# Food Price Trends Analysis and Policy Options for Enhancing Food Security in Eastern Africa

*ASARECA Project Reference Number: PAAP/2012/01*



## Economic Policy Research Centre (EPRC)
## Project Intuition Partner 3

*Progress Report Period April – July 2012*

Prepared by:
Dr.SwaibuMbowa
smbowa@eprc.or.ug

# Background

The March – June year 1, project activities for the Food Price Trends Analysis and Policy Options for Enhancing Food Security in Eastern Africa - kick started on March 20th when EPRC received the Sub-grant agreements from ASARECA for signing.

The EPRC team immediately started by drafting TOR for the data collection requirements (TOR in Appendix attached). This was followed by vetting / searching for a consultancy firm / persons to undertake the data collection, in the months of April – May 2012. This process involved vetting firms, guided by the ability for the firm to collect data in the form that meets the project objectives. Parallel to this activity the Finance department started the process of Funds request from ASERACA.

## Achievements:

- A contract was signed between EPRC and Farmgain Africa to undertake data collection for the period Jan 2002 to Dec 2013. FarmgainAfrica will produce the First Data set covering period (Jan 2002 to June 2012) on the **18th of July 2012** as stipulated in the contract (see attached TOR). The data will be forwarded to ReSAKSS by 25th July. The activity delayed due to unavoidable procurement processes.

- Funds (USD 15,855) request for from ASARECA on the 10th May 2012 were received on the 16th May 2012.

## Summary of Activities
- Production of quarterly Ugandan updates of food and input price charts meant to be undertaken in the month of May 2012. This will be undertaken immediately the data is available from Farmgain Africa.

- Price transmission analysis meant to be undertaken in the Month of June 2012.

- The Policy Forum for Uganda-slatted for May. This could not be held until the data problem is sorted out, and is planned to be undertaken in August 2012.

# Appendix A

## Terms of Reference

## Food Price Trends Analysis and Policy Options for Enhancing Food Security in Eastern Africa

### Background and Context

In the recent past, the international prices of many food commodities have increased substantially as demonstrated by the United Nations Food and Agriculture Organization's (FAO) global food price index (FPI). The global FPI generally rose throughout 2007 and in the first quarter of 2008, before stabilizing in the months of April and May 2008 but peaked in June 2008. Food prices have reached historic highs beginning January 2011. The global FPI averaged 177 points in February 2011, higher than the peak of 167 points during the 2008 global food crisis. The East African region has equally felt the adverse effects of soaring food prices that are a threat to the regions food security situation.

### The purpose of the study

EPRC in partnership with other EAC regional institutions in collaboration with ASARECA have initiated a project to enhance food security in the region by the pursuit of an enhanced regional early warning and policy response mechanism that will mitigate the consequences of food insecurity in the Eastern Africa region as a result of soaring food prices. The project will address the effects of food prices through the case studies that will be undertaken using data collected at individual country level. The information collected will be used by a regional research team to generate the evidence needed to formulate food policies for the region that can address the persistently high and volatile food prices. The project will generate analytical outputs that include country case reports, policy briefs and a forecasting model.

### Objectives

The causes, effects and the policy implications of the food price crisis in the Eastern Africa are not well understood. This Project seeks to develop a framework for forecasting the price changes as a necessary means to predict the extent of food security and a crucial tool for preparing to cope with its impacts as well as providing techniques to overcome its expected effects. The specific research objectives are to:

1. Enhance the collection, standardization and use of regional databases for food and input prices in Eastern Africa;

2. Strengthen the use of forecasting frameworks for food and input price changes in Eastern Africa;

3. Enhance the capacity of analysts to undertake policy analysis and involvement in policy formulation; and

4. Strengthen gender disaggregated stakeholder engagement in policy dialogue in the region.

## Tasks

The principle tasks of the Consultant will be to:

1. Piece together the Ugandan data sets that will be used in the analysis of trends in food prices in Uganda, and how changes in food prices have affected, and are to affect the food security situation in Uganda in the period 2002-2013. The data to be collected by the Consultant are categorized into three broad areas:

   - Data for analyzing the causes and effects of price changes

   - Data for analyzingthe impact of trade restrictions

   - Data for calibrating the price forecasting model

2. Undertake preliminary descriptive data analysis to generate simple graphs and charts and prepare and submit a draft report

3. Develop a data template (portal) in Excel spread sheet in a standardised format for all food commodities

### *Data for analyzing the causes and effects of price changes*

The basic data requirements for monitoring and analyzing the causal-effect of regional price changes on local food prices to be collected by the Consultant include:

(i)  Monthly wholesale and retail prices in key markets for staple foods for the period 2002-2013;

(ii)  Monthly input (fuel and fertilizer i.e. DAP) prices (2002-2013);

(iii)  Monthly prices of other commodities that are important to poor households(2002-2013);

(iv)  Monthly estimates of the cost of shipping imported food commodities from international markets and shipping export food commodities to their final destination (2002-2013);

(v)  The monthly consumer price index (2002-2013); and

(vi)  Monthly exchange rates (2002-2013).

### *Data for analyzing the impact of trade restrictions*

The data required for calibrating the impacts of policy interventions, such as export bans on welfare in the region to be collected by the Consultant include;

(i)     Annual trade flows of food commodities (quantities produced and consumed) from 2002-2013;

(ii)    Monthly domestic food commodity prices (farm gate) from 2002-2013;

(iii)   Monthly Import and export price food commodity price levels from 2002-2013;

(iv)    Direct and cross elasticity estimates (supply and demand) for the respective food commodities. Referenced from the most recent literature;

(v)     Monthly Transfer costs (transport, storage, transaction costs, etc) with respect to the food commodities;

(vi)    Level of tariff rates between 2002 and 2013; and

(vii)   The capital investment in food production after imposition of the food trade restrictions.


*Data for calibrating the price forecasting model*

Data for price forecasting model to be collected by the Consultant will include:

(i)     National food production and stock levels per food commodity (2002-2013);

(ii)    Commodity trade flows per crop commodity (2002-2013) per annum;

(iii)   Direct and cross price elasticities per crop commodity (2002-2013);

(iv)    Information on national food security policy developments

## Data Sources, collection procedures, monitoring and evaluation

The key data sources include: member country statistical databases; Ministries of Agriculture (agricultural production statistics); Ministries of Finance (agricultural trade statistics); PMA (ReSAKSS); BoU; Foodnet; member country revenue authorities; official websites; use of data from trade surveys on transaction costs and barriers); collaborating national research institutions; international data sources such as FAOSTAT and World Bank; Media reports, key information on political and natural shocks; and other relevant data sources depending on the needs.


*Sampling techniques*

This Project will employ time series data covering the period 2002-2013 from the national statistical databases. For purposes of selecting markets for the market integration studies, the Consultant will adopt a *stratified sampling technique*.

Each country (Uganda) will be stratified into regions classified as *food secure* and those that are assumed to be *food insecure*. Simple random sampling technique will be employed to select **two assumed food secure regions** from the food secure stratum and **two considered food insecure regions** from the food insecure stratum. From the selected regions, purposive sampling will be employed to **selected markets from each**

<u>selected</u> region. The individual markets for the Project will also be selected randomly from the strata.

The food commodities Proposed for Uganda include: Maize grain; Wheat; Beans; Rice; Bananas; Livestock products- beef meat and milk, cassava, sweet and Irish potatoes. The units of data reporting will include; Prices in US dollars/ton; and volumes in metric tons.

## Outputs expected /deliverables:

The study is expected to yield the following key outputs:

1. A detailed data set in Excel format covering all food commodities under the respective themes of analysis. The first data set covering the period Jan 2002 to February 2012 will be given first priority and submitted by end of April 2012. Subsequent data points will be collected with time till end of 2013.
2. A summary draft report from data covering the period Jan 2002 to February 2012

## Progress reporting
The consultant will work closely with Dr.SwaibuMbowa, a Research Fellow at the Economic Policy Research Centre.