chemical and textile groups.

The decline or stagnation in the gross value of output of the large- and medium-scale manufacturing sub-sector reversed after the launching of the economic reform program. The available official documents indicate that almost all large- and medium-scale manufacturing industrial groups showed significant improvement after the reform program was implemented. The gross value of output of the large- and medium-scale manufacturing sector registered an average annual growth rate of 20.2 % during the period covering 1991/92 - 1998/99 as shown in Table 3.9.

Table 3.9 Gross Value of Output of the Large- and Medium-Scale Manufacturing Sub-Sector (in thousand Birr).

Industrial Group	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
Food	414,939	521,597	717,920	948,127	1,316,745	1,351,224	1,610,079	2,068,703
Beverages	357,125	474,929	601,473	792,465	863,945	630,408	922,627	922,878
Textile	268,068	454,098	722,131	651,181	770,968	685,517	646,987	689,799
Tobacco	146,335	188,537	191,227	199,936	244,180	240,371	243,776	252,929
Leather and shoes	181,594	288,032	376,970	601,359	634,500	452,133	652,486	565,695
Wood and furniture	38,643	53,001	104,689	120,028	132,621	58,863	158,291	254,524
Paper and printing	90,733	141,835	208,497	200,807	291,564	205,184	291,224	288,047
Chemical	111,798	248,555	422,878	443,633	503,785	465,784	786,595	737,211
Non-metal	68,344	127,838	223,418	336,653	419,673	444,066	550,963	567,797
Metal	84,758	175,769	441,501	636,301	621,113	484,899	530,178	1,024,735
Total	1,762,337	2,674,168	4,010,704	4,930,490	5,799,104	5,996,199	6,393,205	7,272,317
Average Growth Rate 1991/92 - 1998/99 = 20.4								

Source: Compiled from CSA Survey, 1997 and 2000.

In absolute terms production increased from Birr 1.8 billion in 1991/1992 to Birr 7.3 billion in 1998/99. That is, production quadrupled, representing an annual average growth rate of 20.5%. The major share of the increment in the value of production was contributed by food, chemical, non-metal and metal, which achieved average annual growth rates of 22.9%, 26.9%, 30.2%, and 35%, respectively, during the period of 1991/92 - 1998/99. The smallest annual average growth during the reform period in gross value of output was observed in the tobacco industrial group. It registered an annual average growth rate of 7.8% during the period under consideration.

Note that a mere increase in the gross value of the output of manufacturing industries might not have meaningful economic importance unless it is supported by a commensurate growth in the value added. Evidence indicates that the value added in the large- and medium-scale manufacturing declined annually at an average rate of 2.4% during the 1980s. However, this trend has been reversed since the introduction of the economic reform program. The value added at factor cost of large- and medium-scale manufacturing increased from Birr 336.8 million in 1991/92 to Birr 1,982.9 million in 1998/99, representing an annual average growth rate of 25.3% during the period covering 1991/92 - 1998/99.

Table 3.10 Value Added of the Large- and Medium-scale Manufacturing Sub-sector (in thousand Birr).

Industrial Group	1991/92	1996/97	1997/98	1998/99
Food	70,083	482,606	352,024	759,179
Beverages	43,981	180,123	173,832	166,162
Textile	57,378	155,252	130,850	131,838
Tobacco	39,426	64,950	99,384	135,141
Leather and shoes	20,486	177,804	108,448	141,443
Wood and furniture	13,809	59,561	60,869	52,234
Paper and printing	35,698	94,105	108,829	107,676
Chemical	29,665	157,840	231,826	170,660
Non-metal	16,883	186,948	187,148	172,957
Metal	9,406	122,680	81,821	145,634
Total	336,815	1,681,871	1,535,031	1,982,924

Source: Compiled from CSA Survey.

Food, non-metal, leather and shoes, and chemicals registered high annual growth rate of 34%, 33.2%, 27.6% and 25%, respectively, in value added in the period spanning 1991/92 - 1998/99. The lowest annual growth in value added during that period was recorded in the wood and furniture group. Also, the beverage and textile groups increased by 1.9% to 11.9% annually during the same period, respectively.

Another indicator of the performance of the manufacturing sector is the value added per person, defined as the ratio of value added created to the number of persons employed. Value added per person is also known as *labor productivity*. Value added per person declined at an annual average rate of 3.4% during the 1980s. This might have been due to, among other things, redundancy of labor in the sector together with obsolete and outdated technology causing the marginal product of labour to decline over time. After the reform, however, value added per person increased. Labor productivity was highest in metal, followed by those of food and leather and shoes. Labor productivity registered an annual average growth rate of 33.9%, 30.1%, and 25.6% in the metal, food, and leather and shoe industrial groups, respectively, during the 1991/92 - 1998/99 period.

The manufacturing sector has shown improvements in terms of gross value of output, value added, and value added per person during the post-reform period. This might be attributed to the incentive for profit and the creation of a relatively conducive environment induced by the granting of managerial autonomy to public enterprises; the active involvement of a number of private manufacturing establishments; the improved availability of inputs and spare parts; and the recovery of the agricultural sector, which enhanced the supply of raw materials to the manufacturing sector. These factors are expected to continue to contribute to the improvements in the performance of the manufacturing sector.

Activity 3.13



- 1 What indicators would you use to assess the performance of the industrial sector?
- 2 Explain the reasons for the poor performance of the industrial sector during the Derg.
- 3 Discuss the factors that contributed to the relatively improved performance of the industrial sector during the post-reform period.

Content Check 3.7

- 1 One of the following can be used to measure the performance of the industrial sector except
 - A Gross value of output
 - B Value added at factor cost
 - C Value added at current market prices
 - D Employment
 - E None of the above
- 2 All of the following contributes to declining value added per person except
 - A redundancy of labor
 - B obsolete and outdated technology
 - C shortage of raw materials
 - D None of the above
- 3 As a percentage of total industrial GDP, one of the following has the highest growth
 - A small-scale manufacturing
 - B large- and medium-scale manufacturing
 - C construction
 - D other industrial subsectors
- 4 “Mere increase in the gross value of output of manufacturing industries definitely has meaningful economic importance”. *True/False (Give reasons).*

3.8 PROBLEMS OF AND POSSIBLE REMEDIES FOR OF THE INDUSTRIAL SECTOR

At the end of this section, you will be able to:

- assess the problems of and identify possible remedies for the industrial sector.

Key Terms and Concepts



- Market-related
- Input-related
- Technology related

What specific problems does the manufacturing sector within your locality encounter?

The manufacturing sector of Ethiopia is in its infant stage due to many interrelated problems. These problems are generally related to finance, technology, market, policy, input supply and other socio-economic factors. Let us examine some of these problems.

A *Lack of Finance*

The shortage of financial resources has been one for the major bottlenecks for industrial development in Ethiopia. The possible sources of this finance have been agricultural- and non-agricultural-commodity producing sectors in the economy. The agricultural sector, which is the mainstay of the Ethiopian population, has not been capable of generating the required surplus for the industrial sector, given its subsistence nature and backwardness. The other commodity-producing sectors, especially the manufacturing industry, is underdeveloped and most public enterprises are heavy users of foreign exchange. That is, they are highly import-dependent. This means that they have not been net savers and hence have no surplus. Given such a low saving rate, it is difficult to undertake industrial investment.

High collateral requirements by the formal lending institutions have aggravated the problem of financial shortage.

B *Market-Related Problems (Marketing Problems)*

The availability of markets is obviously one of the determinants of the development of the manufacturing sector. According to CSA survey (2000), market-related problems accounted for 39.5% of the underutilization of the capacity observed in the large- and medium-scale manufacturing establishments.

Market-related problems arise due to the following factors:

- *Weak domestic demand for manufacturing output — this is due to the subsistence nature of agriculture on which the vast majority of the people rely for food, etc. As a result, the purchasing power of the people is very low.*
- *Lack of marketing information about both local and export markets.*
- *Strong competition from cheap imports.*
- *A consumer bias against local products.*

C Technology-Related Problems (Technological Problems)

It is argued that it is impossible to think of industrial development without the application of modern science and technology. Technology-related problems have contributed to the poor level of industrialization in Ethiopia.

Technological problems may reveal themselves in one of the following ways:

- *Lack of sufficient information on appropriate technology. This is a serious obstacle to both existing firms and to those investors wishing to invest in the sector. This is related to the shortage of local institutions involved in technological support services.*
- *The technology we have today is not developed based on available local raw materials. This limits the linkage that is expected in the domestic economy of the manufacturing sector. It rather makes the sector triangulating the shortage of foreign currency of the country. The ratio of imported raw material to total raw material is too high for Ethiopian local manufacturing to flourish. For instance, in 2002/03, the import intensity was 22.0% and 29.0% for food and beverage, and textile groups, respectively. The situation is worse in basic iron and steel, and motor vehicles, trailers, and semi-trailers, with 99.2% and 93.4%, respectively. On average, for the indicated year, the import intensity for all medium- and large-scale manufacturing was 43.5%.*
- *The technology we use is also capital intensive. This approach is basically not recommended for economies like Ethiopia where unemployment is rising.*

D Input-Related Problems

Input-related problems also hamper the development of industry in Ethiopia. This is mainly due to the high cost and shortage of foreign exchange for imported

inputs and to the unreliability of domestic sources of inputs and their poor quality. The survey conducted by CSA in 2000 ranked the shortage of raw materials as the second most serious problem that contributes to the underutilization observed in large- and medium-scale enterprises, accounting for 25.9% of the total underutilization.

There are also other problems like policy problems and human-resource-related problems in relation to lack of skilled manpower and absence of industrial discipline and work ethics. These and other problems do not only limit new investments, but also reduce the productive capacity of the already existing enterprises. For instance, according to CSA (2000), the large- and medium-scale manufacturing establishments used only 49.2% of their capacity due to various problems, the most serious of which were market-related problems and the shortage of raw materials. Therefore, in order to create accelerated industrialization in Ethiopia, it is imperative to identify and tackle the problems that are hampering the development of this sector.

Activity 3.14



What are the major constraints limiting industrial development in Ethiopia and what measures do you recommended to tackle these problems?

Content Check 3.8



- 1 “Shortage of financial resources has been one of the major bottlenecks of industrial development in Ethiopia”. True/False (Give reasons).
- 2 “The manufacturing industry is highly export-dependent”. True/False (Give reasons).
- 3 “The reliance on capital-intensive technology is one of the technology-related problems in Ethiopia”. True/False (Give reasons).

UNIT REVIEW

UNIT SUMMARY

- ❑ The industrial sector of Ethiopia has undergone significant evolution. The main factors for such developments include, the establishment of strong central government together with the construction of the Ethio-Djibouti Railway, increased settlement of foreign citizens from Armenia, Greece, Italy and India, which brought the necessary entrepreneurial skills for manufacturing establishments, and the increased demand for imported goods among the urban population. The industrial structure so evolved was characterized by substantial foreign ownership and has been dependent on imported technology.
- ❑ However, this trend was completely reversed during the Derg period in terms of ownership and control of industries. Almost all large- and medium-scale establishments were in the government's hands, and the participation of the private sector was curtailed. That is, no room was available for private sector involvement, especially in large- and medium-scale establishments. As a result, the proportion of public-owned large- and medium-scale manufacturing establishments was higher than that of private establishments during the 1980s because of the nationalization programme.
- ❑ This trend reversed again during the 1990s, and both public and private sectors have participated in large- and medium-scale manufacturing. The ownership structure also changed, that is, there have been privately-owned large- and medium-scale establishments. And the size of large- and medium-scale manufacturing has increased recently because of the active participation of the private sector.
- ❑ Coming to the role of the industrial sector in the national economy, the sector contributes output, employment, and foreign exchange to the Ethiopian economy. Of all the industrial groups, large- and medium-scale manufacturing contributes the most significant proportion of value added, employment, and foreign exchange earnings to the national economy.
- ❑ With regard to industrial development strategies, we have reviewed the Imperial, the Derg and the Post-Derg periods. Prior to 1974, the declared state policy was to promote a pro-capitalism economic

system, based on public and private initiative. In this regard, the state's role included the actual undertaking of industrial investment, promotion of industrial enterprises through its financial institutions, and the promotion and execution of policies intended to attract industrial investment. These policies included encouraging the processing of local raw materials, promoting import-substitution, and giving special emphasis to industries that have strong linkage effects with the rest of the economy.

- ❑ The performance of the industrial sector can be measured by using the sector's gross value added at factor cost, value added at current market price, and value added per person employed. By any of these indicators, the sector's performance has been less impressive during the last two decades or so.
- ❑ There are a number of problems that have constrained the growth of the sector. These problems include weaknesses in technology, markets, finance, policies, skilled manpower, and the like. Broadly, these problems can be classified as technological, structural, and policy problems. On the technology front, lack of information on suitable technologies and lack of support for technology are the main problems for the sector. We use the term structural to refer to bottlenecks inherent in the overall economy, such as the small size of the domestic market. Finally, policy-related problems include tariff rates, land policies, unfair and arbitrary tax imposition, and the like, which have hampered the development of the sector.



REVIEW EXERCISE FOR UNIT 3

I Choose the best answer from the given alternatives.

- 1 The Ethiopian manufacturing sector suffers from all of the following except _____.
 - A lack of infrastructure
 - B absence of adequate institutional support
 - C strong competition with imported goods
 - D usage of labor intensive technology
 - E None of the above

- 2 Due to post-Derg reforms, the manufacturing sector showed some improvements after the Derg period. This was due to all of the following except _____.
- A active involvement of the private sector.
 - B higher level of protection given to domestic producers.
 - C improved availability of foreign exchange for importing necessary inputs.
 - D A and B
 - E None of the above
- 3 Which of the following is not true about the manufacturing sector of Ethiopia?
- A It is highly import intensive.
 - B It is dominated by the production of non-consumer items.
 - C Weak domestic demand.
 - D All of the above
 - E None of the above
- 4 The production structure of Ethiopian manufacturing is dominated by _____.
- A textile, metallurgical, and food.
 - B textile, food, and chemicals
 - C food, beverages and wood products
 - D food, beverages, and textile
 - E none of the above
- 5 According to the system of National Accounts of Ethiopia, which one is different from the rest?
- A Water supply
 - B Press
 - C Mining
 - D Construction
 - E Manufacturing

- 6 Compared to the agricultural sectors a well-developed industry is expected to _____.
- A employ more people
 - B serve as a reliable source of foreign currency
 - C create strong linkages among various sectors
 - D all of the above
 - E none of the above
- 7 Import intensity refers to:
- A the excess of imports over exports in a nation
 - B debt burden
 - C the ratio of value of imported raw materials to the total value of raw materials used
 - D the total value of imported machinery, equipment, spare parts, raw materials, etc. in a year
 - E none of the above
- 8 The dominance of the private sector came to an end during
- A the Imperial era
 - B the Derg era
 - C the current government
 - D None of the above
- 9 In terms of value added to the large- and medium-scale sub-sectors, one of the following is dominant
- A textile
 - B wood and furniture
 - C food and beverage
 - D chemicals
- 10 _____ has the largest number of establishments and share of employment
- A Oromia
 - B Addis Ababa
 - C Tigray
 - D SNNPs
 - E none of the above

II Say True or False and give your reasons.

- 11 The control of power by the Military regime changed both the ownership and management of the industrial sector significantly.
- 12 According to the definition of industrialization, the small-scale manufacturing industries play the most important role in the industrialization process.
- 13 In terms of the revenue obtained from sales, the food and beverage industrial group has been the highest contributor in recent times.
- 14 The share of employment in the non-metal, paper and printing industrial groups has been declining recently.
- 15 Sugar is one of the Ethiopian products which is given preferential treatment by European countries.
- 16 ADLI was instituted to strengthen the inter-sectoral linkages between agriculture and industry.
- 17 During the Imperial period, the large- and medium-scale manufacturing enterprises were dominated by the public sector.
- 18 The manufacturing sector contribution to the overall economy is still at its lowest level.
- 19 One of the factors expected to contribute to the improved performance of the manufacturing sector is the recovery of the agricultural sector.
- 20 The shortage of foreign exchange for imported inputs and the poor quality of domestic sources of inputs are some of the problems hampering the development of industry in Ethiopia.

III Answer the following briefly.

- 21 What criteria are used to categorize nations as industrialized? Also discuss the situation of Ethiopia's industry in relation to these criteria.
- 22 Explain factors that have contributed to the development of the industrial sector in Ethiopia.
- 23 Discuss the linkages between agriculture and industry.
- 24 Discuss the shortcomings of the industrial development strategies of the Imperial era.