Fertilizer Cost Chain Analysis
An overview of the Mombasa Corridor

Kenya Fertilizer Roundtable (KeFERT)

Tuesday, 16th October, 2018
Nairobi, Kenya
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

- 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.

Source: AfricaFertilizer.org
Fertilizer Value Chain

Manufacturing
- Cost of Production
- Local capacity?

Logistics
- International freight
- Local freight (road/train)
- Efficiency?

Margins
- Competition
- No. of players-importers, wholesalers, agro-dealers etc.

Product to market at a rate that = ROI to the farmer
Port of Mombasa---FoT

Key highlights:

- 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 – 3,000MT/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*

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<table>
<thead>
<tr>
<th>Port Cost</th>
<th>Direct (Bulk to warehouse) $/Mt</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIF</td>
<td>0</td>
</tr>
<tr>
<td>Stevedores</td>
<td>4.40</td>
</tr>
<tr>
<td>Wharfage</td>
<td>5.50</td>
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<tr>
<td>IDF (customs clearing fee)</td>
<td>2.25% of FOB</td>
</tr>
<tr>
<td>RDL levy (Rail development)</td>
<td>1.5% of CIF</td>
</tr>
<tr>
<td>COC inspection</td>
<td>0.5% of FOB</td>
</tr>
<tr>
<td>Radiation</td>
<td>1% of CIF</td>
</tr>
<tr>
<td>MSS levy</td>
<td>0.50</td>
</tr>
<tr>
<td>Clearance/Agency fee</td>
<td>2.25</td>
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<tr>
<td>Bagging</td>
<td>18.0</td>
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<tr>
<td>Transport to warehouse</td>
<td>5.45</td>
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<tr>
<td>Warehouse handling (In &amp; Out)</td>
<td>5.39</td>
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<tr>
<td>Storage (2 months)</td>
<td>3.00</td>
</tr>
<tr>
<td>Spillage: 0.5% of CIF</td>
<td>1.38</td>
</tr>
<tr>
<td>VAT on services (16%)</td>
<td>9.03</td>
</tr>
<tr>
<td>Finance costs (LC (opening) + interest)</td>
<td>14.65</td>
</tr>
<tr>
<td>Cost to move product in Mombasa port</td>
<td>83.99</td>
</tr>
</tbody>
</table>
Kenya’s fertilizer market structure

- The national government model of procurement and distribution, for the subsidy programme
- The commodity based, interlinked input-credit-output model like that of the tea sector –KTDA, OAF.
- An unintegrated system of independent importers, wholesalers and retailers operating on a cash basis.
Fertilizer Price: Retail vs World prices

Urea World Price vs Local Price

- Urea price in Kenya
- Urea price in world market

Graph showing the comparison between Urea price in Kenya and Urea price in the world market from September 2017 to August 2018.
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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