## Construction of Consumption Aggregates for the Ethiopia Socioeconomic Survey Wave 2: Supplemental Information

## Introduction

A second wave of the Ethiopia Socioeconomics Survey (ESS2) was conducted in 2013-2014. Since the ESS is a panel survey, all rural and small town households interviewed in ESS1 were attempted to be interviewed in the ESS2. In addition, the ESS sample was expanded in ESS2 to include urban households from medium and large towns in Ethiopia. The panel aspect of the ESS allows for analysis of dynamics across time for the same household. In order to allow dynamic analysis on wellbeing from the perspective of consumption expenditures, a consumption aggregate was calculated for ESS2. In order to make the consumption aggregate comparable to ESS1 (for rural and small town households), the same methodology was adopted for ESS2. However, there are several minor differences between the ESS1 and ESS2 aggregates. This document only serves to describe these differences and is a supplement to the consumption aggregate documentation provided for ESS1. Unless otherwise noted in this document, the same methodology was applied for ESS2.

## **Differences from ESS1 Method**

The ESS1 and ESS2 collected very similar data on food and non-food consumption. As for ESS1, the consumption data was collected during the third visit of the ESS2 between February and April 2014.

- 1. The same regional spatial price index (from MoFED from the HCE) is included with the consumption aggregate data file for ESS2. The index is exactly the same as ESS1 except the value for Addis Ababa (1.554) was added since the ESS2 covered this region for the first time. It is again left to the data user to apply this index or to use/calculate a separate spatial price index.
- 2. Winsorization of per capita quantity consumed for each food item was done at the 99<sup>th</sup> percentile level, instead of at the 98<sup>th</sup> percentile. Based on feedback from the first wave, better training of enumerators led to fewer outlier values in consumption of various items, and winsorizing at the 99<sup>th</sup> percentile for wave 2 leads to similar maximum values of per capita consumption as winsorizing at the 98<sup>th</sup> percentile for wave 1.
- 3. In ESS1, kocho and bula (two staples produced from the same starchy plant) were collected together on the same line of the consumption module (food id #17, "kocho/bula"). In ESS2, kocho and bula were collected on separate lines (food id #17a and #17b in the ESS2 questionnaire). Both of these lines were included in the ESS2 consumption aggregate.
- 4. The list of nonfood items included in the ESS1 and ESS2 aggregates are identical. Although one item (house rent) was added to the ESS2 questionnaire, it was excluded from the aggregate to

<sup>&</sup>lt;sup>1</sup> The consumption aggregate documentation for ESS1 can be found at <a href="http://go.worldbank.org/ZK2ZDZYDD0">http://go.worldbank.org/ZK2ZDZYDD0</a>.

maintain comparability with ESS1.

- 5. In ESS2, a wider array of nonstandard units was reported for consumption quantities of food items. Food conversion factors included with the ESS2 data (*Food\_CF\_Wave2.dta*) were applied to convert to standard units (kg or L). These conversion factors are consistent for units reported in both ESS1 and ESS2. As in ESS1, there were some cases where nonstandard units could not be converted and these households (n=125) were excluded from the consumption aggregate calculation and are identified by the variable *no conv*.
- 6. There were some cases (66 households) which reported no food consumption in ESS2. As for ESS1, these households were excluded from the consumption aggregate calculation and are identified by the variable *no\_cons*.

## Variables Included in Data File

- *household\_id:* household identifier for households interviewed in ESS1 (only for merging with ESS1)
- household id2: household identifier, unique for all ESS2 households
- ea id: enumeration area identifier for ESS1 (only for merging with ESS1)
- ea id2: enumeration area identifier for ESS2
- saq01: region code
- rural: rural vs small town indicator
- pw2: household survey weight for ESS2
- adulteq: adult equivalent household size
- hh size: basic household size
- *no\_conv*: indicator for cases where at least on consumption quantity could not be converted to standard units
- no cons: indicator for cases where a household did not report any food consumption
- food cons ann: total (nominal) annualized food consumption
- nonfood cons ann: total (nominal) annualized nonfood consumption
- educ cons ann: total (nominal) annual expenditure on education
- total cons ann: total (nominal) annual consumption expenditure
- price index hce: spatial price index from MoFED, calculated from HCE
- nom totcons aeq: nominal total annual per adult equivalent consumption expenditure
- cons quint: (population weighted) consumption quintiles based on nom totcons aeq