

SURVEY METHODOLOGY

Coverage

The year 2004 Welfare Monitoring Survey covered all rural and urban area of the country except the non-sedentary areas in Afar and Somali Regional States. Excluded are three zones of Afar Region, six zones of Somali Region and all zones of Gambella Region. In the rural part of the country it was planned to cover 2,016 enumeration areas (EAs) and 24,192 households.

The response rate is highly satisfactory. Only two EAs and 39 households (owing to various reasons) were not covered in this survey. The ultimate response rate in rural areas is, therefore, 99.9 percent for EAs and 99.8 percent for households. Regarding urban parts of the country all the planned 760 EAs (100 percent) and 99.9 percent of the 12,160 planned sample households were successfully covered in the survey.

Concepts and Definitions

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.

URBAN DWELLER'S ASSOCIATION, UDA, (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.

FARMER'S ASSOCIATION (FA): is the lowest administrative unit in a settled rural area with its own jurisdiction. It is an association of rural dwellers formed by the inhabitants of a given area whose members are engaged either in agricultural and/or non-agricultural activities.

ENUMERATION AREA (EA): is a unit of land delineated for the purpose of enumeration housing units and population without omission and duplication. An EA usually consists of 150 to 200 households in rural areas and 150 to 200 housing units in urban areas. An enumeration area should be related to a UDA or an FA in one of the following ways.

- An EA may be equal to an FA if the number of the households in the FA is less than or equal to 150 – 200 in rural areas; and is equal to a UDA in urban areas if the number of housing units in the UDA is 150 – 200.
- An EA may be a part of an FA or a UDA and its delineation can not extend outside the boundary of the corresponding FA or a UDA.

COLLECTIVE QUARTER: A collective quarter is a premise (a housing unit, a building or a compound) in which a number of unrelated persons reside together, and share common facilities. Examples of collective quarters are monasteries, prisons, boarding schools, home for aged, children's homes, work camps, military barracks, etc. It is important to note that in the premises of some collective quarters, there may be private households.

HOUSEHOLD: Constitutes of a person or group of persons, irrespective of whether related or not who normally live together in the same housing unit or group of housing units and who have common cooking arrangements.

HEAD OF HOUSEHOLD: A head of a household is a person who economically supports or manages the household or for reasons of age or respect, is considered as head by

members of the household or declares himself as head of a household. Head of a household could be male or female.

MEMBER OF HOUSEHOLD: Person constituting a household is called member of the household. The following are considered as members of a household:

- i) All persons who lived and ate with the household for at least six months including those who were not within the household at the time of the survey and were expected to be absent from the household for less than six months.
- ii) All guests and visitors who ate and stayed with the household for six months and more.
- iii) House maids, guards, baby-sitters, etc. who lived and ate with the household even for less than six months.

HOUSEHOLD SIZE: Is the total number of members of a household.

DOMESTIC EXPENDITURE: is defined as total expenditure incurred by the household or any of its members and includes expenditure on consumption as well as non-consumption items.

INCOME: Refers to domestic consumption of own crops and own livestock and livestock products, domestic consumption of goods and services purchased for resale or produced or processed in the household enterprise other than agriculture, wages and salaries, allowance, overtime, bonus, pension, commission, discounts (i.e. concessions obtained), imputed rent of free housing (i.e. subsidized amount only), imputed rent of owner occupied housing, other employee's benefit, interest received, profit and dividend received, remittance (regularly received), value of items obtained free (i.e. firewood, water, etc.), rent of personal possessions, alimony (regularly received) and other types of income.

GROSS ENROLLMENT RATIO: is the total enrolment in a given level of school, regardless of age, per 100 children of that school age. For example, the gross enrolment

ratio for primary level is defined as a quotient of the total number of pupils in grades 1–6 and the total population aged 7-12 years expressed as percentages.

SCHOOL DROPOUT: A person is considered to be a school dropout if he/she did not appear for the end of year examination or took the examination but did not register the following academic year.

AGE GRADE MISMATCH: is a measure of the age-grade slippage which gives the proportion /number of enrolled persons that are out of school age specified for each level of school (7-12 years for primary and 13-18 years for secondary).

FACILITIES AND AMENITIES: These are basic infrastructures such as food, markets, postal, telephone, school, health, drinking water and transport services etc.

ANTHROPOMETRY: The technique that deals with the measurement of the size, weight and proportions of human body.

ACUTE MALNUTRITION OR WASTING: is a condition of low weight-for-height. Wasting is nutritionally deficient state of recent onset related to sudden food deprivation or malabsorption or poor utilization of nutrients, which results in rapid weight loss.

CHRONIC MALNUTRITION OR STUNTING: is a condition of low height-for-age. Stunting is a nutritional deficient state of long-term food deficiency often combined with persistent ill health.

UNDER WEIGHT: A condition of low weight-for-age. It is a composite index of malnutrition (either acute or chronic malnutrition) based on the principal that a child has an expected weight for that child's age.

Z-SCORE: A statistical measure of the distance, in standard deviation (SD) units, of a value from the mean.

VACCINATION: Any incurable immunizing agent or a preparation containing bacteria so treated as to give immunity from specific diseases when injected in to the subject.

Sampling Frame

The list of all households obtained from the 2001/02 Ethiopian Agricultural Sample Enumeration (EASE) is used as a frame to select the sample EAs in the rural areas of the country. In urban areas, on the other hand, the frame, consisting of households by EA obtained from the 2004 Ethiopian Urban Economic Establishment Census (EUEEC), is used to select sample sites for the 2004 welfare monitoring survey. The frame from which sample households were selected was based on a fresh list of households taken at the beginning of the survey period in each of the selected urban and rural EAs.

Sample Design

For the purpose of the survey the country was divided into three broad categories including rural category, major urban centers category and other urban centers category.

Category I - Rural: This category consists of the rural areas of 58 zones and special Weredas, which are considered as zones, in 7 regions of the country. Harari region and Addis Ababa City Council and Dire Dawa City council were treated independently. Each zone/special Wereda of a region was considered to be a survey domain (i.e. reporting level) for which the major findings of the survey are reported. Rural Harari, Addis Ababa and Dire Dawa each were considered as separate reporting levels.

Category I totally comprises 61 reporting levels. A stratified two-stage cluster sample design in which the primary sampling units (PSUs) were EAs was used to select samples. Twelve households per sample EA were selected as a second Stage Sampling Unit (SSU) to which survey questionnaire finally were administered to the members of sample households.

Category II - Major urban centers: In this category all regional capitals (except Gambella region) and four other major urban centers that have relatively larger population sizes were included. Each of the 14 urban center in this category is taken as a reporting level. Since there is a high variation in the standards of living of the residents

of these urban centers (that may have a significant impact on the final results of the survey), each urban center was further stratified into the following three sub-strata.

- Sub-stratum 1: Households having a relatively high standard of living
- Sub-stratum 2: Households having a relatively medium standard of living
- Sub-stratum 3: Households having a relatively low standard of living

In this category too, a stratified two-stage cluster sample design was adopted to select the primary sampling units (the EAs) and the Second Stage Unit. Allocation of sample EAs to a reporting level among the above mentioned strata were accomplished in proportion to the number of EAs in each stratum. Sixteen households from each of the primary sampling units (EAs) in each reporting level were then selected as a Second Stage Unit (SSU).

Category III - Other urban centers: Urban centers in the country other than those under category II were grouped under this category. A domain of other urban centers is formed for each region (excluding Gambella region) and seven reporting levels were formed in this category. However, there is no domain in category III for Harari, Addis Ababa and Dire Dawa as they do not have urban centers other than those grouped under category II.

Unlike the above two categories, a stratified three stage cluster sample design was adopted to select samples from this category. The primary sampling units were urban centers and the second stage sampling units were EAs. Sixteen households from each of the selected EAs were finally selected as a third stage sampling unit.

Sample Size and Selection Scheme

Category I: A totally of 2,016 EAs and 24,192 households were selected from this category. Sample EAs of each reporting level were selected using Probability Proportional to Size (PPS) with systematic sampling techniques; size being number of household obtained from the 2001/2 Ethiopian Agricultural Sample Enumeration. Twelve households per EA were systematically selected from the fresh list of households prepared at the beginning of the survey.

Category II: In this category 485 EAs and 7,760 households were selected. Sample EAs from each reporting level in this category were also selected using probability proportional to size systematic sampling; size being number of households obtained from the 2004 EUEEC. Sixteen households in each of the selected EAs were systematically selected from the fresh list of households prepared at the beginning of the survey.

Category III: One hundred twenty-seven urban centers, 275 EAs and 4,400 households were selected in this category. Urban centers from each domain as well as EAs in each urban center were selected systematically using probability proportional to size; size being the number of households obtained from the 2004 EUEEC. Sixteen households in each of the selected EAs ultimately were systematically selected from the fresh list of households prepared at the beginning of the survey.

In total, including region rural, region urban and country domains, a total of 148 reporting levels were formed under this design.