EGERTON UNIVERSITY

TEGEMEO INSTITUTE OF AGRICULTURAL POLICY AND DEVELOPMENT

FOOD SITUATION ASSESSMENT 2013

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Report Outline

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Background

- Food security has generally been viewed as synonymous with maize availability.
- Kenya is often considered as maize deficit
- Serious shortages lead to direct Govt interventions in food markets aimed at ensuring food access at affordable prices.
- Tegemeo Institute conducts a food situation assessment to supplements forecasts by other players in the agric-sectors
- In June 2013 a study was conducted in maize surplus and deficit areas

Trends in maize production, consumption and imports (2003 – 2012)

Study sites

Maize Surplus Areas	Maize Self Sufficient Areas	Maize Deficit Areas
U/Gishu	Kakamega	Kisumu
T/Nzoia	Migori/Kuria	Bomet
Bungoma	Meru	Kitui/Mwingi
Narok	Embu	Makueni
Nakuru		Nyeri

•Key informant interviews were conducted with Farmers, Ministry of Agriculture, Livestock and Fisheries (MoALF) Staff, Maize/Grain Traders, Transporters, Millers and NCPB depot/regional managers

•Information obtained provided projections on expected maize supplies, costs of production and food price trends.

Results

A) Crop performance & Outlook 2013

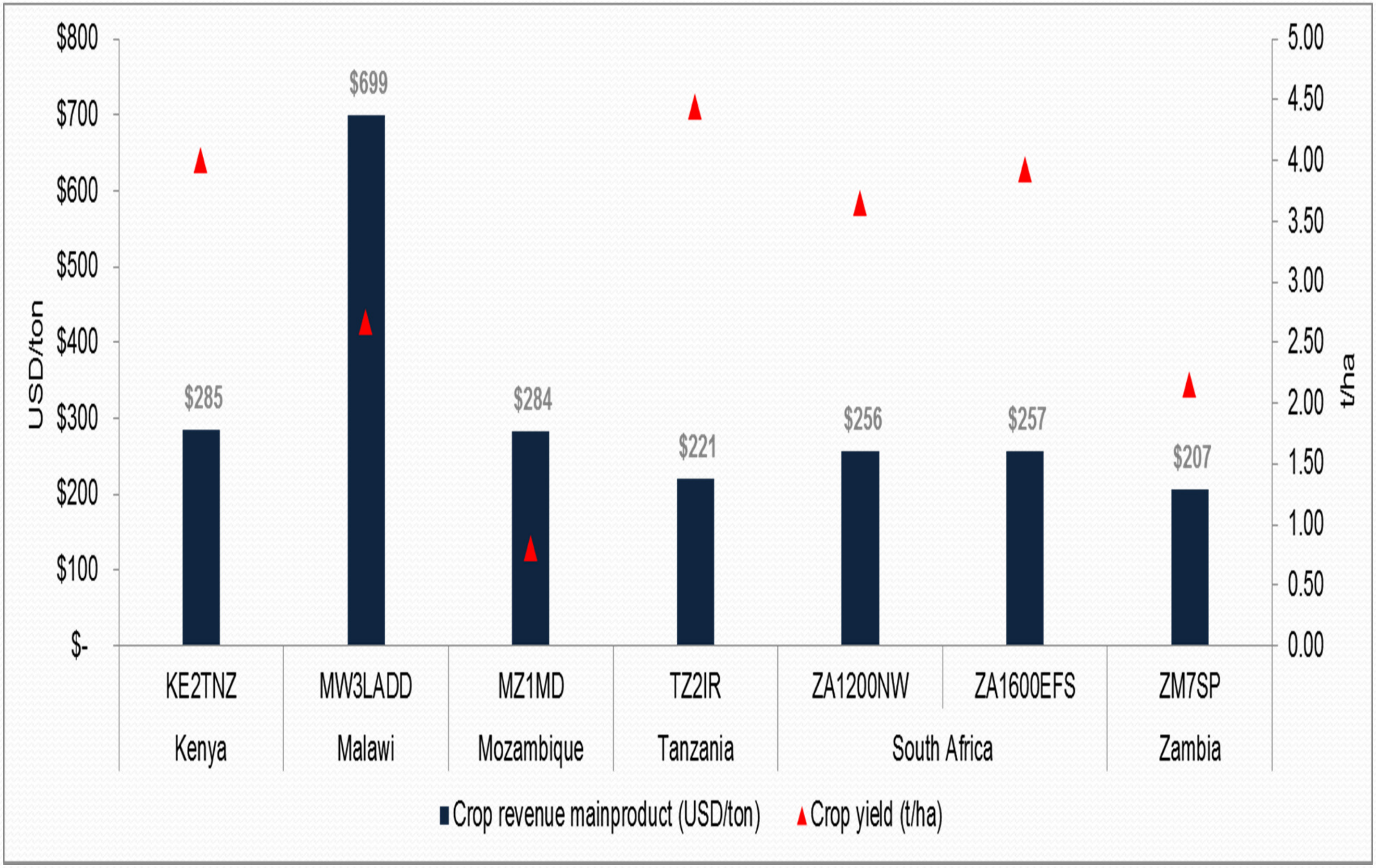
- Area achieved in 2013/14 Long Rains(LR) as at June was 1.3 million hectares
- MoALF LR initial production estimate was 43.4 million bags
- Revised to 24 million bags (August 2013 report)
- Tegemeo's assessment of LR maize production is 28.9 million bags a decline from 2012 LR performance.
- Declined performance in 2013 is attributed to:
  - Delayed planting
  - Reduced or lack of fertilizer application
  - Leaching of nutrients
  - Change of enterprise mix among others

Results Cont…

Crop performance

- The Short rains expected performance are usually 15% of LR harvest (4-5 million bags).
- Total estimated production therefore is 33.9 million bags with annual consumption estimated at 40 million bag
- This is 15% deficit in maize consumption requirement
- The KNBS population projection for 2013 is 43.5million which suggests that the deficit could be as high as 20%

Maize yield & Prices



Results Cont…

B) Maize stocks as at May 2013	
Stocks as at 31st May 2013 in 90kg bags	18,099,205
a) Total East Africa imports (cross border trade) expected between May 2013 to 31st July 2013	200,000
b) Private sector/relief agencies estimated imports outside EAC between April and 30th June 2013	100,000
Estimated harvest between April 2013 to 30th June 2013	
a) Balance long rains harvest up to end of 2012 season	0
b) Short rains projections- balances	0
Total available stocks by 31st July 2013	**18,399,205**
Post – harvest and storage losses estimated at 10%	1,839,920
Projected national availability as at 31st July 2013 (90kg Bags)	16,559,285
Total exports to East Africa Community region	0
Exports outside the EAC region	0
Amount used as animal feeds and seeds (1.5% of household stocks)	181,957
National consumption at a monthly rate of 3.72 million bags for estimated population of 40 million people for the next two months	7,440,000
Balance as at 31st July 2013 (surplus)	**8,937,328**

Results cont…

Estimated maize balance sheet 1^{st}August – 31^{st} Jan 2014

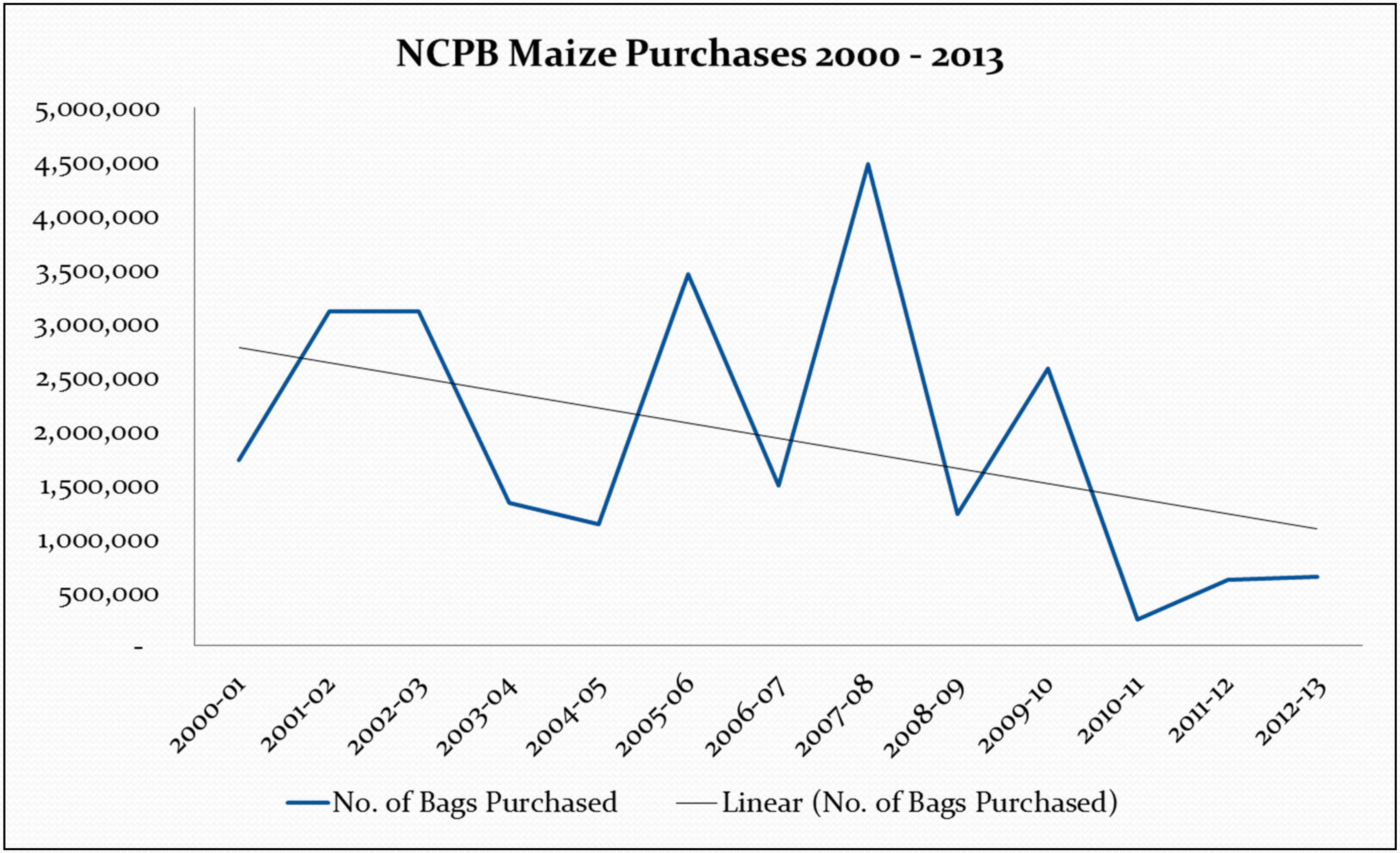
- So far harvest from South Rift, Nyanza and parts of Western provinces are estimated at 2 million bags
- Expected harvest balance(LR) is 26million bags, additional regional imports of 1.8 million less consumption (6 months) will see the country with 12 million bags by end of January
- An additional SR harvest estimated at 4 million will last the country 3-4 months (Until April /May 2014)
- There is need to closely monitor the maize situation especially with regard period after may

Results Cont…

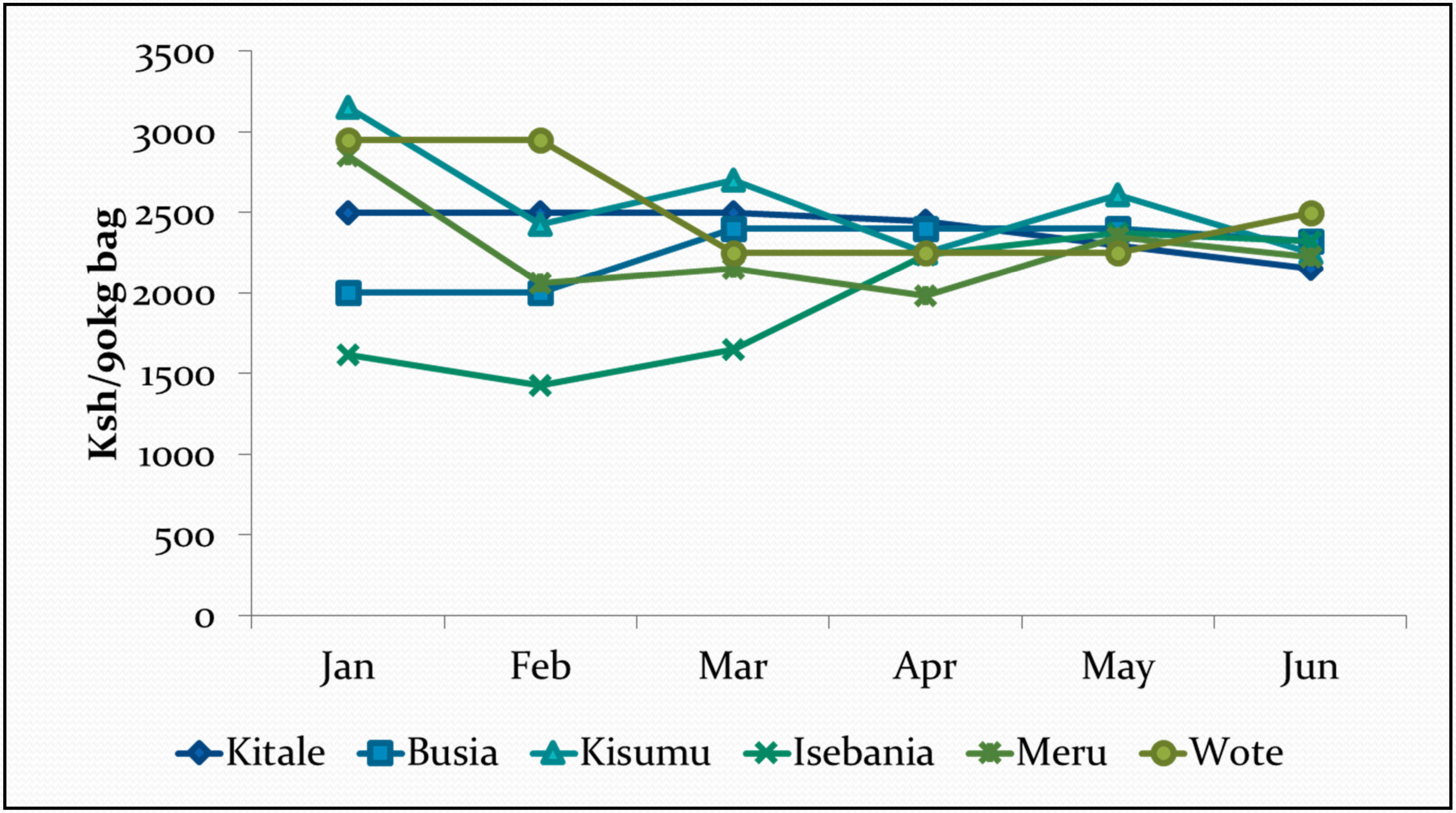
C) Maize marketing and Market prices

- Maize prices for the better part of the year have been stable due to:
  - Good harvests in 2012/13 production
  - Inflows from neighbouring countries
  - Decreased activity by NCPB as a buyer of maize during this period
- Unlike previous years, wholesale maize prices across major markets did not rise during the march-June period
- It is in the month of August that prices started inching up and are currently averaging Ksh 3,000 per bag

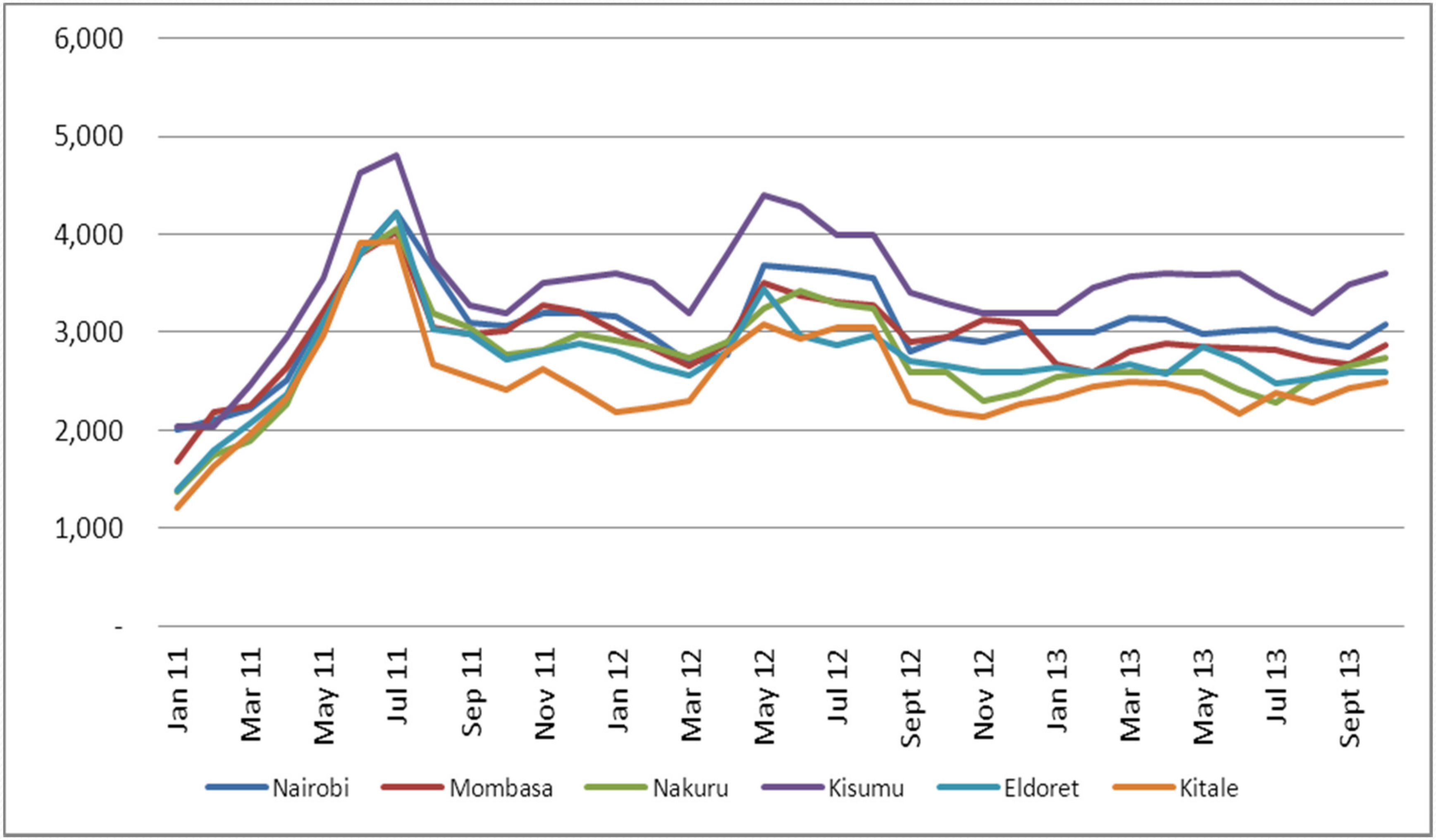
Results Cont…



Maize Price Trends Jan – Jun 2013



Wholesale maize prices in selected markets (2011–2013)



Results cont…

d) Fertilizer availability and prices

- Fertilizer and seed are key inputs in maize production **but** many challenges were reported
- Since 2008 Government through NCPB imports fertilizer to boost food production and improve enterprise profitability
- The price is 30-41% lower than commercial outlets
- Quantities imported average 60,000MT (DAP and CAN at 50:50 ratio) that is inadequate for maize production

Comparison between Commercial and Subsidized Fertilizers

Fertilizer type	Town	Commercial fertilizer prices (Ksh per bag)			NCPB prices	
		2012	2013	Price change (%)	2013	% subsidy
DAP	Meru	3600	3850	7	2480	36
	Kitale	3735	3800	2	2480	35
	Eldoret	3730	3630	-3	2480	32
CAN	Meru	2500	2550	2	1600	37
	Kitale	2400	2700	13	1600	41
	Eldoret	2375	2520	6	1600	37
NPK	Meru	3175	3300	4	2300	30
	Kitale	3400	3400	0	2300	32
	Eldoret	3400	3438	1	2300	33

Conclusion

The food security assessment showed that:

- Stocks from LR harvest will last until January, 2014
- There is a positive food security situation in the short term but…close monitoring is needed
- Dependency syndrome may be contributing to delayed planting and reduction in fertilizer application.
- Fertilizer acquisition/subsidy by the Government alters behaviour thereby negatively affecting production
- Postharvest losses may be higher due to continued rainfall-grain driers needed. Funds???
- Prices remained fairly stable in major markets

Policy Recommendations

- Close monitoring of 2013/14 maize crop performance and national food stock to avoid volatility in prices and supply shortfalls

- Continued rains in the grain basket area may increase postharvest losses **in preparation** resources for maize driers should be mobilized

- Decreased market participation by NCPB shows price stability
  - Cessation of Government interference in the maize market , **OR**
  - If the Government has to purchase maize, it should be at prevailing market prices

- If fertilizers must be purchased then ensure adequate amounts are available to a large number of farmers in all maize growing areas, delivered on time and at the nearest point possible.
  - Private sector partnership, **OR**
  - Purchase from the private sector

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Estimated national stocks Aug – Jan 2014

Household stocks held by farmers as at July 31st 2013	8,541,466	**If lower estimates**
National Stocks as at 31st July 2013 in 90kg bags	10,937,328	10,937,328
a) Total East Africa Imports* (cross border trade) expected between July 2013 to 31st January 2014	1,200,000	1,200,000
b) Private sector/ Relief agencies estimated imports outside EAC between April 2013 to 30th June 2013	600,000	600,000
Estimated harvest between July 2013 to 31stJan 2014	26,000,000	**21,000,000**
Total available stocks by 31st January 2014	38,737,328	33,737,328
Post – harvest and storage losses estimated at 10%	3,873,733	3,373,733
Projected national availability as at 31st January 2014 (90kg Bags)	34,863,595	30,363,595
Amount used as animal feeds (2% of household stocks)	170,829	170,829
Amount used as seeds (1.5% of household stocks)	128,122	128,122
Amount used for industrial products (1% of household stocks)	85,415	85,415
NATIONAL CONSUMPTION at a monthly rate of 3.72 million bags for estimated population of 40 million people for 6 months (August 2013 - Jan 2014)	22,320,000	22,320,000
Balance as at 31st Jan 2014	12,159,229	7,659,229
Short Rains Harvest 4 million bags	*4,000,000*	*4,000,000*
Grand balance	**16,159,229**	**11,659,229**
Months to last from January 2014 - Consumption of 3.72 million bags	***4.34 - May***	***3.13 - April***

Maize production budgets

County	Nakuru	UG	T-Nzoia	Kilgoris
Maize Yields (bags/acre)	**23**	**17**	**23**	**10**
Price	2,100	2,500	2,400	2,400
TOTAL REVENUE/acre	48,300	43,087	55,200	24,686
TOTAL LABOUR	9,814	3,759	5,628	12,130
Land preparation cost	4,140	5,389	4,044	4,800
planter hire Cost/acre	1,500	1,228	933	
Total seed cost per acre	1,254	1,357	1,283	1,693
Total Fertilizers	4,320	7,882	11,153	
Other intermediate cost	4,755	4,743	6,372	
Land Rent	**5,200**	**6,500**	**7,333**	**3,000**
TOTAL INTERMEDIATE	19,969	27,098	31,119	9,493
TOTAL COSTS LESS WORKING K	**29,783**	**30,857**	**36,747**	**21,623**
PROFIT=TR-TC (per acre)	18,517	12,229	18,453	3,063
Cost per bag without working K	**1,295**	**1,790**	**1,598**	**2,102**
Working Capital	2,680	2,777	3,307	1,946
TOTAL COSTS PLUS WORKING K	32,463	33,634	40,054	23,569
Cost per bag with Working K	**1,411**	**1,952**	**1,741**	**2,291**