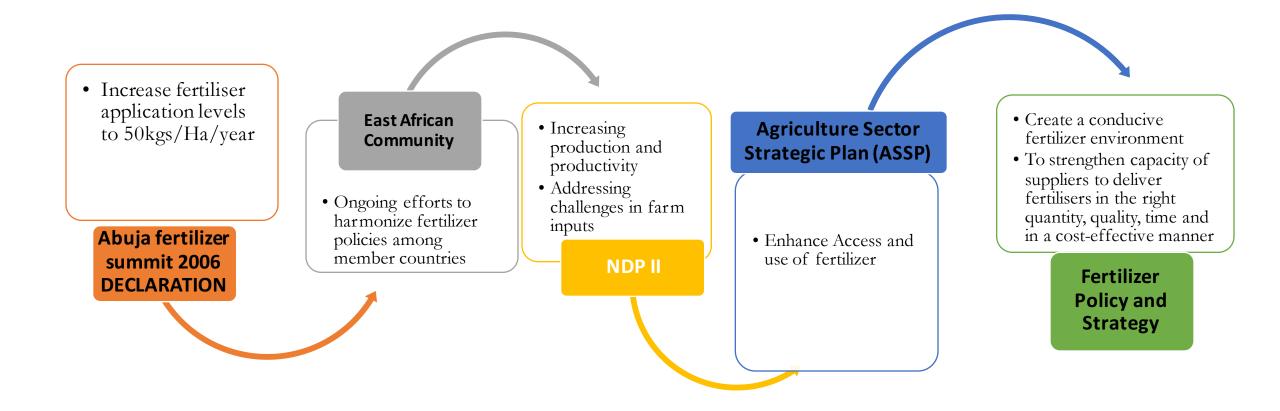
## Fertilizer Market Supply Chain - Uganda

Annet Adong

# Background

- Agriculture is crucial sector in Uganda
  - Employs 66 percent of the population
  - Contributes about 22.4 percent to the GDP and is a major export earner for the country
- Real growth in the sector has declined over time (DSIP) challenge to the poverty eradication drive
  - Low levels of productivity across many enterprises
    - Soil infertility has decreased crop yields to as low as 30% of potential yields. A hectare of Uganda's soils looses about 87kg of nutrients
  - Declining soil fertility and low application rates
    - 8.3 % use inorganic fertilizer, 25.5% use organic fertilizer, 32% use improved seeds (Okoboi et al., 2011)
- Reasons cited for low usage of fertiliser
  - high prices
  - poor knowledge on agronomic aspects related to fertilizer use and its benefits,
  - access to auxiliary services such as credit and poor infrastructure (irrigation, storage, roads) leading to poor access to markets (Okoboi and Barungi, 2012

### Policy framework for the development of fertilizer supply chain

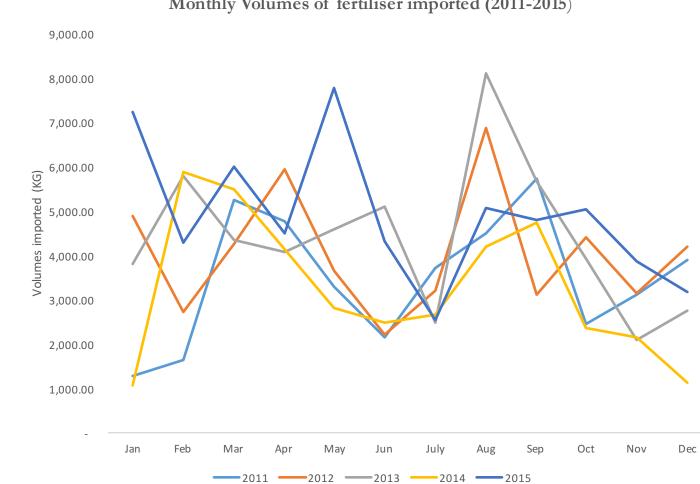


## Data sources

Aggregate data

- FAOSTAT,
- URA
- MAAIF- Regional consumption, prices, importation
- UNADA
- UBOS
- IFDC
- Africa Fertilizers
- World Bank National Household surveys
- Firm level data Small survey and key informant interviews

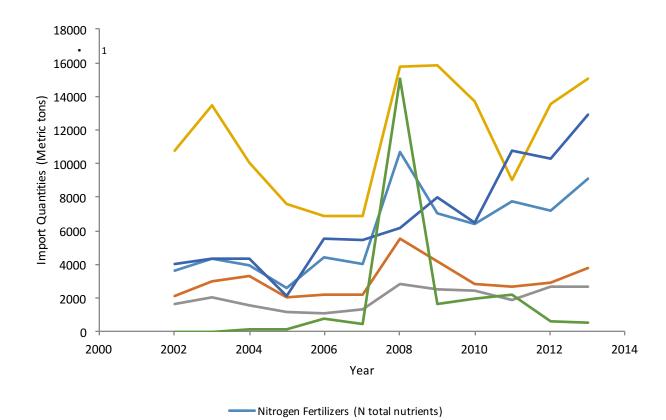
#### Uganda Revenue Authority – Monthly Volumes of fertilizer imported (2011-2015)



Monthly Volumes of fertiliser imported (2011-2015)

• 1

#### FAOSTAT: Uganda's Fertilizer imports by quantity 2002-2013



Phosphate Fertilizers (P205 total nutrients)
Potash Fertilizers (K20 total nutrients)

Uganda's Fertilizer Imports by Quantity for the period 2002 - 2013

• Common fertilizers consumed- DAP, Urea (mostly on maize), NPK (17:17:17), CAN, SSP, TSP and 25:5:5+5s (coffee); potash

- NPK complex
- Urea
- Ammonium nitrate

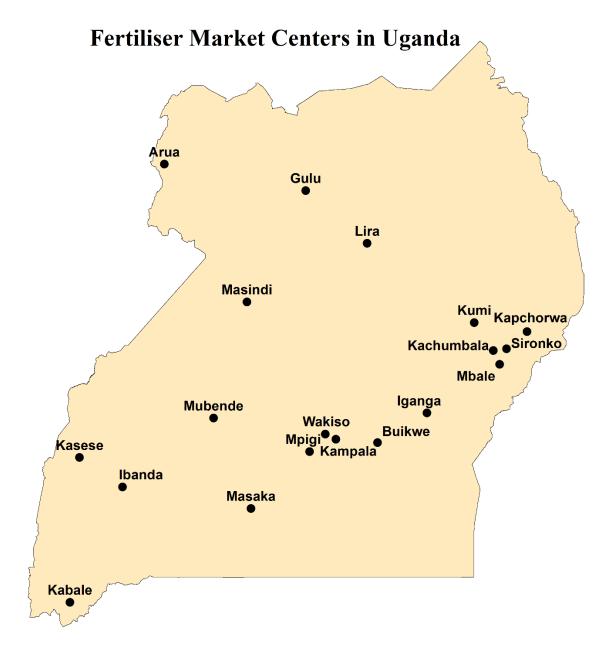
## Data sources

- Aggregate National data
- Ministry of Agriculture Animal Industry and Fisheries

Date	Region	Fertilizer	Price_imp	Price_ws	Price_retail	Imports	Consumption	Intensity

### World bank survey -

- Fertilizer prices across different districts/ regions
- Intensity. Amount of fertilizer consumed for agriculture per hectare of temporary and permanent cropland (kg per ha)



## Mapping of Kampala; Importers

No.	Name	Type of Player	Fertiliser	Qty imported	Price of importation	Sales price	Country of importation
1	Bukoola chemicals	Importer and wholesaler	NPK	16.3	2200	2900	Kenya
			UREA	13.4	1800	2800	Kenya
			DAP	27.1	2000	3200	Saudi Arabia
			CAN	15.2	1700	2800	Cyprus
2	Uganda Crop care	Importer and Retailor	UREA	35	2040	2700	Kenya, Saudi Arabia
			NPK	35	2142	2800	Saudi Arabia, Cyprus
			DAP	35	2244	3000	Cyprus
3	Africa One farmers shop	Importer, wholesaler and retailor	CAN	10.6	1800	2800	Kenya
			UREA	9.6	1800	3000	Kenya
			NPK	11.9	2200	3200	Kenya
			DAP	12.7	2200	3000	Kenya
4	Keith Associates	Importer, wholesaler and retailor	UREA	200	1485	1800	Turkey
			DAP	100	1980	2700	Kenya
			NPK	200	1881	2600	Kenya
5	Green House Chemicals	Importer , wholesaler and retailor					

## Importation

- Computed a list of 10 importers (Balton Uganda Limited, Uganda crop care, Export Trading Company, Bukoola Chemicals, Green House Industries, Eagle Eye Africa Limited, Africa one, Nsanju, Prathista Industry limited, Falcon, Africa one)
- Two pathways to importing fertilizers into Uganda
  - Acquiring directly from international sources (Turkey, Saudi Arabia)
  - Through key importers based in neighboring Kenya and Tanzania (have agents working at container village)
  - Most of them import and sell directly to wholesalers, retailors and consumers (consumers are large firms such as Sugar plantation firms)
  - Some have a network of distributors spread out in different regions of the country (Balton for example has network of agro input dealers spread out in the different districts)
- All are private companies; a combination of foreign and domestic private owners- no state participation and no direct subsidies are received

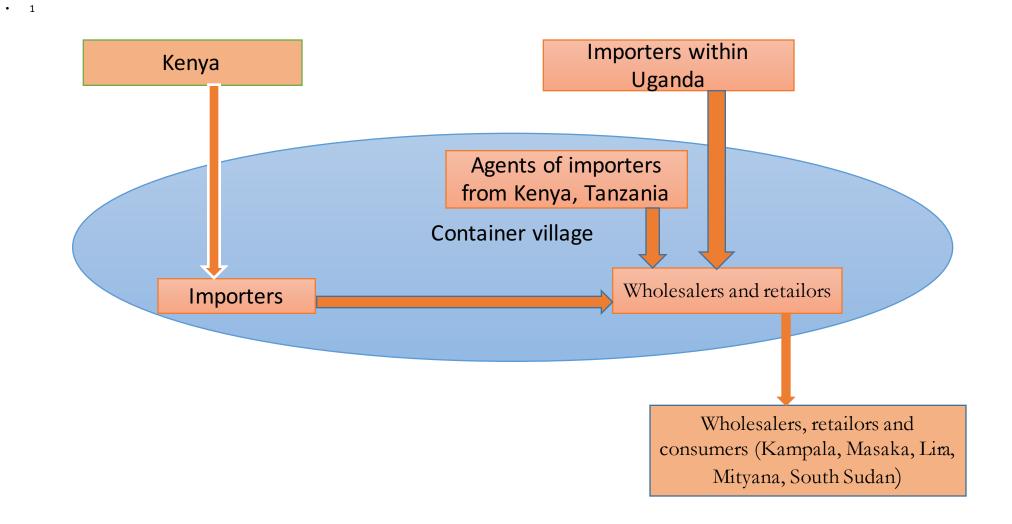
## Kampala Market center – Container village

ID	Fertiliser	Whole sale price	Retail price	Transport cost	Purchase price	Supplier	Buyer
1	UREA	2000	2500	3500 per bag	1800	Bukoola Agents from Kenya	Lira Mbale Masaka
	NPK	2500	3000		1800	Bukoola Agents from Kenya	Lira Mbale Masaka
	TSSP	2500	3000			Bukoola Agents from Kenya	Lira Mbale Masaka
	DAP	2500	3000		2200	Bukoola Agents from Kenya	Lira Mbale Masaka
7	NPK	2200	3000	10,000	2100	Africa one	
	DAP	2400	3000		2300		
	UREA	2000	3000		1900		
10	NPK	2000	3000		1900		
	UREA	1600	1660		1400		
	DAP	2200	2300		1900		

## Market center – Container village

- Has some importers who do wholesaling and retailing (Bukoola and Africa one)
- Most are participating as wholesalers and retailors (prices differ depending on the quantities one is purchasing)
- Agents of Kenya Importers visit shop by shop to find out if customers need supply
- Transport costs are minimal because the suppliers are within the market
- Sales are dependent on seasons

## Mapping of container village



## Inquiries

- Establishing the number of participants in market distribution center might be difficult- (for all the districts)
  - Establish from UNADA lists/offices
- Filling in the network distribution centers- For upcountry markets, participants are likely to be spread out and not concentrated in one place;
  - Distinguish between market center and local market center
- Price variation based on qty bought in the incidence that one is both a wholesaler and retailor;
  - Entry of data for such scenarios (repeation of entry or create a new sheet).
- Collecting income data

## Way forward

- Aggregate Data MAAIF, URA
- Small surveys and key informant interviews within Kampala- other local market centers (Nakawa, Nakasero, Bwaise)
- Upcountry visits
  - Eastern Uganda Mbale and Kapchorwa
  - Northern Arua, Gulu and Lira;
  - Western Masindi and Kasese
  - Central Kampala, Wakiso and Mityana