Integrating Food and Nutrition Security into Economic Transformation and Industrialization Agenda:
How can agriculture be the driver rather than follower of economic transformation in Tanzania?

New Dodoma Hotel, Dodoma
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FROM BULK SUPPLIES TO BULK PROCUREMENTS:
A PARADIGM SHIFT FOR IMPROVING SMALL SCALE FARMERS ACCESS TO QUALITY FERTILIZERS FOR INDUSTRIAL TANZANIA

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Presentation outline

1. Introduction and background
2. BPS legal and institutional framework
3. BPS at importation level
4. BPS at domestic distribution level (wholesale and retail)
5. BPS at farm level
6. BPS success stories and case studies
7. BPS hiccups and the road map
Introduction

Fertilizer is one of the most important inputs for increasing crop yield. In observation of this, over more than half a century, the Government of Tanzania has deployed a variety of approaches in overcoming the challenge of high prices that inhibits access to fertilizers by small scale farmers (SSF).

Some of the approaches were:
1. Input subsidies (Transport, direct price subsidies etc.)
2. Input loans by crop buyers (Factories, millers, agribusiness men etc.)
3. Input loans by banks through guarantees from crop buyers and/or cooperative unions
The BPS value chain links

Supply side (5 links. For the sake of cost minimization, BPS aims at reducing the links to 3 or 2 depending on demand side farming scale and purchasing power):

1. Manufacturers
2. Importers (take fertilizer DSM from manufacturers)
3. Distributors (take fertilizer from importers to regional HQ and some LGAs)
4. Wholesalers (take fertilizers from distributors to LGAs HQ and some ward commercial centers)
5. Retailers (take fertilizers from wholesalers to retail shops where farmers purchase)

Demand side:
- Small scale farmers (SSF)
- Medium scale farmers (MSF)
- Large scale farmers (LSF)
The fertilizer Bulk Procurement System (BPS) was established by the Minister of Agriculture Hon. Dr. Charles J. Tizeba (MP) following the Fertilizer (Bulk Procurement) regulations, 2017 published in the Government Notice – GN) No. 49 of February 17, 2017.

Through these regulations, all importers submit their requirements to the regulator (TFRA). After submission of requirements, a tender is announced and one prequalified successful bidder imports all the fertilizer on behalf of others using his own source of funds.

The first BPS tender was opened on July 21, 2017 for importation of basal fertilizer (DAP) and top dressing fertilizer (Urea). The first cargo arrived in September, 2017.
Indicative Prices

As a way of making SSF realize the BPS volume discount, TFRA set indicative prices according to section 4(1)(u) of the Fertilizer Act, 2009 and regulation 56 of the Fertilizer (Amendment) Regulations, 2017.
The fertilizers under indicative prices were calculated for fertilizers that were imported through BPS (DAP and Urea). Indicative prices for other fertilizer types will be announced later. The indicative prices were calculated by TFRA by considering the costs indentified by the fertilizer stakeholders (FST – Fertilizer Society of Tanzania)
Fertilizer indicative prices: Cost build up

The following costs were considered in the indicative price structure:

1. FOB as offered by the successful bidder
2. Marine costs
3. Port charges
4. Inland transport costs
5. Marketing margin for distributors, wholesalers and retailers
Summary price reduction around the country

- Lindi: Sh90,000, Sh51,621
- Mbeya: Sh68,000, Sh53,666
- Arusha: Sh60,750, Sh53,172
- Morogoro: Sh68,500, Sh51,043
- Njombe: Sh53,141
- Tanga: Sh75,750, Sh51,020
- Geita: Sh85,000, Sh55,762

Source: MWANANCHI Newspaper, September 13, 2017
BPS success stories: A relief for farmers

Source: DAILY NEWS, August 24, 20
BPS success stories: Domestic distribution savings

How fertilize bulk transportation contributes to farm gate price reduction through application of the "economies of scale" principal

Case: Transport cost from DSM to Makambako by fertilizer cargo size

<table>
<thead>
<tr>
<th>Distance</th>
<th>647 km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of 50kg bags</td>
<td>Weight (Tones)</td>
</tr>
<tr>
<td>1</td>
<td>0.05</td>
</tr>
<tr>
<td>70</td>
<td>3.5</td>
</tr>
<tr>
<td>200</td>
<td>10</td>
</tr>
<tr>
<td>600</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Nkonya, N.M., November, 2017
BPS significantly reduced the import and farm gate prices while increasing fertilizer utilization.

For instance, the DAP from Morocco FOB price was US$ 365 per MT on the tender date (Argus, July 21, 2017) but the successful tender bid was US$ 307 (16% reduction).

This reduction was transmitted to farm gate. Coupled with the market access cost (MAC) based indicative prices, the reduction was 11 – 40%
Besides the volume discounts inherent with BPS, demand side financed cargo movement leads to reduced costs due to the fact that transport related risks (accidents, traffic fines, spoilage, customer unreliability etc.) are transferred to the demand side and when they are avoided, they add up to the retailer marketing margins; thus become incentives for them to minimize retail prices.

Conversely, when risks are on the supply side, they fixed and are part of the price offered by wholesalers to retailers. Further, the demand side may negotiate for transport cost reduction directly or using returning cargo approach
### Demand driven supply chain: fewer links, less price, more profit

<table>
<thead>
<tr>
<th>Urea value chain segments</th>
<th>Location</th>
<th>Indicative Price</th>
<th>Bulk Supply System (BSS)</th>
<th>Bulk Procurement System (BPS)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Free On Board (FOB) price</strong></td>
<td>Russia</td>
<td></td>
<td>21,692</td>
<td></td>
<td>As on July 21, 2017</td>
</tr>
<tr>
<td>Marine costs, port charges etc.</td>
<td>DSM</td>
<td></td>
<td>11,787</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Importer</strong></td>
<td>DSM</td>
<td>33,480</td>
<td>33,480</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport + off/loading + marketing margin</td>
<td></td>
<td></td>
<td>1,339</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Distributor</strong></td>
<td>DSM</td>
<td>34,819</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport + off/loading + marketing margin</td>
<td></td>
<td></td>
<td>6,589</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wholesaler</strong></td>
<td>Mwanza</td>
<td>41,408</td>
<td>43,001</td>
<td></td>
<td>Retail price at retailer purchase source is used if the cargo bought is below the bulk threshold of 5MT</td>
</tr>
<tr>
<td>Transport + off/loading</td>
<td>2,044</td>
<td>2,000</td>
<td>5,500</td>
<td></td>
<td><strong>Under BSS</strong>, the cargo is bought in Mwanza at a regional wholesale price and transported to retail point at Tshs 2,000 per 50kg bag</td>
</tr>
<tr>
<td>Total cost</td>
<td>45,001</td>
<td>38,980</td>
<td></td>
<td></td>
<td><strong>Under BPS</strong>, the cargo is bought in DSM at an ex-warehouse price and transported in a bulk cargo at Tshs 5,500 per 50kg bag in 30MT truck</td>
</tr>
<tr>
<td><strong>Retailer</strong></td>
<td>Geita TC</td>
<td>43,452</td>
<td>43,452</td>
<td>43,452</td>
<td>4,473</td>
</tr>
<tr>
<td>Marketing margin</td>
<td></td>
<td></td>
<td>(1,549)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Nkonya, N.M., January, 2018
The Ministry of Agriculture has mobilized the fertilizer business community to participate in BPS while enhancing making small scale farmers improve their fertilizer purchasing power through reduced prices.
The Urea utilization for the last cropping season was 88,752 MT. The utilization for this cropping season (Up to January, 2018) was 105,400 MT (19% increase)

<table>
<thead>
<tr>
<th>Carryover stock from 2016/7</th>
<th>33,400 MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports before BPS</td>
<td>40,000 MT</td>
</tr>
<tr>
<td>BPS imports</td>
<td>32,000 MT</td>
</tr>
</tbody>
</table>

More BPS fertilizer import permits are being processed. Up to the end of the 2017/8 cropping season, the total Urea utilization is expected to be 45% as compared to the utilization in 2016/7 season.
BPS HICCUPS AND THE ROADMAP

Like any new system replacing another one in place for a long time, BPS has been faced with the following challenges

1. **Weather related transport cost increase:** This was overcome by authorizing Regional and District authorities increase fertilizer prices so that it reaches farmers without causing financial losses on fertilizer traders

2. **Previous fertilizer supply systems hangover:** Retailers waiting for wholesalers to move the fertilizer to them. Being risk managers to retail level, they sold the fertilizer at prices which were disincentives for retail business

This was combated through sensitization sessions for retailer to form groups through which they procure and transport fertilizers in bulk.
3. **Illegal exports:** The relatively higher fertilizer prices (Tshs 70,000 – 80,000/= per 50kg Urea bag) in neighboring countries (Zambia, Malawi) attracted illegal exports which lead to local scarcity.

This was overcome through stock movement control whereby the fertilizer cargo from DSM to the retail level was monitored on weekly basis.

4. **Potential fertilizer scarcity** due to reduced prices: This will be overcome by importing bigger fertilizer amounts to cover the whole of the next season and also sensitization for construction of more fertilizer storage facilities in rural areas.
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THANK YOU