
**Living Standards Measurement Study- Integrated Surveys
on Agriculture (LSMS-ISA): NON STANDARD UNITS
MARKETS SURVEY**



Association of Ethiopian Microfinance Institutions

Manual for Interviewers and Supervisors

4/24/2015

Contents

1. Introduction.....	3
2. The field workers role.....	4
2.1. Enumerators	4
2.2. Supervisors.....	5
3. Understanding the Survey Questionnaire	5
3.1.Suggested Zones for Market Survey	5
3.2.Administering the Market Survey	8
3.3.Survey instrument administration	8
3.4.DESRIPTION FOR MARKET SURVEY QUESTIONNAIRE.....	9
3.5.Nonstandard Unit Measurement Lists.....	22
4.Use of tablets and troubleshooting.....	22
GENERAL NOTE	22
4.1.Starting the Interview	23
5. Annex.....	37
Annex 1. Market items segregated by region	37

1. Introduction

In developing countries like Ethiopia there are several nonstandard units (NSUs) which are used to quantify the amount of various items. These nonstandard units are mostly common in rural areas where they are used to measure the amount of land and commodities which are usually consumables. Studies that are aimed to analyze household welfare are mainly based on household survey data particularly on household expenditure data. Information on household expenditure is important to analyze living standard, cost of living, level of poverty and consumer behavior which allow to create appropriate policies (Disney et al., 2001). Majority of surveys in developed countries use price information to measure the welfare of household which means income or expenditures are stated in monetary units. However, most surveys in Ethiopia (see e.g. the Ethiopian rural household surveys (ERHS) and Ethiopian socioeconomic survey (ESS)) use quantities to measure expenditure and these quantities are mainly reported in NSUs. Any analysis using these quantities requires the conversion of the NSUs into standard units and such conversion is not straightforward. Previous experience shows that communities use variety of units and these are often not easily comparable across communities or easily expressed in to standard units. Also, in some cases local units with similar name found to differ in size.

Establishing accurate conversion units is thus vital to produce valid measures thereby ensuring the quality of studies based on the measures and, conclusions and inferences made from the findings of the studies. World Bank has announced to conduct a market survey to establish accurate measurement of NSUs for the various crops and food items which are available in the ESS data. EFTRI/AEMFI therefore takes interest in conducting this survey assuring the effectiveness of the work given its vast experience in undertaking large scale surveys.

This survey aims at collecting market data for non-standard measurement from nine regions (Tigray, Afar, Amhara, Oromiya, SNNP, Benishangule, Gambela, Harari and Somali) and one administrative city (Dire Dawa). The survey plans to visit approximately 30 zones and 60 market places throughout the country. In each place, items with non-standard measurement, including food production items-in open market places-and consumption food items-in household, are measured in kilogram.

2. The field workers role

2.1. Enumerators

The enumerators are expected to complete the main market place and household questionnaire and using laptops/tablets. The instructions and troubleshooting tips working with computer assisted personal interview (CAPI) are given in part 4 of this manual. The way you act will affect the accuracy of the information that you collect, as well as public perception of this exercise. Be willing to listen, be patient, polite, positive and friendly. **Introduce the survey in a way that encourages the respondent:** The introduction to the interview gives the respondent an idea of what the study is all about and why they should give up their time to participate. You will also have a letter to show that you are working for Association of Ethiopian Microfinance Institutions (AEMFI) and its collaborators.

In general, as an enumerator, you need to:

- be patient and tactful when interviewing household members in order to win their cooperation and trust;
- ensure interviewed households and or vendors of items to be measured complete confidentiality of all collected data: If the respondent hesitates about answering the questions, or asks what the information will be used for, repeat that the information will be kept completely confidential.
- follow the instructions established during enumerators' training;
- know the content of the survey manual;
- follow the instructions given by the team supervisor;
- identify the required food items from the recognized market place and household
- identify the kind of non-standard measurements used for the identified item
- measure each item at least two times in kilogram
- take a picture for all measured items
- record the GPS address of each market places

2.2. Supervisors

The supervisor will

- Contact with appropriate regional and woreda level government offices and identify local potential assistance persons in each market place that can facilitate the process of identifying the intended items and the corresponding non-standard measurements.
- keep communicating with the regional coordinators and the data manger
- Ensure that the logistics are done appropriately to facilitate the movement of the interviewers
- In collaboration with the core survey team, training of enumerators before the survey
- Ensure the questionnaire has been filled appropriately

3. ¹Understanding the Survey Questionnaire

The questionnaire is designed aiming to capture and measure with standard unit measurement for all production and consumption foods used in specific regions and markets.

3.1.Suggested Zones for Market Survey

Table 1 below provides the suggested list of zones in which you will conduct the market surveys. This list was selected based upon a comprehensive review of the NSUs observed for each crop and food item in the ESS data at the regional and then zonal level. Zones within each region were selected whose observed NSU lists had the greatest overlap with the full region-level list of NSUs. Several zones were also included to ensure full geographic coverage for the larger regions.

One or two markets are identified from each zone. Markets are selected from each zones based on the following criteria

- The zonal or special woreda center was selected

The next step was identifying market centers to visit with in each zone. One or two markets are identified from each zone. We have taken in to consideration market size, language, ethnicity

¹ this section is almost entirely extracted, only with minor revisions, from the World Bank document prepared for this survey

and other criteria during market center selections. Mainly we have selected zonal or woreda centers as market centers assuming that these towns/ cities have bigger markets as well as the market is open the whole weeks. Table 1 also shows the markets to be visited in each zone.

Table 1. Zones and markets

List of Market Centers				
Region	Zone		Market	
	Code	Name	Zone market	Second market with in the Zone or adjacent zone
TIGRAY				
TIGRAY	5	WESTERN TIGRAY	Shire	
TIGRAY	2	CENTRAL TIGRAY-ZONE	Axum	
TIGRAY	3	EASTERN TIGRAY ZONE	Adigrat	
Tigray	6	MEKELLE	Mekelle	
TIGRAY	4	SOUTHERN TIGRAY-ZONE	Maychew	Alamata
AMHARA				
AMHARA	1	NORTH GONDAR-ZONE	Gondor Town	Debariq
AMHARA	2	SOUTH GONDAR-ZONE	Debre tobor	Bahirdar
AMHARA	3	NORTH WELLO-ZONE	Woldiya	Kobo or lasta
AMHARA	11	BAHIRDAR		
AMHARA	4	SOUTH WELLO-ZONE	Dessie	
AMHARA	5	NORTH SHEWA-ZONE	DebreBirhan	Shewarobit
AMHARA	10	OROMIYA Zone	Bati	
AMHARA	6	EAST GOJAM ZONE	Debremarkos	Dejen
OROMIYA				
OROMIYA	1	WEST WELLEGA-ZONE	Gimbi	Nejo

OROMIYA	4	JIMMA -ZONE	Jimma Town	Gelila (Limmu Woreda)
OROMIYA	11	BALE-ZONE	Robe	
OROMIYA	14	GUJI-ZONE		Hageremariam
OROMIYA	17	WEST ARSI-ZONE	Shashemene	Assasa
OROMIYA	18	KELEM WELLEGA ZONE	Dembidolo	Dale Wabera (Kake town)
OROMIYA	19	HORO GUDRU WELLEGA-ZONE	Shambu	Fincha
OROMIYA	6	MAO KOMO SPECIAL-WEREDA	Assebe Teferi	Bedessa
BENISHANGUL GUMUZ				
BENISHANGUL GUMUZ	3	ASOSA-ZONE	Assosa	
BENISHANGUL GUMUZ	6	MAO KOMO SPECIAL-WEREDA	Tongo town	
SNNP				
SNNP	1	GURAGHE ZONE	Welkite	
SNNP	2	HADIYA	Hossana	
SNNP	3	KEMBATA TIBARO-ZONE	Durame	
SNNP	21	HALABA WOREDA	Halaba	
SNNP	4	SIDAMA-ZONE	Hawassa	Aleta Wondo
SNNP	5	GEDEO-ZONES	Dilla	
SNNP	6	WOLAYITA	Sodo	
SNNP	9	KEFA-ZONE	Bonga	
SNNP	10	GAMO GOFA ZONE	Arbaminch	Chencha
SNNP	11	BENCH MAJO ZONE 11	Mizan	
SNNP	12	YEM SPECIAL-WEREDA	Fofa	
SNNP	17	DAWURO-ZONE	Tercha	
SNNP	18	BASKETO SPECIAL-WEREDA	Laska	

SNNP	20	SILTE 20	Worabe	
GAMBELA				
GAMBELLA	1	Agnewak ZONE 1	Gambella Town	
GAMBELLA	3	MEJENGER-ZONE	Meti	
DIREDAWA				
DIRE DAWA	1	DIRE DAWA-ALL ZONE	Diredawa	
SOMALI	2	Jijiga Zone	Jijiga town	
HARAR	1	Harar town	HARAR	
AFAR	3	Zone 3	Awash 7 killo	

3.2.Administering the Market Survey

This survey involves three major activities

1. Identifying and measuring nonstandard units as well as completing the survey instrument.
2. Taking GPS coordinates of the market center
3. Taking pictures of the market center

3.3.Survey instrument administration

This subsection gives you important information on the instruments, how to administer the questionnaire, how to deal with the market survey respondents, etc.

Before you go to a selected household, you should ensure that you are ready to start the market survey data collection. That is make sure that you have all the necessary equipment such as, CAPI notebooks, GPS phone, Weighing scales, paper questionnaires and pen. Moreover, Make sure that you have the correct location (region, zone, woreda) and Market identification code of the selected market center. You will start completing module A (cover page of the instrument)

and this section will be completed by the field worker. All Questions of Module A will be completed by the field worker without asking any respondent.

You may encounter some unusual cases during the data collection. If you encounter a different or unusual case in a particular section or sections for a market and are not sure what to do, write all of the details down on the computer/questionnaire or in your notebook. Obtain as much information as possible to enable you to complete the questionnaire efficiently when you leave the market. After you completed collecting data from the market, check this manual for guidance. If the solution cannot be found in this manual, you should consult your Field Supervisor or AEMFI staffs.

Your Interactions with the Local administrators and Community: Most Market centers are in Zonal or woreda towns. As you will be working intensively for few days in the city/ town with community members in carrying out the survey, it is vital that you establish a good working relationship with local administrators as well as traders in the market center.

Your work is not to be secretive. Please explain what it is you are doing to all community members and local administrators who ask about your activities. You should be respectful, courteous, and patient with everyone in the locality/ market center. The quality of your work is to a large degree dependent on the level of cooperation you receive from the local administrators, members of the communities in which the market is located.

Getting support letter from regional and local administrators: Please also bear in your mind that this period is also an election period and most local administrators will ask you many questions about your work. Therefore, you must always have a clearance letter from the regional as well as local administrators. This must be done before you started to collect any data or reach to the market centers. Since the market centers are located in zonal or woreda town getting clearance will not take much time.

3.4.DESCRPTION FOR MARKET SURVEY QUESTIONNAIRE

This subsection will provide you brief description of the market survey questionnaire. The sections in the Household questionnaire are organized as follows:

- MODULE A: MARKET IDENTIFICATION
- MODULE B: CROP AND CONSUMPTION UNIT MEASUREMENT
- MODULE C: OTHER CROP UNIT MEASUREMENT

General Notes: There are two groups of items in this questionnaire. One is for non-container units and the second group is containers nonstandard units. Non containers will be administered once and must not be repeated in every market whereas containers will be collected from each selected market. The non-containers that are not covered during the piloting exercise will be distributed among different groups of field workers. Hence, each team will collect the measurements and prices of the assigned items only from one market. Moreover, non-containers units will be collected only from one vendor. The weight and price of container nonstandard units will be collected from each market and from two vendors in each market. Please also note the following points during the data collection:

- If some of the non-containers are not available in the market please create the units yourself. For example if you cannot find three sizes of sweet potato *medeb*. That is if only one *medeb* is available in the market, please create the other two and make them big medium and small *medeb*s. That is, the market *medeb* will be small *medeb* and twice of the market *medeb* will be medium and three times of the market *medeb* will be big *medeb*.
- Please collect the non-container data only from one market and one vendor
- For the containers data will be collected from each market and from two vendors.
- In the market you might found a variety size of containers. For instance you might find 10 different sizes of madaberia. In such cases please use the container that is commonly used by the farmers or by the local community. You might purchase these containers and ask the vendor to give you item filled in with similar size of containers.

Module A: Market Identification: this section mainly aimed to collect information about the location of the market, staff detail and interview details. This section is mainly completed by the field worker without asking any respondent. Both are identification and names of field staffs are

10

coded in the CAPI and field workers are supposed to complete this section before they have started any market data collection.

Q0 Market Identification number: each market will have a unique identifier to be assigned by your field supervisors so please enter/record market id in the space provide

Q1-Q4. These questions are mainly focused on area identification of the market survey. Enter/record the name and the area code of the region/zone/woreda and market name of the selected market center. These codes are also preceded in the CAPI and select the correct code from the option lists

Q5-Q6 Staff details: In this part of the questionnaire, spaces are provided for the field enumerators and field supervisors involved in this field work activities. Names of all field staffs are preceded in the CAPI.

Q7-8 date and time of interview: there is a space provide for date and time of interview in the CAPI. However this section will be automatically filled in by the CAPI from the machine time and date. Hence please make sure that the date and time of your machine is properly working. Please also remember that this question is protected and don't try to change and modify these questions

Q9 - 10. GPS Coordinates: Record the GPS coordinates (latitude and longitude) of the selected market center. GOS coordinates will be taken form the center of the market not from corners of the market. Please also refer to the section that explains on how to use GPS devices.

Q11-12: weighing scale information: please record the type of scales used to measure items in the market. During the data collection you might use different personal and market weighing scales and information related to the instruments used will be recorded in the pace provided.

CSPro 6.0 - [Market Suroy Ethiopia containers.fmf *]

File Edit View Options Align CAPI Options Tools Window Help

Nonstandard Unit Market Survey

MODULE A: MARKET IDENTIFICATION

0. Market survey Ethiopia identification	<input type="text"/>	9. Location coordinates: Latitude(GPS N)	<input type="text"/>
1. Region Code	<input type="text"/>	10. Location coordinate: Longitude(GPS E)	<input type="text"/>
2. Zone Code	<input type="text"/>		
3. Woreda Code	<input type="text"/>		
4. NAME OF MARKET (market of Woreda town)	<input type="text"/>		
5. TEAM SUPERVISOR NAME	<input type="text"/>		
6. FIELD WORKERS NAME	<input type="text"/>		
7a. Date Western (D-M-Y)	<input type="text"/>		
8a. STARTING TIME OF INTERVIEW	<input type="text"/>		

MARKET SCALE CALIBRATION

1344,268

9:42 AM 5/4/2015

CSPro 6.0 - [Market Surey Ethiopia containers.fmf *]

File Edit View Options Align CAPI Options Tools Window Help

4. NAME OF MARKET (market of Woreda town) _____

5. TEAM SUPERVISOR NAME

6. FIELD WORKERS NAME

7a. Date Western (D-M-Y)

8a. STARTING TIME OF INTERVIEW

MARKET SCALE CALIBRATION

Select an item that weighs approximately 6-7 kg.
Weigh the item using your team's digital scales and record the weights in question 8. Weigh the same item using the market scale and record the weight in question 9.

11. a. Enumerator 1 scale _____ KG

12. Weight using primary market scale _____ KG

13. NOTES _____

338,338

9:43 AM 5/4/2015

Module B: Crop/Item Unit Measurement

Q1-Q2 CROP CODE AND CROP NAME: Both crop code and crop name are pre filled in or prepopulated in the CAPI and there is no need to record codes and names for these questions

Q3 UNIT NAME: All local unit names for each crop type is also prefilled in or prepopulated in the CAPI and there is no need to record names for this question

Q4 Size? All the size options for the nonstandard units is also prefilled in the CAPI and there is no need to be completed by the field worker.

Q5 WAS ITEM MEASURED? Record if the crop local unit combination is measured. If the item is measured record Yes (1) if the Item is not recorded Record No (2)

Q6 Why was item not measured?: if the answer for Q5 is no record the reason why the item is not measured in the space provided and skip to the next item

Q7a and Q8a Item Sample Weight #1 and Item Sample Weight #2: if the answer for Q5 is yes record the weighing result of each item in the space provided. Each item will be measured twice and the first result is recorded in Q7a and second result is recorded in Q 8a. Please see below the measuring procedures and instruction below

Q7b and Q8b Price for Item Sample Weight #1 and Price for Item Sample Weight #2: if the answer for Q5 is yes record the price for the measured item in the space provided. The price of each item measured will be recorded twice from two different vendors. Price from vendor 1 will be recorded in Q7b and price from vendor 2 will be recorded in Q 8b.

NOTE: Please note that for each item and unit combination two weights will be taken from two different vendors. Therefore weight 1 (weight from Vendor 1) and price of weight 1 (price from Vendor 1) will be recorded in Q7a and 7b respectively. Weight 2 (weight from Vendor 2) and price of weight 2 (price from Vendor 2) will be recorded in Q8a and 8b respectively

Q9: Which type of scale was used? : Record the type of scale used to measure each listed items in the space provided

CSPro 6.0 - [Market Surey Ethiopia containers.fmf *]

File Edit View Options Align CAPI Options Tools Window Help

'MODULE B: CROP UNIT MEASUREMENT

	1. CROP NAME	2. CROP CODE	3. UNIT NAME	4. SIZE	5. Was item measured?	6. Why was item not measured?	6B. Why was item not measured? Others specify	7A. Item Sample Weight #1	7B. Item Sample Weight #2
1					<input type="checkbox"/>	<input type="checkbox"/>			
2					<input type="checkbox"/>	<input type="checkbox"/>			
3					<input type="checkbox"/>	<input type="checkbox"/>			
4					<input type="checkbox"/>	<input type="checkbox"/>			
5					<input type="checkbox"/>	<input type="checkbox"/>			
6					<input type="checkbox"/>	<input type="checkbox"/>			
7					<input type="checkbox"/>	<input type="checkbox"/>			
8					<input type="checkbox"/>	<input type="checkbox"/>			
9					<input type="checkbox"/>	<input type="checkbox"/>			
10					<input type="checkbox"/>	<input type="checkbox"/>			

809,30

9:44 AM 5/4/2015

MODULE C: OTHER ITEM UNIT MEASUREMENT

Module C (Other crop unit measurement) is only to collect nonstandard unit that are not listed in Module B. When we go to the market we could find some local units that are common to measure the list of items in Module B. so these new local units/ nonstandard units must be listed in module C. In module B the Item name, Item code, unit name and size was prefilled but for this module the Item name, Item code, unit name and size must be completed by the field worker.

Q1-Q2 CROP CODE AND CROP NAME: Both crop code and crop name are to be selected from the options provided. The crop names and codes are not prefilled and must be completed by the field worker. You have of options for Item Name (Crop Name) once you have selected the Item the name will be automatically filled in.

Q3 UNIT NAME: Please complete the nonstandard unit that you have found in the market but not in the list.

Q4. SIZE: if the local unit has different sizes please select the different size from the option provided. For example if the local unit has Large, medium, and small sizes you have to select the item three times to be measured using these different sizes.

Q5 WAS ITEM MEASURED? This will not be asked for this module. The field is protected and will be skipped to the weight

Q6 Why was item not measured?: This will not be asked for this module. The field is protected and will be skipped to the weight

Q7a and Q8a Item Sample Weight #1 and Item Sample Weight #2: if the answer for Q5 is yes record the weighing result of each item in the space provided. Each item will be measured twice and the first result is recorded in Q7a and second result is recorded in Q 8a. Please see below the measuring procedures and instruction below

Q7b and Q8b Price for Item Sample Weight #1 and Price for Item Sample Weight #2: if the answer for Q5 is yes record the price for the measured item in the space provided. The price of each item measured will be recorded twice from two different vendors. Price from vendor 1 will be recorded in Q7b and price from vendor 2 will be recorded in Q 8b.

NOTE: Please note that for each item and unit combination two weights will be taken from two different vendors. Therefore weight 1 (weight from Vendor 1) and price of weight 1 (price from Vendor 1) will be recorded in Q7a and 7b respectively. Weight 2 (weight from Vendor 2) and price of weight 2 (price from Vendor 2) will be recorded in Q8a and 8b respectively

Q9: Which type of scale was used? : Record the type of scale used to measure each listed items in the space provided

CSPro 6.0 - [Market Surey Ethiopia containers.fmf *]

File Edit View Options Align CAPI Options Tools Window Help

Forms

'MODULE C: OTHERS CROP UNIT MEASUREMENT

	1. CROP NAME	2. CROP CODE	3. UNIT NAME	4. SIZE	5. Was item measured?	6. Why was item not measured?	6B. Why was item not measured? Others specify	7A. It Sam Weight
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

7b. END DATE OF INTERVIEW

8b. ENDTIME OF INTERVIEW

Activate Forms Window

9:46 AM 5/4/2015

Selecting Items to Weigh:

The two measurements of a given item should be collected from two different vendors. When selecting an item/unit combination to measure in the markets, confirm with the seller that the unit is consistent with your identification.

The order of items listed on the questionnaire does not have to be followed. You may skip around as necessary to complete the market questionnaire most efficiently. **If there are any common units you notice are missing from the list, please take the measurement and fill in the line with “Other, specify” and blank space for other unit (question 2). This is the bottom line for each item. Be sure to write the name of the unit under question 2 (crop Name).**

Availability:

When a crop is available at a market, you should try to collect as many of the listed unit measurements as possible. **Even if a crop-unit combination is not for sale at the market, it**

should still be weighted. All crop/unit combinations may be not available in the primary woreda market.

Weighing Items & Scale Operation:

The digital scales used for the crop-cutting exercise (KD8000 Scale by My Weight) will be used for the market survey. These are accurate but are not ideal for rough conditions. Great care must be taken when applying them in the field. Keep scales clean and dry.

All weights taken will be recorded in kg except of Milk or any liquid and must be measured in liters.

Note: the maximum weight on the scales is 100 kg. If you suspect the item to exceed this limit break the load into two or more batches and record the sum of the measurements. If a large scale is available for use in the market, you may use this for larger units (fees for use of scale will be provided when necessary). When using the market scales, ensure the scale is calibrated correctly by checking the balance is at “0” with nothing on it. If more than one scale is available, select a scale that has a government certification stamp.

Select an item that weighs approximately 50-60 kg, even though the digital scale may have the capacity to weigh 100kg. Weigh this item using each personal digital scale and record the weights in question 6. Weigh the same item from another vendor using the personal digital scale and record the weight in question 7. This will allow us to compare the accuracy of the measurements.

If the shape of the item to be measured is not appropriate to be weighed in the digital scale; use the scale in the market giving priority to scales which are with government certification.

If a large scale is not available for use in the market, only 1 measurement is required for units over 40kg.

The weight recorded on the Market Questionnaire must **not** include the weight of the container. The weight of the empty container must be subtracted from the total weight.

1. Place the scale on a stable flat surface. The scale must be as level as possible before weighing items.
2. Press [O / I] to turn the scale on. The Scale will run a brief check and once the scale is stable, the display will show “0.000Kg”.

Note: If the display does not show the weighing unit as Kg then the scale was not configured correctly for the last item/s weighed. Press [MODE] to select the correct unit (KG) to be used and reweigh previous item if necessary.

Note: Some items may require the use of a container to hold the item on the scale. When a container is used, place the empty container on the scale and wait for a stable reading. Once a stable reading is displayed press [Tare] and the display will read “0.000Kg”.

3. Add items to scale, wait for stable reading and record weight displayed.
- 4.

Unit Photos

In addition to collecting conversion factors, photos will also be taken of each unit. These photos will serve two purposes: (1) to provide data users with a more accurate perception of what the NSUs actually are (e.g. a basket, cup) and their relative size, and (2) be used in future waves of the ESS to aid in respondents’ estimation of quantities in NSUs. In the latter case, the photos will be particularly useful in standardizing units such as a “bunch” or “pile” that are not clearly defined.

Required photos:

Photos are not required for every single item/unit combination. Many NSUs in the ESS are containers which do not vary across items. Therefore, only a photo of the container itself is required. For units that are not containers such as “bunch” (esir) or “pile” (medeb), item specific

photos must be taken. [A complete list of required photos will be compiled once the unit lists have been finalized].

Unlike conversion factors, photos will not need to be taken in every single zone. Each individual required photo will be assigned to up to 3 separate survey teams. This will allow us to capture some potential variation in units across regions and also better ensure that we have complete photo coverage in the event the assigned unit is not available in the market to photograph.

General guidelines for taking photos:

- Photos should be well lit so that the items can be easily seen and you can differentiate between the item and its shadow or background.
- For photos of containers that are commonly used to measure a large number of items, the containers could be photographed empty or filled with one of the items it is used to measure.
- For item specific photos, the weighed quantity should be photographed. For example, the potatoes used to weigh a medeb should be the exact same potatoes photographed for the medeb.
- Each photo should contain only one food item or unit.
- A size reference item must be in the picture to illustrate the relative size of the main objects. This should be something that generally comes in one standard size and is easily identifiable to respondents. Examples include a water or soda bottle, a writing pen, a box of matches, etc .
- The dimension or volume of the item must be clear. Usually this means taking the picture from a side angle, either directly horizontal to the item, or slightly above horizontal. With single items (one tomato, but not a pile of tomatoes) aerial photos (taken from directly above a container, for example) maybe be fine. Aerial photos of containers or items that are in a pile are generally not useful.

(Please see the sample pictures from Malawi for Reference)

Filing and Naming of photo

Only a single photo will be taken for consumption items that are measure using non containers like medeb, esir, shekim, etc. We have a separate list of items that require a single photo for the whole survey on the questionnaire. That means you don't need to take photo from each market. However, we must take for every container or local units such as madaberia, tasa, Kamba etc . We have also list of items that require photo for the different sizes of local units in the questionnaire from each market.

The entire photo taken from the market must be filed and named consistently through the survey. The following is the procedure you must follow to file and name the photo taken from each market:

1. For all markets we must have one photo folder. This folder must be named by the name of the market. For example if the market is Bahirdar market the folder must be named as “Bahirdar_photo”
2. Each market folder must have two sub folders and must be named as market name and vendor number. For example for Bahirdar market we must have two folders Named “Bahirdar Vendor 1” and “Bahirdar Vendor 2”
3. All the Market folders and subfolders must be created before they went to the market (even before they went to the field).
4. After the folders and subfolders are created all the photos taken from each market must be kept in each subfolder. The photo names must also be consistent throughout the survey. The file name must include market name, crop name, local unit, size and vendor number. For example if you have measured and taken photo from Bahirdar market and the item is wheat in small madabariya from the first vendor then the photo name must be “Bahirdar_wheat_Small Madaberia_V1” and the same filing procedure will be made to other items. However, if the photo for all sizes is in one photo then the file name must be “Bahirdar_wheat_All_ Madaberia_V1” “all sizes are
5. The photo for all sizes must be taken together. That is one photo must be taken for large, medium and small size local units. But in some case it could be difficult to find all sizes

in one vendor. In such situation you can take different photo for different sizes of the same local/ nonstandard units. But you must indicate the size of the unit in the file name.

6. Please also note that you must take the photo for all items with the items filled in the container. Moreover, you must take one sample empty containers for all sizes in each market.

3.5. Nonstandard Unit Measurement Lists

This section contains the list of measurements to be performed in the market survey. The list of measurements is unique for each region and is based upon the crops/food items and NSUs commonly observed within the region in the ESS data.

4. Use of tablets and troubleshooting

GENERAL NOTE

1. Make sure that you have the following equipments for the survey.
 - ✓ **Laptops** – One per supervisor
 - ✓ **Note or tablets** – One per enumerators with the following:
 - With one extra battery for laptops
 - bag
 - External GPS unit/ could be phone
 - ✓ **USB Internet Routers (or Dongles)** for all Supervisors- these are available
 - ✓ **Field bags** – for interviewers/supervisors to carry their field equipment
 - ✓ **Manuals** – All survey Related Manuals
2. Before you start your interview, make sure that the device you are using:
 - ✓ Properly functioning with both batteries. Batteries are fully charged.
 - ✓ Has latest anti-virus is installed.
 - ✓ Have correct settings (such as time and date, partitions, etc.).
 - ✓ Has the CAPI instrument is loaded.
 - ✓ Is loaded with all of the right software (such as Amharic software's, etc.).
 - ✓ Have USB dongles for internet that are working properly.

NOTE:

1. Every night batteries should be charged.
2. Do not disassemble the laptop.
3. Keep the battery and laptop away from fire or heat.
4. Keep the surrounding of your laptop free to allow ventilation
5. Keep the laptop, battery, power cables clean and dry.

4.1.Starting the Interview

1. To start Add

First go to the desktop and look for **Market Survey Ethiopia. Pff** shortcut



Market Surey Ethiopiopia.pff

When you click the above shortcut from the desktop you will automatically enter to the cover page of the questioner.

The screenshot displays the CSPro 6.0 software interface for the 'Market Survey Ethiopia.fmf' project. The title bar reads 'CSPro 6.0 - [Market Surey Ethiopiopia.fmf]'. The menu bar includes File, Edit, View, Options, Align, CAPI Options, Tools, Window, and Help. The toolbar contains various icons for file operations and data entry. The main window is titled 'Central Statistical Agency of Ethiopia' and 'Nonstandard Unit Market Survey'. It is divided into two main sections: 'MODULE A: MARKET IDENTIFICATION' and 'MARKET SCALE CALIBRATION'. The 'MODULE A' section contains fields for: 0. Market survey Ethiopia identification, 1. Region Code, 2. Zone Code, 3. Woreda Code, 4. NAME OF MARKET (market of Woreda town), 5. TEAM SUPERVISOR NAME, 6. FIELD WORKERS NAME, 7a. Date Western (D-M-Y), and 8a. STARTING TIME OF INTERVIEW. The 'MARKET SCALE CALIBRATION' section includes instructions: 'Select an item that weighs approximately 6.7 kg. Weigh the item using your team's digital scales and record the weights in question 8. Weigh the same item using the market scale and record the weight in question 9.' It also has fields for 11. a. Enumerator 1 scale and 12. Weight using primary market scale, both in KG. The Windows taskbar at the bottom shows the system clock as 4:10 PM on 24-Apr-15.

If you don't see the above window, contact your supervisor. Then you will start recording with **Market Survey Identification** which will be provided by the core team. Then at **Date Western** and **STARTING OF INTERVIEW** you will not record anything the machine will record it by itself. In the GPS location part you will record the coordinates you get from the GPS machines. Before you go to the next, make sure that the geographic codes you entered are correct.

4. Was **BARLEY** in **KERCHAT/KEMBA** measured?

'MODULE B: CROP UNIT MEASUREMENT'

	1. CROP CODE	2. CROP NAME	3. UNIT NAME	4. Was item measured?	5. Why was item not measured? Others specify	6. Item Sample Weight #1	7. Item Sample Weight #2	8. Which type of scale was used?
1	1	BARLEY	KERCHAT/KEMBA	<input type="checkbox"/>	<input type="checkbox"/> 1 YES <input type="checkbox"/> 2 NO			
2	1	BARLEY	KUNNA	<input type="checkbox"/>				
3	1	BARLEY	DAWLA	<input type="checkbox"/>				
4	1	BARLEY	ESIR	<input type="checkbox"/>				
5	1	BARLEY	CHINET	<input type="checkbox"/>				
6	1	BARLEY	FERESOLA	<input type="checkbox"/>				
7	1	BARLEY	GUCHE	<input type="checkbox"/>				
8	1	BARLEY	JONIYA	<input type="checkbox"/>				
9	1	BARLEY	KASHA	<input type="checkbox"/>				
10	1	BARLEY	KUBAYA	<input type="checkbox"/>				

7b. END DATE OF INTERVIEW

8b. ENDTIME OF INTERVIEW

For Help, press F1

2 Partial ADD Field = SBQ04 Occurrence 1 of 1

4:16 PM 24-Apr-15

This will be shown when you enter to the next module, which is **Module B Crop Unit Measurement** this will allow you to record the unit measurements which you find from the field.

At the last page of the questioner there is the Date and Time you finish and it will not be recorded by you because the machine by itself will do it to you then it will ask you to **accept the case or not** you will choose **Yes** or **No**

CSEntry - (Apl File = Market Surey Ethiopiaopia.ent , Data File = data)

File Mode Edit Navigation View Options Help

5. Why was **BULA** in **ROLL** not measured?

'MODULE B: CROP UNIT MEASUREMENT

	1. CROP CODE	2. CROP NAME	3. UNIT NAME	4. Was	5. Why was item	5. Why was item not measured? Others specify	6. Item Sample Weight #1	7. Item Sample Weight #2	8. Which type of scale was used?
296	120	CHEESE	CUP						
297	121	EGGS	PIECES						
298	122	SUGAR	CUP						
299	122	SUGAR	BIRCHIKO						
300	123	SALT	CUP						
301	123	SALT	KUBAYA						
302	123	SALT	SINI						
303	123	SALT	TASA						
304	126	BULA	MEDEB						
305	126	BULA	ROLL	2	1				

7b. END DATE OF INTERVIEW 24/04/15

8b. ENDTIME OF INTERVIEW 17:32:00

For Help, press F1

2 Partial: ADD Field = SBQ05 Occurrence 305 of 305

5:32 PM 24-Apr-15

Taking backup and e-mailing data to the head office

The fields supervisors must take a back of data after completing each market and the data must be send to the head office team. We expect each team member to send completed data every Sunday to the head office team. This will help the research team to send comments before the team moved to another zone or worded.

The data folder name must include date and name of supervisor

How to use the LG Mobile for GPS Application

The following steps are used to use the GPS (Global Positioning System) of the point of a place **Longitude (E) and Latitude (N)** value of a point.

In LG mobile first the application of **GPS Essentials** to be installed (It is already installed it) if it is failed or removed what you do the following steps are used.

1. Drag the **Setting** program into the desktop of the mobile



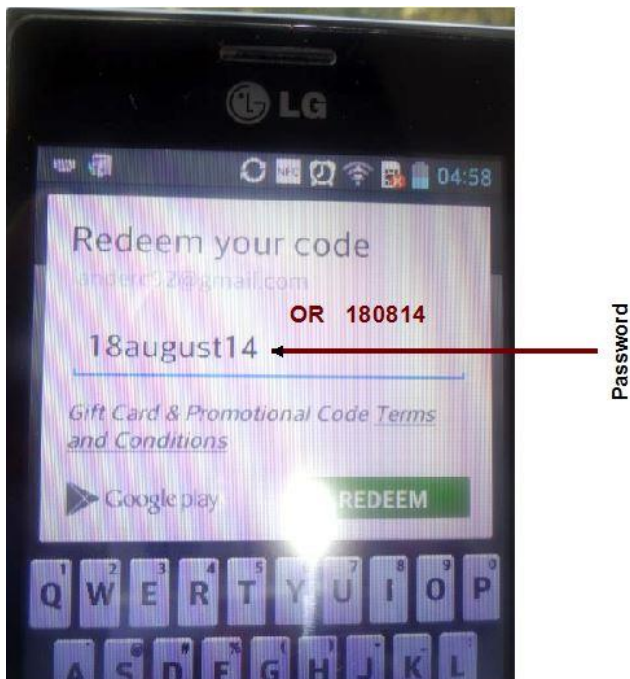
2. Open the **setting** and open the **Wi-Fi**



3. Open the **play store** program



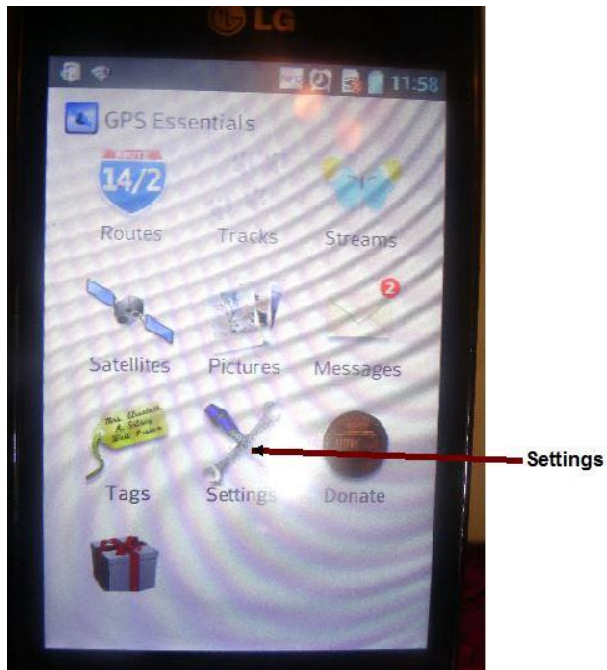
and write down **GPS Essential** on the bar of play store.



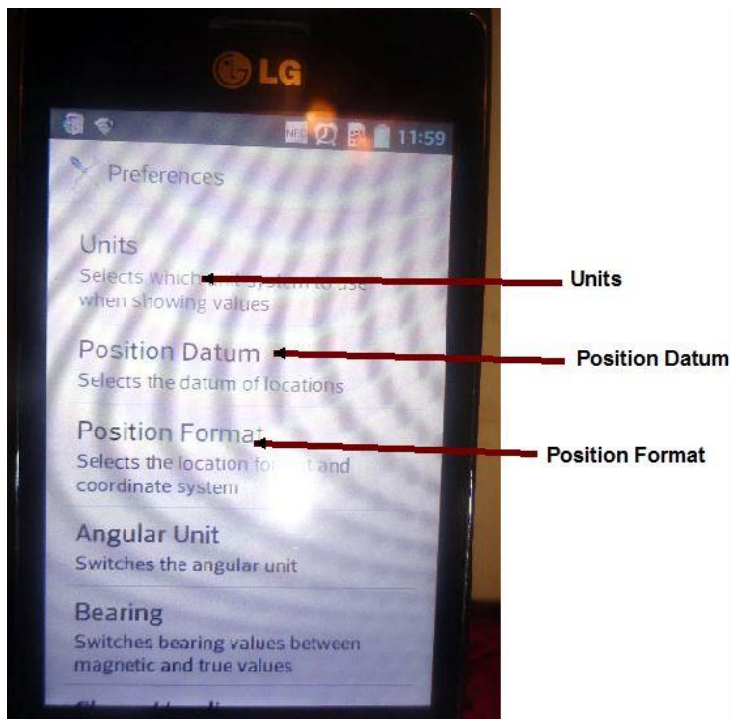
4. In the GPS Essential it has **Dashboard, Waypoints and Setting** program is very important for this survey



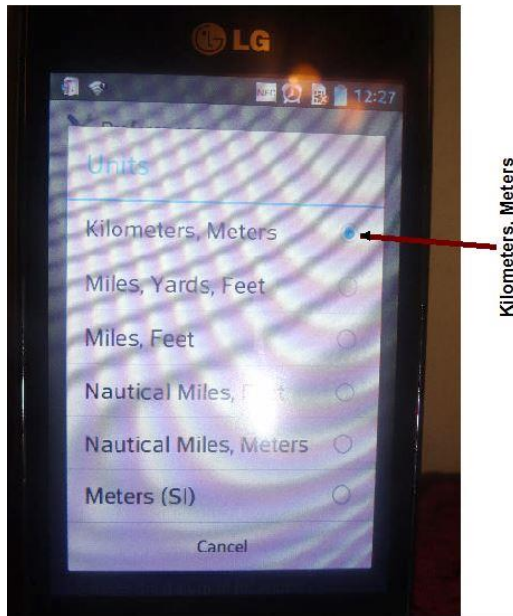
5. First to open the **Setting** to adjust which tool would use in this case the **Units**, **Position datum** and **Position format** would be selected



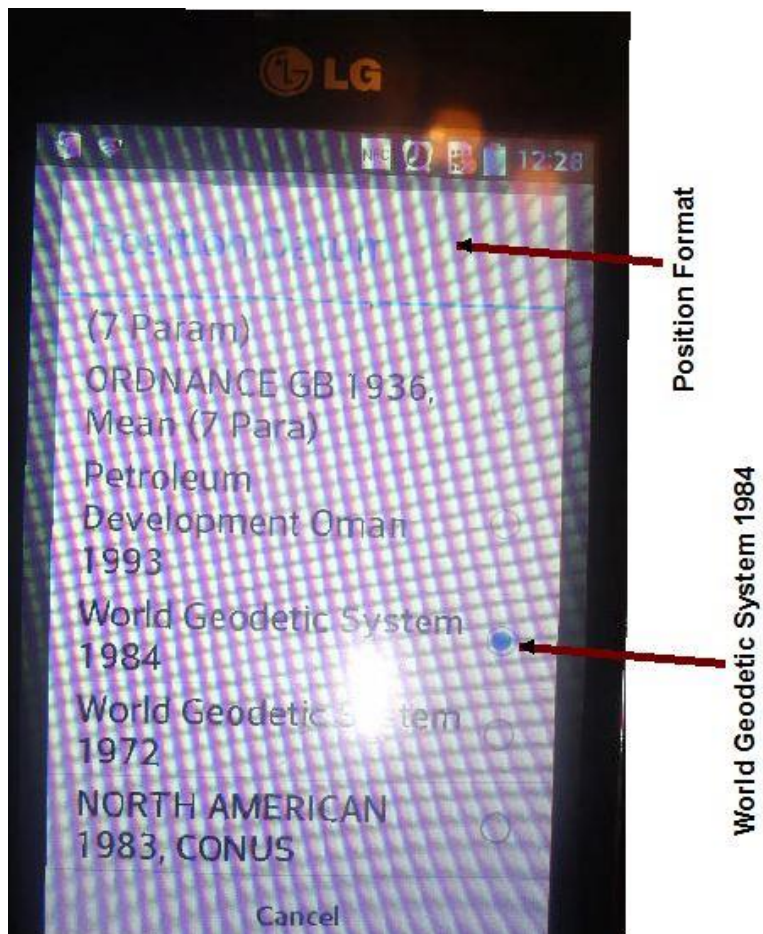
6. Open **Preferences**



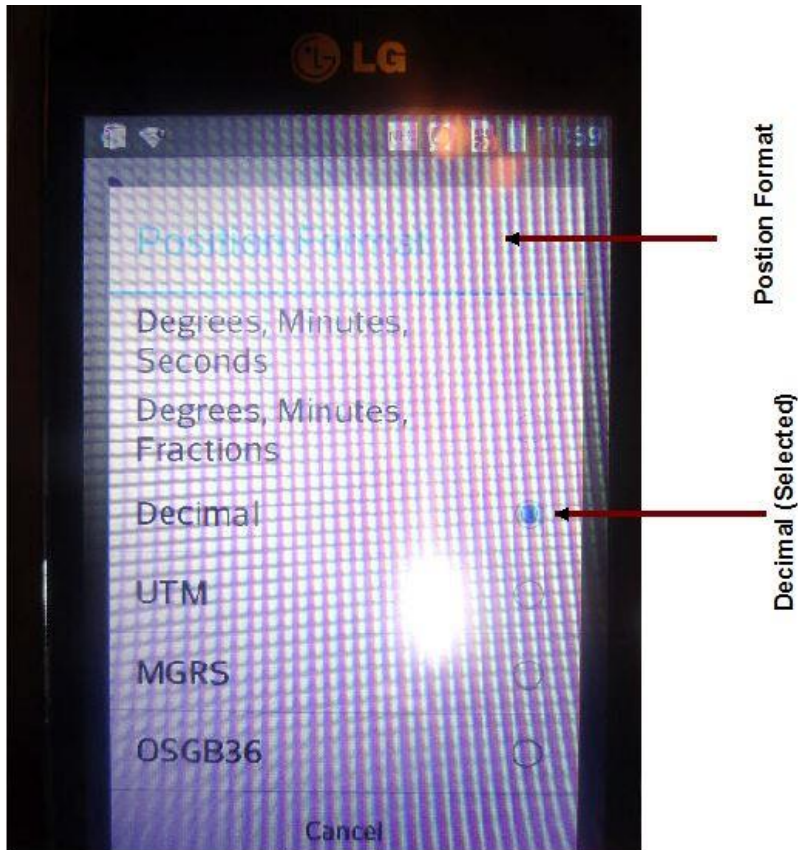
7. Adjust the **Units** (Select **Kilometers, meters**),



8. In Position Datum (Select **World Geodetic System 1984**),



9. Position Format would be (Select **Decimal**)



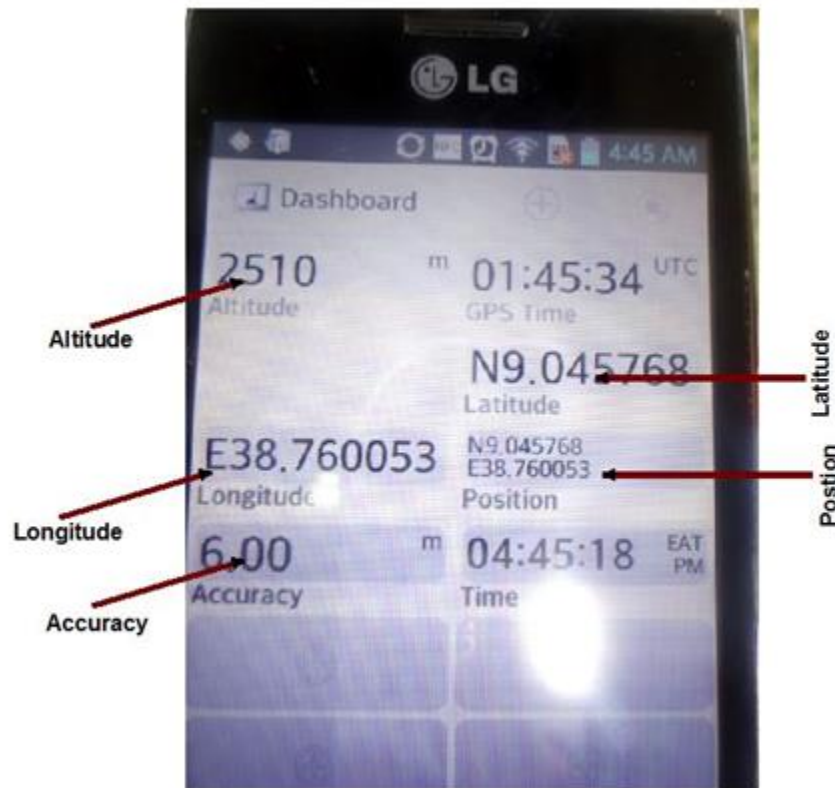
10. When the Dashboard open and the **Altitude, Date, Battery level, Latitude, Longitude, Position, Accuracy, Time, and Number of Satellites** are important to see in the dashboard therefore to see the above you have to open the \oplus sign in the **Dashboard** and Select the values you want to show on the **Dashboard**. (In the below image the Accuracy and latitude are selected and its color could be green)




11. Once installed the GPS Essentials open the GPS Essential program which is very important to take the **E (Longitude) and N (Latitude)** coordinate of the point.

Example. **N9.045768 E38.760053** Addis Ababa Sidest Kilo campus NCR Building (By the way this data can take in one of the office near to a window which shows how it is

accurate because its accuracy is 6 meter)



12. Open the **Dashboard** then check the Accuracy less than or equal to **5** Meter you can take the Latitude and Longitude value in your exercise book with other important data like time number of satellites, Accuracy, and data.
13. In the GPS essentials of the **Waypoints** icon you have to hold down the **Waypoint** icon and press the  Add button and save, give name and finally send in E-mail (I recommend in your survey area the Internet might not be working so you have to write down in your note book the above information.)

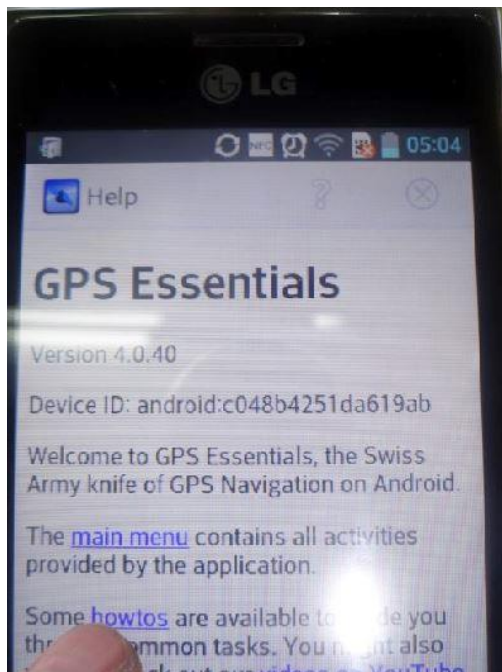


NOTE: Be Cautious

- If the sky is cloudy and some time the satellite were not working it is possible to restart your LG mobile and in the GPS essential of **Dashboard** you have select again the important thing in **Number 10**
- When you take the coordinates (**Latitude and Longitude**) of the survey area it is good and recommend in the gate of the door (not inside).
- Always charge the **LG Mobile** and only use for collecting each household coordinate and better to open in the survey area which helps to keep the battery.
- For more information to know the GPS in LG mobile first open the GPS Essential program click the right bottom of the mobile and open **Help menu**.



To get Help
Click Here



5. Annex

Annex 1. Market items segregated by region

1. TIGRAY

TABLE 3a: AGRICULTURAL UNIT LIST FOR TIGRAY

CROP		UNIT		
Name	Code	Name	Code	Other
BARLEY	1	KUNNA	7	
BARLEY	1	ESIR	11	
BARLEY	1	CHINET	13	
BARLEY	1	OTHERS(SPECIFY)	14	JONIYA
BARLEY	1	OTHERS(SPECIFY)	14	SHEMBER
MAIZE	2	KUNNA	7	
MAIZE	2	ESIR	11	
MAIZE	2	CHINET	13	
MAIZE	2	OTHERS(SPECIFY)	14	SHEMBER
MILLET	3	ESIR	11	
MILLET	3	CHINET	13	
SORGHUM	6	KUNNA	7	
SORGHUM	6	ESIR	11	
SORGHUM	6	CHINET	13	
SORGHUM	6	OTHERS(SPECIFY)	14	SHEMBER
TEFF	7	KUNNA	7	
TEFF	7	ESIR	11	
TEFF	7	CHINET	13	
TEFF	7	OTHERS(SPECIFY)	14	CHERET
TEFF	7	OTHERS(SPECIFY)	14	SAHIN
TEFF	7	OTHERS(SPECIFY)	14	SHEMBER
TEFF	7	OTHERS(SPECIFY)	14	TASA

WHEAT	8	KUNNA	7	
WHEAT	8	ESIR	11	
WHEAT	8	CHINET	13	
WHEAT	8	OTHERS(SPECIFY)	14	JONIYA
HORSE				
BEANS	13	KUNNA	7	
HORSE				
BEANS	13	OTHERS(SPECIFY)	14	TASA
FIELD PEAS	15	KUNNA	7	
CACTUS	19	KERCHAT/KEMBA	4	
CACTUS	19	KUNNA	7	
NUEG	25	KUNNA	7	
RED				
PEPPER	38	KERCHAT/KEMBA	4	

TABLE 3b: CONSUMPTION UNIT LIST FOR TIGRAY

ITEM		UNIT		
Name	Code	Name	Code	Other
Teff	1	Other(Specify)	33	SHEMBER
Teff	1	Other(Specify)	33	TASA
Wheat	2	Other(Specify)	33	SHEMBER
Wheat	2	Other(Specify)	33	TASA
Barley	3	Other(Specify)	33	SHEMBER
Barley	3	Other(Specify)	33	TASA
Maize	4	Other(Specify)	33	TASA
Sorghum	5	Other(Specify)	33	TASA
Millet	6	Other(Specify)	33	TASA
Horsebeans	7	Other(Specify)	33	TASA

Chick Pea	8	Other(Specify)	33	TASA
Field Pea	9	Other(Specify)	33	TASA
Lentils	10	Other(Specify)	33	SHEMBER
Lentils	10	Other(Specify)	33	TASA
Meat	18	Number	4	
Meat	18	Other(Specify)	33	KERCHAT
Meat	18	Other(Specify)	33	MEDEB
Cheese	20	Cup	31	
Eggs	21	Number	4	
Sugar	22	Cup	31	
Salt	23	Cup	31	
Salt	23	Other(Specify)	33	TASA
Coffee	24	Cup	31	

2. AMHARA

TABLE 4a: AGRICULTURAL UNIT LIST FOR AMHARA

CROP		UNIT		
Name	Code	Name	Code	Other
BARLEY	1	KERCHAT/KEMBA	4	
BARLEY	1	KUNNA	7	
BARLEY	1	DAWLA	9	
BARLEY	1	CHINET	13	
BARLEY	1	OTHERS(SPECIFY)	14	GUCHE
BARLEY	1	OTHERS(SPECIFY)	14	KASHA
BARLEY	1	OTHERS(SPECIFY)	14	MADABERIA
MAIZE	2	KERCHAT/KEMBA	4	
MAIZE	2	KUNNA	7	

MAIZE	2	CHINET	13	
MAIZE	2	OTHERS(SPECIFY)	14	MADABERIA
MAIZE	2	OTHERS(SPECIFY)	14	TASA
MILLET	3	KERCHAT/KEMBA	4	
MILLET	3	KUNNA	7	
MILLET	3	CHINET	13	
MILLET	3	OTHERS(SPECIFY)	14	KASHA
MILLET	3	OTHERS(SPECIFY)	14	MADABERIA
SORGHUM	6	KUNNA	7	
SORGHUM	6	DAWLA	9	
SORGHUM	6	CHINET	13	
SORGHUM	6	OTHERS(SPECIFY)	14	KASHA
TEFF	7	KERCHAT/KEMBA	4	
TEFF	7	KUNNA	7	
TEFF	7	CHINET	13	
TEFF	7	OTHERS(SPECIFY)	14	KASHA
TEFF	7	OTHERS(SPECIFY)	14	MADABERIA
TEFF	7	OTHERS(SPECIFY)	14	SAHIN
WHEAT	8	KERCHAT/KEMBA	4	
WHEAT	8	KUNNA	7	
WHEAT	8	DAWLA	9	
WHEAT	8	CHINET	13	
WHEAT	8	OTHERS(SPECIFY)	14	KASHA
WHEAT	8	OTHERS(SPECIFY)	14	MADABERIA
ROMAN	9	CHINET	13	
CHICK PEAS	11	KERCHAT/KEMBA	4	
CHICK PEAS	11	KUNNA	7	
CHICK PEAS	11	CHINET	13	
HARICOT				
BEANS	12	KUNNA	7	

HARICOT				
BEANS	12	OTHERS(SPECIFY)	14	TASA
HORSE BEANS	13	KERCHAT/KEMBA	4	
HORSE BEANS	13	KUNNA	7	
HORSE BEANS	13	DAWLA	9	
HORSE BEANS	13	CHINET	13	
HORSE BEANS	13	OTHERS(SPECIFY)	14	MADABERIA
HORSE BEANS	13	OTHERS(SPECIFY)	14	TASA
LENTILS	14	KUNNA	7	
LENTILS	14	CHINET	13	
LENTILS	14	OTHERS(SPECIFY)	14	KASHA
LENTILS	14	OTHERS(SPECIFY)	14	MADABERIA
FIELD PEAS	15	KUNNA	7	
FIELD PEAS	15	DAWLA	9	
FIELD PEAS	15	CHINET	13	
FIELD PEAS	15	OTHERS(SPECIFY)	14	KASHA
VETCH	16	KERCHAT/KEMBA	4	
VETCH	16	KUNNA	7	
VETCH	16	CHINET	13	
VETCH	16	OTHERS(SPECIFY)	14	MADABERIA
LINESEED	23	KUNNA	7	
LINESEED	23	OTHERS(SPECIFY)	14	MADABERIA
NUEG	25	KERCHAT/KEMBA	4	
NUEG	25	KUNNA	7	
NUEG	25	OTHERS(SPECIFY)	14	MADABERIA
RAPE SEED	26	KUNNA	7	
RAPE SEED	26	OTHERS(SPECIFY)	14	KUBAYA
RAPE SEED	26	OTHERS(SPECIFY)	14	MADABERIA
RAPE SEED	26	OTHERS(SPECIFY)	14	SAHIN
SESAME	27	KUNNA	7	

SESAME	27	CHINET	13	
SUNFLOWER	28	KUNNA	7	
SUNFLOWER	28	CHINET	13	
FENUGREEK	36	KUNNA	7	
RED PEPPER	38	KUNNA	7	
RED PEPPER	38	CHINET	13	
LEMONS	44	CHINET	13	
MANGOS	46	KERCHAT/KEMBA	4	
GARLIC	55	KUNNA	7	
GARLIC	55	ESIR	11	
GARLIC	55	OTHERS(SPECIFY)	14	GUCHE
GARLIC	55	OTHERS(SPECIFY)	14	SAHIN
GARLIC	55	OTHERS(SPECIFY)	14	TASA
KALE	56	OTHERS(SPECIFY)	14	CHERET
ONION	58	CHINET	13	
GREEN PEPPER	59	OTHERS(SPECIFY)	14	TASA
POTATOES	60	KERCHAT/KEMBA	4	
POTATOES	60	CHINET	13	
POTATOES	60	OTHERS(SPECIFY)	14	KASHA
POTATOES	60	OTHERS(SPECIFY)	14	MADABERIA
PUMPKINS	61	PIECES	5	
CHAT	71	ESIR	11	
GESHO	75	KERCHAT/KEMBA	4	
GESHO	75	KUNNA	7	
GESHO	75	OTHERS(SPECIFY)	14	MADABERIA
CORIANDER	79	KUNNA	7	

TABLE 4b: CONSUMPTION UNIT LIST FOR AMHARA

ITEM	UNIT
------	------

Name	Code	Name	Code	Other
Teff	1	Other(Specify)	33	SAHIN
Wheat	2	Other(Specify)	33	BIRCHIKO
Wheat	2	Other(Specify)	33	SAHIN
Maize	4	Other(Specify)	33	SAHIN
Sorghum	5	Other(Specify)	33	BIRCHIKO
Sorghum	5	Other(Specify)	33	KUNA
Horsebeans	7	Cup	31	
Horsebeans	7	Other(Specify)	33	SAHIN
Chick Pea	8	Cup	31	
Chick Pea	8	Other(Specify)	33	BIRCHIKO
Chick Pea	8	Other(Specify)	33	KUNA
Field Pea	9	Cup	31	
Field Pea	9	Other(Specify)	33	SAHIN
Linseed	13	Other(Specify)	33	TASA
Banana	15	Number	4	
Meat	18	Number	4	
Meat	18	Other(Specify)	33	MEDEB
Milk	19	Cup	31	
Cheese	20	Cup	31	
Eggs	21	Number	4	
Sugar	22	Cup	31	
Sugar	22	Other(Specify)	33	BIRCHIKO
Salt	23	Cup	31	
Coffee	24	Cup	31	

3. OROMIA

TABLE 5a: AGRICULTURAL UNIT LIST FOR OROMIA

CROP		UNIT		
Name	Code	Name	Code	Other

BARLEY	1	KUNNA	7	
BARLEY	1	OTHERS(SPECIFY)	14	KUBAYA
BARLEY	1	OTHERS(SPECIFY)	14	MADABERIA
MAIZE	2	KUNNA	7	
MAIZE	2	OTHERS(SPECIFY)	14	KUBAYA
MAIZE	2	OTHERS(SPECIFY)	14	MADABERIA
MILLET	3	KUNNA	7	
MILLET	3	OTHERS(SPECIFY)	14	KUBAYA
OATS	4	OTHERS(SPECIFY)	14	MADABERIA
SORGHUM	6	KUNNA	7	
SORGHUM	6	DAWLA	9	
SORGHUM	6	OTHERS(SPECIFY)	14	KUBAYA
SORGHUM	6	OTHERS(SPECIFY)	14	MADABERIA
TEFF	7	KUNNA	7	
TEFF	7	OTHERS(SPECIFY)	14	KUBAYA
TEFF	7	OTHERS(SPECIFY)	14	MADABERIA
WHEAT	8	KUNNA	7	
WHEAT	8	OTHERS(SPECIFY)	14	MADABERIA
HARICOT				
BEANS	12	KUNNA	7	
HARICOT				
BEANS	12	DAWLA	9	
HARICOT				
BEANS	12	OTHERS(SPECIFY)	14	BERECHEKO
HARICOT				
BEANS	12	OTHERS(SPECIFY)	14	KUBAYA
HARICOT				
BEANS	12	OTHERS(SPECIFY)	14	MADABERIA
HORSE BEANS	13	KUNNA	7	
HORSE BEANS	13	OTHERS(SPECIFY)	14	KUBAYA

HORSE BEANS	13	OTHERS(SPECIFY)	14	MADABERIA
LENTILS	14	KUNNA	7	
FIELD PEAS	15	KUNNA	7	
FIELD PEAS	15	OTHERS(SPECIFY)	14	KUBAYA
FIELD PEAS	15	OTHERS(SPECIFY)	14	MADABERIA
LINESEED	23	KUNNA	7	
NUEG	25	KUNNA	7	
NUEG	25	OTHERS(SPECIFY)	14	KUBAYA
NUEG	25	OTHERS(SPECIFY)	14	MADABERIA
RAPE SEED	26	KUNNA	7	
RAPE SEED	26	OTHERS(SPECIFY)	14	KUBAYA
RAPE SEED	26	OTHERS(SPECIFY)	14	MADABERIA
SESAME	27	OTHERS(SPECIFY)	14	MADABERIA
RED PEPPER	38	KUNNA	7	
RED PEPPER	38	OTHERS(SPECIFY)	14	KUBAYA
BANANAS	42	ZELELA	3	
BANANAS	42	KERCHAT/KEMBA	4	
BANANAS	42	OTHERS(SPECIFY)	14	AMBAZA
MANGOS	46	KERCHAT/KEMBA	4	
ORANGES	47	KERCHAT/KEMBA	4	
PAPAYA	48	KERCHAT/KEMBA	4	
PAPAYA	48	PIECES	5	
GARLIC	55	ESIR	11	
KALE	56	ESIR	11	
KALE	56	CHINET	13	
GREEN PEPPER	59	OTHERS(SPECIFY)	14	FESTAL
GREEN PEPPER	59	OTHERS(SPECIFY)	14	KUBAYA
POTATOES	60	OTHERS(SPECIFY)	14	MADABERIA
PUMPKINS	61	KERCHAT/KEMBA	4	
PUMPKINS	61	PIECES	5	

SWEET				
POTATO	62	MEDEB	8	
GODERE	64	KERCHAT/KEMBA	4	
GODERE	64	MEDEB	8	
GODERE	64	OTHERS(SPECIFY)	14	SAHIN
CHAT	71	ESIR	11	
CHAT	71	OTHERS(SPECIFY)	14	ZOREBA
COFFEE	72	KUNNA	7	
COFFEE	72	OTHERS(SPECIFY)	14	KASHA
COFFEE	72	OTHERS(SPECIFY)	14	KUBAYA
COFFEE	72	OTHERS(SPECIFY)	14	MADABERIA
ENSET	74	CHINET	13	
ENSET	74	OTHERS(SPECIFY)	14	GUDEGADE
GESHO	75	ESIR	11	
GESHO	75	OTHERS(SPECIFY)	14	SHAKIM
SUGAR CANE	76	ESIR	11	
CORIANDER	79	OTHERS(SPECIFY)	14	BERECHEKO
AVOCADOS	84	KERCHAT/KEMBA	4	

TABLE 5b: CONSUMPTION UNIT LIST FOR OROMIA

ITEM		UNIT		
Name	Code	Name	Code	Other
Maize	4	Other(Specify)	33	TASA
Haricot Beans	11	Other(Specify)	33	KUBAYA
Haricot Beans	11	Other(Specify)	33	TASA
Banana	15	Number	4	
Potato	16	Other(Specify)	33	MEDEB
Kocho	17	Roll	11	
Kocho	17	Shekim	12	

Meat	18	Number	4	
Meat	18	Other(Specify)	33	MEDEB
Milk	19	Cup	31	
Milk	19	Other(Specify)	33	KUBAYA
Eggs	21	Number	4	
Salt	23	Cup	31	
Salt	23	Other(Specify)	33	TASA
Coffee	24	Cup	31	
Coffee	24	Other(Specify)	33	SINI
Chat / Kat	25	Roll	11	
Chat / Kat	25	Other(Specify)	33	AKARA
Chat / Kat	25	Other(Specify)	33	ZORBA
Bula	26	Roll	11	

4. BENISHANGUL GUMUZ

**TABLE 6a: AGRICULTURAL UNIT LIST FOR
BENISHANGUL GUMUZ**

CROP		UNIT		
Name	Code	Name	Code	Other
MAIZE	2	KUNNA	7	
SORGHUM	6	KUNNA	7	
TEFF	7	KUNNA	7	
HARICOT BEANS	12	KUNNA	7	
SESAME	27	KUNNA	7	
RED PEPPER	38	DAWLA	9	
BANANAS	42	ZELELA	3	
BANANAS	42	KERCHAT/KEMBA	4	

MANGOS	46	KERCHAT/KEMBA	4
MANGOS	46	PIECES	5
ORANGES	47	PIECES	5
PAPAYA	48	PIECES	5
KALE	56	ESIR	11
PUMPKINS	61	PIECES	5
SWEET POTATO	62	KERCHAT/KEMBA	4
SWEET POTATO	62	MEDEB	8
CHAT	71	ESIR	11
COFFEE	72	KUNNA	7

**TABLE 6b: CONSUMPTION UNIT LIST FOR
BENISHANGUL GUMUZ**

ITEM		UNIT		
Name	Code	Name	Code	Other
Maize	4	Other(Specify)	33	KUBAYA
Sorghum	5	Other(Specify)	33	KUBAYA
Millet	6	Other(Specify)	33	KUBAYA
Horsebeans	7	Cup	31	
Horsebeans	7	Other(Specify)	33	KUBAYA
Lentils	10	Cup	31	
Haricot Beans	11	Other(Specify)	33	KUBAYA
Linseed	13	Cup	31	
Onion	14	Other(Specify)	33	MEDEB
Banana	15	Number	4	
Meat	18	Other(Specify)	33	MEDEB
Milk	19	Cup	31	
Cheese	20	Cup	31	
Eggs	21	Number	4	

Salt	23	Cup	31	
Coffee	24	Cup	31	
Coffee	24	Other(Specify)	33	KUBAYA
Chat / Kat	25	Other(Specify)	33	ZORBA

5. S.N.N.P.

TABLE 7a: AGRICULTURAL UNIT LIST FOR SNNP

CROP		UNIT		
Name	Code	Name	Code	Other
BARLEY	1	KUNNA	7	
BARLEY	1	CHINET	13	
BARLEY	1	OTHERS(SPECIFY)	14	FERESULA
BARLEY	1	OTHERS(SPECIFY)	14	KUBAYA
BARLEY	1	OTHERS(SPECIFY)	14	MADABERIA
BARLEY	1	OTHERS(SPECIFY)	14	NEDO SHEKEME
MAIZE	2	KUNNA	7	
MAIZE	2	CHINET	13	
MAIZE	2	OTHERS(SPECIFY)	14	FERESULA
MAIZE	2	OTHERS(SPECIFY)	14	MADABERIA
MAIZE	2	OTHERS(SPECIFY)	14	SHERA
SORGHUM	6	KUNNA	7	
SORGHUM	6	ESIR	11	
SORGHUM	6	CHINET	13	
SORGHUM	6	OTHERS(SPECIFY)	14	FERESULA
SORGHUM	6	OTHERS(SPECIFY)	14	MADABERIA
SORGHUM	6	OTHERS(SPECIFY)	14	SHERA
TEFF	7	KUNNA	7	
TEFF	7	ESIR	11	

TEFF	7	CHINET	13	
TEFF	7	OTHERS(SPECIFY)	14	FERESULA
TEFF	7	OTHERS(SPECIFY)	14	KUBAYA
TEFF	7	OTHERS(SPECIFY)	14	MADABERIA
TEFF	7	OTHERS(SPECIFY)	14	SHERA
WHEAT	8	KUNNA	7	
WHEAT	8	CHINET	13	
WHEAT	8	OTHERS(SPECIFY)	14	FERESULA
WHEAT	8	OTHERS(SPECIFY)	14	MADABERIA
WHEAT	8	OTHERS(SPECIFY)	14	NEDO SHEKEME
WHEAT	8	OTHERS(SPECIFY)	14	SHERA
CASSAVA	10	KERCHAT/KEMBA	4	
CASSAVA	10	MEDEB	8	
CASSAVA	10	OTHERS(SPECIFY)	14	MADABERIA
HARICOT BEANS	12	KUNNA	7	
HARICOT BEANS	12	OTHERS(SPECIFY)	14	KUBAYA
HARICOT BEANS	12	OTHERS(SPECIFY)	14	MADABERIA
HARICOT BEANS	12	OTHERS(SPECIFY)	14	TASA
HORSE BEANS	13	KUNNA	7	
HORSE BEANS	13	CHINET	13	
HORSE BEANS	13	OTHERS(SPECIFY)	14	FERESULA
HORSE BEANS	13	OTHERS(SPECIFY)	14	KUBAYA
HORSE BEANS	13	OTHERS(SPECIFY)	14	MADABERIA
FIELD PEAS	15	KUNNA	7	
FIELD PEAS	15	CHINET	13	
FIELD PEAS	15	OTHERS(SPECIFY)	14	KUBAYA
FIELD PEAS	15	OTHERS(SPECIFY)	14	MADABERIA
RED PEPPER	38	KERCHAT/KEMBA	4	
BANANAS	42	ZELELA	3	
BANANAS	42	KERCHAT/KEMBA	4	

BANANAS	42	PIECES	5	
BANANAS	42	OTHERS(SPECIFY)	14	AMBAZA
BANANAS	42	OTHERS(SPECIFY)	14	BUNCH
MANGOS	46	KERCHAT/KEMBA	4	
MANGOS	46	PIECES	5	
MANGOS	46	OTHERS(SPECIFY)	14	MADABERIA
PAPAYA	48	KERCHAT/KEMBA	4	
PAPAYA	48	PIECES	5	
GARLIC	55	ESIR	11	
KALE	56	KERCHAT/KEMBA	4	
KALE	56	ESIR	11	
KALE	56	CHINET	13	
KALE	56	OTHERS(SPECIFY)	14	NEDO SHEKEME
KALE	56	OTHERS(SPECIFY)	14	SHAKIM
ONION	58	ESIR	11	
GREEN PEPPER	59	MEDEB	8	
POTATOES	60	KERCHAT/KEMBA	4	
POTATOES	60	KUNNA	7	
POTATOES	60	MEDEB	8	
POTATOES	60	OTHERS(SPECIFY)	14	MADABERIA
PUMPKINS	61	KERCHAT/KEMBA	4	
PUMPKINS	61	PIECES	5	
SWEET POTATO	62	KERCHAT/KEMBA	4	
SWEET POTATO	62	KUNNA	7	
SWEET POTATO	62	MEDEB	8	
SWEET POTATO	62	OTHERS(SPECIFY)	14	MADABERIA
SWEET POTATO	62	OTHERS(SPECIFY)	14	ZENBILE
GODERE	64	KERCHAT/KEMBA	4	
GODERE	64	MEDEB	8	
GODERE	64	OTHERS(SPECIFY)	14	KANITA

GODERE	64	OTHERS(SPECIFY)	14	MADABERIA
GODERE	64	OTHERS(SPECIFY)	14	ZENBILE
CHAT	71	ESIR	11	
CHAT	71	OTHERS(SPECIFY)	14	MADABERIA
CHAT	71	OTHERS(SPECIFY)	14	SHAKIM
CHAT	71	OTHERS(SPECIFY)	14	ZOREBA
COFFEE	72	KERCHAT/KEMBA	4	
COFFEE	72	KUNNA	7	
COFFEE	72	OTHERS(SPECIFY)	14	KUBAYA
COFFEE	72	OTHERS(SPECIFY)	14	MADABERIA
ENSET	74	KERCHAT/KEMBA	4	
ENSET	74	PIECES	5	
ENSET	74	ESIR	11	
ENSET	74	CHINET	13	
ENSET	74	OTHERS(SPECIFY)	14	JENBE
GESHO	75	ESIR	11	
SUGAR CANE	76	PIECES	5	
SUGAR CANE	76	ESIR	11	
SUGAR CANE	76	CHINET	13	
SUGAR CANE	76	OTHERS(SPECIFY)	14	SHAKIM
TOBACCO	78	ESIR	11	
RUE	81	ESIR	11	
AVOCADOS	84	KERCHAT/KEMBA	4	
AVOCADOS	84	PIECES	5	
AVOCADOS	84	KUNNA	7	
AVOCADOS	84	OTHERS(SPECIFY)	14	MADABERIA

TABLE 7b: CONSUMPTION UNIT LIST FOR SNNP

ITEM	UNIT
------	------

Name	Code	Name	Code	Other
Teff	1	Other(Specify)	33	KUBAYA
Wheat	2	Other(Specify)	33	KUBAYA
Wheat	2	Other(Specify)	33	TASA
Maize	4	Other(Specify)	33	KUBAYA
Sorghum	5	Other(Specify)	33	KUBAYA
Horsebeans	7	Cup	31	
Horsebeans	7	Other(Specify)	33	KUBAYA
Chick Pea	8	Cup	31	
Field Pea	9	Other(Specify)	33	KUBAYA
Onion	14	Number	4	
Onion	14	Other(Specify)	33	ESIR
Onion	14	Other(Specify)	33	MEDEB
Banana	15	Number	4	
Banana	15	Pair	6	
Potato	16	Shekim	12	
Potato	16	Other(Specify)	33	ESIR
Potato	16	Other(Specify)	33	MEDEB
Kocho	17	Roll	11	
Kocho	17	Other(Specify)	33	ESIR
Kocho	17	Other(Specify)	33	KUBAYA
Kocho	17	Other(Specify)	33	MEDEB
Meat	18	Number	4	
Meat	18	Other(Specify)	33	MEDEB
Milk	19	Cup	31	
Cheese	20	Roll	11	
Cheese	20	Other(Specify)	33	MEDEB
Eggs	21	Number	4	
Sugar	22	Cup	31	
Salt	23	Cup	31	

Salt	23	Other(Specify)	33	KUBAYA
Salt	23	Other(Specify)	33	SINI
Coffee	24	Cup	31	
Coffee	24	Other(Specify)	33	ESIR
Coffee	24	Other(Specify)	33	KUBAYA
Coffee	24	Other(Specify)	33	MELEKIYA
Coffee	24	Other(Specify)	33	SINI
Chat / Kat	25	Other(Specify)	33	ZORBA
Bula	26	Other(Specify)	33	MEDEB

6. GAMBELLA

TABLE 8a: AGRICULTURAL UNIT LIST FOR GAMBELLA

CROP		UNIT		
Name	Code	Name	Code	Other
MAIZE	2	OTHERS(SPECIFY)	14	MADABERIA
BANANAS	42	OTHERS(SPECIFY)	14	AMBAZA
MANGOS	46	OTHERS(SPECIFY)	14	ZENBILE
PAPAYA	48	PIECES	5	
KALE	56	ESIR	11	
PUMPKINS	61	PIECES	5	
COFFEE	72	KERCHAT/KEMBA	4	
ENSET	74	CHINET	13	
SUGAR				
CANE	76	PIECES	5	
RUE	81	ESIR	11	

TABLE 8b: CONSUMPTION UNIT LIST FOR GAMBELLA

ITEM		UNIT		
Name	Code	Name	Code	Other

MAIZE	2	OTHERS(SPECIFY)	14	MADABERIA
BANANAS	42	OTHERS(SPECIFY)	14	AMBAZA
MANGOS	46	OTHERS(SPECIFY)	14	ZENBILE
PAPAYA	48	PIECES	5	
KALE	56	ESIR	11	
PUMPKINS	61	PIECES	5	
COFFEE	72	KERCHAT/KEMBA	4	
ENSET	74	CHINET	13	
SUGAR				
CANE	76	PIECES	5	
RUE	81	ESIR	11	

6. DIRE DAWA

TABLE 9: AGRICULTURAL UNIT LIST FOR DIRE DAWA

CROP		UNIT		
Name	Code	Name	Code	Other
MAIZE	2	OTHERS(SPECIFY)	14	MADABERIA
MAIZE	2	OTHERS(SPECIFY)	14	TANIKA
MAIZE	2	OTHERS(SPECIFY)	14	TASA
SORGHUM	6	KUNNA	7	
SORGHUM	6	OTHERS(SPECIFY)	14	MADABERIA
SORGHUM	6	OTHERS(SPECIFY)	14	TANIKA
SORGHUM	6	OTHERS(SPECIFY)	14	TASA
WHEAT	8	OTHERS(SPECIFY)	14	TANIKA
HARICOT BEANS	12	OTHERS(SPECIFY)	14	MADABERIA
HARICOT BEANS	12	OTHERS(SPECIFY)	14	TANIKA
HARICOT BEANS	12	OTHERS(SPECIFY)	14	TASA
GROUND NUTS	24	OTHERS(SPECIFY)	14	MADABERIA

GROUND NUTS	24	OTHERS(SPECIFY)	14	TASA
ONION	58	OTHERS(SPECIFY)	14	MADABERIA
PUMPKINS	61	PIECES	5	
SWEET POTATO	62	OTHERS(SPECIFY)	14	MADABERIA
TOMATOES	63	OTHERS(SPECIFY)	14	JERIKAN
GUAVA	65	OTHERS(SPECIFY)	14	MADINA
CHAT	71	ESIR	11	
CHAT	71	OTHERS(SPECIFY)	14	AKARA