Fertilizer Statistics Overview

KENYA

2012 - 2015

Outline

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Background information

- An overview of fertilizer statistics in Kenya from 2012 – 2015.

- More emphasis is given to the year 2015 and each analysis is based on the products with higher quantities.

- Data obtained from Kenya National Bureau of Statistics (KNBS) and Validated by Fertilizer Technical Working Group – Kenya (FTWG-KEN)

- 2015 data validated from the 3rd – 4th October, 2016.

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Fertilizer production

HS Code	Product	2012	2013	2014	2015
3103100000	SSP			2,500	3,000

Source: FTWG-KEN
*2015 estimated

Comments:

- There is primary production of SSP in Kenya by KEL Chemicals limited.

- There are also secondary production of fertilizers by Arm Cement Limited (Mavuno Fertilizers), Mea Fertilizers and Toyota Tshusho Fertilizer Africa, blending different grades of NPK's.

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Fertilizer imports

HS Code	Fertilizer Name	2012	2013	2014	2015
3105200000	NPK's	139,578	129,540	136,880	166,342
3105300000	DAP	126,470	273,939	144,450	127,672
3102400000	CAN	53,616	101,201	87,900	99,120
3105510000	NP Compounds	12,028	20,853	35,594	65,295
3102100000	Urea	66,804	114,515	25,117	43,584
	Others fertilizers	46,684	49,983	64,779	54,419
Total fertilizer for agric (mt)		**445,180**	**690,032**	**494,720**	**556,432**

Source: FTWG-KEN

TOP 5 IMPORTED FERTILIZERS 2015

- Others fertilizers 10%
- Urea 8%
- NPK's 30%
- NP Compounds 11%
- CAN 18%
- DAP 23%

Comments:

- NPK's, DAP & CAN accounted for 71% of the total fertilizers officially imported to Kenya.

- Comparing the imports for the past four years shows that the top 5 imports have been consistent throughout.

- Urea imports increased to 8% of the total imports in 2015 as compared to previous year of 5%.

Other fertilizers includes products like; Phosphate Rock, SOP, MOP, Potassium nitrate, etc

TOP FERTILIZER IMPORTS PER YEAR

■ 2012 ■ 2013 ■ 2014 ■ 2015

MT — NPK's, DAP, CAN, NP Compounds, Urea, Others fertilizers

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Fertilizer monthly imports

Quarter	2012	2013	2014	2015
Q1	207,676	198,290	223,978	264,203
Q2	20,365	113,542	80,909	113,501
Q3	181,479	214,146	94,846	124,777
Q4	35,661	164,053	94,986	53,951
Total	445,180	690,032	494,720	556,432

Source: FTWG-KEN

KENYA FERTILIZER MONTHLY CUMULATIVE IMPORTS (2012-2015)

Comments:

- Most fertilizers imported to Kenya reach the port in the first quarter.

- In 2015, fertilizers imports was at its peak in February with 125,756mt (almost 23% of all 2015 imports).

SEASON	CROPS	Jan	Feb	Mar	Apr	May	Jun	Jul	Jul	Aug	Sep	Oct	Nov	Dec
Major Season (Long Rains)	**Beans**			growing	growing	harvesting	harvesting	harvesting	harvesting	harvesting	yellow	yellow		
	Fertilizer peak demand				red	red								
	Maize			growing	growing	harvesting	harvesting	harvesting	harvesting	harvesting	yellow	yellow		
	Fertilizer peak demand			red	red	red								
	Millet			growing	growing	harvesting	yellow	yellow	yellow	yellow	yellow			
	Fertilizer peak demand				red									
	Sorghum		growing	growing	growing	harvesting	harvesting	harvesting	harvesting	yellow	yellow			
	Fertilizer peak demand		red	red	red									
	Wheat						growing	harvesting	harvesting	harvesting	yellow	yellow		
	Fertilizer peak demand						red	red	red					
	Rice													
	Peak demand													
Season (Short Rains)	**Maize, Millet, Sorghum, Beans, Barley**	growing	harvesting								yellow	yellow	yellow	growing
	Fertilizer peak demand	red												red

Key:	fertilizer Peak demand	red	sowing	growing	harvesting	yellow

FAO/GIEWS,FEWSNET

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Fertilizer exports

HS Code	Fertilizer Name	2012	2013	2014	2015
3105200000	NPK	14,121	14,188	11,838	12,701
3105300000	DAP	1,127	5,951	2,897	9,813
3102100000	Urea	3,375	3,393	2,176	6,479
	Other fertilizers	2,082	2,552	7,316	4,577
Total fertilizers for Agric (mt)		**20,705**	**26,084**	**24,227**	**33,570**

Source: FTWG-KEN

2015 FERTILIZER EXPORTS

Other fertilizers 14%
NPK 38%
Urea 19%
DAP 29%

Comments:

- In 2015, NPK's were the most exported fertilizers from Kenya-38%, of total fertilizer exports.

- NPK's, Urea and DAP exports has been consistent over the years.

TOP FERTILIZER EXPORTS PER YEAR

■ 2012 ■ 2013 ■ 2014 ■ 2015

Other fertilizers includes products like; Phosphate Rock, SOP, MOP, Potassium nitrate, etc

Fertilizer origins and destinations 2015

TOP 10 COUNTRIES OF ORIGIN

Values (MT):
- SAUDI ARABIA, 148,246
- CHINA, 96,828
- SWITZERLAND, 77,448
- UKRAINE, 52,308
- NORWAY, 46,230
- RUSSIA, 38,874
- ITALY, 29,430
- TURKEY, 16,564
- CROATIA, 7,500
- JORDAN, 6,091

COUNTRY OF DESTINATIONS (EXPORTS)

Values (MT):
- UGANDA, 13,991
- BURUNDI, 8,432
- RWANDA, 5,637

2015 product per origin

Countries of Origin	Saudi Arabia	China	Switzerland	Ukraine	Norway	Russia	Others
NPK	-	0%	47%	2%	23%	23%	5%
DAP	97%	0%	-	-	-	-	3%
CAN	-	0%	-	50%	-	-	50%
NP Compounds	-	99%	-	-	-	-	1%
Urea	57%	32%	-	-	-	-	12%
Other fertilizers	-	33%	-	-	13%	0%	54%

2015 product per destination

Countries of Destinations	Uganda	Burundi	Rwanda	Others
NPK's	40%	3%	23%	34%
DAP	27%	66%	7%	-
Urea	65%	24%	12%	0%
Other fertilizers	44%	2%	28%	25%

Source: FTWG-KEN

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Agricultural and non agricultural uses

2015 NON FERTILIZER USE

Usage	2012		2013		2014		2015	
	Volume (MT)	%	Volume (MT)	%	Volume (MT)	%	Volume (MT)	%
Agriculture	445,180	99.9%	690,032	99.8%	494,720	99.8%	556,432	99.9%
Industrial/Mines	396	0.1%	1,134	0.2%	793	0.2%	804	0.1%
Total (MT)	445,576	100.0%	691,166	100.0%	495,513	100.0%	557,236	100.0%

Source: FTWG-KEN

Others 38%
UAN 62%

Comments:

• Some fertilizer products can be used for both agricultural and industrial purpose depending on the importer.

• On the average, about 0.1% of products imported to Kenya as fertilizers are not used for agricultural purpose.

Others includes Urea, Sodium nitrate, SOP, etc

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Fertilizer apparent consumption

HS Code	Fertilizer Name	2012	2013	2014	2015
3105200000	NPK's	129,803	119,283	133,878	153,640
3105300000	DAP	125,344	267,988	141,553	117,859
3102400000	CAN	53,000	99,898	87,021	98,940
3105510000	NP Compounds	11,954	20,829	35,587	64,218
3102100000	Urea	63,480	110,838	22,941	37,105
	Others fertilizers	40,961	48,146	64,029	54,560
Total (mt)		**424,542**	**666,981**	**485,008**	**526,322**

Source: FTWG-KEN

2015 APPARENT CONSUMPTION

TOP FERTILIZER APPARENT CONSUMPTION PER YEAR

Comments:

- NPK's and DAP were the most consumed fertilizers in Kenya in 2015 (accounted for more than 50%).

- In 2015 total apparent consumption of fertilizers in nutrients were 226 with 121 N, 84 P_2O_5 and 22 K_2O.

NB: Apparent consumption = Production + Imports – Exports – non fertilizer use

Nutrient aggregates was derived using AFO conversion methodology

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NPK analysis

HS Code	Fertilizer Name	2012	2013	2014	2015
3105200000	Total NPK	139,578	129,540	136,880	166,342
3105510000	Total NP	12,028	20,853	35,594	65,295
3105700000	Total NK	-	466	3	-
3105600000	Total PK	86	23	1,610	365
3105900000	NPK (Unknown Grade)	8,758	1,442	800	1
Total (mt)		160,450	152,324	174,887	232,003

Source: FTWG-KEN

2015 NPK COMPLEX FERTILIZERS

Comments:

- NPK's with known grades accounted for 71% of all complex fertilizers imported to Kenya in 2015.

- Total NPK imports in 2015 recorded a percentage increase of 33% from 174,887mt in 2014.

- NPK (Unknown Grade) refers to NPK fertilizers whose grades are not known.

NPK COMPLEX FERTILIZERS PER YEAR

NPK analysis – top 5 2015

HS Code	Fertilizer Name	2015	Major Crops
3105513704	NP 23 23 0	64,672	Maize, Rice, Sugarcane
3105203104	NPK 25 5 5	46,574	Tea
3105203120	NPK 26 5 5	38,374	Tea
3105202522	NPK 17 17 17	31,339	Coffee, Rice, Sugarcane and Horticulture
3105203119	NPK 27 5 5	11,000	
	Other complex fertilizers	40,044	
	Total (mt)	**232,003**	

Source: FTWG-KEN

Comments:

- 67 various grades of NPK, NP, NK and PK have officially been listed with 5 accounting for 83% of all NPK complex fertilizers

DISTRIBUTION OF NPK COMPLEX PER GRADE

Other complex fertilizers 17%

NP 23 23 0 28%

NPK 27 5 5 5%

NPK 17 17 17 13%

NPK 25 5 5 20%

NPK 26 5 5 17%

Volumes and Values 2015

HS Code	Fertilizer Name	Volumes (MT)	Values (USD)	USD/Ton
3105300000	DAP	127,672	65,628,850	514
3102400000	CAN	99,120	32,551,865	328
3105513704	NP 23 23 0	64,672	29,977,883	464
3105203104	NPK 25 5 5	46,574	17,134,328	368
3102100000	Urea	43,584	14,506,355	333
3105203120	NPK 26 5 5	38,374	14,262,557	372
3105202522	NPK 17 17 17	31,339	13,873,696	443

Exchange rate source: (oanda.com Time Period average: 1/1/2015 to 31/12/2015) Kenya=96.677KES/US$

Comments:

- The table shows volumes and values of selected fertilizers officially imported in 2015

❖ USD/Ton = FOB values ÷ volumes imported

Summary of 2015 fertilizer statistics for Kenya

HS Code	Product Name	Production	Total Imports	Exports	Domestic Availability	Non Fertilizer use	Agricultural Imports	Apparent Consumption
2510000000	Phosphate Rock		1,246	11	1,235		1,246	1,235
2814100000	Anhydrous ammonia		52		52	52	-	0
2814200000	Ammonium hydroxide		93		93	93	-	0
2834210000	Potassium nitrate		580	39	541		580	541
2834290000	Magnesium Nitrate		495		495		495	495
3101000000	Organic fertilizer		652	75	577		652	577
3102100000	Urea		43,589	6,479	37,110	5	43,584	37,105
3102210000	Ammonium sulphate		6,119	376	5,743		6,119	5,743
3102300000	Ammonium nitrate		0		0	0	-	0
3102400000	CAN		99,120	180	98,940		99,120	98,940
3102500000	Sodium nitrate		24		24	24	-	0
3102600000	Calcium nitrate		24,072	387	23,684		24,072	23,684
3102800000	UAN		502		502	502	-	0
3102900000	Other N fertilizer		1,042	2	1,039		1,042	1,039
3103100000	SSP	3,000		42	2,958		-	2,958
3103101000	TSP		2,074	217	1,857		2,074	1,857
3103900000	Other P fertilizer		296	368	0		296	0
3104200000	MOP		13,354	1,279	12,075	18	13,336	12,057
3104300000	SOP		3,233	113	3,120	82	3,152	3,038
3104900000	Other K fertilizer			372	0		-	0
3105200000	NPK		166,344	12,701	153,642	2	166,342	153,640
3105300000	DAP		127,672	9,813	117,859		127,672	117,859
3105400000	MAP		1,016	19	997	24	992	973
3105510000	NP compounds		65,295	1,077	64,218		65,295	64,218
3105600000	MKP 0 52 34		365	3	362		365	362
3105900000	NPK (Unknown grade)		2		2	1	1	1
2833210000	Magnessium sulphate			17	0		-	0
Grand Total (MT)		**3,000**	**557,236**	**33,570**	**526,666**	**804**	**556,432**	**526,322**

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