

**THE FEDERAL DEMOCRATIC REPUBLIC OF  
ETHIOPIA  
CENTRAL STATISTICAL AUTHORITY**

**REPORT ON  
URBAN BI-ANNUAL EMPLOYMENT UNEMPLOYMENT SURVEY  
October 2003 1<sup>st</sup> Year Round 1**

**Addis Ababa  
March 2004**

## ***EXECUTIVE SUMMARY***

*In an effort to provide timely statistical information on the labour market situation of the country, the Central Statistical Authority has launched a Bi-annual Employment and Unemployment Survey program starting from October, 2003 G.C. The survey is planned to be conducted twice every year, one in October and the other in April. This survey is the first in the series and will serve as a baseline data for tracing changes. The data from this survey will update the relatively outdated information in the area.*

*The Bi-annual Employment and Unemployment Survey program was designed to provide statistical data on the size and characteristics of the economically active and the non-active population of the country on continuous basis. The variables collected in the survey include: demographic characteristics of household members; economic activity during the last six months; productive activities during the last seven days including characteristics of employed persons such as hours of work, occupation, industry, employment status, and earnings from paid employment; unemployment and characteristics of unemployed persons.*

*Except three zones of Afar Region and six zones of Somali Region, all urban centers of the country were considered in this survey. About 15,270 households were selected from 527 EA using stratified cluster sample design. The sample design enables to provide estimates for urban areas of 11 regions and at country urban level.*

*The data collection operation of the survey, involved a total of about 237 properly trained enumerators and about 60 field supervisors that took place between October 18 and November 18/2003. During the survey data collection operation, close and regular supervision was undertaken at various levels. Spot checks, re-interviewing and a thorough scrutiny of filled-in questionnaires were applied to ensure that the data collection activities being carried out according to the given instruction.*

## **FINDING OF THE SURVEY**

### ***Background of the population***

*The survey result estimated the total urban population of the country in October 2003 to be 8,541,124, of which 4,083,933 (47.8 Percent) are males and 4,457,191 (52.2 Percent) are females. Oromia followed by Addis Ababa City Administration, took the highest share out of the total urban population of the country, while the least percentage is observed for Gambella Region.*

*The children together with the youth make up 62.3 percent, characterizing a young age structure of the population.*

*According to the survey result, among the total urban population aged 10 years and over, 77.9 percent were found to be literate. The proportion of literates among the males (88.4 percent) is higher than that of the females (68.5%). On the other hand, substantially high proportion of the literate (59.2%) attained elementary education (Grade 1-8). Regarding training status, out of the total persons aged 10*

years and over, about 12.3 percent were trained. Any sort of theoretical or practical training exercise provided in class or outside class rooms and that has awarded certificate or diploma is considered as training. The proportion of trained males (17.3 percent) exceeds more than twice that of the females (7.8 percent).

### ***Economically Active and Inactive Population***

*In this survey, economic activity is defined as work, which involves the production of goods and/or services for sale or exchange and production and processing of primary products for own consumption. Usual and current status approaches were used for measuring the economically active population in relation to a short reference period, (seven days) and long reference period, (six calendar months), respectively.*

*In the usual status approach, persons who have been working for most of the weeks during the six month prior to the survey date were considered as being employed, while those who work for less than half of the weeks or those who did not work at all but who were looking or available for work were counted as being unemployed.*

*The employed population based on the current activity status approach consisted of those who were engaged in productive activity at least for four hours during the seven days prior to the date of the interview. Whereas, the unemployed population consists of persons without work but who are available and ready to work if any job was found. Those who neither engage nor available to work in productive activity are classified as the economically inactive. The employed and the unemployed populations together make up the labour force or the economically active population.*

*The size of the active population of the urban parts of the country in the usual and current status approaches are estimated to be 3,546,792 and 3,868,400, respectively. The data thus resulted in an economic activity rates of 53.1 percent and 58 percent for usual and current approaches. The activity rate of males is found to be higher than their female counterparts. Regarding the relationship between age and activity rate, the data depicts a curvilinear association. That is, low and increasing participation of persons at a younger age and high and relatively stable for middle ages (between age group 30-44 years) and then a steady decline at older age groups. Higher proportion of females tends to exit the labour force earlier (age 40-44 years) than the males (age 50-54 years).*

*Looking the activity rates of regions in the last six months, the highest was reported for Addis Ababa City Administration (about 57 percent), while Tigray and Benishangul-Gumuz regions have shown the least rate compared to other regions i.e., 46.6 percent each.*

*The overall economic activity rate has declined from 65 percent in 1999 to its present rate of 58 percent. The decline is more pronounced for the young below age 24 years and for older person aged 60 and above. The decline in activity rate could partly be explained by the increase in school attendance.*

*The number of economically inactive persons during the six months period prior to October 2003 was estimated to be 3,129,532 persons. Similarly, there were 2,807,775 inactive persons in the current status approach. Being a student and homemaking are the major reasons for inactivity status. Defining economic dependency ratio, as a ratio of population not in the labor force (current status approach) to that of the population in the labor force, it was found that for each 100 economically active persons there are about 121 dependents to be supported in terms of food, clothing, health, education and the like.*

### ***Characteristics of the Currently Employed Population***

*As the survey result shows, nearly three-fourths of urban employed population, which is, 2,850,027, of the country are engaged in three equally competent occupations, namely :elementary occupation (24.5 percent), service, shop and market sales workers (24.2 percent), and craft and related activities (23.8 percent). Technical and associate professionals stand at the middle of the spectrum (8.2 percent). While those persons working professional and legislator occupations took the lowest position, each contributing about 3 percent.*

*Concerning main activities, most urban people are absorbed by wholesale and retail trade and manufacturing activities, making up 23.4 percent and 15.4 percent, respectively. Those who have worked in private households, hotel and restaurant, education/ health and social work, public administration, and agriculture occupy an intermediate position, contributing between 7.5 percent to 8.9 percent. Extra-territorial organizations, mining and quarrying, financial intermediation, electricity, gas and water supply and real estate contributed little in terms of creating employment. More males than females are engaged in most activities, except in wholesale and retail trade, manufacturing, private household and hotel and restaurant activities.*

*In terms of employment status the majority of employed population are self-employed (42.0 percent) followed by those employed by government and government parasitatal (20.4 percent) and private organization (15.6 percent). Domestic employees and unpaid family workers also took substantial share (10 percent and 8.6 percent, respectively). The finding further shows that males are dominant in paid employment. However, more females than males are found in domestic employee and unpaid family workers. The proportion of females in self-employment exceeds also the corresponding figure among the males.*

*This survey has collected data on earnings from paid employment. The average amount of earnings for the total paid employees of the country is estimated to be 422 Birr per month. In this survey, earnings for employees are related to gross remuneration and includes bonus, overtime, allowances and other benefits that are obtained only from the main job. Comparison of mean amount of earning among different sectors (industries) has shown that the highest payments are given to those who were working in financial intermediation sector (934 Birr) followed by extra territorial organizations (882 Birr per month). Employees of private households with employed persons and hotels and restaurants earn the least payment, i.e., with 61 Birr and 144 Birr per month, respectively.*

*Another information collected is the informal/ formal nature of employed persons. Persons who work in an enterprise or business that has below ten workers, did not keep book of account and who did not have license were considered to be working in the informal sector. Note that persons engaged in subsistence farming and those who work in private households were excluded from the analysis.*

*According to the survey result, at urban country level a total of 1,138,781 people were engaged in the informal sector, making up 48.2 percent of the total employment. The highest proportion of employed population who work in the informal sector was recorded for Somali Region (61.4 percent) followed by Amhara (56.3 percent), S.N.N.P. (54.7 percent) and Oromia (52.1 percent) regions. The lowest proportion, in this respect was registered by Addis Ababa City Administration (37 percent). A higher proportion of females than males are engaged in the informal sector in all regions.*

### ***Levels and Distribution of Unemployment***

*The unemployment rate, which is computed as the proportion of the unemployed persons out of the economically active population, can be used to measure the level of unemployed population of an area. The survey result reveals that in October 2003, there were 1,010,375 unemployed persons, out of which males are 345,901 and females are 664,474. This means that the rate of unemployment in the current status approach for urban areas of the country is 26.1 percent. Similarly, unemployment among the male and female are 17.5 percent and 35.1 percent, respectively.*

*Regarding the age pattern of unemployment, the rates are higher for the younger groups than the older ones. Nearly two-fifths of the youth population age 15-24 years and one-third of those aged 25-29 years were unemployed during the reference period. The rates then show general declining pattern and remains below 20 percent after age group 30-34 years.*

*The result depicts that unemployment rate is highest in urban areas of Dire Dawa Administrative Council (38.0 percent) followed by Addis Ababa City Administration (32.1 percent), Tigray Region (28.8 percent) and Harari Region (27.4 percent). Also, in urban areas of Afar Region unemployment rate is found to be 27.6 percent. While in the rest of urban areas of regions unemployment rate ranged from 9.8 percent in Gambella Region to 9.8 percent in Oromia Region.*

*It appears that unemployment remains high and stable in urban Ethiopia during the last 10 years. The unemployment rate had grown from 22 percent in 1994 to 26.4 percent in 1999 (CSA, 1997; 2000). The rate in the latest 2003 Urban Bi-annual Employment and Unemployment Survey is 26.1 percent, which is the same level as that observed in 1999 National Labour Force Survey.*

Urban unemployed population who wanted to establish their own business reported that shortage of finance is the main problem they have faced, accounting for about 62 percent. The next important reason is lack of working place /land, which constituted about 14 percent.

# CHAPTER I

## BACKGROUND TO THE SURVEY

### 1.1 Introduction

Statistical information on all aspects of socio-economic activities are essential for the designing, monitoring evaluation of development plans and policies for gagging the growth of investment. Labour force surveys are one of the important sources of data for assessing the role of the population of the country in the economic and social development process. These surveys provide data on the main characteristics of the work force engaged or available to be engaged in productive activities during a given period and also its distribution in the various sectors of the economy. It is also useful to indicate the extent of available and unutilized human recourses that must be absorbed by the national economy to ensure full employment and economic well being of the population. Furthermore, the information obtained from such surveys is useful for the purpose of macro-economic monitoring and evaluation human resource development planning. The other broad objective of statistics on the labour force is for the measurement of relationship between employment, income and other social and economic characteristics of the economically active population for the purpose of formulating, monitoring and evaluation of employment policy and programs. Seasonal and other variations and changes over time in the size and characteristics of the employment and unemployment can be monitored using up-to-date information from labour force survey.

CSA has been providing labour force and related data at different levels and with varying details in their content. These include the 1976 Addis Ababa Man Power and Housing Sample Survey the 1978 Survey on Population and Housing Characteristics of Seventeen Major Towns, the 1980/81 and 1987/88 Rural Labour Force Surveys, and the 1984 & 1994 Population and Housing Census. The 1996 and 2002 Surveys of Informal Sector and most of the household surveys also provide limited data on the area. Some information can also be derived from small, large and medium scale establishment surveys. Till the 1999 survey there hasn't been a comprehensive national labour force survey representing both urban and rural areas.

The latest data in the subject had been collected before four years and can be considered relatively out-dated as the sector is dynamic and sensitive to economic and social changes. Moreover, it lacks data for trend and comparable analysis. Thus, to fill-in the data gap in this area, a series of current and continuous labour force survey need to be undertaken. Recognizing this fact and in response to request from different data users, the CSA has launched a biannual employment-unemployment survey program starting October, 2003 G.C

This survey is the first in the series and will serve as a baseline data for tracing changes. This program covers only urban areas of all regions. Rural areas will be included in the future as necessary. The survey is planned to be conducted twice every year, one in October and another in April. October and April in Ethiopia represent peak and slack agricultural periods.

This report presents some of the summary of findings of the survey together with statistical tables. The introduction and the summary report are organized into six chapters. Further more statistical tables corresponding to the summary chapters are presented in Annex I.

## **1.2 Objectives of the survey**

The bi-annual employment and unemployment survey program was designed to provide statistical data on the size and characteristics of the economically active and the non-active population of the country on continuous basis. The data will be useful for policy makers, planners, researchers, and other institutions and individuals engaged in the design, implementation and monitoring of human resource development projects and the performance of the economy. The specific objectives of the this survey are to:

- generate data on the size of work force that is available to participate in production process;
- Determine the status and rate of economic participation of different sub-groups of the population;
- identify those who are actually contributing to the economic development (employed) and those out of the sphere;
- determine the size and rate of unemployed population;
- Provide data on the structure of the working population;
- Obtain information about earnings from paid employment;
- identify the distribution of employed population in the formal/informal sector of the economy;
- generate baseline data to trace changes over time in the future.

## **1.3 Contents of the questionnaire**

The survey is mainly aimed at providing information on the economic characteristics of the population aged 10 years and over, i.e., their activity status, employment, and unemployment situation. It has also covered detailed socio-demographic background variables such as age, sex, relationship to the head of household, educational status, training and marital status.

The survey has used a structured questionnaire to solicit the required data. Before taking its final shape, the draft questionnaire was tested by undertaking a pre-test. The pre-test was conducted in Addis Ababa , Debreziet and Sendafa. Based on the findings of the pre-test, the content, layout and presentation of the questionnaire was amended. Comments and inputs on the draft contents of the survey questionnaire obtained from user-producer forum were also incorporated in the final questionnaire.

The questionnaire is organized in to five sections;

- Section - 1 Area identification of the selected household: this section dealt with area identification of respondents such as region, zone, wereda, etc.,
- Section -2 Demographic characteristics of household: it consisted of the general socio-demographic characteristics of the population such as age, sex, education, states & types of training and marital status.
- Section - 3 Economic activity during the last six months: this section covered the usual economic activity status, number of weeks of Employment /Unemployment and reasons for not usually working.
- Section - 4 Productive activities during the last seven days: this section dealt with the status and characteristics of employed persons such as hours of work occupation, industry, employment status, and Earnings from employment.
- Section - 5 Unemployment and characteristics of unemployed persons: the section focused on the size and characteristics of the unemployed population.

The questionnaire used in the field for data collection was prepared in Amharic language. Most questions have pre-coded answers and column numbers were assigned for each question. A copy of the questionnaire translated to English is attached as Annex II of this report.

The survey employed two approaches in the measurement of the economically active population, namely the usual and the current status approaches. In the usual status approach, which refers to a longer time interval, data was collected about the main or usual economic activity of the population. On the other hand, the current status approach was based on a shorter reference period, and data was collected with reference to the current activity of the population. The usual status approach refers to the last six months of the fixed calendar dates of April to September, while the current approach referred to the last seven days prior to the date of interview.

# CHAPTER II

## SURVEY METHODOLOGY

### 2.1 Scope and Coverage

The 2003 Urban Bi Annual Employment and Unemployment survey covered only urban parts of the country. Except three zones of Afar and six zones of Somali regions, where the residents are pastoralists, all urban centers of the country were considered in this survey. On the other hand, residents of collective quarters, homeless persons and foreigners were not covered in the survey. Including Addis Ababa City Administration and Dire Dawa Administrative Council, the following eleven domains (reporting levels) were formed.

1. Urban Tigray
2. Urban Afar
3. Urban Amhara
4. Urban Oromia
5. Urban Somali
6. Urban Benishangul-Gumuz
7. Urban SNNP
8. Urban Gambella
9. Urban Harari
10. Urban Addis Ababa
11. Urban Dire Dawa

Taking into account of domain for the entire country, all in all, twelve domains (reporting levels) were constructed.

### 2.2 Sample Design, Sample Size and Response Rate

Information from the listing of the 1994 Population and Housing Census was utilized to develop the sampling frame for the 2003 Urban Bi Annual Employment and Unemployment Survey. It was by taking into account of cost and precision of major variables that determination of sample size was achieved. Moreover, in order to judge precisions of major variables, the 1999 Labor Force Survey result was the main source of information that was taken into consideration.

Except Harari, Addis Ababa and Dire Dawa, where all urban centers of the domain were incorporated in the survey, in other domains a three stage stratified cluster sample design was adopted to select the samples from each domain. The primary sampling units (PSU's) were urban centers selected

systematically using probability proportional to size; size being number of households obtained from the 1994 Population and Housing Census. From each selected urban centers enumeration areas (EA's) were selected as a second stage sampling unit (SSU). The selection of the SSU's was also done using probability proportional to size; size being number of households obtained from the 1994 Population and Housing Census. For each sampled EA a fresh list of households was prepared at the beginning of the survey. Thirty households from each sample EA were selected at the third stage. The survey questionnaire was finally administered to those thirty households selected at the last stage.

The selection scheme for Harari, Addis Ababa and Dire Dawa was similar to the case explained above. However, in these three domains instead of a three-stage design a two-stage stratified cluster sample design with enumeration areas as PSU and households (from the fresh list) as secondary sampling unit was used.

As regards the response rate of the survey, a total of 99 urban centers were selected and incorporated into the survey. To be covered by the survey, 527 enumeration areas was initially selected, and the survey could successfully be carried out in all the 527 (100%) of the EA's. The total number of expected households that were to be interviewed was 15810, however, due to different reasons 126 sample households were not interviewed. As a result only 15684 households was actually covered by the survey, which made the ultimate response rate of the survey 99.2 %.

Distribution of sampling units (planned and covered) by domain (reporting level) is specified in Summary Table 2.1. Estimation procedures of total, ratio and sampling errors are also given in Appendix 1.

**Summary Table 2.1 Selected Urban centers, Planned and Covered Enumeration Areas & Households by domain of estimation.**

Domain (Reporting level)	No. of Urban centers	Enumeration Areas		Households	
		Planned	Covered	Planned	Covered
Urban Tigray	9	40	40	1,200	1,196
Urban Afar	5	22	22	660	658
Urban Amhara	18	90	90	2,700	2,682
Urban Oromia	29	125	125	3,750	3,722
Urban Somali	7	25	25	750	736
Urban Benishangul-Gumuz	6	20	20	600	595
Urban SNNP	17	63	63	1,890	1,882
Urban Gambella	4	20	20	600	599
Urban Harari	1	22	22	660	645
Urban Addis Ababa	1	75	75	2,250	2,239
Urban Dire Dawa	2	25	25	750	730
<b>Country Total</b>	<b>99</b>	<b>527</b>	<b>527</b>	<b>15,810</b>	<b>15,684</b>

### **2.3 Training of Field Staff**

For the purpose of this survey, the training program of enumerators, supervisors and other field and office staff was conducted in two stages. The first stage training was conducted at the head quarters of the CSA, in Addis Ababa for about five days. The participants were selected from professionals and sub-professionals with long time experiences, branch office statisticians and coordinators, who were to train enumerators and supervisors during the second stage of training conducted at the Branch Statistical Offices. The training was guided by an enumerator and supervisor manual, which consists of detailed explanation of concepts, ideas and instructions on how to fill each entry in the questionnaire.

All the Branch Statistical Offices of the CSA participated in the survey undertaken, that is, in organizing the second stage of training, in deploying the field staff to their respective sites of assignment, and retrieving completed questionnaires and submitting them to the head office for data processing. They were also responsible in administering the financial and logistic aspect of the survey as well as field supervision within the areas of their assignment.

The training at the branch office, which lasted for about seven days, consisted of theoretical discussions on concepts, definitions, and techniques of completing the questionnaire, as well as mock and practical field practice interview of households and/or household members. The objectives of mock and practical interviewing of households were twofold. First, it enabled to assess how well the theoretical class

discussions were understood by all participants, so that they could convey the same message to the enumerators and the supervisors. The second objective was to examine the difficulty, which would likely be encountered during actual fieldwork.

The second stage of training was organized for all field staff and was conducted at 10 selected Branch Statistical Offices. Those who were trained at the head office in turn gave similar training for enumerators and field supervisors for about 7 days. The training consisted of classroom discussions, mock-interview and one-day field practice. In addition, thorough discussions were made after field practice. The discussions were intended to exchange experiences among participants and pinpoint the areas of the survey questions that need more care and attention.

## **2.4 Organization of the Fieldwork**

In order to carry out this survey with the desired level of quality, there was a need to organize a large staff that performs the various survey activities. The 25 Branch Statistical Offices of the Authority carried out the data collection operation. These offices have permanent and contract enumerators stationed in the selected enumeration areas. The data collection operation of the survey, involved a total of about 237 enumerators and about 60 field supervisors involved with an average supervisor-enumerator ratio of 1 : 5. Out of the total enumerators about 149 were recruited on contract basis and 88 were permanently stationed enumerators for price survey.

The interviews were made by going from house-to-house using a structured questionnaire. The data was collected from each sampled household and the respondent from whom the information collected was the head of the household or other responsible household member. Most of the enumerators were assigned to 2-3 sampled enumeration areas in which they could easily converse with the respondent's dialect. Interpreters were made available in cases where there is difficulty to converse. Data collection took place between October 18 and November 18/2003.

In some of the sample sites the data collection was carried out in phases. That is, after completing the data collection in the selected enumeration area enumerators were shifted to another assigned next adjacent sample sites to carry out the same exercise. Field supervision was undertaken side by side with the data collection. During the survey data collection operation, close and regular supervision was undertaken at various levels. Spot checks, re-interviewing and a thorough scrutiny of filled-in questionnaires were applied to ensure that the data collection activities being carried out according to the given instruction. In addition to this, the statisticians in branch statistical offices and branch statistical office heads made supervision of the data collection operation.

Senior staff members from the CSA head quarters in Addis Ababa, apart from giving training to the enumerators and supervisors at Branch Statistical Office level, participated in the field supervision activities, which took about one week. Furthermore, during fieldwork, statisticians from different department visited nearly all Branch Statistical Offices and selected urban enumeration areas. In this instance they have discussed on the objectives and importance of the survey, the expected quality of the data and some other related issues with supervisors and enumerators.

## **2.5 Concepts And Definitions of Key Variables**

**Urban Center:** - In principle is defined as a locality with 2000 or more inhabitants. In this survey, however, for practical purposes an urban center includes the following regardless of the number of inhabitants.

- i) All administrative capitals (Regional capitals, Zonal capitals and Wereda capitals),
- ii) Localities with Urban Dweller's Association (UDAs) not included in (i),
- iii) All localities which are not included either in (i) or (ii) above having a population of 1000 or more persons, and whose inhabitants are primarily engaged in non-agricultural activities.

**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.

**Enumeration Area (EA):** is a unit of land delineated for the purpose of enumerating population and housing units without omission and duplication. An EA in rural areas usually consists of 150-200 households, and on the other hand an EA in urban areas constitutes 150-200 housing units.

**Household:** Consists of a person or groups of persons, irrespective of whether related or not, who normally live together in the same housing units or group of housing units and have common cooking and eating arrangements.

**Head of household:** is a person who economically supports or manages the household or for some reason of age or respect is considered as head by the other members of the household. It could be a male or a female.

**Usual member of a household:** a person is considered as usual members of a household if he or she is:

- a) A person who continuously, that is, at least for six months live and have a common cooking and eating arrangements with the household; or
- b) A person who is absent from the household at the time of the survey but his absence has not elapsed the six months criterion; or
- c) Housemaids, guards, baby sitters, etc...with no other dwelling and who were staying with the household at the time of the survey.

## **2.6 Data Processing**

The filled-in questionnaires that were retrieved from the field were first subjected to manual editing and coding. During the fieldwork the field supervisors, Statisticians and the heads of branch statistical offices have checked the filled-in questionnaires and carried out some editing. However, the major editing and coding operation was carried out at the head office. All the edited questionnaires were again fully verified and checked for consistency before they were submitted to the data entry. After the data was entered, it was again verified using the computer.

Using the computer edit specification prepared earlier for this purpose, the entered data were checked for consistencies and then computer editing or data cleaning was made by referring back to the filled-in questionnaire. This is an important part of data processing operation in attaining the required level of data quality. Consistency checks and re-checks were also made based on tabulation results. Computer programs used in data entry, machine editing and tabulation were prepared using the Integrated Microcomputer Processing System (IMPS).

## **2.7 Organization of the Report**

This report contains six chapters. The first chapter covers background to the survey, where the objectives and the contents of the survey questionnaire were discussed. Chapter II deals with the survey methodology, where scope and coverage, sample size and response rate, training of field staff, organization of field work, concepts and definitions of key variables, data processing and constraints of the survey and organization of the report. The results of the survey are presented in the subsequent four chapters, that is, chapters III to VI. Chapter III deals with the size and socio-demographic characteristics of the urban population such as the distribution of population by age, sex, and education. Chapter IV presents data on the economic participation of the population aged ten years and over.

Chapter V explores the characteristics of the employed population, finally Chapter VI focuses on the detailed characteristics of the unemployed population. Statistical tables corresponding to each of the summary chapters are presented in Annex I. Annex II and Annex III provide Survey Questionnaire and classification of Highest Grade Completed. Estimation procedures of total, ratio and sampling errors; and Estimates and CV's for Selected Tables are presented in Annex IV and Annex V, respectively.

# **CHAPTER III**

## **SIZE AND SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE URBAN POPULATION**

### **3.1 Introduction**

This chapter presents background information, which are pertinent in this and in the subsequent chapters. These include population size, age-sex structure, household size, educational attainment, literacy, training and marital status of the population. Moreover certain estimates like average household size; headship, dependency and sex ratios of the population are highlighted.

### **3.2 Sizes and Age-Sex Structure of the Urban Population**

Population Size is one of the most important variables in human development planning. The structure of the population in terms of age and sex is also another important aspect of demographic characteristics. Summary Table 3.1 presents the distribution of urban population covered by the survey classified by sex and region, while Summary Table 3.2 shows sex and age distribution of urban population the country and regions.

The survey result showed that the total urban population of the country in October 2003 to be 8,541,124, of which 4,083,933 (47.8 Percent) are males and 4,457,191 (52.2 Percent) are females. Oromia followed by Addis Ababa City Administrative, took the highest share out of the total urban population of the country, while the least percentage is observed for Harari Region.

The data in Summary Table 3.2 indicate that children below 15 years of age constitute 33.9 percent of the total urban population. Apparently, 28.4 percent of the urban population falls within youth (15-24 years) age group. Old age persons (65 years of age and over) constitute only about 3 percent. The children together with the youth make up 62.3 percent, characterizing a young age structure of the population.

### **3.3. Dependency Ratio and Sex Ratio of Urban Population**

One important implication of the age structure is the concept of dependency. Age dependency structure has an effect on the socio-economic development of a country. High age dependency increases the burden on the working population, as they have to support non-working population. The age dependency ratio, that is, the ratio of those below age 15 and over 65 years of age to those aged 15-64 years is estimated to be 58.4 percent. This means, there are 58.4 dependents for each 100 working age population. The total dependency ratio is composed of 53.8 child dependents and 4.6 elderly dependent. It should be noted that these measures are crude because the working age population did not consider actual engagement in productive activities.

**Summary Table 3.1 Distribution of Urban Population by Sex and Region: 2003**

Region	Both sexes		Male		Female		Sex Ratio
	No	%	No	%	No	%	
Country Total	8,541,124	100.0	4,083,933	100.0	4,457,191	100.0	91.6
Tigray	626,929	7.3	296,258	7.3	330,671	7.4	89.6
Afar	67,887	0.8	33,182	0.8	34,705	0.8	95.6
Amhara	1,461,250	17.1	674,254	16.5	786,996	17.7	85.7
Oromia	2,415,162	28.3	1,195,869	29.3	1,219,293	27.4	98.1
Somali	230,679	2.7	119,952	2.9	110,727	2.5	108.3
Benishangul-Gumuz	51,301	0.6	25,407	0.6	25,894	0.6	98.1
S.N.N.P.	973,885	11.4	479,716	11.7	494,169	11.1	97.1
Gambella	68,924	0.8	36,290	0.9	32,634	0.7	111.2
Harari	82,243	1.0	38,074	0.9	44,169	1.0	86.2
Addis Ababa City Admin.	2,356,661	27.6	1,085,656	26.6	1,271,005	28.5	85.4
Dire Dawa Adm. Council	206,202	2.4	99,274	2.4	106,928	2.4	92.8

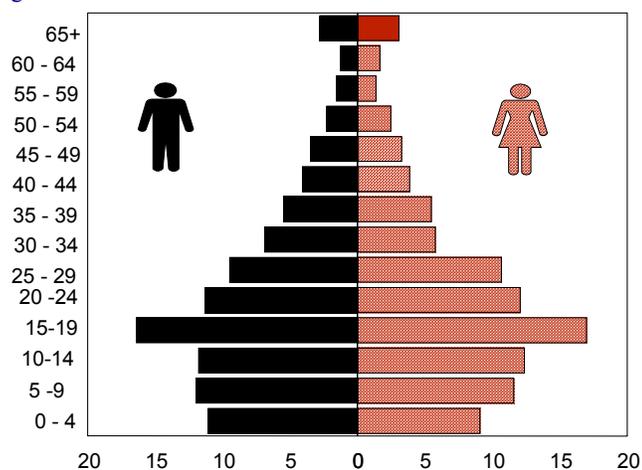
Further scrutiny of age pattern of the population pyramid presented in Figure 1 showed the fact that there is a general decline in fertility during recent years. The percentage of males and females in the age group 15-19 is found to be unusually (disproportionately) high. This could have happened partly due to age shift and partly due to migration of students from rural to urban areas.

Sex ratio is defined as the number of males per 100 females. The sex composition has an effect on economic activities through the relative size of the working population. Assuming no selective migration, sex ratio in the general population is expected to be 100. As a result the data in Summary Table 3.1 indicates the overall urban sex ratio is 91.6, showing excess females over males. Observation of sex ratio by regions reveals males predominantly exceeding females only in Gambella (111.2) and Somali region (108.3).

**Summary Table 3.2 Percentage Distribution of Urban Population by Age Group and Sex, (Country Total): 2003**

Age Group and Sex	Both sexes		Male		Female	
	No	%	No	%	No	%
All Ages	8,541,124	100.0	4,083,933	100.0	4,457,191	100.0
0 – 4	855,977	10.0	451,872	11.1	404,105	9.1
5 – 9	1,008,825	11.8	491,175	12.0	517,650	11.6
10 – 14	1,035,043	12.1	480,629	11.8	554,413	12.4
15 – 19	1,428,081	16.7	671,334	16.4	756,747	17.0
20 – 24	998,947	11.7	461,163	11.3	537,783	12.1
25 – 29	862,707	10.1	386,020	9.5	476,687	10.7
30 – 34	540,869	6.3	281,953	6.9	258,916	5.8
35 – 39	468,302	5.5	225,091	5.5	243,211	5.5
40 – 44	338,777	4.0	165,762	4.1	173,015	3.9
45 – 49	288,597	3.4	140,994	3.5	147,603	3.3
50 – 54	202,691	2.4	93,373	2.3	109,318	2.5
55 – 59	130,328	1.5	65,883	1.6	64,446	1.4
60 – 64	131,247	1.5	55,107	1.3	76,141	1.7
65+	250,734	2.9	113,577	2.8	137,156	3.1

**Figure 1 AGE - SEX DISTRIBUTION OF URBAN POPULATION :**



### 3.4 Number of Persons per Household and Average Household Size

Household characteristics affect the social and economic well being of the members of the household. Large household size is associated with crowding, which can lead to unfavorable health and economic conditions.

**Summary Table 3.3 Average Household Size of Urban Areas by Sex of Head of Household, Headship Rate and Region: 2003**

Regions	Male Headed			Female Headed			Total		
	All HHs	Av. HH size	Headship rate	All HHs	Av. HH size	Headship rate	All HHs	Av. HH size	Headship rate
Country	1,381,799	4.3	33.8	756,046	3.5	17.0	2,137,845	4.0	25.0
Tigray	91,627	4.0	30.9	85,521	3.0	25.9	177,148	3.5	28.3
Afar	14,921	3.5	45.0	5,530	2.9	15.9	20,451	3.3	30.1
Amhara	242,424	4.0	36.0	165,885	2.9	21.1	408,309	3.6	27.9
Oromia	414,435	4.1	34.7	201,971	3.5	16.6	616,406	3.9	25.5
Somali	37,458	4.7	31.2	14,941	3.8	13.5	52,399	4.4	22.7
Benshangul-Gumuz	10,531	3.7	41.4	4,305	2.8	16.6	14,836	3.5	28.9
S.N.N.P Region	166,563	4.3	34.7	71,431	3.6	14.5	237,994	4.1	24.4
Gambella	11,698	4.4	32.2	4,489	4.0	13.8	16,187	4.3	23.5
Harari	13,005	3.8	34.2	10,145	3.2	23.0	23,150	3.6	28.1
Addis Ababa City Admin.	348,672	4.7	32.1	173,563	4.1	13.7	522,235	4.5	22.2
Dire Dawa Adm. Council	30,464	4.5	30.7	18,264	3.7	17.1	48,728	4.2	23.6

Summary Table 3.3 shows the average household size by sex of head of household and headship rate of the urban population. The average number of members of households is estimated to be about four persons in the urban parts of the country. Average household size of higher than 5 persons is recorded in Addis Ababa, Dire Dawa and Somali regions. In all regions, average household size of male-headed households is higher than that of female-headed households. The headship rate of males exceeds the females in the total urban population and follows the same pattern in all regions.

### 3.5 Educational Attainment

In the survey, information on literacy status and educational attainment were collected from every member aged five years and over of the sampled household. A literate person was defined as one who had the ability of both reading and writing in at least one language, and educational attainment refers to highest grade completed for those who declare to be literate.

Summary Table 3.4 presents the literacy status and educational attainment of the surveyed urban population aged 10 years and over by sex. Accordingly, among the total urban population aged 10 years and over, 77.9 percent were found to be literate. Consistent with previous survey results, the proportion of literates among the males (88.4 percent) is higher than that of the females (68.5%).

The data in Summary Table 3.4 further reveals the distribution of literate persons by level of education. The categories of levels of education include Non formal, Grades 1-8, General education not completed, General education completed, Certificate, Diploma/degree not completed, and Diploma and

above. This classification is made in consultation with Ministry of Education and takes care of the new educational structure in the country.

**Summary Table 3.4 Percentage Distribution of Urban Population Aged 10 Years and Over by Sex, Literacy Status and Educational Attainment: 2003**

Literacy Status & Educational Attainment	Sex					
	Both Sexes		Male		Female	
	No.	%	No.	%	No.	%
All Persons	6,676,320	100.0	3,140,884	100.0	3,535,436	100.0
All Illiterate	1,478,059	22.1	362,939	11.6	1,115,120	31.5
All Literate	5,198,059	77.9	2,777,743	88.4	2,420,316	68.5
Not Stated	202	0.0	202	0.0	-	-
All Literate	5,198,059	100.0	2,777,743	100.0	2,420,316	100.0
Non-Formal	129,614	2.5	78,557	2.8	51,057	2.1
Grade 1-8	3,076,571	59.2	1,538,168	55.4	1,538,403	63.6
General Education Not Completed	435,260	8.4	252,823	9.1	182,437	7.5
General Education Completed *	1,058,711	20.4	582,203	20.9	476,508	19.7
Certificate	174,872	3.4	95,911	3.5	78,961	3.3
Diploma (10+3) Not Completed & Degree Not Completed	98,974	1.9	63,127	2.3	35,847	1.5
Diploma & Above	215,699	4.1	162,972	5.9	52,727	2.2
Not Stated	8,358	0.2	3,982	0.1	4,376	0.2

\* Includes those who completed preparatory grades

General education not completed comprises those who have completed grade 9-11 in the old Curriculum or program and those who have completed grade 9 in the new devised program. Respondents who have completed grade 10 in the new system and those who completed grade 12 in the old program are separately shown as "general education completed". The levels beyond general education constitutes those who completed certificate programs and those who have attended at least one year in Diploma (10+3) or Degree programs. Those respondents who have attended higher education and completed the Diploma or Degree program are categorized as Diploma and above. Detailed description of these categories is attached in Annex IV.

The over all educational composition of the total urban literate population shows that substantially high proportion (59.2%) attaining elementary education (Grade 1-8). On the other hand, those who are at the level of 'general education not completed' constituted 18.1 percent of the literate population. Literate females tend to concentrate at the lowest levels of education than their male counterparts. For

instance the proportion who completed grade 1-8 is 63.6% for the females and 55.4% for the males, where as females with diploma or more constitute 2.2% against 5.9% for the males.

Summary Table 3.5 provides the distribution of urban literate population of regions classified by sex. According to the data in the table, Addis Ababa City Administration and Oromia Region stood top in terms of proportion literate population, with 82.4 percent, 80.9 percent. These are closely followed by Harari and S.N.N.P, with 80.5 percent and 79.0 percent respectively.

**Summary Table 3.5 Proportion of Urban Literate Population Aged 10 Years and Over by Sex and Region: 2003**

Region	Both Sexes		Male		Female	
	No.	%	No.	%	No.	%
<b>Country Total</b>	5,198,057	77.9	2,777,741	88.4	242,036	68.5
<b>Tigray</b>	346,939	72.3	189,019	86.2	157,920	60.6
<b>Afar</b>	36,989	68.8	21,303	79.8	15,686	58.0
<b>Amhara</b>	832,027	72.3	445,160	85.9	386,867	61.1
<b>Oromiya</b>	1,516,308	80.9	835,319	90.5	680,989	71.5
<b>Somali</b>	78,272	49.8	52,024	65.7	26,248	33.6
<b>Benishangul- Gumuz</b>	28,809	74.2	16,184	83.7	12,625	64.9
<b>SNNP</b>	578,986	79.0	315,668	88.4	263,318	70.1
<b>Gambella</b>	36,968	74.6	22,560	88.5	14,408	59.9
<b>Harari</b>	52,675	80.5	27,976	94.3	24,699	69.0
<b>Addis Ababa City Admin.</b>	1,578,803	82.4	791,150	90.9	787,653	75.2
<b>Dire Dawa Adm. Council</b>	111,279	71.2	61,377	84.5	49,902	59.6

### 3.6 Training Status of the Urban Population

Training increases the chance of getting employment and develops productivity of workers. In this survey, every member of the household aged 10 years and over was asked to state whether he/she had any kind of training, i.e., professional, vocational or technical, regardless of the duration of training. Those persons who took any sort of training and received a Certificate or Diploma are considered as trained, those who do not have any certified training are described as not trained.

Summary Table 3.6 presents the training status of urban population of regions by sex. It could be observed that out of the total persons aged 10 years and over, about 12.3 percent were trained, while predominately higher proportion, i.e., 87.7 percent were not trained.

Further classification of the trained population by sex reveals that the proportion of trained males (17.3 percent) exceeding more than twice that of the females (7.8 percent). The proportion of trained

population by sex in all regions shows the same pattern with males exceeding females. Among the regions, Addis Ababa and Harari are at the top-position, i.e., with 16.8 percent and 16.4 percent, respectively. On the other hand, Somali and Afar regions, are at the bottom (5.5 percent and 7.8 percent, respectively) in terms of proportion of trained population.

**Summary Table 3.6 Distribution of Urban Population Aged Ten Years and Over by Sex, Region, and Training Status: 2003**

REGION	All Persons			Training Status					
				Not Trained			Trained		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Country Total	6,676,323	3,140,886	3,535,437	87.7	82.7	92.2	12.3	17.3	7.8
Tigray	479,777	219,386	260,391	89.9	85.4	93.6	10.0	14.6	6.2
Afar	53,741	26,699	27,042	92.1	88.3	95.9	7.8	11.6	4.1
Amhara	1,150,783	518,029	632,754	89.8	84.5	94.2	10.2	15.5	5.8
Oromia	1,875,216	923,240	951,976	90.1	85.8	94.2	9.9	14.1	5.7
Somali	157,207	79,185	78,022	94.4	90.3	98.5	5.5	9.4	1.5
Benshangul-Gumuz	38,803	19,336	19,467	87.3	81.8	92.9	12.7	18.2	7.1
SNNP	732,527	357,068	375,459	87.1	82.4	91.6	12.8	17.5	8.3
Gambella	49,541	25,489	24,052	89.7	84.4	95.3	10.3	15.6	4.7
Harari	65,458	29,658	35,800	83.6	76.8	89.3	16.4	23.2	10.7
Addis Ababa City Adm.	1,916,901	870,176	1,046,725	83.2	77.0	88.4	16.8	23.0	11.6
Dire Dawa Adm. Council	156,369	72,621	83,748	87.4	81.1	92.9	12.6	18.9	7.1

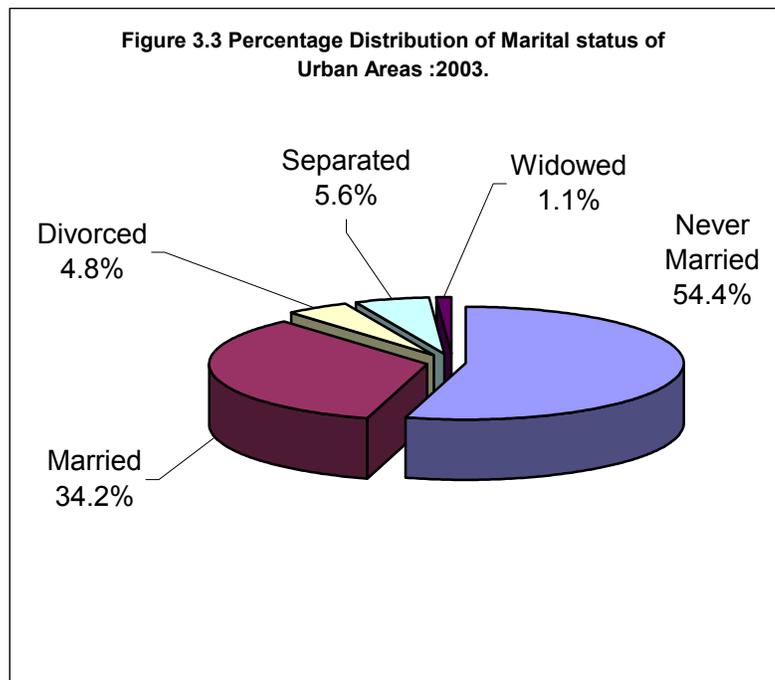
### 3.7 Marital Status of The Urban Population

The survey has collected data on the marital status of the population aged 10 years and over. Marital status was classified into five major groups, i.e., never married or single, married, divorced, separated and widowed. Married person is a person who is living together with a couple bonded by any kind of marital engagement at the time of the survey, i.e., whether legal, religious or traditional. Divorced person is a person who had been married but whose marital engagement was dissolved before the date of interview, while separated persons are considered as those temporarily separated but did not dissolve their engagement. A person who has not remarried after the death of a spouse is considered as widowed.

Summary Table 3.7 presents the percentage distribution of the marital status of respondents aged 10 years and over by sex and region. The result indicates that 54.4 percent of the population aged 10 years and over residing in urban areas are never married. About 34 percent are married, while about 12 percent of the population has once been in marriage but dissolved permanently or temporarily through a divorce, separation or death of spouse.

The data among sexes revealed that 60.9 percent of males and 48.5 percent of females are never married, 35.1 percent of the males and 33.3 percent of the females are married, while about 4 percent of the males and 18.1 percent of the females are divorced, separated or widowed.

Further more, it is observed that the incidence of being single is highest (58 percent) for Addis Ababa populations closely followed by Oromia Region (56 percent). The proportion of divorce was found to be highest for Tigray Region (9.2 percent) followed by Amahara Region (8.6 percent) while Harari Region registered the highest proportion of separated persons (11.4 percent) than the other regions.



**Summary Table 3.7 Percentage Distribution of Urban Population Aged 10 years and Over by Sex, Marital Status and Region: 2003**

Selected Background variables	All		Marital Status					
	Persons	%	Never Married	Married	Divorced	Separated	Widowed	Not Stated
<b>Sex</b>								
Both sexes	6,676,324	100.0	54.4	34.2	4.8	5.6	1.1	0.0
Male	3,140,887	100.0	60.9	35.1	1.9	1.5	0.6	0.0
Female	3,535,437	100.0	48.5	33.3	7.3	9.2	1.6	0.0
<b>Region</b>								
Tigray	479,776	100.0	50.3	32.0	9.2	7.0	1.5	0.0
Afar	53,742	100.0	42.1	44.7	6.3		6.1	0.8
Amhara	1,150,780	100.0	51.4	32.8	8.6	6.5	0.7	0.0
Oromiya	1,875,214	100.0	55.9	33.8	3.4	5.7	1.1	0.0
Somali	157,205	100.0	45.4	44.6	3.1	5.2	1.7	-
Benishangul - Gumuz	38,803	100.0	47.9	42.2	6.5	3.0	0.4	-
SNNP	732,527	100.0	54.4	36.9	3.2	4.7	0.7	-
Gambella	49,541	100.0	48.2	39.2	4.7	6.7	1.1	-
Harari	59,526	100.0	48.6	33.7	4.3	11.4	1.8	
Addis Ababa City Admin.	1,916,902	100.0	57.6	33.1	3.5	4.6	1.2	0.1
Dire Dawa Adm. Council	156369	100.0	49.6	37.5	3.5	6.9	2.5	-

## **CHAPTER IV**

# **ECONOMICALLY ACTIVE AND NON-ACTIVE POPULATION**

### **4.1 INTRODUCTION**

This chapter presents some of the major findings of the survey on the economically active and non-active population. The data on economically active population relates to that of the size and distribution of the work force engaged or available to be engaged in the production of economic goods and services during a given reference period. Such data together with other labour market information would be of a springboard for a clear formulation, monitoring and evaluation of policies and strategies on human resource development.

In terms of activity status, the survey divided the population aged ten years and over into economically active and inactive categories. The lower age limit was fixed at ten years to allow comparisons with other countries and to incorporate information about those children, who start taking part in many types of economic activities at young ages.

Economic activity in the survey was defined in terms of production of goods and services that fall within the United Nations System of National Accounts (SNA) production boundary (ILO, 1990). Hence, in the 2003 Urban Biannual Employment and Unemployment Survey, economic activity is defined as work, which involves the production of goods and/or services for sale or exchange and production of certain products for own consumption. According to the above general definition, economic activity covers production of goods and services intended for sale on the market, production of other goods and services such as government activities; production and processing of primary products (agriculture, hunting, fishing, forestry and logging; and mining and quarrying) for own consumption, processing of primary products by the producers themselves, production of other commodities where part of it is sold on the market; and own account construction and fixed asset formation (expected life use of one year or more). Such economic activities could be performed for an individual, family or private enterprise, government establishment or public organization. The remuneration may be on daily, weekly, monthly, yearly or contract basis. On the other hand, unpaid household chores such as preparing food, cleaning the house, taking care of children or collecting firewood for own consumption are not considered in the category of economic activity. Similarly, unpaid community and volunteer services and prostitution are classified as non-economic activities.

All persons aged ten years and over who were productively engaged or available to be engaged during the reference period were included as economically active persons. In other words, the economically active population comprises all persons aged ten years and over who were employed or unemployed in the reference period. The complements, i.e., those who were neither engaged nor furnish their labour constitute the economically inactive population.

## **4.2 Measurement Approaches of the Economically Active Population**

The two approaches, i.e., usual and current status approaches used for measuring the economically active population were employed in the survey. In the usual status approach, all persons aged ten years and over were asked to report whether they were engaged in productive activities or available to be engaged at work at least some time during the six calendar months prior to the survey month. Those persons who have been engaged or available to be engaged at work for sometime during the six months were asked the number of weeks they spent on each activity status month by month. Based on this information, persons were categorized as employed and unemployed on the basis of majority rule, i.e., persons who were working and/or available to work for at least half of the total number of weeks (thirteen weeks) during the six months were classified as economically active. Among the economically active, those who spent at least half of their active period at work were categorized as employed. On the other hand, persons were categorized as unemployed if their availability period is greater than the employment period.

It follows that, those who neither engage nor available to work in productive activity during most of the reference period due to homemaking, education, illness, etc. are classified as the economically inactive. The economically inactive persons were further asked to report why they were not so engaged or available to be engaged during most of the six months period.

The current status approach measures the activity status in relation to a short reference period, i.e., the seven days prior to the date of the interview. In this approach a series of inquiries related to engagement in economic activity, seeking and availability to work, reason for not being available to work, ...etc., were administered to determine the economic activity status of the population aged ten years and over. These questions are used to divide the population aged ten years and above into the three mutually exclusive categories: employed, unemployed and not in the labour force. If a person experienced a combination of the three status in a week, priority rule is applied in favor of employment over the other two status and unemployment over inactive. As in the case of usual status approach the

employed and the unemployed populations together make up the labour force or the currently active population. The third category, that is, those not in the labour force, represented the population not currently active.

The employed population based on the current activity status approach consisted those who were engaged in productive activity at least for four hours during the seven days prior to the date of the interview. Persons who had regular jobs, or business, or holdings to return to but temporarily absent from work (that is, not at work or worked less than four hours) for various reasons were also included as employed persons.

For a person to be considered as absent from work, he/she must have formal attachment to the job. Employees who were fully/partly paid during their absence, those who will return to their work when relieved from their problem, and those who were not absent for a total of two months are considered to have formal job attachment. Self-employed persons are considered to have formal job attachment; if their place of work/ business is not closed down during their absence from work or they are sure it will be re-opened/continue to function if it is closed down. Whereas, the unemployed population, which will be defined in detail in Chapter VI, consists of persons without work but who are willing /available and ready to work if any job was found during the one month period after the date of the interview.

### **4.3 The Economically Active Population**

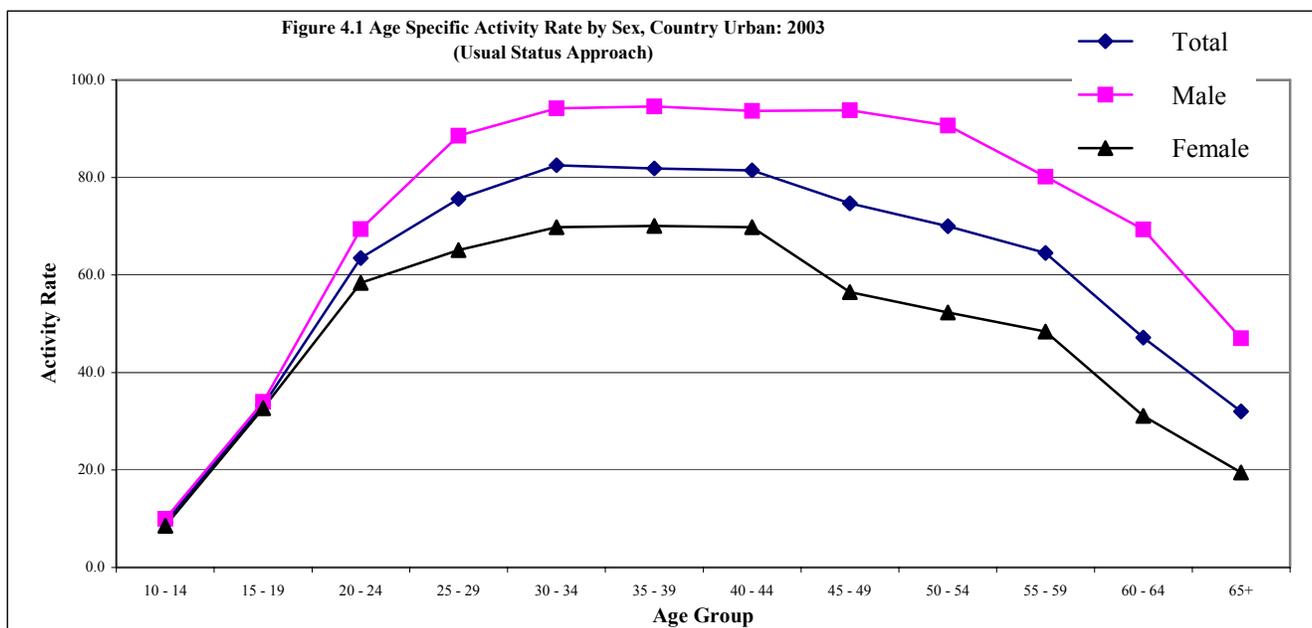
This section presents the size of the economically active and non-active population as measured based on usual and current status approaches. Economic activity rate, which is also called the participation rate of a population are also presented along with the size of economically active population. The economic activity rates are good indicator about the economic condition of an area at a given period of time. The rate is computed as the percentage of the economically active population over the total of the active and the inactive population.

#### **4.3.1 Usual Status Approach**

The size of the active and non-active population during both the last six months (usual status approach) and the last seven days (current status approach) along with the corresponding activity rates are presented in Summary Table 4.1. Accordingly, the size of the active and the non-active population of the urban parts of the country in the usual status approach showed a comparable figure, i.e., is 3,546,792 and 3,129,532, respectively. The data thus resulted in an activity rate of 53.1 percent. With

regard to the difference by sex, the activity rate of males is found to be higher (61.6 percent) than their female counterparts (45.6 percent). Regarding the relationship between age and activity rate, the data in the table depicts a curvilinear association. That is, low and increasing participation of persons at a younger age and high and relatively stable for middle ages (between age group 30-44 years) and then a steady decline at older age groups (see Figure 4.1). Higher proportion of females tends to exit the labour force earlier (age 40-44 years) than the males (age 50-54 years). Also, economic activity rates for males are higher than that of the females in all age groups. The higher involvement of females in the housekeeping activities, which is considered to be non-productive, are may be accountable for the lesser activity rates among them.

Looking the activity rates of regions in the last six months, the highest was reported for Addis Ababa City Administration (about 57 percent), while Tigray and Benishangul-Gumuz regions have shown the least participation rate compared to other regions i.e., 46.6 percent each. Participation rates observed for longer reference period were found to be lower as compared to the corresponding current status rates for the country and all regions (See Summary Table 4.2). Among males, Addis Ababa City Administration and Tigray Region showed the highest and lowest activity rate, i.e., 71.3 percent and 51.0 percent, respectively. Where as, Gambella and Tigray Regions registered the highest and lowest participation rates among females.



**Summary Table 4.1 Distribution of Urban Population Aged Ten years and over by Age Group, Sex, Activity Status and Activity Rate, Country Total: 2003**

Age Group and Sex	All Persons	Usual approach			Current approach			
		Active Population	Non-active Population	Activity Rate	Active Population	Non-active Population	Not Stated	
All ages								
Total	6,6763,24	3,546,792	3,129,532	53.1	3,868,400	2,807,775	149	57.9
Male	3,140,888	1,933,491	1,207,397	61.6	1,974,424	1,166,315	149	62.9
Female	3,535,436	1,613,301	1,922,135	45.6	1,893,976	1,641,460	0	53.6
10 – 14								
Total	1,035,043	95,561	939,482	9.2	105,391	929,651	0	10.2
Male	480,630	48,028	432,602	10.0	48,793	431,836	0	10.2
Female	554,413	47,533	506,880	8.6	56,598	497,815	0	10.2
15 – 19								
Total	1,428,081	475,847	952,234	33.3	515,214	912,718	149	36.1
Male	671,334	228,403	442,931	34.0	221,782	449,403	149	33.0
Female	756,747	247,444	509,303	32.7	293,432	463,315	0	38.8
20 – 24								
Total	998,947	633,835	365,112	63.5	709,545	289,401	0	71.0
Male	461,164	319,934	141,230	69.4	327,786	133,377	0	71.1
Female	537,783	313,901	223,882	58.4	381,759	156,024	0	71.0
25 – 29								
Total	862,708	652,413	210,295	75.6	732,022	130,684	0	84.9
Male	386,021	342,067	43,954	88.6	352,887	33,133	0	91.4
Female	476,687	310,346	166,341	65.1	379,135	97,551	0	79.5
30 – 34								
Total	540,868	446,254	94,614	82.5	481,735	59,134	0	89.1
Male	281,952	265,574	16,378	94.2	271,282	10,671	0	96.2
Female	258,916	180,680	78,236	69.8	210,453	48,463	0	81.3
35 – 39								
Total	468,302	383,382	84,920	81.9	412,927	55,375	0	88.2
Male	225,091	212,916	12,175	94.6	219,383	5,708	0	97.5
Female	243,211	170,466	72,745	70.1	193,544	49,667	0	79.6
40 – 44								
Total	338,777	275,994	62,783	81.5	294,491	44,286	0	86.9
Male	165,762	155,263	10,499	93.7	158,832	6,930	0	95.8
Female	173,015	120,731	52,284	69.8	135,659	37,356	0	78.4
45 – 49								
Total	288,597	215,561	73,036	74.7	230,099	58,498	0	79.7
Male	140,994	132,233	8,761	93.8	135,922	5,072	0	96.4
Female	147,603	83,328	64,275	56.5	94,177	53,426	0	63.8
50 – 54								
Total	202,691	141,811	60,880	70.0	150,367	52,326	0	74.2
Male	93,373	84,670	8,703	90.7	86,740	6,634	0	92.9
Female	109,318	57,141	52,177	52.3	63,627	45,692	0	58.2
55 – 59								
Total	130,329	84,050	46,279	64.5	87,823	42,505	0	67.4
Male	65,883	52,835	13,048	80.2	55,099	10,784	0	83.6
Female	64,446	31,215	33,231	48.4	32,724	31,721	0	50.8
60 – 64								
Total	131,248	61,949	69,299	47.2	65,955	65,293	0	50.3
Male	55,107	38,235	16,872	69.4	40,882	14,225	0	74.2
Female	76,141	23,714	52,427	31.1	25,073	51,068	0	32.9
65+								
Total	250,733	80,135	170,598	32.0	82,831	167,904	0	33.0
Male	113,577	53,333	60,244	47.0	55,036	58,542	0	48.5
Female	137,156	26,802	110,354	19.5	27,795	109,362	0	20.3

### **4.3.2. Current status approach**

According to this survey, the total labour force of urban areas of the country as measured using current status approach is estimated to be 3,868,400. This gives an activity rate of about 58 percent. As in the case of usual approach, economic participation rate of the males is higher (62.9 percent) than that of the females (53.6 percent). The age pattern of economic participation rates, shown in Figure 4.2, resembles that observed in the usual status approach. The levels at all age are; however, higher in the current than usual status approach. The overall economic participation rate has declined from 65 percent in 1999 to its present rate of 58 percent. The decline is more pronounced for the young age below age 24 and for older person aged 60 and above. The decline in activity rate could partly be explained by the increase in school attendance. The highest activity rate (97.5 percent) among the males is observed at the age group 35 – 39 while the peak (81.3 percent) for females is at the age group 30 – 34 years.

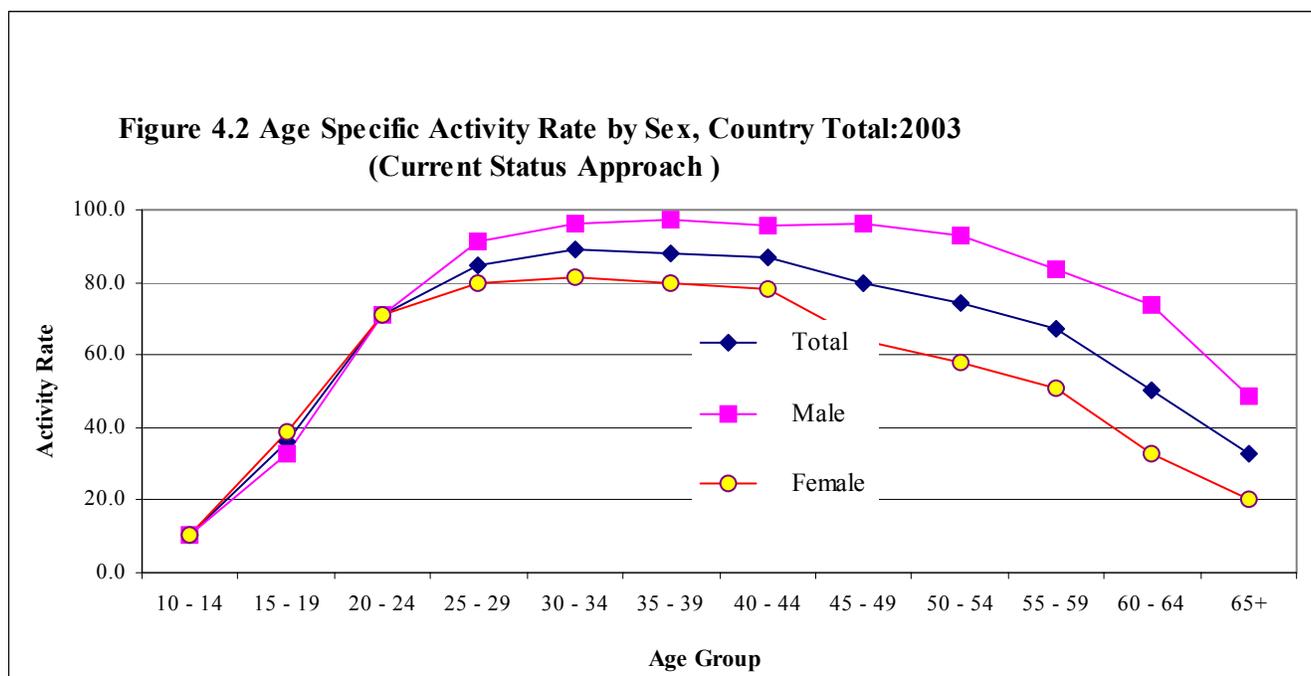
In the current status approach, Affar Region has shown the highest (65.0 percent) participation rate as compared to other regions, while Tigray Region has registered the least participation rate 48.8 percent (See Summary Table 4.2). In Addis Ababa City Administration, Dire dawa Administrative Council, and Harari region, the participation rates were observed to be more than 61.5 percent. Among the males the lowest and highest current participation rates are recorded for Tigray Region (51.0 percent) and Addis Ababa City Administration (71.3 percent).

### **4.4 Reason for Being Economically Inactive**

In this survey, persons are broadly categorized as active and non-active population. As defined in section 4.2 of this chapter, the former comprises employed and unemployed persons, while the latter consists of those neither employed nor unemployed. Persons who were economically inactive (i.e. those who were not engaged and/or not available to be engaged in productive activities) were asked to state the main reason for not participating in productive activities during the last six months. The size of the non-active population aged 10 years and over is presented in Summary Table 4.1 along with the active population. Accordingly, there were 3,129,532 persons, who were economically inactive during the six months period prior to October 2003. Similarly there were 2,807,775 inactive persons in the current status approach.

**Summary Table 4.2 Economic Activity Rate of Population Aged Ten years and over by Sex and Region in the Current Status Approach & Usual Status Approach: 2003**

Regions	<i>Economic Activity Rate</i>					
	Current Status			Usual Status		
	Total	Male	Female	Total	Male	Female
Country Total	57.9	62.9	53.6	53.1	61.5	45.6
Tigray	48.8	51.0	47.1	46.6	49.7	43.9
Affar	65.0	69.5	60.5	56.1	64.7	47.6
Amhara	54.8	57.4	52.6	51.4	56.4	47.3
Oromia	55.9	60.1	51.8	51.4	60.5	42.6
Somali	56.8	62.3	51.2	52.1	60.4	43.7
Benishangul-Gumuz	52.3	59.3	45.4	46.6	56.4	36.8
S.N.N.P.	59.4	63.4	55.6	54.1	61.8	46.8
Gambella	59.8	63.5	55.9	55.2	61.7	48.2
Harari	61.5	66.7	57.3	54.5	62.8	47.7
Addis Ababa City Admin.	62.9	71.3	55.9	56.9	68.7	47.1
Dire Dawa Adm. Council	62.9	64.7	61.4	54.2	59.9	49.2



Accordingly the resulting data presented in Summary Table 4.3, the majority (61.8 percent) of the inactive persons reported education, i.e., being a student as a reason for their inactivity. Homemaking contribute significantly (18 percent) to inactivity in urban areas. Illness or injury and pension/old age make up 7.1 percent and 6.3 percent, respectively. Being student is more common reason among the male (80 percent) than the females (51.6 percent), while as expected, homemaking pertains to inactive females not to males. Similar to the country figure, in the majority of regions, more than three-fifths of the inactive were found to be students followed by homemakers. The contribution of homemakers is relatively higher among inactive persons of Somali and Affar regions. On the other hand, compared to other regions, higher proportion of inactive persons in Somali Region and Dire Dawa Administrative Council stated that they did not participate in economic activity because they were too young to work.

**Summary Table 4.3 Distribution of Economically Non-Active Population by Regions and Reason for not being Active, During the last Six Months (Usual Status Approach - Country Total): 2003**

Regions	Total Non - active		Reason for not being active							
	No.	%	Home making	Student	Disabled	Illness	Too young	Prostitutes	Pensioned/old age	Others
Country Total	3,129,480	100.0	18.0	61.8	0.7	6.4	2.5	0.2	6.3	3.9
<i>Sex</i>	3,129,480	100.0	18.0	61.8	0.7	6.4	2.5	0.2	6.3	3.9
<i>Male</i>	1,207,398	100.0	2.1	79.5	1.0	5.6	2.8	0.0	5.3	3.3
<i>Female</i>	1,922,082	100.0	28.0	50.7	0.5	6.9	2.3	0.3	6.8	4.2
<i>Region</i>										
Tigray	256,353	100.0	13.4	61.0	2.1	7.9	4.4	0.4	8.1	2.7
Affar	23,511	100.0	26.0	53.6	0.2	7.7	2.1	0.0	4.0	6.1
Amhara	558,709	100.0	16.9	65.6	0.9	6.0	2.1	0.5	6.5	1.6
Oromia	910,903	100.0	17.1	63.4	0.7	6.5	2.6	0.2	5.7	3.7
Somali	75,290	100.0	30.9	45.5	0.3	4.0	6.4	0.0	6.4	6.3
Benishangul-Gumuz	20,646	100.0	21.7	66.6	0.3	3.0	2.1	0.9	2.6	2.7
S.N.N.P.	335,552	100.0	18.2	65.0	0.2	6.0	3.6	0.2	3.7	2.9
Gambella	22,182	100.0	22.2	62.4	1.0	4.0	4.1	0.0	4.4	2.0
Harari	29,762	100.0	18.9	51.0	2.2	8.5	1.0	0.0	10.5	6.4
Addis Ababa City Admin.	824,941	100.0	19.4	59.3	0.3	6.6	1.0	0.1	7.1	5.6
Dire Dawa Adm. Council	71,637	100.0	17.7	50.3	0.4	6.2	8.5	0.0	7.5	9.0

*Note: The percentages of Not Stated cases are not shown in the Summary Table*

#### 4.5 Economic Dependency Ratio Based On the Current Activity Status Approach

All persons in the working age group do not participate at work. Parts of the population do not work or look for work due to various reasons. So as to have a means to their survival they depend on those who

already engaged or available to be engaged in productive activity. The ratio of persons in the dependent category to those of economically active groups provides a useful approximation to economic dependency burden. The economic dependency ratio is defined as population not in the labour force (current status approach) to that of population in the labour force (Shryock, 1976). Summary Table 4.4 presents economic dependency ratio by sex and region. The data in the table shows the economic dependency ratio for both sexes at country level to be 120.8 per 100 active persons. This means for each 100 economically active persons there are about 121 dependents to be supported in terms of food, clothing, health, education and the like. As observed from the table females were more dependent as compared to males 135 against 107, respectively.

Summary Table 4.4 further shows a marked difference between regions' economic dependency. The highest economic dependency burden was found in Tigray Region, with about 168 dependents per 100 economically active persons, followed by Somali Region (158.4 dependents per 100 active persons). Benishangul-Gumuz, Gambella, Amhara, and Oromia regions reported to have about 153, 133, 132 and 131 dependents per 100 active persons, respectively. The lowest economic dependency ratio is reported for Affar region (93.6 dependents per 100 active persons).

#### **4.6 Current Activity Rate by Some Background Variables**

In this section, the differentials of activity rates in relation to educational attainment and marital status are presented (see Summary Table 4.5). According to the survey result the current activity rates for the illiterate and literate populations were 49.8 percent and 40.8 percent, respectively. A similar pattern was observed for both females & males. The literate showed slightly lower activity rate than the illiterate because part of the former group are students who stay in school and cannot be engaged or furnish their labour for production of goods and services. Among the literate category, persons who have educational level of diploma and above recorded the highest activity rate (86.3 percent). The second highest rate was registered for those who have certificate (about 80 percent) followed by those who became literate through non-formal education (57.4 percent).

The activity rate for persons who completed General Education (that is in the ex-curriculum grade 12 completed and the new curriculum 10th grade completed) was 47.0 percent. The pattern was similar for both sexes, but more active persons were found among the males than the females at all educational levels.

Concerning the relationship between activity rate and marital status, the survey result in Summary Table 4.5 shows slight variation among the married (60.9 percent) and divorced (61.2 percent). The highest activity rate was recorded for separated (66.2 percent), while never married, exhibited the lowest activity rate of 29.2 percent at country level. The major reason for lower percentage of inactives among the never married could be of that most of the single are young and attending school. In all categories of marital status, the males show higher activity rates than the females. The marital status pattern of economic participation rate showed variation between sexes. For the males, the married group had the highest rate (83.5 percent) followed by the separated (82.9 percent).

**Summary Table 4.4 Distribution of Population Aged Ten Years and Over by Economic Dependency Ratio, Sex and Region, Country Total: 2003**

Regions	Sex					
	Both sexes		Male		Female	
	No.	%	No.	%	No.	%
Country Total	4,672,725	120.8	2,109,510	106.8	2,563,215	135.3
Tigray	392,613	167.6	184,477	165.0	208,136	169.9
Affar	32,824	93.6	14,557	78.2	18,267	111.1
Amhara	831,070	131.9	376,668	126.6	454,402	136.6
Oromia	1,367,665	130.6	641,211	115.6	726,454	147.4
Somali	141,399	158.4	70,635	143.2	70,764	177.1
Benishangul-Gumuz	30,999	152.7	13,946	121.7	17,053	192.9
S.N.N.P.	538,381	123.6	253,165	111.7	285,216	136.5
Gambella	39,297	132.6	20,099	124.1	19,198	142.9
Harari	41,974	104.2	18,303	92.6	23,671	115.5
Addis Ababa City Admin.	1,148,723	95.1	464,193	74.7	684,530	116.7
Dire Dawa Adm. Council	107,777	109.5	52,254	111.1	55,523	108.0

Among the females, the separated took the leading position (60.9 percent) closely followed by the divorced (60.1 percent) and the widowed group (42.0 percent). The relatively higher participation rate for married group among men is not surprising in view of the fact that, the husband is considered as the major bread winner for the family in the country.

**Summary Table 4.5 Distribution of Current Activity Rate by Some Background Variables and Sex Country Total: 2003**

Background Variables	Sex		
	Total	Male	Female
<b>Educational Attainment</b>			
Illiterate	49.8	63.9	45.3
Literate	40.8	50.3	29.9
Non Formal	57.4	63.4	48.1
Grades 1-8	34.3	43.9	24.8
General Education Not Completed	34.3	42.4	23.0
General Education completed	47.0	56.1	36.1
Certificate	79.9	84.3	74.6
Diploma/10+3/not complete & Degree not completed	35.7	39.5	29.0
Diploma & Above	86.3	90.0	74.6
<b>Marital Status</b>			
Never Married	29.2	32.8	25.2
Married	60.9	83.5	39.8
Divorced	61.2	65.6	60.1
Widowed	43.6	55.4	42.0
Separated	66.2	82.9	60.9

\* Includes those who completed preparatory grades

## **CHAPTER V**

### **CHARACTERISTICS OF THE CURRENTLY EMPLOYED POPULATION**

#### **5.1 Introduction**

As defined in the previous chapter, the employed population in the current status approach consists of those who were engaged in productive activity for four hours or more during the seven days prior to the date of the interview. Persons who had regular jobs or business or holdings to return to but were absent from work (i.e., not at work or worked less than four hours) for various reasons were also included as employed persons. In this chapter, some of the characteristics of the currently employed population will be presented.

#### **5.2 Employment to Population Ratio**

Employment to Population Ratio is calculated as a percentage of total employment to that of the working age population. According to the data in Summary Table 5.1, the employment to population ratio for urban parts of the country in the 2003 survey was 42.8 percent. This means, 42.8 percent of the total population of the urban areas of the country aged 10 years and over was working during the reference period. The ratio for the males (51.8 percent) is higher than the ratio of the females (34.8 percent).

Apparently, the highest employment to population ratio (53.9 percent) is reported for Gambella followed by S.N.N.P. (47.9 percent) and Affar (47.2 percent) regions. The lowest employment to population ratio was recorded for Tigray Region (34.8 percent).

#### **5.3 Occupation and Industry**

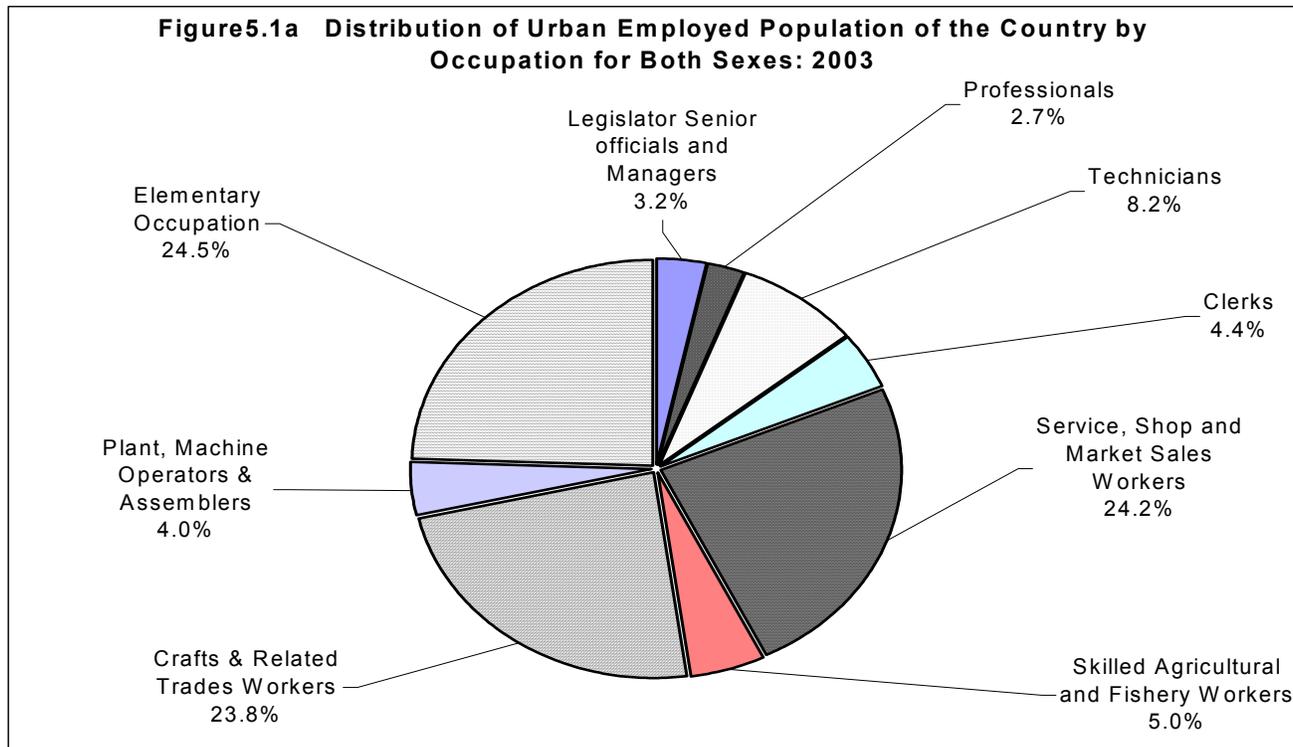
Responses of the type of occupation and industry of employed persons were coded for the first time in the field and further verified at the head office during data editing and coding stage, using the National Occupation and Industry Classification (NOIC) code book. The NOIC codes were adopted from the International Standard Classification of Occupation (ISCO-88) and International Standard Industrial

Classification (ISIC, 1990), taking into account the prevailing national socio-economic conditions. The NOIC uses a 3-digit coding system corresponding to 3 level classifications in successively finer detail. In the case of occupation, these levels referred as Major group, Sub-major group and Minor group. In the case of industry, the levels are ordered as Major division, Sub-major division and Minor division. In the NOIC, the occupational classification was categorized into 9 major groups, 28 sub-major groups and 113 minor groups. Whereas, the industrial classification contains 13, 60, and 159 major, sub-major and minor divisions, respectively.

**Summary Table 5.1 Distribution of Urban Employed Population of Regions Aged Ten Years and Over by Sex and Employment to Population Ratio, country-Total: 2003**

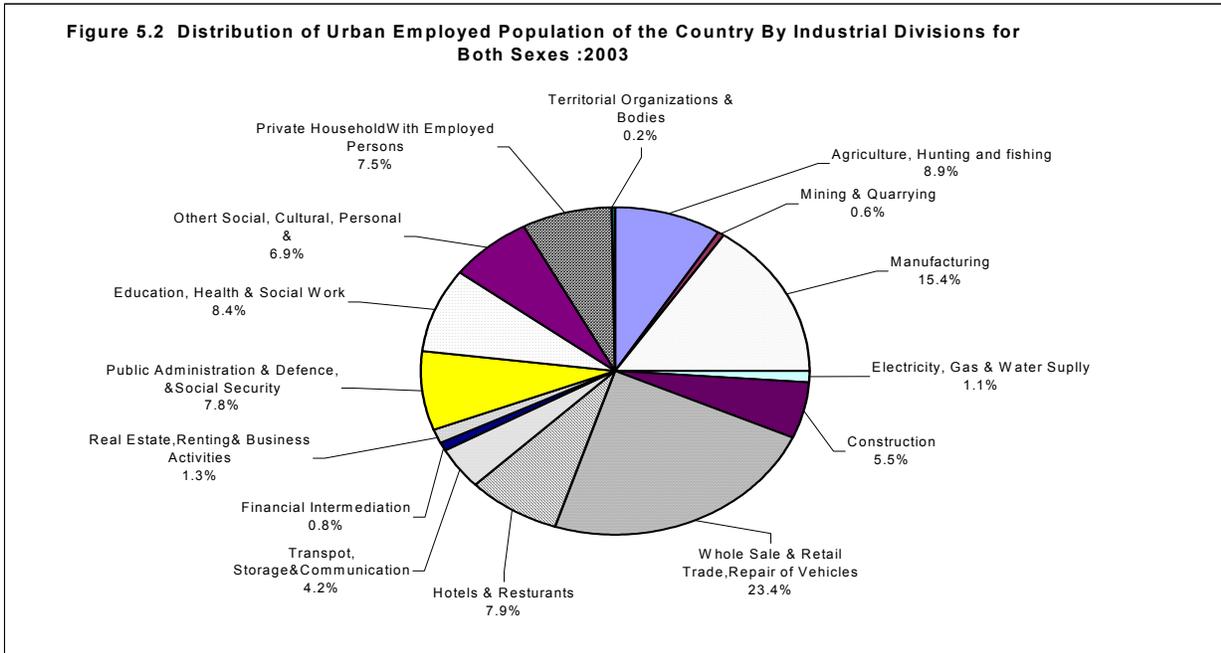
Region	Total Population			Total Employed Population			Employment to Population Ratio		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Regions	6,676,323	3,140,886	3,535,437	2,858,027	1,628,523	1,229,504	42.8	51.8	34.8
Tigray	479,777	219,386	260,391	166,921	88,706	78,215	34.8	40.4	30.0
Affar	53,741	26,699	27,042	25,369	15,705	9,664	47.2	58.8	35.7
Amhara	1,150,783	518,029	632,754	494,016	250,028	243,988	42.9	48.3	38.6
Oromia	1,875,216	923,240	951,976	793,242	464,388	328,854	42.3	50.3	34.5
Somali	157,207	79,185	78,022	73,409	43,492	29,917	46.7	54.9	38.3
Benishangul-Gumuz	38,803	19,336	19,467	17,242	10,701	6,541	44.4	55.3	33.6
S.N.N.P	732,527	357,068	375,459	351,189	200,183	151,006	47.9	56.1	40.2
Gambella	49,541	25,489	24,052	26,715	15,566	11,149	53.9	61.1	46.4
Harari	65,458	29,658	35,800	29,232	16,138	13,094	44.7	54.4	36.6
Addis Ababa City Admin.	1,916,901	870,176	1,046,725	819,625	489,499	330,126	42.8	56.3	31.5
Dire Dawa Adm. Council	156,369	72,621	83,748	61,067	34,117	26,950	39.1	47.0	32.2

Figure 5.1a presents the distribution of the currently employed population aged 10 years and over by major occupational groups at country urban level. As observed from the figure nearly three-fourths of urban employed population of the country are engaged in three equally competent occupations, namely elementary occupation (24.5 percent), service, shop and market sales workers (24.2 percent), and craft and related activities (23.8 percent). Technical and associate professionals stand at the middle of the spectrum (8.2 percent). While those persons working professional and legislator occupations took the lowest position, each contributing about 3 percent.



Fewer females are engaged as professionals and legislator as well as in skilled agricultural workers and machine operators. On the other hand, more females are engaged in elementary occupation, service sector, clerk areas as compared to that of males. The occupation structure remains almost the same as compared to the 1999 Labour Force Survey result, with slight increase in the white-collar occupation (professional and legislator) and technicians.

Figure 5.2 shows the major industrial divisions of the urban employed population of the country aged 10 years and over. As expected, most urban people are absorbed by wholesale and retail trade and manufacturing activities, making up 23.4 percent and 15.4 percent, respectively. Those who have worked in private households; hotel and restaurant; education/ health and social work; public administration, and agriculture occupy an intermediate position, contributing between 7.5 percent to 8.9 percent. Extra-territorial organizations; mining and quarrying; financial intermediation, electricity, gas and water supply and real estate contributed little in terms of creating employment. More males than females are engaged in most activities, except in wholesale and retail trade, manufacturing, private household and hotel and restaurant activities.



## 5.4 Employment Status

Employment status of a person indicates the level of involvement and degree of decision-making in respective activity. Employment status is classified in to employee government, employee government parastatal, employee private organization, employee NGO's, domestic employees, self-employed, unpaid family worker, employer, apprentice, members of cooperatives and others. The percentage distribution of urban employed population of the country by employment status and sex is presented in Summary Table 5.2

At urban country level, the majority of employed population are self-employed (42.0 percent) followed by those employed by government or government parastatal (20.4 percent) and private organization (15.6 percent). As can be seen from the table, the total paid employees constituted about 48.0 percent of the total working population. Domestic employees and unpaid family workers also took substantial share (10 percent and 8.6 percent, respectively).

The data in Summary Table 5.2 further shows that males are dominant in paid employment. The proportion of private organization employees and employees of NGO among the males is almost two fold of that of the females. Similarly, the proportion of government employees is about one and half times higher as compared to their female counterparts. However, more females than males are found in domestic employee and unpaid family workers. The proportion of females in self-employment exceeds also the corresponding figure among the males.

**Summary Table 5.2 Percentage Distribution of Currently Employed Urban Population Aged Ten Years and Over by Sex and Employment Status, Country Total: 2003**

Sex	Total Employed Person	Employment Status												
		Paid Employees						Self Employed	Unpaid Family Worker	Employer	Apparentice	Members Of Cooperatives	Other s	Not Stated
		Total paid Employees	Gov't Employee	Gov't Paratatal Employee	Private Employee	NGO's Employee	Domestic Employee							
					Organization									
Total	2,858,031 100.0	1,365,294 47.8	523,412 18.3	59,120 2.1	445,367 15.6	53,463 1.9	283,932 9.9	1,200,515 42.0	244,968 8.6	15,813 0.6	5,984 0.2	4,260 0.1	20,401 0.7	796 0.0
Male	1,628,529 100.0	828,175 50.9	355,896 21.9	38,672 2.4	320,817 19.7	38,542 2.4	74,248 4.6	649,742 39.9	114,349 7.0	11,430 0.7	3,844 0.2	3,438 0.2	16,972 1.0	579 0.0
Female	1,229,502 100.0	537,119 43.7	167,516 13.6	20,448 1.7	124,550 10.1	14,921 1.2	209,684 17.1	550,773 44.8	130,619 10.6	4,383 0.4	2,140 0.2	822 0.1	3,429 0.3	217 0.0

## **5.5 Number of Hours Worked**

The measurement of hours of work was dealt with in the resolution concerning statistics of hours of work adopted by the Tenth International Conference on Labour Statistics (ICLS) in 1962. In this survey hours of work was measured in terms of hours actually worked and usual hours of work. Hours of work include not only directly performed activities but also time spent on all related and complementary activities at the work place and outside the work place such as seeking business or waiting for customers, keeping records, maintaining equipment or being available for business.

The 2003 Urban Bi-annual Employment and Unemployment Survey (UBEUS) includes question on the number of hours worked for two purposes. First, the response on the number of hours worked during the seven days prior to the date of the interview together with the information on formal job attachment is used to classify respondents as employed or not, as described in Chapter IV. The second objective of including questions on number of hours worked was to gather data on intensity of work among the employed population.

In the survey all persons who were engaged in productive activities during the seven days prior to the date of the interview were asked to provide the number of hours they actually worked in all of their productive activities in the reference period. The response was recorded turn by turn for each of the days in a separate notebook so as to reach at the total hours of work during the week, which were filled in the main questionnaire. In recording the number of hours worked, care was taken to exclude hours paid for but not worked, such as paid leave, paid sick leave or paid public holidays from actual hours of work. Meal breaks, time spent on travel to and from work /for those who have specified place of work/ and hours spent on household activities that were not considered as productive are also excluded. For employed persons who were not at work during the seven days prior to the date of the interview, the number of hours of work was recorded as zero. On the other hand, any time that employed persons have spent in productive activity in places other than work site is considered as working hour.

In countries like Ethiopia, where the majority of the population are illiterate and engaged in the informal sector, collecting accurate data on hours of work is not simple. The reliability of the data may be affected due to memory lapse and lack of knowledge about the concept of time on the part of the respondents. The absence of standard working hour and irregular nature of working days and hours for the majority of activities in the informal sectors also may make it difficult to tell the exact number of hours worked especially when the reference period is longer. Thus, considering the inherent data

collection problems of hours of work in developing countries, the results given regarding working hours can be regarded as indicators but not as the true levels and measurements of intensity of work.

The percentage distribution and the mean number of hours worked by region during the seven days prior to the date of interview is presented in Summary Table 5.3. The data revealed that on average urban population of the country were working for 43 hours. It is found that about 35.0 percent of the employed population were working for 40-57 hours followed by those who worked 22-39 hours (23.1 percent). Persons who have job attachment but did not work at all for the last seven days or who have zero working hours make up 5.0 percent of the employed population.

Employed persons in urban areas of Dire Dawa Administrative Council and Addis Ababa City Administration showed a relatively higher mean number of hours worked as compared to other regions. Whereas mean number of hours of work for Benishangul-Gumuz Region were found to be the lowest (34 hours). Further more, the mean number of hours worked for males is higher than that of females (45 hours for males against 41 hours for females). The same pattern holds true in all regions (see Figure 5.3).

## **5.6 Earnings from Paid Employment**

Paid Employment jobs are those jobs where the employees hold explicit (written or oral) or implicit employment contracts, which give them a basic remuneration. Some or all of the tools, capitals equipment, information systems and/or premises used by the employees may be owned by others, and the employees may work under direct supervision of, or according to strict guidelines set by the owner(s) or persons in the owners' employment. Persons in "paid employment" jobs are typically remunerated by wages and salaries, but may be paid by commission from sales, by piece rates, bonuses or in kind payments such as food, housing or clothing. In this survey, Earnings for employees are related to gross remuneration and includes bonus, overtime, allowances and other benefits that are obtained only from the main job.

**Summary Table 5.3 Distribution of Currently Urban Employed Population Aged Ten Years and Over by Region and Mean Number of Hours Worked: 2003**

Region	Total Employed Population	Number of Hours Worked							Not Stated	Mean Number of Hours of work		
		0	1-3	4-21	22-39	40-57	58-74	75+		Total	Male	Female
All Regions	2,858,029	142,482	3,369	368,458	661,556	989,823	444,661	244,589	3,091	43	45	41
	100.0	5.0	0.1	12.9	23.1	34.6	15.6	8.6	0.1			
Tgray	166,922	3,091	863	24,225	41,665	62,547	22,882	11,154	495	42	44	40
	100.0	1.9	0.5	14.5	25.0	37.5	13.7	6.7	0.3			
Affar	25,371	1,605	0	2,227	4,223	11,640	3,135	2,541	0	44	45	43
	100.0	6.3	0.0	8.8	16.6	45.9	12.4	10.0	0.0			
Amhara	494,017	35,614	649	57,834	129,752	140,444	76,230	53,494	0	44	45	42
	100.0	7.2	0.1	11.7	26.3	28.4	15.4	10.8	0.0			
Oromia	793,241	37,041	1,031	144,581	181,639	254,082	114,945	59,104	818	41	44	37
	100.0	4.7	0.1	18.2	22.9	32.0	14.5	7.5	0.1			
Somali	73,408	2,937	0	7,832	19,790	24,395	14,250	4,126	78	43	46	39
	100.0	4.0	0.0	10.7	27.0	33.2	19.4	5.6	0.1			
Benishangul-Gumuz	17,241	1,993	53	2,443	6,451	4,543	1,376	382	0	34	37	31
	100.0	11.6	0.3	14.2	37.4	26.3	8.0	2.2	0.0			
S.N.N.P	351,189	21,543	256	69,279	94,243	107,987	36,718	20,876	287	37	40	34
	100.0	6.1	0.1	19.7	26.8	30.7	10.5	5.9	0.1			
Gambella	26,714	972	0	3,353	9,944	5,882	4,515	1,988	60	43	44	40
	100.0	3.6	0.0	12.6	37.2	22.0	16.9	7.4	0.2			
Harari	29,234	2,135	32	3,523	8,531	9,413	4,166	1,434	0	40	43	37
	100.0	7.3	0.1	12.1	29.2	32.2	14.3	4.9	0.0			
Addis Ababa City Admin.	819,627	30,422	485	49,515	157,759	345,233	155,247	79,746	1,220	49	49	47
	100.0	3.7	0.1	6.0	19.2	42.1	18.9	9.7	0.1			
Dire Dawa Adm. Council	61,065	5,130	0	3,642	7,561	23,654	11,199	9,746	133	49	51	48
	100.0	8.4	0.0	6.0	12.4	38.7	18.3	16.0	0.2			

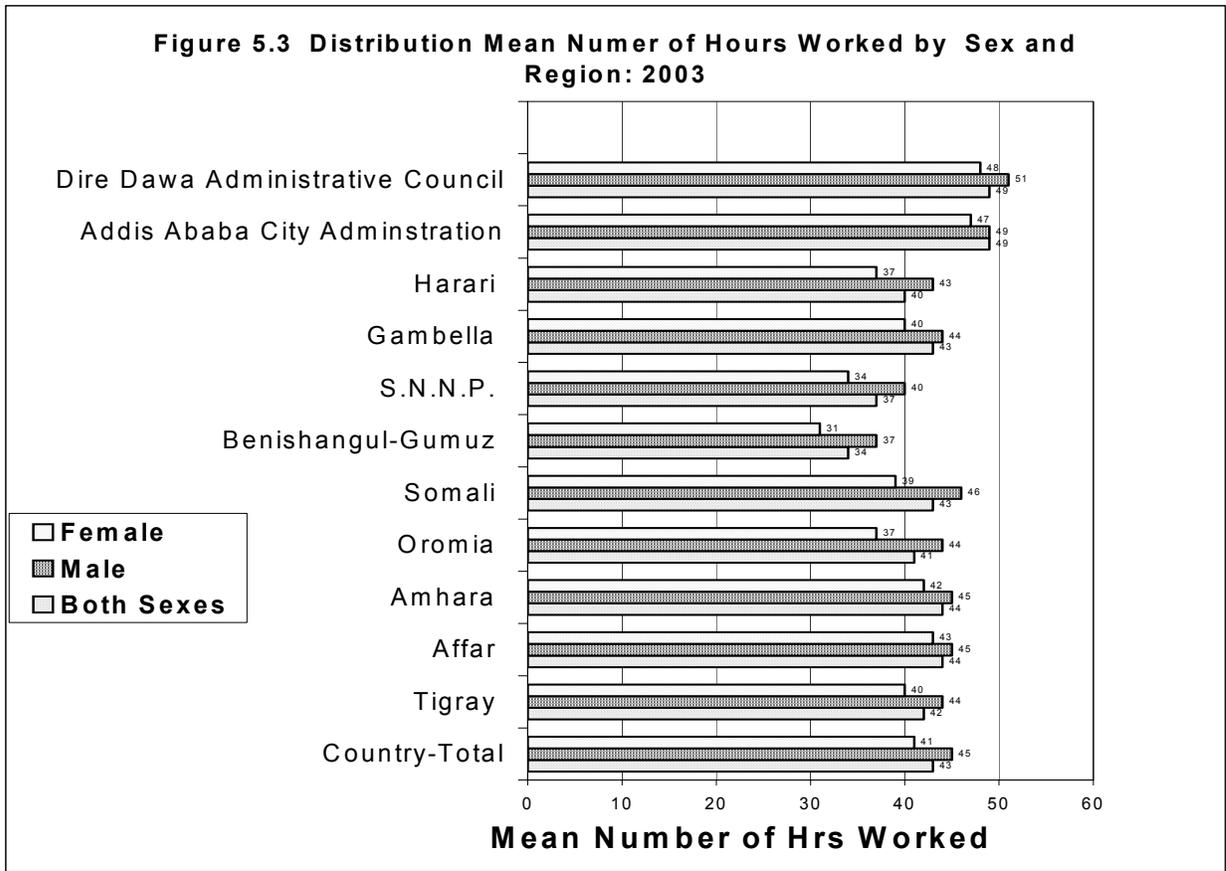
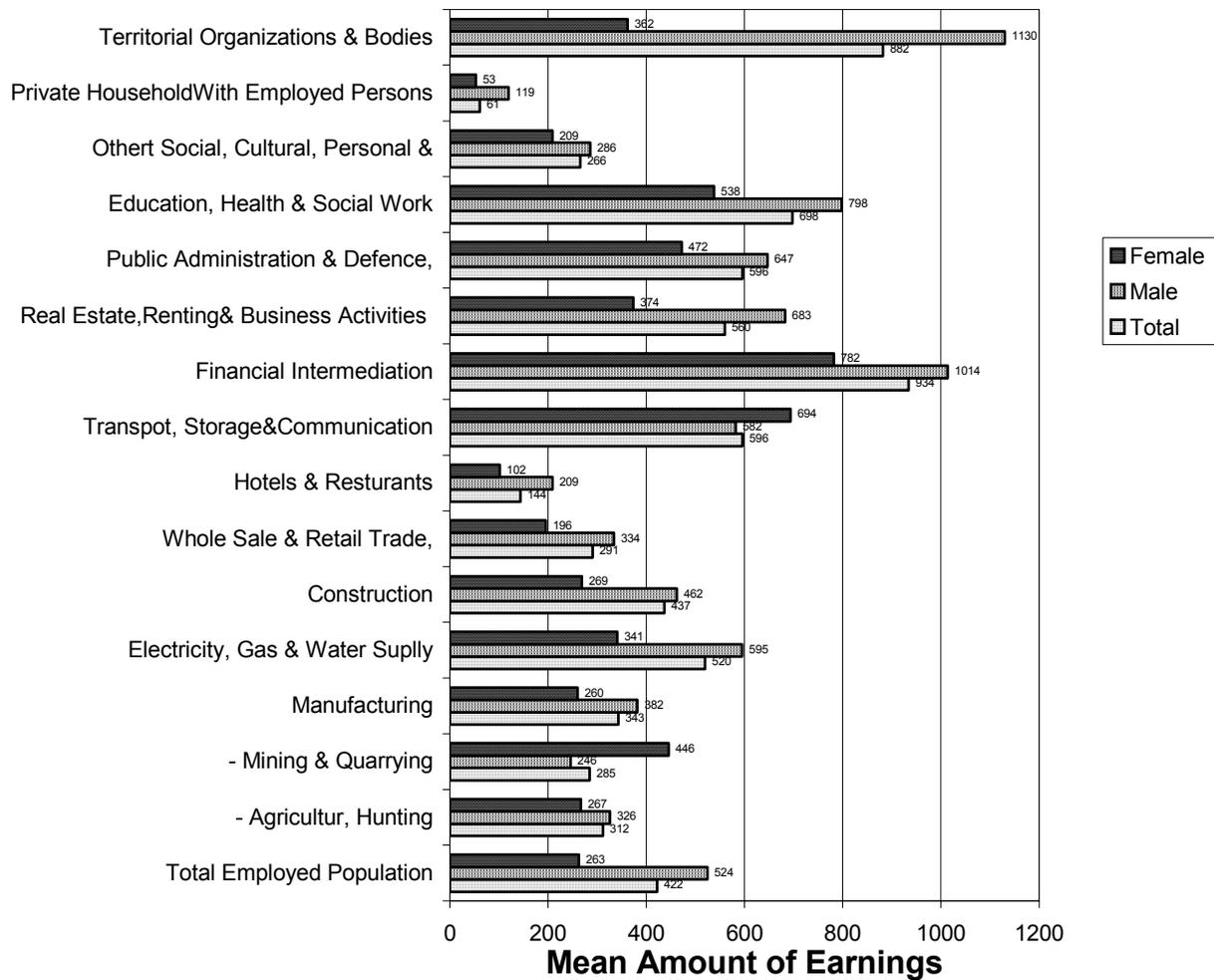


Figure 5.4 shows the urban distribution and mean amount of earning for paid employees by major industrial divisions at urban country level. The mean amount of earnings for the total paid employees of the country is estimated to be 422 Birr per month. Comparison of mean amount of earning among different sectors (industries) has shown that the highest payments are given to those who were working in financial intermediation sector (934 Birr) followed by extra territorial organizations (882 Birr per month). Employees of private households with employed persons and hotels and restaurants earn the least payment, i.e., with 61 Birr and 144 Birr per month, respectively.

Generally, in most industrial divisions male paid workers earn more than their female counterparts. Among the males the highest mean amount of payment were given by extra territorial organization (1130 Birr) and in financial intimidation industrial divisions (1014 Birr). While the highest mean amount of earning for females was paid by financial intermediation industrial divisions (782 Birr) (see also Figure 5.4).

**Figure 5.4 Distribution of Mean Amount of Earnings by Sex and Major Industrial Divisions for the Country: 2003**



### 5.7 Sector of the Economic Activities

For statistical purposes, the informal sector is considered as a group of production units, which according to the definitions and classification provided in the United Nation System of National Accounts (Rev.4), form part of the household sector as household enterprises or, equivalently, unincorporated enterprises owned by households. The informal sector is defined irrespective of the kind of work place where the productive activities are carried out, the extent of fixed capital used, the duration of the enterprise and its operation as main or secondary activity of the owner.

This survey include questions to identify the sector of economy in which employed persons are engaged as their main activity. The information collected refers to only part of the employed population. That is, persons engaged in subsistence farming and those who work in private households were exempted from the analysis of the sector of economy.

Employed persons whose employment status was government employee, government parasitatal employee, NGOs employee and members of cooperatives were treated as being working in the formal sector. Other employed persons whose employment status of main activity were employer, private organization employee, self-employed, and apprentice were asked whether the business/enterprise they were engaged in:

- a) has ten or more workers,
- b) is keeping book of account that show monthly income statement and balance sheet and
- c) is licensed.

Based on the response to these three conditions, classification on the sector of economy was made as: formal, informal, or ‘not-identified’. Employed persons who satisfy at least one of the above conditions were considered as employed in the formal sector. For those who respond “no” for all of the three questions, the activity was taken as informal. Persons who doesn’t know the situation about their main activity/business/ enterprise with respect to the above questions, were labeled as “not-identified”

Summary Table 5.4 presents the proportion of urban employed population of the country who are engaged in the informal sector. According to the survey result, at urban country level a total of 1,138,781 people were engaged in the informal sector, making up 48.2 percent of the total employment. The highest proportion of employed population who work in the informal sector was recorded for Somali Region (61.4 percent) followed by Amhara (56.3 percent) S.N.N.P (54.7 percent) and Oromiya (52.1 percent) regions. The lowest proportion; in this respect, was registered by Addis Ababa City Administration (37 percent). A higher proportion of females than males are engaged in the informal sector in all regions.

With the exclusion of the own account daily laborers from the analysis, at country level, the proportion of employed persons in the informal sector becomes 47.1 percent, 38.1 percent and about 60 percent for both sexes combined, male and female, respectively.

**Summary Table 5.4 Proportion of Urban Working Population in the Informal Sector Aged Ten Years and Over by Region and Sex: 2003**

Region	Total Working Population			Proportion of Working Population in the in formal Sector		
	Total	Male	Female	Total	Male	Female
All Regions	1,933,844	1,117,731	816,113	69.2	62.9	78.0
Tgray	115,982	54,722	61,260	67.0	59.8	73.4
Affar	12,914	7,332	5,582	78.8	68.7	92.0
Amhara	338,206	170,799	167,407	78.3	71.0	85.7
Oromia	558,921	315,896	243,025	74.6	66.8	84.8
Somali	53,194	28,248	24,946	91.6	87.0	96.8
Benishangul-Gumuz	9,624	6,065	3,559	68.5	58.5	85.5
S.N.N.P	244,197	138,833	105,364	82.2	78.4	87.2
Gambella	19,105	10,022	9,083	83.6	74.4	93.8
Harari	18,750	10,228	8,522	71.7	61.6	83.9
Addis Ababa City Admin.	524,579	354,458	170,121	49.6	48.4	52.3
Dire Dawa Adm. Council	38,375	21,130	17,245	61.1	49.4	75.4

**Note:** Subsistence Farming and Domestic Workers are not included

## **CHAPTER VI**

### **SIZE AND CHARACTERISTICS OF THE CURRENTLY UNEMPLOYED POPULATION**

#### **6.1 Introduction**

This chapter presents the size and rates of urban unemployment classified into regional levels by age group and sex. In addition, the pattern of unemployment in relation to educational attainment, work experience and duration of unemployment...etc., will be assessed briefly. Even though, information regarding unemployment was collected using the current and usual measurement approaches the results presented in this chapter refers only to the current activity status approach.

#### **6.2 Measurement of Unemployment**

The measurement of unemployment is based on the following three criteria that must be satisfied simultaneously; “without work”, “currently available for work” ‘and “seeking work”’ (ILO, 1983). The standard definition of unemployment is based on the "seeking work" criterion that can be interpreted as activity or efforts undertaken by non-working persons during a specified reference period or prior to it in order to find a job (i.e. paid or self employment). The specific steps may include registration at a public or private employment exchange, application to employers, checking at worksites, farms, factory gates, market or other assembly places, placing or answering newspaper advertisements, seeking assistance of friends or relatives, looking for land, building, machinery or equipment to establish own enterprise, arranging for financial resources, applying for work permits and licenses, etc. However, in situations where the conventional means of seeking work are of limited relevance, where the labour market is largely unorganized or of limited scope, where labour absorption is, at the time inadequate or where the labour force is largely self-employed, the above standard definition of unemployment with its emphasis on seeking work criterion might be restrictive and might not fully capture the prevailing employment situations in many developing countries including Ethiopia. Hence, the International Standards introduced provisions, which allows for the relaxation of the seeking work criterion in certain situations.

The provisions are two types, namely, partial relaxation and complete relaxation. Following the recommendations of the International Standard and reviewing the prevailing national situation, the 2003 Urban Bi-annual Employment and Unemployment Survey introduced a provision to capture the different forms of unemployment using the above alternative measurements. The treatment of the two options in the survey is described as follows.

Under partial relaxation, the definition of unemployment includes discouraged persons in addition to persons satisfying the standard definition. Discouraged job seekers are those who want a job but did not take any active step to search for work because they believe that they cannot find one.

Under the completely relaxed definition, unemployment includes persons without work and those who are available for work, including those who were or were not seeking work. That is, the seeking work criterion is completely relaxed and unemployment is based on the “without work” and “availability” criterion only. The availability in this situation is tested by asking the willingness to take up work for wage or salary in locally prevailing terms, or readiness to undertake self-employment activity, given the necessary resources and facilities. It should be noted that fulltime students are considered as available only if they are ready to withdraw from their studies in order to accept a job.

This survey collected unemployment data in the standard, partially relaxed and completely relaxed options of measurements. After thorough evaluation and assessment of the results obtained using the three alternative and complementary measures; the rates obtained using the completely relaxed definition were found most plausible and hence selected for reporting.

In this survey, those persons aged ten years and over who did not work at least four hours or did not have job to return to, were asked to respond whether they were available or willing to work if job was found during the coming one month. Those who respond “Yes” answer to this question were further tested whether they were ready to take a job under prevailing conditions.

### **6.3 Levels and Distribution of Unemployment**

As described in Chapter IV, data on the current unemployment was collected by asking a series of filtering questions to all unemployed persons aged ten years and over. The result obtained from the current status approach refers to the level of unemployment during short time interval of the seven days prior to the date of interview.

The unemployment rate, which is computed as the proportion of the unemployed persons out of the economically active population, can be used to measure the level of unemployed population of an area. These rates can also be used to make differential studies between sub groups of the population.

Summary Table 6.1 presents the size of the current unemployed population and unemployment rate by sex and age group at country urban level. The survey result reveals that in October 2003, there were 1,010,375 unemployed persons, out of which males are 345,901 and females are 664,474. This means that the rate of unemployment in the current status approach for urban areas of the country is 26.1 percent. Similarly, unemployment among the male and female are 17.5 percent and 35.1 percent, respectively. This indicates unemployment is more of a problem for females than males.

**Summary Table 6.1 Current Unemployment Rate for Urban Population Aged Ten Years and Over by Sex, Age Group and Educational Level, Country-Total: 2003**

Age Group	Economically Active			Total Unemployed Population			Unemployment- Rate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	3,868,400	1,974,424	1,893,976	1,010,375	345,901	664,474	26.1	17.5	35.1
10-14	105,391	48,793	56,598	24,379	10,157	14,222	23.1	20.8	25.1
15-19	515,214	221,782	293,432	191,029	70,273	120,756	37.1	31.7	41.2
20-24	709,545	327,786	381,759	282,192	99,944	182,248	39.8	30.5	47.7
25-29	732,022	352,887	379,135	210,966	62,877	148,089	28.8	17.8	39.1
30-34	481,735	271,282	210,453	93,035	26,730	66,305	19.3	9.9	31.5
35-39	412,927	219,383	193,544	65,056	15,591	49,465	15.8	7.1	25.6
40-44	294,491	158,832	135,659	43,530	12,021	31,509	14.8	7.6	23.2
45-49	230,099	135,922	94,177	36,163	12,148	24,015	15.7	8.9	25.5
50-54	150,367	86,740	63,627	22,876	9,123	13,753	15.2	10.5	21.6
55-59	87,823	55,099	32,724	17,396	11,251	6,145	19.8	20.4	18.8
60-64	65,955	40,882	25,073	12,874	8,420	4,454	19.5	20.6	17.8
65+	82,831	55,036	27,795	10,879	7,366	3,513	13.1	13.4	12.6
<b>Level of Education</b>									
<b>Total Unemployed</b>	3,873,009	1,977,093	1,895,916	1,010,749	346,123	664,626	26.1	17.5	35.1
Illiterate	921,509	264,401	657,108	184,995	32,658	152,337	20.1	12.4	23.2
Literate	2,946,891	1,710,022	1,236,869	825,377	313,242	512,135	28.0	18.3	41.4
Non-formal	93,563	59,173	34,390	19,182	9,359	9,823	20.5	15.8	28.6
Grades 1-8	1,437,219	806,874	630,345	380,574	131,271	249,303	26.5	16.3	39.6
General Education not Completed	224,850	137,901	86,949	75,691	30,717	44,974	33.7	22.3	51.7
General Education Completed *	768,561	424,593	343,968	292,594	115,339	177,255	38.1	27.2	51.5
Certificate	161,115	89,180	71,935	21,364	8,348	13,016	13.3	9.4	18.1
Diploma/10+3/ not completed & Degree not completed	50,752	32,117	18,635	15,420	7,179	8,241	30.4	22.4	44.2
Diploma & Above	206,222	157,514	48,708	20,175	10,806	9,369	9.8	6.9	19.2
Not Stated	4,609	2,670	1,939	377	223	154	8.2	8.4	7.9

\* Includes those who completed preparatory grades.

Regarding the pattern of unemployment almost tow-fifths of the youth population age 15-24 years and one-third of those aged 25-29 years were unemployed during the reference period. Unemployment is going to be declining from the age group 30-54 years and increasing then after. The rate for females are higher than that of males in all age groups except at old age group 50-65 years and above.

Summary Table 6.1 also presents unemployment rate of urban population of the country by educational attainment. According to the data in the table, the overall unemployment rate for literate persons is higher than that of illiterate (28 percent against 20 percent). Among the literate group, the rate of unemployment was relatively higher among those who completed general education (38.1 percent) closely followed by those who are general education not level (33.1 percent). The above phenomenon is more pronounced among the females than males. As expected, the incidence of unemployment was relatively lower for those with diploma and above (9.8 percent).

Summary Table 6.2 shows current urban unemployment rate by region and sex. The result depicts that unemployment rate is highest in urban areas of Dire Dawa Administrative Council (38.0 percent) followed by Addis Ababa City Administration (32.1 percent), Tigray Region (28.8 percent) and Harari Region (27.4 percent). Consultation with Branch Statistical Office of the CSA revealed that Return migrants from Djiboutie around the survey time might have contributed for the increase in the level of unemployment in Dire Dawa Administrative council. Also, in urban areas of Affar Region unemployment rate is 27.6 percent, while in the rest of urban areas of regions unemployment rate ranged from 24.3 percent for Oromia Region to 9.8 percent in Gambella Region.

**Summary Table 6.2 Current Unemployment Rate For Urban Population Aged Ten Years and Over by Sex and Region: 2003**

Region	Economically Active			Total Unemployed Population			Unemployment- Rate		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All Regions	3,868,400	1,974,424	1,893,976	1,010,372	345,900	664,472	26.1	17.5	35.1
Tgray	234,315	111,781	122,534	67,395	23,075	44,320	28.8	20.6	36.2
Affar	35,063	18,625	16,438	9,694	2,920	6,774	27.6	15.7	41.2
Amhara	630,180	297,586	332,594	136,164	47,558	88,606	21.6	16.0	26.6
Oromia	1,047,496	554,657	492,839	254,255	90,270	163,985	24.3	16.3	33.3
Somali	89,279	49,317	39,962	15,871	5,825	10,046	17.8	11.8	25.1
Benishangul-Gumuz	20,302	11,461	8,841	3,060	760	2,300	15.1	6.6	26.0
S.N.N.P	435,503	226,550	208,953	84,315	26,368	57,947	19.4	11.6	27.7
Gambella	29,627	16,191	13,436	2,912	625	2,287	9.8	3.9	17.0
Harari	40,269	19,771	20,498	11,037	3,633	7,404	27.4	18.4	36.1
Addis Ababa City Admin.	1,207,940	621,464	586,476	388,313	131,964	256,349	32.1	21.2	43.7
Dire Dawa Adm. Council	98,425	47,020	51,405	37,358	12,903	24,455	38.0	27.4	47.6

It appears that unemployment remains high and stable in urban Ethiopia during the last 10 years. The unemployment rate had grown from 22 percent in 1994 to 26.4 percent in 1999 (CSA, 1887;2000). The rate in the latest 2003 Urban Bi-annual Employment and Unemployment Survey is 26.1 percent, which

is the same level as that observed in 1999 National Labour Force Survey. Though the two labour force surveys follow the same definition, finer and detail probing of students concerning the question of readiness and availability to work in some kind of job, were strictly applied in the latter than the former survey. Full time students are considered as available only if they were ready to withdraw from their studies in order to accept a job.

#### 6.4 Unemployment and Problems of Establishing Own Business

The unemployed persons were asked about whether they have tried to establish their own business and the type of problems they faced. As observed from Summary Table 6.3, urban unemployed population who wanted to establish their own business reported that shortage of finance is the main problem they have faced, accounting for about 62 percent. The next important reason is lack of working place (land), which constituted about 14 percent. Similar pattern of the type of problem faced holds true among both the males and females.

**Summary Table 6.3 Percentage Distribution of Population Aged Ten years and Over Who Wants to Establish Own Business by Sex and Type of Problems Faced, Country-Total: 2003**

Sex	All Persons	Type of Problems Faced										Not Stated
		I have no Problem	Shortage of Finance	Lack of Training	Problem of Working Place/Land	Lack of Finance & Training	Lack of Working Place & Land	Lack/ Absence of License	Shortage/ Absence of Equipment	Do not Know	Others	
Total	832,222	53,298	515,220	20,363	22,688	39,366	115,040	2,660	1,738	17,337	18,828	25,684
	100.0	6.4	61.9	2.4	2.7	4.7	13.8	0.3	0.2	2.1	2.3	3.1
Male	26,425	13,442	161,896	6,233	4,490	15,811	38,059	1,037	1,030	5,288	8,430	8,534
	100.0	5.1	61.3	2.4	1.7	6.0	14.4	0.4	0.4	2.0	3.2	3.2
Female	567,972	39,856	353,324	14,130	18,198	23,555	76,981	1,623	708	12,049	10,398	17,150
	100.0	7.0	62.2	2.5	3.2	4.1	13.6	0.3	0.1	2.1	1.8	3.0

#### 6.5 Previous work experience and Duration of Unemployment

Summary Table 6.4 presents the distribution of urban unemployed population by sex, previous work experience and duration of unemployment. As it has been indicated in the table, out of 1,010,372

unemployed persons in urban areas of the country, i.e., about 45 percent never had work experience prior to the survey date. The data also revealed that more than half of unemployed females had no previous work experience. While, more than three-fifths of unemployed male had previous work experience.

In the table mentioned above, one can easily see that the majority i.e. three-fifths of the unemployed persons have been without work for 1-24 months. The table also shows 12.4 percent and 8.9 percent of unemployed urban population remained job less for 96 or more months and 25-36 months, respectively. The above pattern also holds true for both the males and the females.

**Summary Table 6.4 Percentage Distribution of Currently Unemployed Urban Population Aged ten years and Over by Sex, Work Experience and Duration of Unemployment, Country Total: 2003**

	Sex					
	Both Sexes		Male		Female	
<b>Previous Work Experience</b>						
Total Unemployed Persons	1,010,372	100.0	345,900	100.0	664,472	100.0
Unemployed with Work Experience	542,009	53.6	219,080	63.3	322,929	48.6
Unemployed without Work Experience	460,703	45.6	123,322	35.7	337,381	50.8
Not Stated	7,039	0.7	3,499	1.0	3,540	0.5
<b>Duration of Unemployment</b>						
Total Unemployed Persons	1,010,372	100	345,904	100	664,468	100
<1 months	118,630	11.7	52,705	15.2	65,925	9.9
1-6 months	211,557	20.9	88,806	25.7	122,751	18.5
7-12 months	183,300	18.1	60,956	17.6	122,344	18.4
13-24 months	165,258	16.4	55,948	16.2	109,310	16.5
25-36 months	90,042	8.9	30,008	8.7	60,034	9.0
37-48 months	47,586	4.7	11,958	3.5	35,628	5.4
49-60 months	36,553	3.6	8,118	2.3	28,435	4.3
61-72 months	18,453	1.8	5,939	1.7	12,514	1.9
73-84 months	10,935	1.1	3,586	1.0	7,349	1.1
85-95 months	2,048	0.2	223	0.1	1,825	0.3
96 or more months	126,010	12.5	27,657	8.0	98,353	14.8

## ESTIMATION PROCEDURES OF TOTAL, RATIO AND SAMPLING ERRORS

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

**1. Estimate of domain total  $\hat{Y}_h$  for the two-stage sample design is given by:**

$$\hat{Y}_h = \sum_{i=1}^{n_h} \frac{M_h H_{hi}}{n_h M_{hi} h_{hi}} \sum_{j=1}^{h_{hi}} Y_{hij} = \sum_{i=1}^{n_h} \sum_{j=1}^{h_{hi}} W_{hi} Y_{hij} \text{-----} \quad (1)$$

Where,

$$W_{hi} = \frac{M_h H_{hi}}{n_h M_{hi} h_{hi}} \text{ is the basic sampling weight}$$

**2. The estimate of domain total  $\hat{Y}_h$  for the three-stage sample design is given by:**

$$\hat{Y}_h = \sum_{i=1}^{n_h} \frac{M_h}{n_h n_{hi}} \sum_{j=1}^{n_{hi}} \frac{H_{hij}}{M_{hij} h_{hij}} \sum_{k=1}^{h_{hij}} Y_{hijk} \text{-----} \quad (2)$$

$$= \sum_{i=1}^{n_h} \sum_{j=1}^{n_{hi}} \sum_{k=1}^{h_{hij}} W_{hij} Y_{hijk}$$

Where,

$$W_{hij} = \frac{M_h H_{ij}}{n_h n_{hi} M_{hij} h_{hij}} \text{ is the basic sampling weight}$$


---

The following notations were used in the formula:

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

$M_{hi}$  = Total number of households, in EA/ PSU i for the two-stage sample design or in urban center/PSU i for the three-stage sample design, stratum h obtained from the sampling frame.

$n_h$  = Number of successfully covered sample EA's for the two stage sample design or urban centers for the three stage sample design in stratum h.

$H_{hi}$  = Total number of households identified during the survey listing in EA/PSU i, stratum h (for the two-stage sample design).

$h_{hi}$  = Total number of households successfully covered in EA/PSU i, stratum h (for the two-stage sample design).

$M_{hij}$  = Total number of households in EA/SSU j, urban center/PSU i and stratum h obtained from the sampling frame (for the three-stage sample design).

$n_{hi}$  = Number of sample EA's successfully covered in urban center/PSU i stratum h (for the three-stage sample design).

$H_{hij}$  = Total number of households identified during the survey listing in EA/SSU j, urban center/PSU i and stratum h (for the three-stage sample design)

$h_{hij}$  = Number of sample households successfully covered in EA/SSU j, urban center/PSU i and stratum h (for the three-stage sample design).

$Y_{hij}$  = The observed value of a characteristic y for household j in EA/PSU i and stratum h (for the two-stage sample design).

$Y_{hijk}$  = The observed value of a characteristic y for household k in EA/SSUj, urban center/PSU i and stratum h (For the three-stage sample design).

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

$$\hat{Y} = \sum_{h=1} \hat{Y}_h$$

### 3. 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:

$$V(\hat{y}_h) = \frac{n_h}{n_h - 1} \left[ \sum_{i=1}^{n_h} \hat{Y}_{hi}^2 - \frac{\hat{Y}_h^2}{n_h} \right] \text{-----} \quad (3)$$

in which  $\hat{Y}_{hi} = W_{hi} \sum_{j=1}^{h_{hi}} Y_{hij}$  for the two-stage sample design

and  $\hat{Y}_{hi} = \sum_{j=1}^{n_{hi}} W_{hij} \sum_{k=1}^{h_{hij}} y_{hijk}$  for the three-stage sample design

Since the strata are independent,

$$V(\hat{Y}) = \sum_h V(\hat{Y}_h) \text{-----} \quad (4)$$

$$SE(\hat{Y}_h) = \sqrt{Var(\hat{Y}_h)} \text{-----} \quad (5)$$

#### 4. 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:

$$CV(\hat{Y}_h) = \frac{\sqrt{Var(\hat{Y}_h)}}{\hat{Y}_h} \times 100 \text{ ----- (6)}$$

and

Ninety five confidence interval (CI) of domain total:

$$\hat{Y}_h \pm 1.96 \times SE(\hat{Y}_h) \text{ ----- (7)}$$

#### 5. Ratio estimates:

$$\hat{R}_h = \frac{\hat{Y}_h}{\hat{X}_h} \text{ and } \hat{R} = \frac{\hat{Y}}{\hat{X}} \text{ ----- (8)}$$

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

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

In which

$$Cov(\hat{Y}_h, \hat{X}_h) = \frac{n_h}{n_h - 1} \left[ \sum_{i=1}^{n_h} \hat{Y}_{hi} \hat{X}_{hi} - \frac{\hat{Y}_h \hat{X}_h}{n_h} \right]$$

Estimates of standard error, coefficient of variation and confidence interval for the ratio estimate can be calculated by adopting formulas 5, 6 and 7.

Table 1 Urban Population of Regions Aged Ten Years and Over by Age Group, Sex and Activity status, During the last Six Months (Usual Status Approach) - Country Total: 2003

Age Group and Sex	All Persons	CV	Activity Status						
			Active	CV	Non-Active	CV	Not Stated	CV	
All ages									
Total	6,676,323	.96	3,546,790	1.07	3,129,533	1.26	-	-	-
Male	3,140,886	1.12	1,933,489	1.35	1,207,397	1.61	-	-	-
Female	3,535,437	.99	1,613,301	1.20	1,922,136	1.37	-	-	-
10 - 14									
Total	1,035,043	1.44	95,561	5.08	939,482	1.53	-	-	-
Male	480,629	1.73	48,028	7.76	432,602	1.79	-	-	-
Female	554,413	1.93	47,533	5.67	506,880	2.04	-	-	-
15 - 19									
Total	1,428,081	1.37	475,846	2.34	952,235	1.76	-	-	-
Male	671,334	1.81	228,403	2.76	442,931	2.44	-	-	-
Female	756,747	1.78	247,444	3.30	509,303	2.21	-	-	-
20 - 24									
Total	998,947	1.71	633,835	2.03	365,112	2.61	-	-	-
Male	461,163	2.41	319,934	3.07	141,230	3.36	-	-	-
Female	537,783	2.04	313,901	2.37	223,882	3.35	-	-	-
25 - 29									
Total	862,707	1.98	652,412	2.06	210,295	4.24	-	-	-
Male	386,020	2.78	342,067	2.83	43,954	8.60	-	-	-
Female	476,687	2.42	310,346	2.71	166,341	4.77	-	-	-
30 - 34									
Total	540,869	2.08	446,254	2.26	94,614	4.70	-	-	-
Male	281,953	2.95	265,574	3.10	16,378	8.12	-	-	-
Female	258,916	2.70	180,680	3.11	78,236	5.41	-	-	-
35 - 39									
Total	468,302	2.02	383,382	2.19	84,920	4.55	-	-	-
Male	225,091	3.20	212,916	3.21	12,175	14.53	-	-	-
Female	243,211	2.28	170,466	2.59	72,745	4.66	-	-	-
40 - 44									
Total	338,777	2.08	275,994	2.25	62,783	5.24	-	-	-
Male	165,762	2.77	155,263	2.89	10,499	9.98	-	-	-
Female	173,015	2.95	120,731	3.41	52,284	5.90	-	-	-
45 - 49									
Total	288,597	2.52	215,561	3.02	73,037	4.63	-	-	-
Male	140,994	4.13	132,233	4.37	8,761	10.33	-	-	-
Female	147,603	2.92	83,328	3.40	64,275	5.09	-	-	-
50 - 54									
Total	202,691	2.65	141,811	3.40	60,881	4.13	-	-	-
Male	93,373	4.38	84,670	4.74	8,703	9.73	-	-	-
Female	109,318	3.12	57,141	4.53	52,177	4.51	-	-	-
55 - 59									
Total	130,328	2.72	84,050	3.46	46,279	4.77	-	-	-
Male	65,883	4.05	52,835	4.63	13,048	9.03	-	-	-
Female	64,446	3.87	31,215	5.23	33,231	5.75	-	-	-
60 - 64									
Total	131,247	3.26	61,949	3.88	69,299	4.93	-	-	-
Male	55,107	4.33	38,235	5.22	16,872	7.55	-	-	-
Female	76,141	4.42	23,714	5.68	52,427	5.97	-	-	-
65+									
Total	250,734	2.29	80,135	3.62	170,599	2.91	-	-	-
Male	113,577	3.10	53,333	4.07	60,244	4.67	-	-	-
Female	137,156	2.86	26,802	7.06	110,354	3.15	-	-	-

Table2 Urban Population of Regions Aged Ten Years and Over by Age Group,Sex  
and Activity status,During the last Seven days(Current Approach) - Country Total: 2003

Age Group and Sex	All Persons	CV	Activity Status						
			Active	CV	Non-Active	CV	Not Stated	CV	
All ages									
Total	6,676,323	.96	3,868,400	1.09	2,807,773	1.28	149	48.75	
Male	3,140,886	1.12	1,974,423	1.36	1,166,314	1.59	149	48.75	
Female	3,535,437	.99	1,893,977	1.17	1,641,460	1.44	-	-	
10 - 14									
Total	1,035,043	1.44	105,392	5.23	929,651	1.54	-	-	
Male	480,629	1.73	48,793	7.72	431,836	1.79	-	-	
Female	554,413	1.93	56,598	6.47	497,815	2.03	-	-	
15 - 19									
Total	1,428,081	1.37	515,214	2.25	912,718	1.76	149	48.75	
Male	671,334	1.81	221,782	2.88	449,403	2.38	149	48.75	
Female	756,747	1.78	293,432	2.95	463,315	2.30	-	-	
20 - 24									
Total	998,947	1.71	709,546	1.97	289,401	2.82	-	-	
Male	461,163	2.41	327,786	3.02	133,377	3.38	-	-	
Female	537,783	2.04	381,759	2.27	156,024	3.85	-	-	
25 - 29									
Total	862,707	1.98	732,022	1.95	130,684	5.78	-	-	
Male	386,020	2.78	352,887	2.76	33,133	10.83	-	-	
Female	476,687	2.42	379,135	2.49	97,551	6.59	-	-	
30 - 34									
Total	540,869	2.08	481,735	2.21	59,134	5.50	-	-	
Male	281,953	2.95	271,282	3.04	10,671	10.31	-	-	
Female	258,916	2.70	210,453	3.03	48,463	6.21	-	-	
35 - 39									
Total	468,302	2.02	412,927	2.15	55,375	5.51	-	-	
Male	225,091	3.20	219,383	3.26	5,708	11.85	-	-	
Female	243,211	2.28	193,544	2.42	49,667	5.99	-	-	
40 - 44									
Total	338,777	2.08	294,491	2.19	44,286	6.50	-	-	
Male	165,762	2.77	158,832	2.85	6,930	12.01	-	-	
Female	173,015	2.95	135,659	3.21	37,356	7.39	-	-	
45 - 49									
Total	288,597	2.52	230,099	2.89	58,499	5.34	-	-	
Male	140,994	4.13	135,922	4.26	5,072	14.05	-	-	
Female	147,603	2.92	94,177	3.28	53,426	5.71	-	-	
50 - 54									
Total	202,691	2.65	150,366	3.26	52,325	4.45	-	-	
Male	93,373	4.38	86,740	4.65	6,634	11.14	-	-	
Female	109,318	3.12	63,627	4.19	45,692	4.81	-	-	
55 - 59									
Total	130,328	2.72	87,823	3.37	42,505	4.93	-	-	
Male	65,883	4.05	55,099	4.49	10,784	10.26	-	-	
Female	64,446	3.87	32,724	5.26	31,721	5.79	-	-	
60 - 64									
Total	131,247	3.26	65,955	3.75	65,293	5.18	-	-	
Male	55,107	4.33	40,882	4.98	14,225	8.43	-	-	
Female	76,141	4.42	25,073	5.61	51,068	6.08	-	-	
65+									
Total	250,734	2.29	82,830	3.58	167,903	2.94	-	-	
Male	113,577	3.10	55,036	4.00	58,542	4.72	-	-	
Female	137,156	2.86	27,795	7.05	109,362	3.18	-	-	

Table 3 Economically Active Urban Population of Regions Aged Ten Years and Over by Age Group, Sex Whether Employed or Not During the last Six Months (Usual Status Approach) - Country Total: 2003

Age Group and Sex	Economically Active	CV	Employed	CV	Total unemployed	CV
All ages						
Total	3,546,790	1.07	2,810,532	1.16	736,258	2.14
Male	1,933,489	1.35	1,634,900	1.48	298,590	3.31
Female	1,613,301	1.20	1,175,632	1.39	437,668	2.29
10 - 14						
Total	95,561	5.08	81,059	5.69	14,502	8.47
Male	48,028	7.76	41,450	8.68	6,578	12.88
Female	47,533	5.67	39,609	6.36	7,924	10.31
15 - 19						
Total	475,846	2.34	342,992	2.86	132,854	3.29
Male	228,403	2.76	174,948	3.22	53,455	4.89
Female	247,444	3.30	168,045	4.31	79,399	4.06
20 - 24						
Total	633,835	2.03	422,028	2.59	211,807	3.00
Male	319,934	3.07	236,384	3.76	83,550	4.94
Female	313,901	2.37	185,645	3.09	128,257	3.65
25 - 29						
Total	652,412	2.06	502,829	2.15	149,583	4.38
Male	342,067	2.83	286,561	3.15	55,506	6.34
Female	310,346	2.71	216,268	2.90	94,077	5.53
30 - 34						
Total	446,254	2.26	380,699	2.44	65,556	6.14
Male	265,574	3.10	240,701	3.26	24,873	10.55
Female	180,680	3.11	139,998	3.39	40,683	7.45
35 - 39						
Total	383,382	2.19	335,158	2.35	48,223	6.58
Male	212,916	3.21	196,406	3.29	16,510	14.94
Female	170,466	2.59	138,753	2.88	31,713	6.32
40 - 44						
Total	275,994	2.25	243,340	2.31	32,654	8.71
Male	155,263	2.89	143,048	3.02	12,215	9.90
Female	120,731	3.41	100,292	3.27	20,439	12.68
45 - 49						
Total	215,561	3.02	188,899	3.19	26,662	9.85
Male	132,233	4.37	119,173	4.48	13,060	17.81
Female	83,328	3.40	69,725	3.72	13,602	9.15
50 - 54						
Total	141,811	3.40	124,218	3.71	17,593	8.32
Male	84,670	4.74	76,128	5.13	8,542	13.05
Female	57,141	4.53	48,090	4.94	9,051	10.49
55 - 59						
Total	84,050	3.46	70,046	3.68	14,004	10.01
Male	52,835	4.63	44,289	4.95	8,546	12.49
Female	31,215	5.23	25,756	5.56	5,459	15.62
60 - 64						
Total	61,949	3.88	50,952	4.24	10,997	10.16
Male	38,235	5.22	30,342	5.82	7,893	12.01
Female	23,714	5.68	20,610	5.87	3,104	19.37
65+						
Total	80,135	3.62	68,311	3.97	11,824	9.13
Male	53,333	4.07	45,470	4.44	7,862	11.39
Female	26,802	7.06	22,841	7.91	3,961	14.53

Table 4 Economically Active Urban Population of Regions Aged Ten Years and Over by Age Group, Sex  
Whether Employed or Not During the last Seven days (Current Status Approach) - Country Total: 2003

Age Group and Sex	Economically Active	CV	Employed	CV	Total unemployed	CV
All ages						
Total	3,868,400	1.09	2,858,027	1.17	1,010,373	1.73
Male	1,974,423	1.36	1,628,523	1.50	345,900	2.61
Female	1,893,977	1.17	1,229,504	1.34	664,472	2.04
10 - 14						
Total	105,392	5.23	81,013	5.72	24,379	11.60
Male	48,793	7.72	38,636	9.20	10,157	9.56
Female	56,598	6.47	42,377	6.04	14,222	18.24
15 - 19						
Total	515,214	2.25	324,186	2.95	191,028	2.96
Male	221,782	2.88	151,509	3.62	70,273	4.12
Female	293,432	2.95	172,677	4.12	120,756	3.75
20 - 24						
Total	709,546	1.97	427,354	2.58	282,191	2.80
Male	327,786	3.02	227,843	3.87	99,944	4.64
Female	381,759	2.27	199,512	2.91	182,248	3.41
25 - 29						
Total	732,022	1.95	521,056	2.18	210,966	3.66
Male	352,887	2.76	290,010	3.05	62,877	6.41
Female	379,135	2.49	231,046	2.94	148,089	4.36
30 - 34						
Total	481,735	2.21	388,699	2.46	93,035	4.94
Male	271,282	3.04	244,552	3.31	26,730	6.89
Female	210,453	3.03	144,147	3.40	66,305	6.37
35 - 39						
Total	412,927	2.15	347,871	2.38	65,056	4.54
Male	219,383	3.26	203,792	3.42	15,591	9.23
Female	193,544	2.42	144,079	2.78	49,465	5.11
40 - 44						
Total	294,491	2.19	250,961	2.23	43,530	7.04
Male	158,832	2.85	146,811	2.97	12,021	9.52
Female	135,659	3.21	104,150	3.18	31,509	9.01
45 - 49						
Total	230,099	2.89	193,936	3.27	36,163	5.68
Male	135,922	4.26	123,774	4.62	12,148	9.54
Female	94,177	3.28	70,162	3.60	24,015	7.18
50 - 54						
Total	150,366	3.26	127,491	3.63	22,876	7.12
Male	86,740	4.65	77,617	5.04	9,123	11.69
Female	63,627	4.19	49,874	4.81	13,753	9.02
55 - 59						
Total	87,823	3.37	70,427	3.74	17,396	8.05
Male	55,099	4.49	43,848	5.06	11,251	9.63
Female	32,724	5.26	26,579	5.53	6,145	14.50
60 - 64						
Total	65,955	3.75	53,082	4.12	12,873	9.15
Male	40,882	4.98	32,463	5.58	8,420	11.44
Female	25,073	5.61	20,619	5.96	4,454	15.41
65+						
Total	82,830	3.58	71,952	3.90	10,879	9.92
Male	55,036	4.00	47,669	4.36	7,366	11.77
Female	27,795	7.05	24,282	7.68	3,513	17.54

Table 5 Paid Employees of Regions Aged Ten Years and Over by Sex, and Total Amount of Payment Per Month - Country Total: 2003

Period of Payment and Sex	Total Paid Employees	CV	Amount of Payment Per Month (In Birr)*														Not Stated	
			<50	CV	50-99	CV	100-199	CV	200-399	CV	400-699	CV	700-999	CV	1000+	CV	CV	
All Persons																		
Total	1,382,531	1.68	143,978	4.39	179,935	4.23	199,326	3.68	294,833	2.87	279,071	2.76	159,212	2.95	114,492	4.42	11,684	10.55
Male	843,469	1.91	25,145	12.96	64,142	8.17	126,743	4.55	198,361	3.69	202,245	3.31	119,693	3.13	100,163	4.57	6,976	12.29
Female	539,062	2.19	118,833	4.46	115,792	4.35	72,583	4.80	96,472	4.00	76,826	4.34	39,519	5.40	14,330	10.77	4,707	15.95
Hourly																		
Total	7,553	21.38	646	52.27	1,543	36.04	1,253	39.30	2,179	42.39	1,313	39.02	432	58.42	187	83.81	-	-
Male	6,060	24.61	110	80.94	722	36.02	1,142	42.46	2,179	42.39	1,287	39.75	432	58.42	187	83.81	-	-
Female	1,493	40.51	536	60.91	821	59.94	111	80.49	-	-	26	98.37	-	-	-	-	-	-
Daily																		
Total	60,052	6.99	8,135	11.52	15,154	23.77	14,444	8.21	13,191	8.56	5,912	12.44	2,315	17.10	478	26.70	423	35.59
Male	50,766	8.01	3,262	19.51	13,299	26.88	12,893	8.61	12,687	8.80	5,504	11.73	2,315	17.10	443	27.82	362	38.39
Female	9,286	10.78	4,873	13.41	1,855	24.09	1,550	26.82	504	33.53	407	86.49	-	-	36	94.92	60	95.15
Weekly																		
Total	73,885	8.61	7,730	19.71	11,332	15.20	24,492	11.38	16,169	16.48	11,408	36.67	2,030	23.77	351	62.81	372	60.92
Male	64,398	9.66	4,166	33.54	9,695	17.19	20,907	12.84	15,740	16.89	11,408	36.67	1,921	24.74	351	62.81	211	76.82
Female	9,487	11.70	3,565	17.37	1,637	27.74	3,586	20.57	429	64.08	-	-	109	76.82	-	-	161	98.34
Fort Nightly																		
Total	40,984	7.13	2,954	22.53	4,017	19.12	14,622	10.86	10,596	14.88	6,919	15.07	1,291	28.37	309	68.26	276	68.69
Male	29,109	8.62	860	44.05	1,691	32.06	9,500	13.32	8,920	15.93	6,384	15.92	1,291	28.37	309	68.26	153	98.60
Female	11,875	11.73	2,093	26.13	2,326	23.43	5,122	17.30	1,676	40.25	535	44.48	-	-	-	-	123	93.38
Monthly																		
Total	1,181,490	1.73	120,957	4.77	144,732	4.16	141,150	4.05	249,233	3.04	251,990	2.54	152,522	3.03	112,252	4.50	8,654	12.58
Male	681,490	1.96	14,848	18.99	36,795	8.98	80,441	5.28	156,761	4.03	176,312	2.92	113,321	3.23	97,982	4.66	5,031	15.24
Female	499,999	2.27	106,109	4.75	107,938	4.55	60,709	5.26	92,472	4.07	75,677	4.37	39,201	5.44	14,271	10.80	3,623	17.58
Yearly																		
Total	6,816	15.06	2,535	32.71	920	32.06	847	40.86	449	53.23	654	31.70	209	39.22	449	30.61	754	27.08
Male	3,425	15.62	1,010	41.48	648	33.00	267	37.39	-	-	473	41.43	-	-	426	31.94	602	23.16
Female	3,392	22.82	1,525	37.73	272	78.39	580	57.10	449	53.23	181	37.53	209	39.22	23	84.73	152	98.07
Others																		
Total	11,751	11.51	1,021	23.02	2,237	25.89	2,519	27.06	3,015	22.19	876	35.24	413	61.82	466	53.29	1,205	31.69
Male	8,222	13.83	889	25.71	1,292	35.74	1,594	32.01	2,075	26.99	876	35.24	413	61.82	466	53.29	618	35.91
Female	3,530	21.14	132	41.63	945	37.01	925	48.89	941	39.05	-	-	-	-	-	-	587	52.92

