



# EVANS SCHOOL OF PUBLIC AFFAIRS

UNIVERSITY *of* WASHINGTON

## Evans School Policy Analysis and Research (EPAR)

### Marketable Surplus Background

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### Purpose

The purpose of this analysis is to provide a measure of marketable surplus of maize in Tanzania. We proxy marketable surplus with national-level estimates of total maize sold, presumably the surplus for maize producing and consuming households. We also provide national level estimates of total maize produced and estimate “average prices” for Tanzania which allows this quantity to be expressed as an estimate of the value of marketable surplus. The analysis uses the Tanzanian National Panel Survey (TNPS) LSMS - ISA which is a nationally representative panel survey for the years 2008/2009 and 2010/2011 conducted from October to September of those years. Survey weights must be applied to the data to report nationally representative statistics.

### Deliverable

The attached spreadsheet has four tabs that demonstrate the process of data cleaning and weighting. The first tab entitled “Weighted Cleaned All HHS” is the final product which displays these national-level estimates using weighted cleaned data for all surveyed households including those with zero quantity harvested due to the destruction of the crop. On this tab only observations for which the reported maize produced equaled or exceeded the reported amount of maize sold were included in calculating estimates of the average amount of maize sold and average price data.

### Process

The TNPS provided nationally representative averages for the amounts of maize sold and maize produced per household as well as the weighted proportion of these households with respect to the entire sample of households. The total number of households for Tanzania was estimated with linear extrapolation based on the Tanzanian National Bureau of Statistics for the years 2002 and 2012. The weighted proportions of maize-producing and maize-selling households were multiplied to the national estimate of total households. This estimate of total Tanzanian maize-selling and maize-producing households was then multiplied by the average amount sold and by the average amount produced respectively to obtain national level estimates of total maize sold and total maize produced in 2009 and 2011.

*Please direct comments or questions about this research to Leigh Anderson and Mary Kay Gugerty, at [eparx@u.washington.edu](mailto:eparx@u.washington.edu).*

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