

FERTILIZER STATISTICS OVERVIEW KENYA 2018 - 2022

2023 Edition – Version 1

Outline

1. Production
2. Import
3. Origins
4. Agric. and non-agric. Use
5. NPK import analysis
6. Export & Destinations
7. Consumption (app)
8. Summary

Background Information

- Overview of fertilizer statistics in Kenya from 2018 – 2022 and January to March 2023.
- Emphasis on 2022, and each analysis is based on the products with higher quantities.
- Official trade data obtained from the Kenya Revenue Authority (KRA) and validated by Fertilizer Technical Working Group – Kenya (FTWG-KEN).
- 2022 data validated from 7th – 8th June, 2023.

Fertilizer Production

KENYA

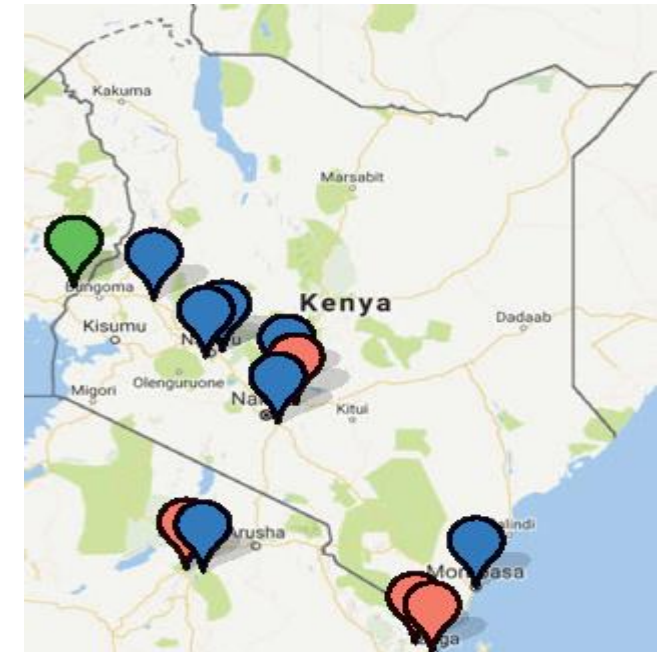
HS Code	Product	2014	2015	2016	2017
3103100000	SSP	2,500	3,000	3,000	2,500

*2016 & 2017 estimates from FTWG-KEN

Comments

- KEL Chemicals Limited produces phosphate fertilizer SSP in Kenya. There has been no production since the beginning of 2018.
- Fertilizers are imported in compounds and bulk. The bulk fertilizers are blended into various formulations and distributed through a network/system of distributors and retail agro-dealers.
- Several companies are involved in the blending of fertilizers in Kenya, including CFAO Agri Limited (formerly Toyota Tshusho), MEA Fertilizers, Export Trading Company Limited, Fertiplant East Africa, Kel Chemicals Limited, and Maisha Minerals & Fertilizers Limited. These companies blend different grades of NPK fertilizers specifically for the local and regional markets.

Fertilizer Plants in Kenya



Fertilizer Import

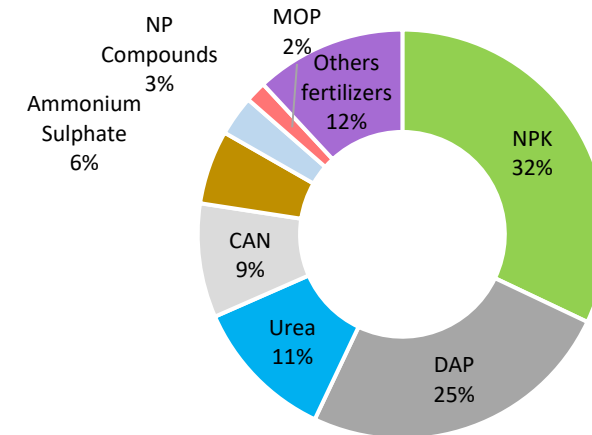
KENYA

HS Code	Fertilizer Name	2018	2019	2020	2021	2022	2023*
3105200000	NPK	143,621	193,057	127,143	177,117	210,751	34,540
3105300000	DAP	252,199	262,897	319,039	294,696	164,435	139,986
3102100000	Urea	68,045	89,996	152,537	96,865	74,809	60,992
3102400000	CAN	100,950	118,268	132,900	127,223	59,276	46,092
3102210000	Ammonium Sulphate	13,792	16,967	19,410	17,892	38,376	11,271
3105510000	NP Compounds	15,894	8,843	31,768	15,176	20,828	86,240
3104200000	MOP	9,646	15,370	11,142	12,614	10,918	20,158
	Others fertilizers	22,271	60,729	40,610	51,087	78,338	26,759
Total (mt)		626,418	766,126	834,549	792,670	657,730	426,038

*2023 - Data from January to March

<https://viz.africafertilizer.org/#/kenya/availability>

TOP IMPORTED FERTILIZERS IN 2022



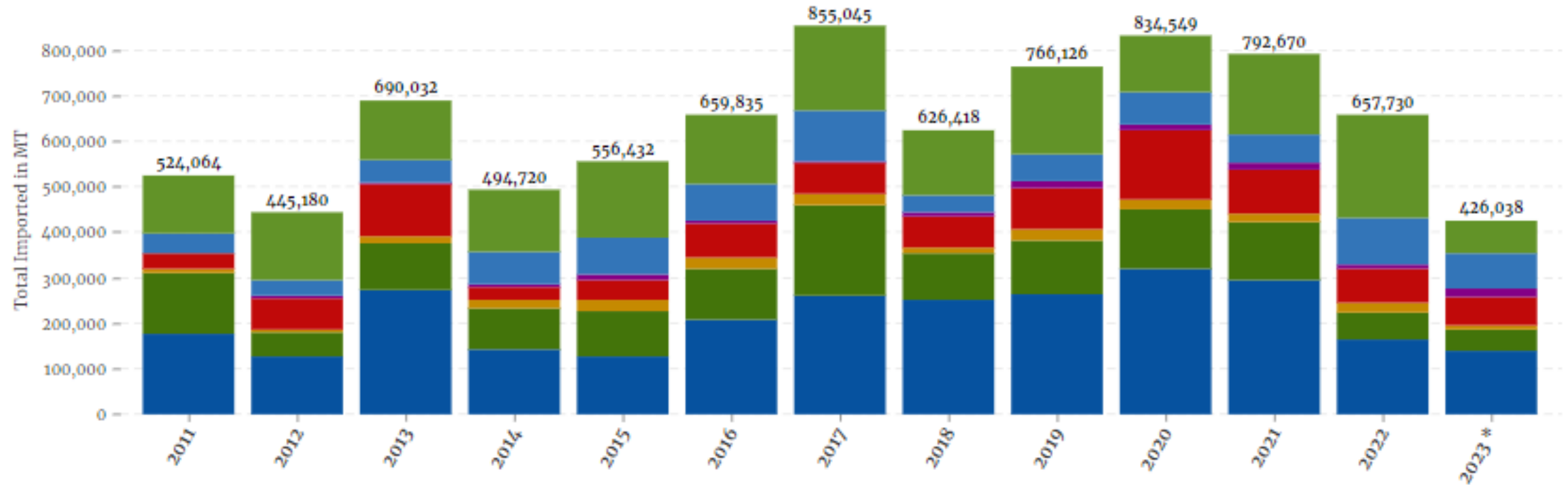
Comments

- The official imports of fertilizers to Kenya experienced a decline from 834,549mt in 2020 to 792,670mt (-5%) in 2021, and further decreased to 657,730mt (-17%) in 2022. However, between January and March 2023, approximately 426,038mt of various fertilizers were imported into Kenya.
- The decrease in fertilizer imports in 2022 can be attributed to disruptions in the global supply chain, such as the Russia-Ukraine war, as well as the high price of fertilizers.
- Out of the total 657,730mt of fertilizers officially imported in 2022, 602mt were identified as enhancers, which are products that promote healthy plant growth including bio-stimulants and micronutrients.
- The top imported fertilizers to Kenya include NPK, DAP, CAN, Urea, SoA, NP Compounds, and MOP.

Fertilizer Import on Dashboard

KENYA

● Calcium Ammonium Nitrate ● Calcium Nitrate ● Diammonium Phosphate ● Muriate of Potash ● NPK ● Urea ● Others

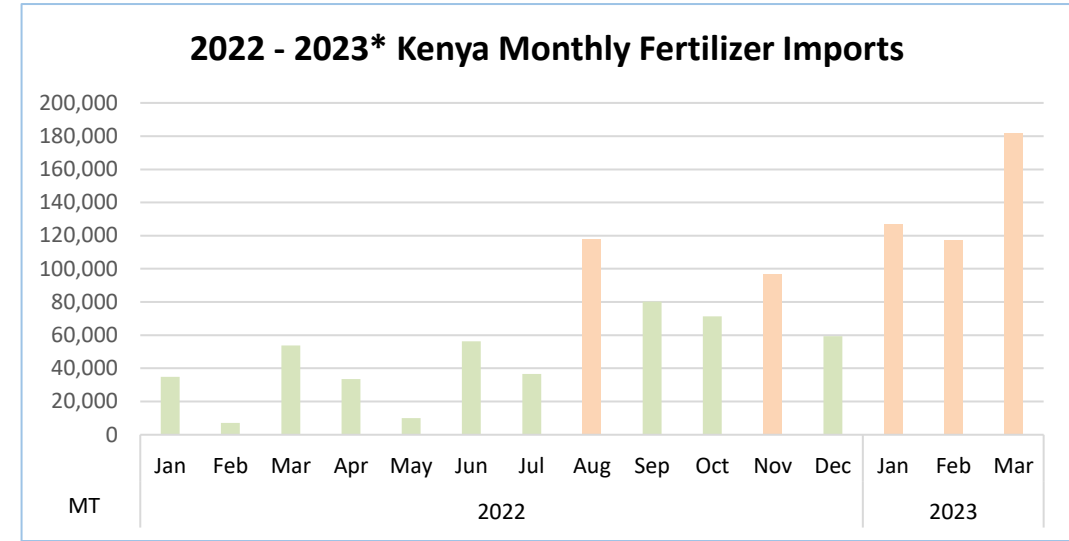


Fertilizer Monthly Import

KENYA

Quarter	2018	2019	2020	2021	2022	2023*
Q1	247,294	271,814	259,352	287,084	95,652	426,038
Q2	147,610	234,693	118,873	191,942	99,825	
Q3	125,807	132,759	231,062	163,316	234,632	
Q4	105,707	126,860	225,262	150,328	227,621	
Total (mt)	626,418	766,126	834,549	792,670	657,730	426,038

*2023 - Data from January to March



Comments

- In November and December of 2022, approximately 156,000mt of fertilizers were officially brought into the country, and these supplies were carried over into 2023 as the demand for fertilizers typically increases starting in February.
- From November 2022 to March 2023, around 582,000mt of fertilizers have been imported into Kenya, indicating that there is an adequate supply of fertilizers in the country. However, farmers have been facing difficulties primarily due to the high prices of fertilizers when it comes to purchasing them.

Crop Calendar

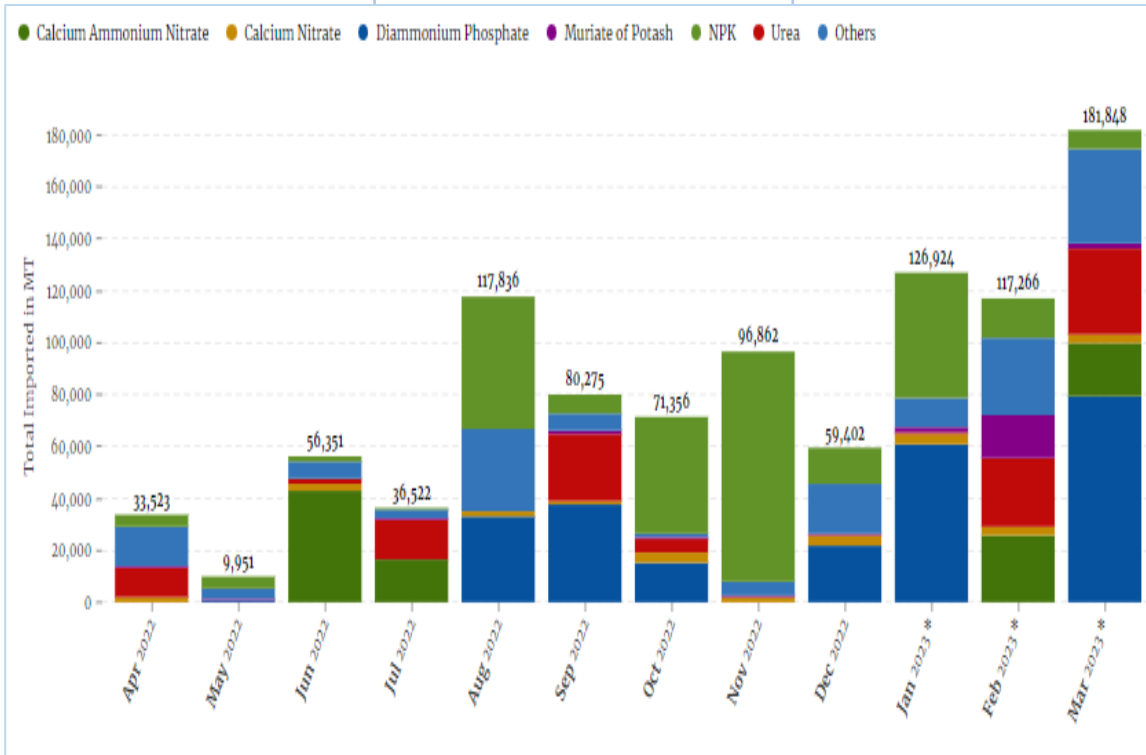
SEASON	CROPS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Major Season (Long Rains)	Beans			◆	◆	◆	◆	◆	◆	◆	◆		
	Maize			◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Millet			◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Sorghum		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Wheat					◆	◆	◆	◆	◆	◆	◆	
	Rice												
Minor Season (Short Rains)	Maize, Millet, Sorghum, Beans, Barley	◆	◆	◆							◆	◆	◆

Key: ◆ Fertilizer Peak Demand Sowing Growing Harvesting

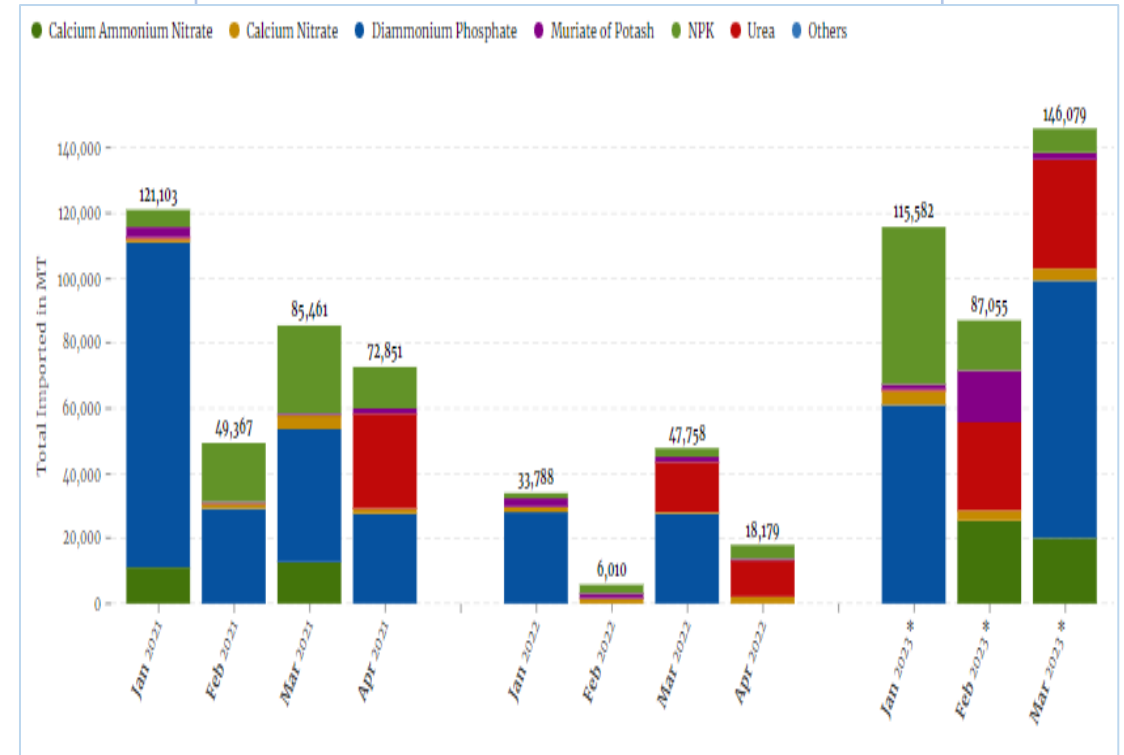
Source : FAO/GIEWS, Fertilizer Demand: AfricaFertilizer

Fertilizer Monthly Import on Dashboard KENYA

Monthly Import



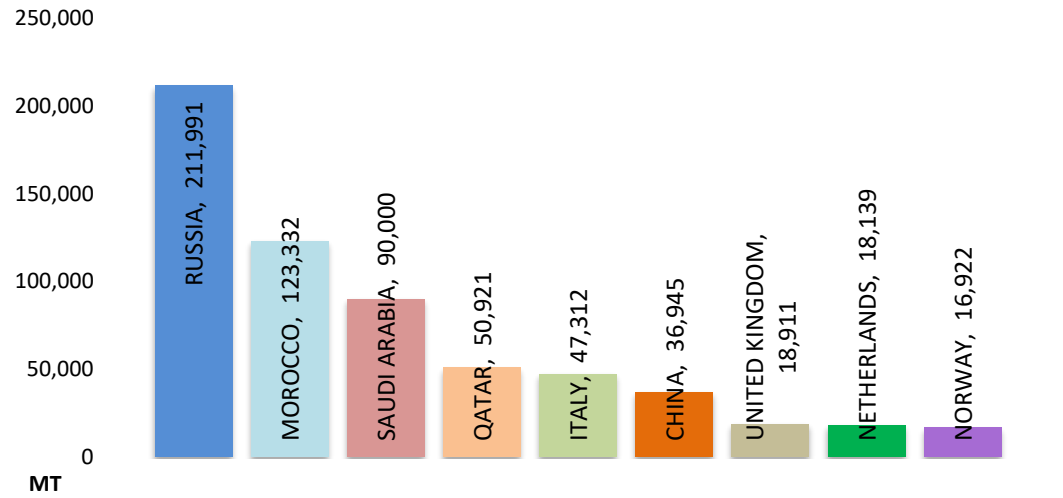
Consecutive Periods 2021-2023



Fertilizer Origins

KENYA

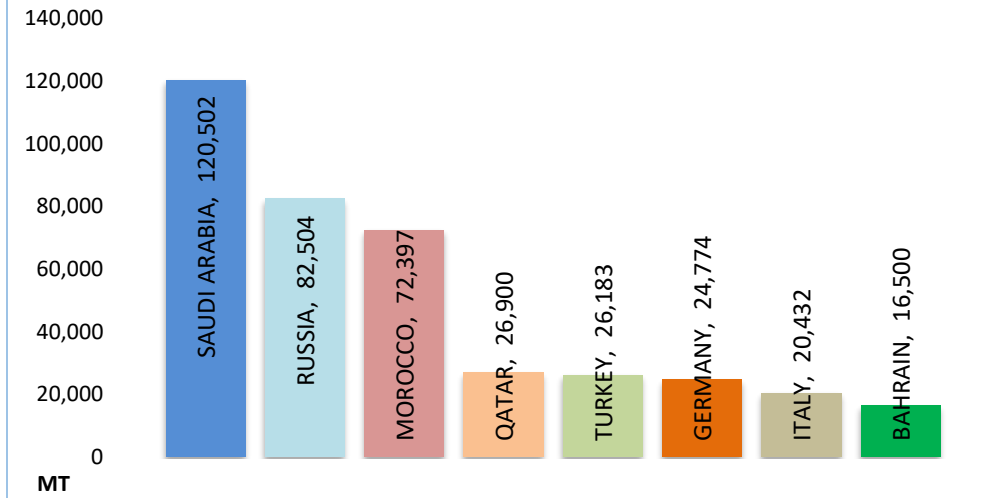
TOP COUNTRIES OF ORIGIN IN 2022



Countries of Origin	Russia	Morocco	Saudi Arabia	Qatar	Italy	China	Other Countries
NPK	92%	-	-	-	-	0%	8%
DAP	-	57%	43%	-	-	0%	-
Urea	7%	-	25%	68%	-	-	0%
CAN	12%	-	-	-	72%	-	16%
Ammonium Sulphate	-	-	-	-	11%	75%	14%
NP Compounds	27%	0.65	-	-	-	-	7%
MOP	7%	-	-	-	-	-	93%
Others fertilizers	0%	21%	1%	-	0%	9%	69%

Most MOP in 2022 were imported from Jordan and Lithuania.

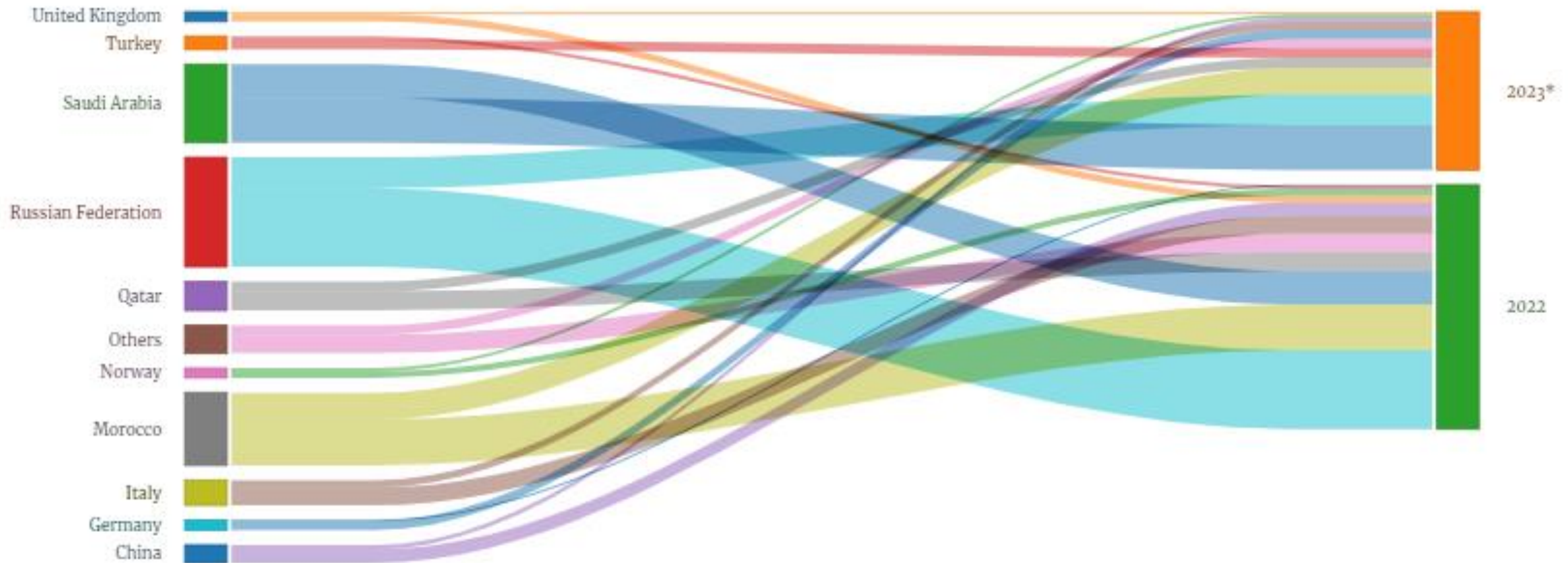
TOP COUNTRIES OF ORIGIN IN 2023 (JAN - MAR)



Countries of Origin	Saudi Arabia	Russia	Morocco	Qatar	Turkey	Germany	Italy	Other Countries
NPK	-	97%	-	-	0%	-	-	3%
DAP	74%	-	26%	-	-	-	-	-
Urea	28%	-	-	44%	-	-	-	28%
CAN	-	-	-	-	56%	-	44%	-
Ammonium Sulphate	-	-	-	-	-	6%	-	94%
NP Compounds	-	57%	42%	-	-	-	-	2%
MOP	-	-	-	-	-	91%	-	9%
Others fertilizers	-	1%	-	-	2%	21%	-	76%

2021 Fertilizer Origins on Dashboard

KENYA



Agricultural and Non-agricultural Uses

KENYA

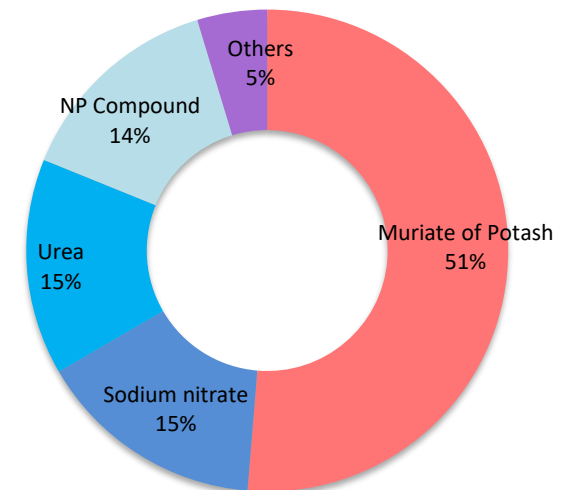
Usage	2018		2019		2020		2021		2022		2023*	
	Volume (MT)	%	Volume (MT)	%	Volume (MT)	%	Volume (MT)	%	Volume (MT)	%	Volume (MT)	%
Agriculture	626,418	99.7%	766,126	99.8%	834,549	99.9%	792,670	99.9%	657,730	99.9%	426,038	99.97%
Industrial/Mines	1,750	0.3%	1,298	0.2%	578	0.1%	528	0.1%	552	0.1%	132	0.03%
Total (mt)	628,168	100.0%	767,424	100.0%	835,126	100.0%	793,198	100.0%	658,283	100.0%	426,170	100.0%

*2023 - Data from January to March

Comments

- Depending on the importer, certain products can serve both agricultural and industrial purposes. When imported products are not intended for agricultural purposes, they are categorized as non-agricultural use.
- The table provided illustrates the utilization of products, distinguishing between agricultural and non-agricultural use over the years.
- On average, approximately 0.1% of the imported fertilizer products are used for industrial purposes.

2022 NON FERTILIZER USE



NPK Import Analysis

KENYA

HS Code	Fertilizer Name	2018	2019	2020	2021	2022	2023*
3105200000	Total NPK	143,621	193,057	127,143	177,117	210,751	34,540
3105510000	Total NP	15,894	8,843	31,768	15,176	20,828	86,240
3105700000	Total NK	-	-	1,009	596	341	185
3105600000	Total PK	296	338	209	334	205	1
3105900000	NPK (Unknown Grade)	-	-	-	-	-	-
Total (mt)		159,811	202,237	160,129	193,223	232,124	120,966

*2023 - Data from January to March

Comments

- Blending companies import Urea, TSP, DAP, MAP and MOP to blend different formulations of NPK for farmers in Kenya and in the region.
- Blenders and other major fertilizer importing companies also import finished NPK with various grades to sell directly to farmers. Blended types and volumes are currently unknown.
- The tables provided shows details of NPK compounds that were imported to Kenya in 2022 and Q1 of 2023.

NPK, NP, PK and NK Import	2022	Major Crops
NPK 26-5-5	172,644	Wheat
NP 18.9-37.7-0	13,550	
NPK 17-17-17	11,739	Maize, Beans, Rice, Avocados, French beans, Tomatoes, etc
NP 23-23-0 + 5SO ₃ + 2CaO + 0.2Zn	5,718	Maize, Irish potatoes, Tomatoes, Sunflower, French beans, etc
NPK 25-5-5 + 5SO ₃ + 2CaO + 1MgO + 0.3B	5,547	Tea
NPK 22-6-12 + 1.4MgO + 3S + 0.15B + 0.15Zn	5,514	
NPK 25-5-10	5,488	
NPK 9 18 6 + 6S + 23CaO + 2MgO + 1Zn + 0.1B	3,474	Maize, Beans, Wheat, Sorghum, Barley
NPK 27-6-6	3,136	
Others	5,314	
Total (mt)	232,124	

NPK, NP, PK and NK Import	2023*	Major Crops
NP 23-23-0 + 5SO ₃ + 2CaO + 0.2Zn	48,884	Maize, Irish potatoes, Tomatoes, Sunflower, French beans, etc
NP 18.9-37.7-0	35,913	
NPK 17-17-17	28,200	Maize, Beans, Rice, Avocados, French beans, Tomatoes, etc
NPK 25-5-5 + 5SO ₃ + 2CaO + 1MgO + 0.3B	2,750	Tea
NPK 22-6-12 + 3S + 2CaO + 1MgO + 0.2B + 0.2Zn	2,475	
NP 27-10-0 + 15CaO	1,443	
Others	1,301	
Total (mt)	120,966	

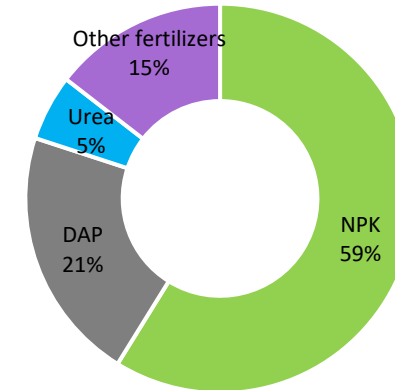
Fertilizer Re-Exports

KENYA

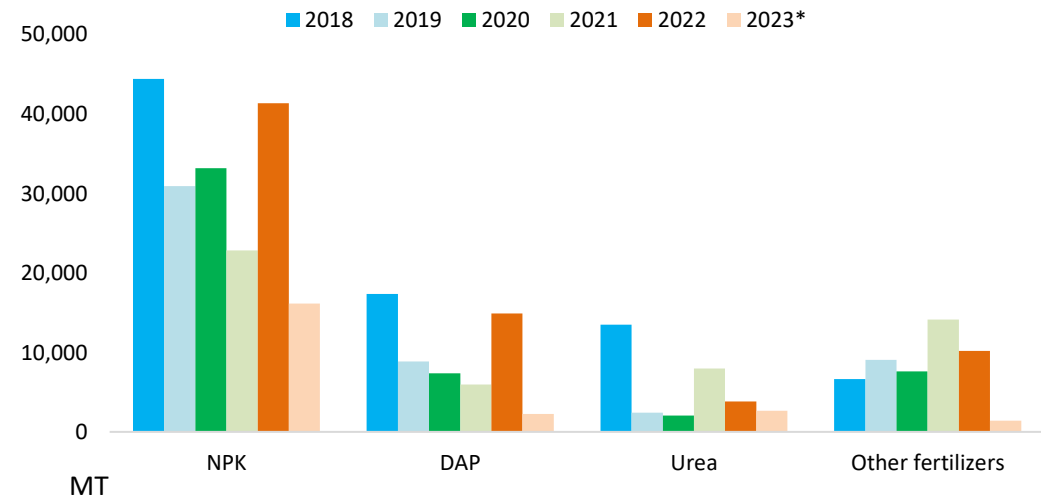
HS Code	Fertilizer Name	2018	2019	2020	2021	2022	2023*
3105200000	NPK	44,437	30,936	33,202	22,848	41,364	16,146
3105300000	DAP	17,376	8,871	7,377	5,961	14,903	2,264
3102100000	Urea	13,497	2,437	2,075	7,993	3,842	2,676
	Other fertilizers	6,666	9,075	7,615	14,155	10,204	1,416
Total (mt)		81,977	51,319	50,268	50,957	70,312	22,502

*2023 - Data from January to March

2022 FERTILIZER EXPORT



TOP FERTILIZER EXPORTS PER YEAR

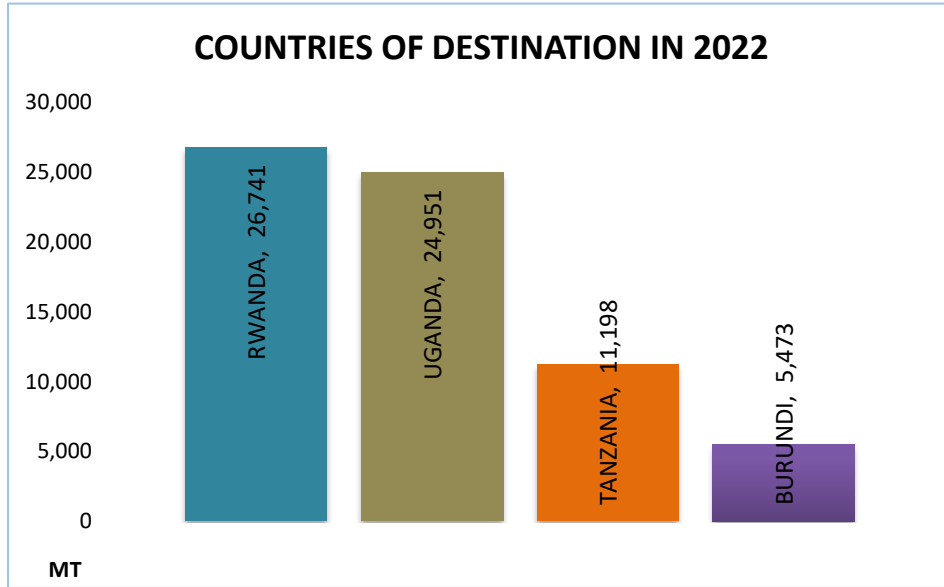


Comments

- Official fertilizer re-exports from Kenya increased from 50,957MT in 2021 to 70,312MT in 2022 (38% increase).
- Between January to March 2023, 22,502mt of fertilizers have officially been re-exported from Kenya.
- The increase can be attributed to some policies in some countries. Example is Rwanda imported more fertilizers from Kenya than Tanzania due to Bulk Procurement System (BPS) policy in Tanzania.
- NPK's and DAP fertilizers are the most re-exported fertilizers from Kenya into neighboring countries

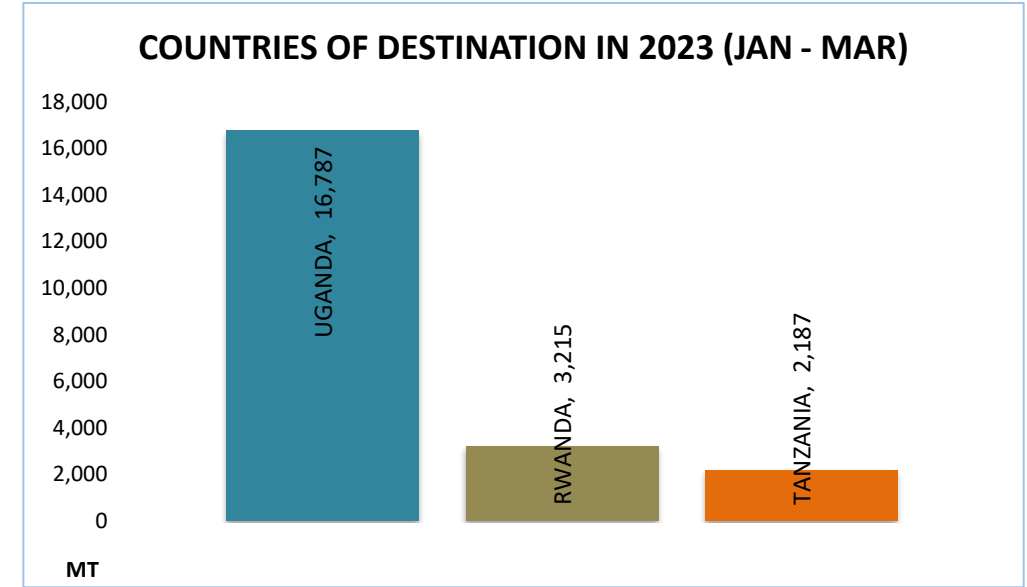
Fertilizer Destinations

KENYA



Countries of Destination	Rwanda	Uganda	Tanzania	Burundi	Other Countries
NPK	49%	44%	4%	-	3%
DAP	41%	23%	0%	35%	0%
Urea	7%	83%	6%	-	4%
Other fertilizers	0%	0%	91%	2%	6%

In 2022, 9,000mt of CAN were re-exported to Tanzania.



Countries of Destination	Uganda	Rwanda	Tanzania	Other Countries
NPK	89%	8%	3%	0%
DAP	44%	56%	-	-
Urea	46%	19%	34%	1%
Other fertilizers	11%	14%	55%	19%

Fertilizer Apparent Consumption

KENYA

HS Code	Fertilizer Name	2018	2019	2020	2021	2022	2023*
3105200000	NPK	99,184	162,121	93,942	154,269	169,386	18,394
3105300000	DAP	234,823	254,026	311,662	288,735	149,533	137,722
3102100000	Urea	54,547	87,559	150,463	88,872	70,967	58,316
3102400000	CAN	98,655	116,904	132,680	127,217	50,276	46,092
3102210000	Ammonium Sulphate	12,441	16,180	18,380	17,771	38,181	11,269
3105510000	NP Compounds	15,894	8,843	31,766	13,934	20,828	86,240
	Others fertilizers	30,131	74,632	50,735	59,290	88,258	46,071
Total (mt)		545,675	720,265	789,628	750,089	587,429	404,105

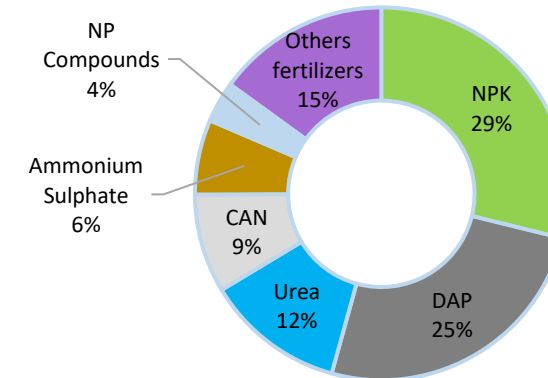
*2023 - Data from January to March

Comments

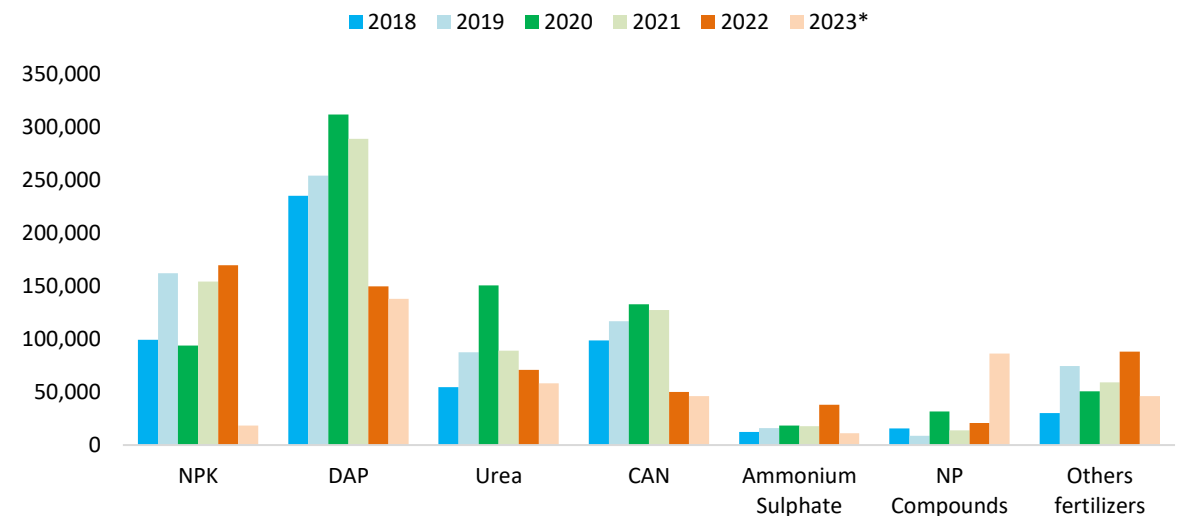
- The apparent consumption of fertilizers in Kenya experienced a decline from 789,628mt in 2020 to 750,089mt (-5%) in 2021, and further decreased to 587,429mt (-22%) in 2022.
- The decrease in apparent consumption can be attributed to various factors, including global issues and the high prices of fertilizers in 2022, which impacted the importation of fertilizers.
- The carryover stocks for these years are not specified, but it is estimated that all volumes imported between November and December are used in the subsequent year.

NB: Apparent consumption = Production + Imports – (Re)Exports – Non Fertilizer Use

2022 APPARENT CONSUMPTION



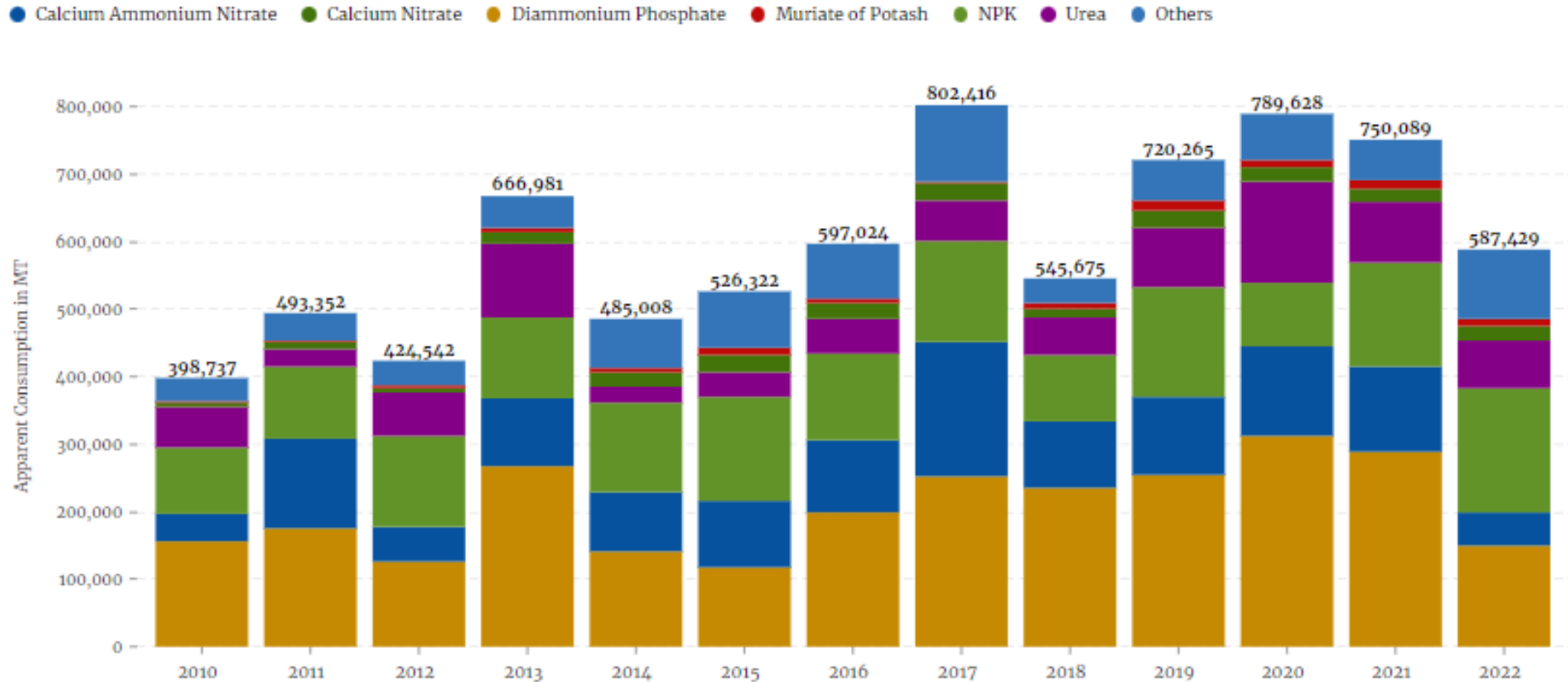
FERTILIZER APPARENT CONSUMPTION PER YEAR



<https://viz.africafertilizer.org/#/kenya/use>

Fertilizer Apparent Consumption on Dashboard

KENYA



<https://viz.africafertilizer.org/#/kenya/use>

- The government has a strong dedication to bolstering various agricultural value chains such as maize, beans, coffee, horticultural crops, tea, rice, Irish potatoes, and sugarcane. This commitment is demonstrated through the National Fertilizer Subsidy Program, which provides support to both small-scale and large-scale farmers.
- In the 2022/2023 season, the subsidized fertilizers within the program include NPKs , CAN (Calcium Ammonium Nitrate), Urea, SoA and TSP. DAP was not included in the subsidy program due to concerns that it can contribute to soil acidity.
- The accessibility of National Cereals and Produce Board (NCPB) depots to farmers is a notable challenge in the distribution of subsidized fertilizers.
- Safaricom and One Acre Fund are among the organizations that have taken initiatives to offer affordable fertilizers to farmers.
- There is a growing presence of companies involved in the importation of organic fertilizers in Kenya, with a significant portion of these fertilizers being in liquid form. 9,357mt and about 56,000 liters of organic fertilizers were imported in 2022.
- The classification of a fertilizer as organic, according to the ongoing review of the Kenya organic fertilizer standard, is based on having a carbon content of 70% and above.
- A new type of organo-mineral fertilizer, composed of a combination of cow dung and mineral fertilizer, is emerging in Kenya.
- It is necessary to collect and make available information regarding the types and quantities of NPK blends in the country.
- Stakeholders also identified several factors that impact consumption trends, including government tenders, financing frameworks such as Forex, external market shocks, affordability, availability, and the technical and financial capacity of farmers.

Summary of 2022 Fertilizer Statistics

KENYA

HS code	Product	Production	Total Imports	Non-Fertilizer Use	Exports	Fertilizer Imports	2022 Apparent Consumption
3105200000	NPK		210,364		41,142	210,364	169,223
3105200000	NPK (Liquid)		386		223	386	164
3105300000	Diammonium Phosphate		164,461	25	14,903	164,435	149,533
3102100000	Urea		74,827	80	3,842	74,747	70,905
3102100000	Urea (Liquid)		62		0	62	61
3102400000	Calcium Ammonium Nitrate		59,276		9,000	59,276	50,276
3102210000	Ammonium Sulphate		38,375	0	194	38,375	38,181
3102210000	Ammonium Sulphate (Liquid)		2			2	2
3105510000	NP Compound		20,907	78		20,828	20,828
3102600000	Calcium Nitrate		20,648		420	20,648	20,228
3102600000	Calcium Nitrate (Liquid)		605			605	605
3103101000	Triple Super Phosphate		16,560			16,560	16,560
3104300000	Sulphate of Potash		16,343	0	46	16,343	16,297
3104200000	Muriate of Potash		11,201	283	218	10,918	10,700
3101000000	Organic Fertilizer		9,357		29	9,357	9,327
3101000000	Organic Fertilizer (Liquid)		59		0	59	58
3102900000	Other Nitrogen Fertilizer		5,747		25	5,747	5,722
3102900000	Other Nitrogen Fertilizer (Liquid)		56		8	56	48
3105400000	Monoammonium Phosphate		4,782	0	20	4,782	4,762
3105400000	Monoammonium Phosphate (Liquid)		9			9	9
3103900000	Other phosphate Fertilizer		2,701		13	2,701	2,688
3103900000	Other phosphate Fertilizer (Liquid)		3			3	3
3104900000	Other Potash fertilizer		266		8	266	258
3104900000	Other Potash fertilizer (Liquid)		7			7	7
3105700000	NK Compound (Liquid)		215			215	215
3105700000	NK Compound		126			126	126
9999999990	Enhancers		328		189	328	139
9999999990	Enhancers (Liquid)		274		1	274	274
3105600000	PK Compound		113		24	113	90
3105600000	PK Compound (Liquid)		91			91	91
3102500000	Sodium nitrate		85	85		-	-
3102300000	Ammonium Nitrate (Liquid)		49			49	49
3102300000	Ammonium Nitrate		0	0		-	-
2834210000	Potassium nitrate				11	-	11
Grand Total (mt)		-	658,283	552	70,312	657,730	587,429
2021 Total			793,198	528	50,957	792,670	750,089
% Change			-17%	4%	38%	-17%	-22%

Summary of 2023 (Jan – Mar) Fertilizer Statistics

KENYA

HS code	Product	Production	Total Imports	Non-Fertilizer Use	Exports	Fertilizer Imports	2023* Apparent Consumption
3105300000	Diammonium Phosphate		139,986		2,264	139,986	137,722
3105510000	NP Compound		86,240			86,240	86,240
3102100000	Urea		61,007	22	2,676	60,986	58,310
3102100000	Urea (Liquid)		6			6	6
3102400000	Calcium Ammonium Nitrate		46,092			46,092	46,092
3104200000	Muriate of Potash		20,268	110	365	20,158	19,793
3105200000	NPK		34,444		16,146	34,444	18,298
3105200000	NPK (Liquid)		96			96	96
3102210000	Ammonium Sulphate		11,271		2	11,271	11,269
3102600000	Calcium Nitrate		10,850		95	10,850	10,755
3101000000	Organic Fertilizer		7,093		1	7,093	7,093
3101000000	Organic Fertilizer (Liquid)		2			2	2
3104300000	Sulphate of Potash		5,851		55	5,851	5,796
3105400000	Monoammonium Phosphate		854		62	854	792
3105400000	Monoammonium Phosphate (Liquid)		26			26	26
2510000000	Rock Phosphate		671			671	671
3103101000	Triple Super Phosphate		552			552	552
3102900000	Other Nitrogen Fertilizer		463		7	463	456
3105700000	NK Compound		112			112	112
3105700000	NK Compound (Liquid)		72			72	72
3105600000	PK Compound (Liquid)		1			1	1
3102500000	Sodium nitrate		0	0		-	-
2834210000	Potassium nitrate				1	-	1
3104900000	Other Potash fertilizer		155		168	155	13
3104900000	Other Potash fertilizer (Liquid)		2			2	2
9999999990	Enhancers (Liquid)		40		0	40	40
9999999990	Enhancers		12		201	12	189
3103900000	Other phosphate (Liquid)		1		459	1	457
Grand Total (mt)		-	426,170	132	22,502	426,038	404,155

Participants of 2023 FTWG

KENYA

Name	Organisation	E-mail
Edwin Oseko	Ministry of Agriculture	osekonomics@gmail.com
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KENYA



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AfricaFertilizer seeks to provide clear, relevant, and opportune data and market information on fertilizers in the sub-Saharan African region, to support the implementation of continental, regional and national agricultural and more specifically fertilizer policies and regulations, and promote the growth and development of competitive markets, to the benefit of both the public and private sector, and fertilizer stakeholders globally.



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