

Background Paper
On
**Making the regional food balance sheet work - Supporting National Food
Balance Sheet Committees**

For consideration at the

3rd USAID Feed the Future East Africa Regional Meeting – Focus on Structured Trade
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1.0 Background

The EAC Food Security Action Plan (2011-2015) was adopted by the 9th Extra-Ordinary Summit of Heads of State held in Arusha, Tanzania on 19th April, 2011. The Plan proposes preparation of a Regional Food Balance Sheet (RFBS) as a key policy tool for management of food availability in the EAC region.

The quest for a regional food balance sheet is premised on the current situation where each EAC Partner State runs its own food balance sheet for monitoring food availability. The Free Trade Area in the EAC, which has been concretized through elimination of import duty on intra-regional trade, sets a trading platform for food to move freely from surplus countries to deficit countries. This implies that Food deficit EAC countries can rely on food availability in surplus EAC countries. The reality of this expectation is underscored by increase in food trade since 2005 when EAC Customs Union was launched.

Pooling of regional food stock data in form of a regional food balance sheet helps governments and traders to have knowledge of the available food stock in the region for purposes of food security planning and intra-regional sourcing of commodities. Hypothetically a country that would be about to institute austerity trade measures based on foreseen food deficit within its borders would uphold such policy if, on the overall, the EAC region has a food surplus. This would in turn motivate investments in the production and other levels of the regional value chain leading to benefits to farmers and consumers.

The EAC through support from USAID/COMPETE, Eastern African Grain Council (EAGC) and in collaboration with Alliance for Commodities Trade in Eastern and Southern Africa (ACTESA), has supported national survey on food balance sheet. The surveys culminated into national consultative meetings and a regional stakeholder's workshop that developed a draft Regional Food Balance Sheet template and a proposed institutional structure for pooling the Regional Food Balance sheet.

The purpose of this Background Paper is to further introduce the RFBS concept into the wider stakeholder base in the process of implementation of the RFBS component of the EAC Food Security Action Plan. The paper provides an example of a regional food balance sheet using data pooled from the national surveys in the five EAC countries to demonstrate that construction of a RFBS is feasible. The Regional Food Balance Sheet template was adopted at the EAC Regional meeting held on 1st and 2nd September 2011.

The Regional Meeting was given a head start by National Consultative meetings that held between May and July 2011 in all the five EAC countries, where the concept of the Regional Food Balance was endorsed and National Food Balance Sheet Committees proposed. The National FBS Committees have been established in all the EAC Partner States. The Committees are responsible for ensuring timely preparation and submission of the National Food Balance Sheet to the EAC. As a pilot the committees have prepared the food balance sheets for April, May, June and July 2011, which are being used in the development of the EAC RFBS web portal and training module for capacity building the National Committees and especially the focal points in the Ministries of Agriculture and Private sector organizations.

2.0 Regional Food Balance Sheet

3.1 Template

The food balance sheet template (**Annex 1**) is adapted from the FAO food balance sheet format. Specific variations have been introduced to make the food balance amenable as a tool for traders and policy makers. The food balance sheet is meant to be completed every month (the first week of the month). The components of the food balance sheet items and data sources are presented below under the (A) Domestic Supply side and (B) Domestic Utilization): -

A. Domestic Supply

1. Carry Over Stocks - as at (last date of previous month, say 31st March 2011) (MT):

This is the stock carried over from the previous month expressed in metric tonnes. It is the stock build up from harvest and imports in the previous month that will not have been used up by the end of that month. The stock held in the following forms will be declared for purposes of distinguishing the stock held for emergency and relief services and tradeable stock:

1.1 Stock held by Food Reserve Agency:

This is the stock held by Government Reserve Agencies.

1.1.1 For Strategic Reserve

This is the stock held by Government Food Reserve Agencies for use in case of famine or emergencies

1.1.2 For Commercial Use

This is the stock held by Government Food Reserve Agencies for commercial use, i.e. for sale in the domestic market or exports

1.2 Stock held by Processors:

This is the stock held by Processors. The Millers Association, through the focal private sector FBS coordination point will avail the data for purposes of construction of the FBS.

1.3 Stock held in warehouses participating in Warehouse Receipt System (WRS):

This is the stock held by warehouses participating in Warehouse Receipt System (WRS). The Coordinating organization for WRS, through the focal private sector FBS coordination point will avail the data for purposes of construction of the FBS.

1.4 Stock held by private warehouse operators (non WRS warehouses):

This is the stock held by private warehouses. The Coordinating organization for private sector grain warehouses, through the focal private sector FBS coordination point will avail the data for purposes of construction of the FBS.

1.5 Stock held by households:

This is the stock held by households at farm level for domestic consumption. It is estimated from production estimate of the previous month. The basis for this computation is based on the reality that out of a total production a certain proportion of the

production is retained at household level for domestic consumption or sale. The Ministry of Agriculture, working in collaboration with the private sector will determine the percentage of previous month's production estimate that is held at household level for consumption or sale.

1.6 Stock held for Food Relief (e.g. WFP etc):

This is the stock held for relief purposes by organizations such as WFP. These organizations will avail the data through the coordination point of food relief agencies, to the national FBS focal point for use in preparation of national FBS.

2. Production Estimate:

This is estimated production for the reporting month. For purposes of constructing Regional Food Balance Sheet on monthly basis, the annual production projections will be interpolated on monthly basis. As an example, if annual production of maize is 2m metric tonnes and assuming that all this maize harvested in a period of 4 months, say October to December, monthly production estimates will be 500,000 metric tonnes per month for the month of October to December. Production estimates for the rest of the year (January to September) will be nil.

This forms very useful information for policy makers and traders. Knowledge of the expected production on monthly basis enables traders to plan the sourcing of the commodity from the country/region where the product is being harvested. This information helps the policy makers to know the amount of food coming into the market for purposes of ensuring that the region is food safe and working towards facilitating the trade of the products in question.

3. Import projection for the reporting month (e.g. April 2011):

These are projected imports for the reporting month by:

- 3.1 Government Agencies
- 3.2 Processors
- 3.3 Traders
- 3.4 Food Relief Agencies (e.g. WFP etc)

Each of these organizations will avail the data through the relevant coordination unit to the national FBS contact point.

4. Post harvest loss:

Post harvest loss is expected during the harvest and storage process. In each country, the PHL that the Ministry of Agriculture uses in producing the annual food balance sheet will be applied.

5. National availability of food for the reporting month

The sum of carry over stock, production estimates (having been adjusted for post harvest loss) and projected imports give regional food availability.

B. Domestic Utilization

6. National consumption projections for the reporting month (e.g. April 2011)

This is the estimated monthly consumption of the specific product. This data is to be availed by the Ministry of Agriculture using the formula used for compilation of annual food balance sheet. Monthly consumption figure will be derived from the annual consumption projections.

7. Seed (Projected allocation for seed in the reporting month, e.g. April 2011) - (MT)

This is the proportion of production estimate which is used as seed. The Ministries of Agriculture will provide this data based on national experiences.

8. Feed (Projected allocation for feed in the reporting month, e.g. April 2011) - (MT)

This is the proportion of production estimate which is used for feed. The Ministries of Agriculture will provide this data based on national experiences.

9. Industrial Use (Projected allocation for industrial use in the reporting month, e.g. April 2011) - (MT)

This is the proportion of production estimate which is used for industrial use. The Ministries of Agriculture will provide this data based on national experiences.

10. Export projections (projected exports in the reporting month, e.g. April 2011)

These are projected exports for the reporting month by:

10.1 Government Agencies

10.2 Traders

10.3 Food Relief Agencies (WFP etc)

Each of these organizations will avail the data through the relevant coordination unit to the national FBS contact point.

11. Available stock by end of the reporting month e.g. 30th April 2011 (MT) = 5 – (6 + 7+8+9+10)

This is the net available food at the end of the reporting month. It is the balance of the food available after taking into account projected consumption, utilization for seed, feed and industrial and projected exports.

3.2 EAC Regional Food Balance Sheet

To test the feasibility of assembling a regional balance, data from national food balance sheet surveys was used. One key limitation was differences in reporting period. For purposes of this exercise, it was assumed that the reporting period was April 2010. Table 1 below gives the results of aggregation.

Table 1: Illustrative EAC Regional Food Balance Sheet As at 1st April 2010

	Maize	Wheat	Rice	Beans	Millet	Sorghum
(1) Carry Over Stocks – as at 31 st March 2011 (MT)	854,085	5,077	41,709	93,060	10,154	84,238

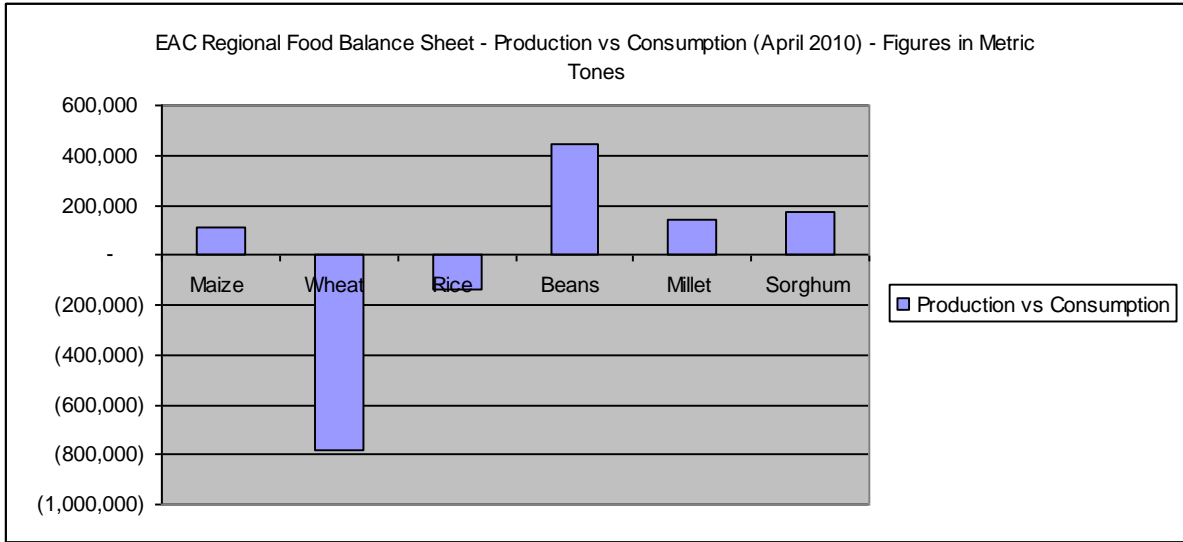
	Maize	Wheat	Rice	Beans	Millet	Sorghum
(2) Imports (projections for 2010)	604,677	880,088	279,055	38,390	4,757	29,783
(3) Production (projections for 2010)						
➤ <i>Long rains</i>	5,830,162	468,648	918,683	1,593,205	1,010,524	1,116,378
➤ <i>Short Rains</i>	2,261,414	89,879	295,415	857,946	93,147	518,915
Total Production per year	8,091,576	558,527	1,214,098	2,451,151	1,103,671	1,635,293
(4) Post harvest loss	573,727	36,306	40,931	122,736	22,385	103,701
(5) Regional Availability (MT) = (1+2+3)-4	8,976,611	1,407,386	1,493,931	2,459,865	1,096,197	1,566,060
(6) Exports (projected exports for 2010)	-	-	-	-	-	-
• <i>Exports to EAC/COMESA</i>	126,828	5,378	25,382	37,364	-	14,524
• <i>Extra regional exports</i>	-	2,000	4,000	61	-	-
Total Exports	126,828	5,378	25,382	37,425	-	14,524
(7) Regional Consumption (MT)	7,980,077	1,344,055	1,355,102	2,010,240	962,486	1,460,509
(8) Available stock by end of As at 1st April 2010 (MT) = 5 – (6 + 7)	870,244	67,442	113,447	591,606	133,711	91,027

Source: National Food Balance Sheet survey reports

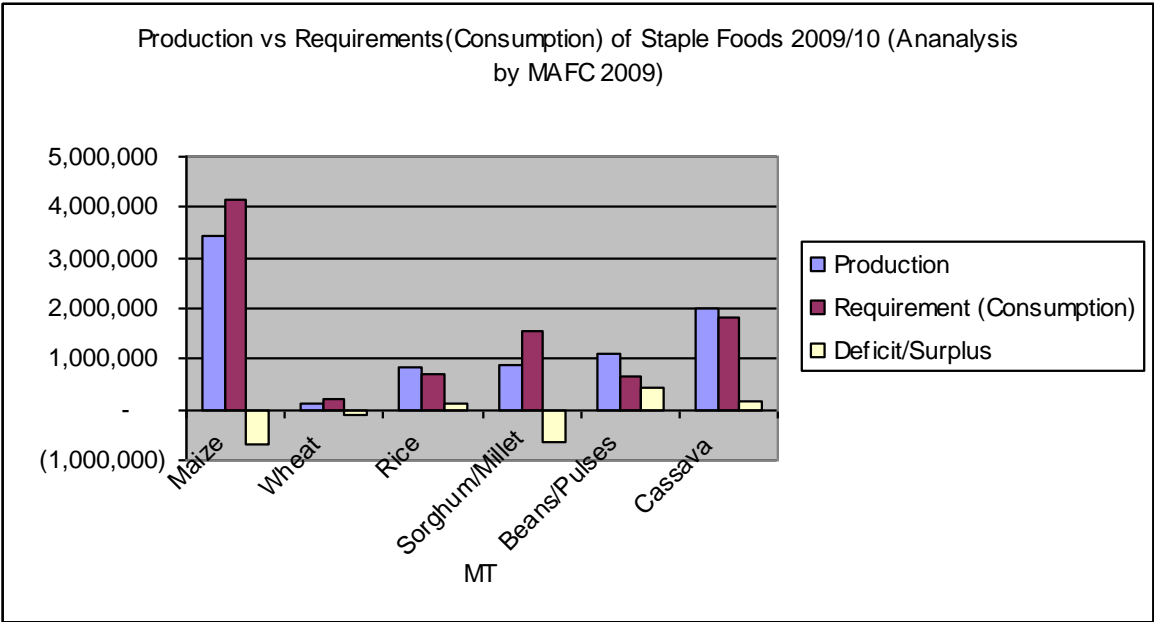
From this table we are able to get the picture of products where the region's total production surpasses consumption, with the surplus getting cleared through trading (exports). The products in this category are – maize, beans, millet and sorghum.

On the other hand, we are also able to see the products where regional consumption surpasses production leading to a deficit situation. The products in question are wheat and rice. The deficit gap gets cleared through trade (imports).

These two scenarios already show the importance of the regional food balance sheet as a tool to inform on the food deficit/surplus situation and the role that trade plays in bridging the surplus/deficit gaps.



Country level analysis can demonstrate EAC countries with potential to supply the regional value chain with tradable surplus. For instance, the Tanzania staple foods VCA study, quoting data compiled by the Ministry of Agriculture demonstrates Tanzania as a surplus country for rice, beans and cassava. The regional market therefore becomes a captive destination market for these products.



The regional food balance sheet will therefore be a vital tool for surplus producing countries such as Tanzania to identify deficit countries within the EAC and facilitate exportation of these products to these countries. Presently, sad to say, the deficit EAC countries are relying on extra-regional importation of these products because regional supplies cannot reach the regional market. Once the regional food balance reveals market opportunity, the next step is to ensure that underlying trade policies and other trade facilitation measures/instruments are enabling. Only then will the surplus produce feed the hungry in EAC.

3.0 EAC Regional Food Balance Sheet: Institutional Framework and Application

At the heart of the Regional Food Balance Sheet is credibility of the data. This is to be assured by the institutional structure that is mandated to pool the data. The following institutional structure was adopted by the Regional FBS meeting.

3.1 National FBS Committee

As pointed out above, in each EAC Partner States, National FBS committees have been formed. These institutional structures were put in place in line with the guidelines below, which were motivated by need to ensure the data generated is authentic and owned by all stakeholders before being submitted to the regional level for aggregation.

3.1.1 Membership, product range and data collection modalities

a) Membership

The membership and management structure includes Public (Chair) and Private sector (co-chair) Institutions. The day to day management of FBS is at the Ministry of Agriculture early warning departments. The committees are composed of the Public and Private sector stakeholder institutions as follows: -

Public: Ministries of Agriculture, Ministries of Trade, Ministries of Emergency programs, Central Bureau of Statistics organizations, National Food Reserve Agencies, Revenue Authorities, Central Banks, Ministries of Finance & Planning.

Private sector: Farmer organizations, Traders Organizations, Millers Organizations, Warehouse operators, commodity exchanges, consumer organizations

International Agencies/programs supporting food security: For example: FAO, FEWSNET and WFP.

b) Product coverage

Product Range: For a start, the products that EAC RFBS is focusing on are as follows: Maize, Wheat, Rice (paddy), beans, millet and sorghum.

c) Data collection modalities and frequency

Data from the Public sector institutions will be collected by the Ministry of Agriculture using the specifications in the EAC RFBS template. The Government is already collecting this data. The data is however never vetted by the stakeholders and its validity is always questioned. The National FBS Committee provides a forum for validating the data for use in national policy making process and information to the regional partners on food availability situation in the reporting country.

Data from the private sector will be collected by EAGC from its members and non members. The vital activity here is mobilizing and registering private sector contributor institutions who will be submitting the data to EAGC. These include warehouse operators (WRS and Non-WRS), Traders and Millers. Capacity building among target private sector institutions and EAGC is needed in order to ensure that a critical mass is registered/mobilized and they have been equipped with skills for submission of the statistics to EAGC country focal point in a timely manner. In Tanzania, the National Committee is using the modalities that the Government had already established. EAGC will therefore complement this by bringing additional stakeholders on board.

d) Frequency of Meetings and data publication:

National Food Balance sheet will be prepared on monthly basis and submitted to the EAC by the 10th of the following month. The National FBS committee will therefore be monthly in the initial period. The frequency could be reduced to once every two months once the Committee has mastered the art and also once the National FBS process is automated to allow online review and approval by the members.

3.1.2 Mandate of the National Committee

The National FBS Consultative meetings agreed on the following as the mandate of the National FBS Committees, which may be reviewed from time to time to take into account dynamics in the course of reporting on National Food Balance Sheet.

1. Identify institutions that are responsible for availing data for the food balance sheet
2. Periodic review and approval of national food balance sheet data before its uploading to the EAC Food Balance Sheet System
3. Upload National Food Balance Sheet to the EAC designated website
4. Identify registered warehouses whose data enters the regional food balance sheet for purposes of facilitating such warehouses' participation in the EAC green channel trade for staple foods
5. Periodic review of EAC RFBS based (registered warehouses) green channel trade for staple foods – volume and value of registered warehouses regional trade
6. Monitor Regional Food Availability through the EAC RFBS and advise on food appropriate policy actions/interventions
7. Participate in Regional Food Balance Sheet period meetings

3.2 Application of the RFBS

3.2.1 Linking warehouses to regional markets and the role of RFBS in achievement of this objective

Efforts towards promotion of trade in staple foods have increasingly been focusing on Warehouse Receipt System and promotion of private sector operated grain warehouses as part of the measures that will stimulate production and marketing of grain in the EAC region. Further, this system is expected to encourage investments in the storage facilities as private sector seeks to cash on the liquidity arrangement under WRS. It is therefore safe to conclude that with appropriate enabling policy environment that facilitates realization of these expectations, it is

only a question of time before the region starts experiencing surplus which needs to be moved to deficit regions.

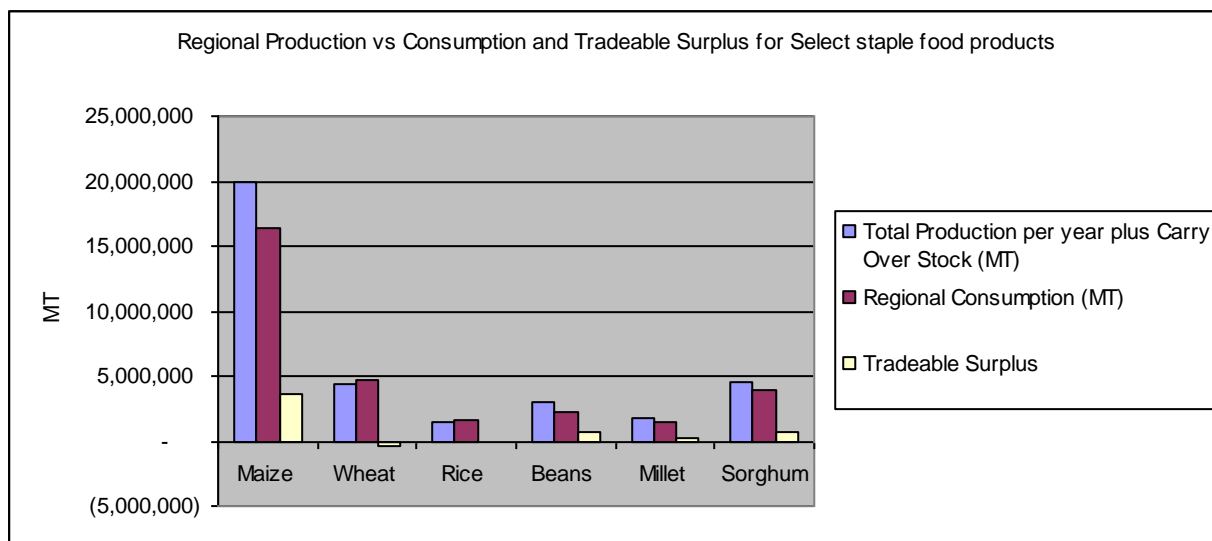
The essence of the RFBS, as we understand, is to provide information of available food in the region so that private sector and food security agencies can order the food from countries where surplus, as per RFBS reporting is recorded.

Given that the key infrastructure of the WRS are certified warehouses working under strict code of regulations/operations, it is important that such warehouses be registered for purposes provision of data for food balance as well as regional trade. This effort should be coordinated by EAGC and other collaborating partners.

3.2.2 RFBS based predictable mechanism for management of staple foods export/import bans or restrictions

Presently governments use national food balance sheet to gauge the status of food availability and decisions on whether to restrict or relax import or export of select food items, such as maize, wheat and rice.

There is need for the region to shift from national FBS based system to Regional FBS system. The case for this is demonstrated by existence of tradable surplus in virtually all products, with exception of wheat and rice that were reported in the Regional FBS above. The bar chart below illustrates this scenario.



In order for countries to base their decision on whether to apply a ban or restriction for exports or imports on RFBS, there is need to determine a threshold of comfort, which once reached, the country can then issue a three month notice of intention to impose export/import ban/restriction. This threshold may be referred to as regional trigger stock (RTS) which should be derived out of the Regional Stock that may be defined as follows:

$$RTS = COS + PE$$

Where COS – Carry over Stock and PE – Production Estimate for the month.

$RTS = RS - RC$ (Regional Consumption)

As a policy there is need to agree on the level of RTS that would trigger export bans/restrictions. If $RS > RC$ then no country should apply export ban. If the margin between RS and RC is, say 25%¹ then the country can issue notice for application of export restriction after 3 months, unless the regional food situation improves through projected imports. A three months notice introduces predictability and allows traders to plan for such an eventuality. In trade, 3 months (or 90 days) is the standard period for contract delivery.

¹ *The EAC Partner States would need to agree on an appropriate percentage that provides the comfort that policy makers may be seeking in pegging national food security policy to regionally available food stock. This threshold is to be discussed and guidance/policy proposals obtained during the EAC Meeting on Considérations of alternative Policy measures to export bans*

Annex 1

EAC Regional Food Balance Sheet - (Automated Template)

Country :.....

Month :.....

	Maize (Metric Tonnes)	Wheat(Metric Tonnes)	Rice(Metric Tonnes)	Beans(Metric Tonnes)	Millet(Metric Tonnes)	Sorghum(Metric Tonnes)
A. Domestic Supply						
(1) Carry Over Stocks – as at end of the month preceding the reporting month – e.g. 31 st March 2011 (MT) (1.1 + 1.2 + 1.3 + 1.4+1.5+1.6)						
1.1 Stock held by Food Reserve Agency						
1.2 Stock held by Millers						
1.3 Stock held in registered warehouses (i.e. Warehouses participating in Warehouse Receipt System (WRS)						
1.4 Stock held by private warehouse operators						
1.5 Stock held by households						
1.6 Stock held for Food Aid (WFP etc)						
(2) Imports projections for the reporting month - e.g. April 2011 (2.1 + 2.2+2.3)						

	Maize (Metric Tonnes)	Wheat(Metric Tonnes)	Rice(Metric Tonnes)	Beans(Metric Tonnes)	Millet(Metric Tonnes)	Sorghum(Metric Tonnes)
2.1 From EAC						
2.2 From COMESA and SADC						
2.3 From Extra Regional sources (from outside the EAC, COMESA and SADC)						
(3) Production Estimate for reporting month - e.g. April 2011						
(4) Post harvest loss						
(5) National Availability for the reporting month = (1+2+4) - (4)						
B. Domestic Utilisation						
(6) National Consumption (MT) in reporting month (e.g. April 2011)						
(7) Seed (Projected allocation for seed in the reporting month, e.g. April 2011) - (MT)						
(8) Feed (Projected allocation for feed in April 2011) - (MT)						
(9) Industrial Use						
(10) Export projections (projected exports in the reporting month, e.g. April 2011) (10.1+10.2+10.3)						
10.1 Exports to EAC						
10.2 Exports COMESA and SADC						
10.3 Exports to Extra regional destinations (i.e. outside EAC, COMESA and SADC)						

	Maize (Metric Tonnes)	Wheat(Metric Tonnes)	Rice(Metric Tonnes)	Beans(Metric Tonnes)	Millet(Metric Tonnes)	Sorghum(Metric Tonnes)
(11) Available stock by end of the reporting month e.g. 30th April 2011 (MT) = 5 – (6 + 7+8+9+10)						

