

## Fertilizer Cost Chain Analysis

An overview of the Mombasa Corridor

#### Kenya Fertilizer Roundtable (KeFERT)

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### Setting the scene

#### Major changes in SSA fertilizer markets

- Change from commodity purchasing to development down the value chain.
  - This is evolving as the role of distribution channel players changes.
    - Further integration by manufacturers/traders
      - Shortening the value chain
      - Defining and servicing specific market sectors (One Acre Fund— OAF))
    - Players having to redefine roles to maintain market share
    - Governments continually wanting to control the space
- ✤ A recognition of the role balanced nutrition plays increasing productivity.
- The recognition that acidity is having a major impact on both productivity and Nutrient Use Efficiency.
- An increasing awareness by governments to address the mounting food security issues.





### **Country overview: KENYA**



#### Source: AfricaFertilizer.org

- 2015-2017: 20-25% subsidized market; County gov. subsidies
- Maize + Tea > 80%
- Kenya has 4 blenders MEA, ARM, TTFA and ETG. Exports and re-exports approx. 50,000mt to Uganda and Rwanda
- Mainly DAP+ NPK (25-5-5; 23-23-0 and 17-17-17)
- Brand images surrounding certain products
  - DAP: strong historic use, failures with other products
  - Compounds: Historic and issues of adulteration
  - Blends (flexibility and SMNs)
- Limited capacity in institutions of broad issues of balanced nutrition and product options
- Reluctances of farmers to change
- Reasonable distribution network
- Consumption at >500KT-fertilizer prices are still of concern.



### **Fertilizer Value Chain**



#### Product to market at a rate that = ROI to the farmer



### Port of Mombasa---FoT

#### \* Key highlights:

2003

- The busiest port off the East African coast consisting of four harbours Kilindini, Port Reitz, Port Tudor and Old Port.
- Kilindini is the largest harbour with 18 berths and 2 oil terminals. There are 12 berths handling general cargo with a draft of 10-11.5 meters.
- Discharge rates for fertilizers estimated at 2,000<sup>mm</sup>/<sub>2</sub>,000MT/day with bagging at quayside. 4,000 – 6,000MT/day if bulk cargo discharged to warehouse.
- Port is expanding 3 berths currently under construction.
- SGR extending to Port in 12-18 months
- Transit warehouses located within the port. Additional storage located outside the port operated by private logistics companies e.g. Bollore logistics, Mitchell Cotts, Rapid Kate etc.
- ETG has a storage terminal next to the Mombasa port, allowing them to offload bulk on truck into warehouse for storage\*
  Google earth

Port Cost	Direct (Bulk to warehouse) \$/Mt
CIF	0
Stevedores	4.40
Wharfage	5.50
IDF (customs clearing fee) 2.25% of FOB	6.28
RDL levy (Rail development) 1.5% of CIF	4.19
COC inspection: 0.5% of FOB	1.18
Radiation: 1% of CIF	2.79
MSS levy	0.50
Clearance/Agency fee	2.25
Bagging	18.0
Transport to warehouse	5.45
Warehouse handling (In & Out)	5.39
Storage (2 months)	3.00
Spillage: 0.5% of CIF	1.38
VAT on services (16%)	9.03
Finance costs (LC (opening) + interest)	14.65
Cost to move product in Mombasa port	83.99



### Kenya's fertilizer market structure

- The national government model of procurement and distribution, for the subsidy programme
- The commodity based, interlinked input-creditoutput model like that of the tea sector –KTDA, OAF.
- An unintegrated system of independent importers, wholesalers and retailers operating on a cash basis.



Farmers- Small scale (58%) and Large scale farmers (42% Greater than 2 ha)



### Fertilizer Price: Retail vs World prices

Urea World Price vs Local Price





### Highlight

- Fertilizer is a 'logistics game'
- \$15-25 freight to Mombasa; but \$80-90 across the port (compared to \$40 in Durban) and \$50-60 to transport product upcountry
- Demurrage \$10,000/day (new product testing process, port congestion and gate failures)

#### How can we lower fertilizer prices?



# **Thank You!**

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