AfricaFertilizer
Data-Driven Decisions for African Food Systems

IFDC 50th ANNIVERSARY
Developing Agriculture from the Ground Up

FERTILIZER STATISTICS OVERVIEW

ETHIOPIA

2010 - 2023

2024 EDITION

CountrySTAT
Food and agriculture data network

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NEPAD
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MINISTRY OF AGRICULTURE

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Ethiopian Agricultural Businesses Corporation

Ethiopian Horticulture Producer Exporters Association

EHPEA
SUPPORT · CONNECT · EXCHANGE

Wallace & Associates

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Ethiopia

Outline

1. Production
2. Import
3. NP compounds
4. Monthly import
5. Origins
6. Consumption (app)
7. Other comments
8. Summary

Background Information

- Overview of fertilizer statistics in Ethiopia from 2010 – 2023.
- Official trade data obtained from Ministry of Agriculture and Natural Resources (MoANR) , Ethiopian Agricultural Businesses Corporation (EABC) and Ethiopian Customs Commission (ECC), validated by Fertilizer Technical Working Group – Ethiopia.
- 2023 data was validated on 11th June, 2024.
- Data has been converted from Ethiopian calendar years to the Gregorian calendar years.

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Fertilizer Production

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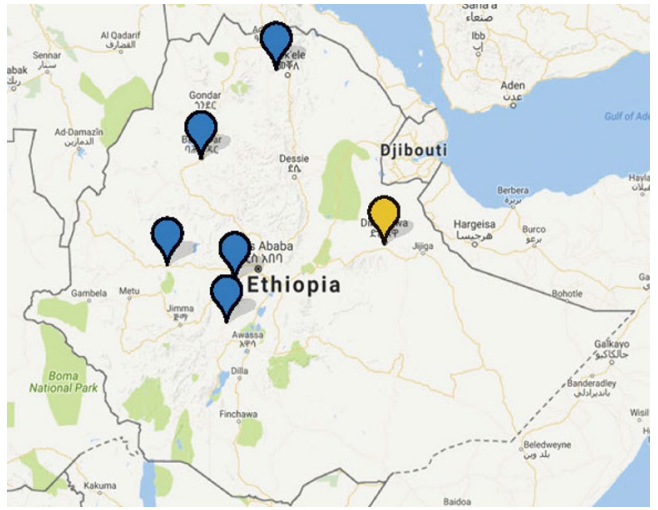
Comments

- There is currently no primary production of inorganic fertilizers in Ethiopia. However, there is a Public-Private Partnership initiative aimed at establishing a manufacturing plant in Dire Dawa.
- Additionally, between 2014 and 2016, five fertilizer blending plants were installed. The blending was initiated at a facility managed by farmer's cooperative unions strategically located in four regions. Initially, these plants used to blend small quantities by incorporating Boron, Zinc, and Sulphur into imported DAP and NP compounds to tailor the nutrient composition to the specific needs of the soil and crops for farmers.
- Unfortunately, these plants are currently non-functional due to inefficient operational capacity. In response, the Ministry of Agriculture (MoA) has engaged OCP to operationalize at least two of these blending factories.
- OCP has been eyeing the Ethiopian market for years now. In 2024, one of the blending plants located in Bahir Dar, Amhara region, began formulating soil amendments; calcium-carbonate and calcium-oxide aimed at treating acidity. This development follows the testing of 18 new fertilizer formulas in 2022 and 2023. Soil acidity has become a serious problem in the northern highlands of Ethiopia, with the Ministry of Agriculture (MoA) reporting that 43% of cultivated land is affected.

Fertilizer Plants in Ethiopia



https://viz.africafertilizer.org/#/ethiopia/directory

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Fertilizer Import

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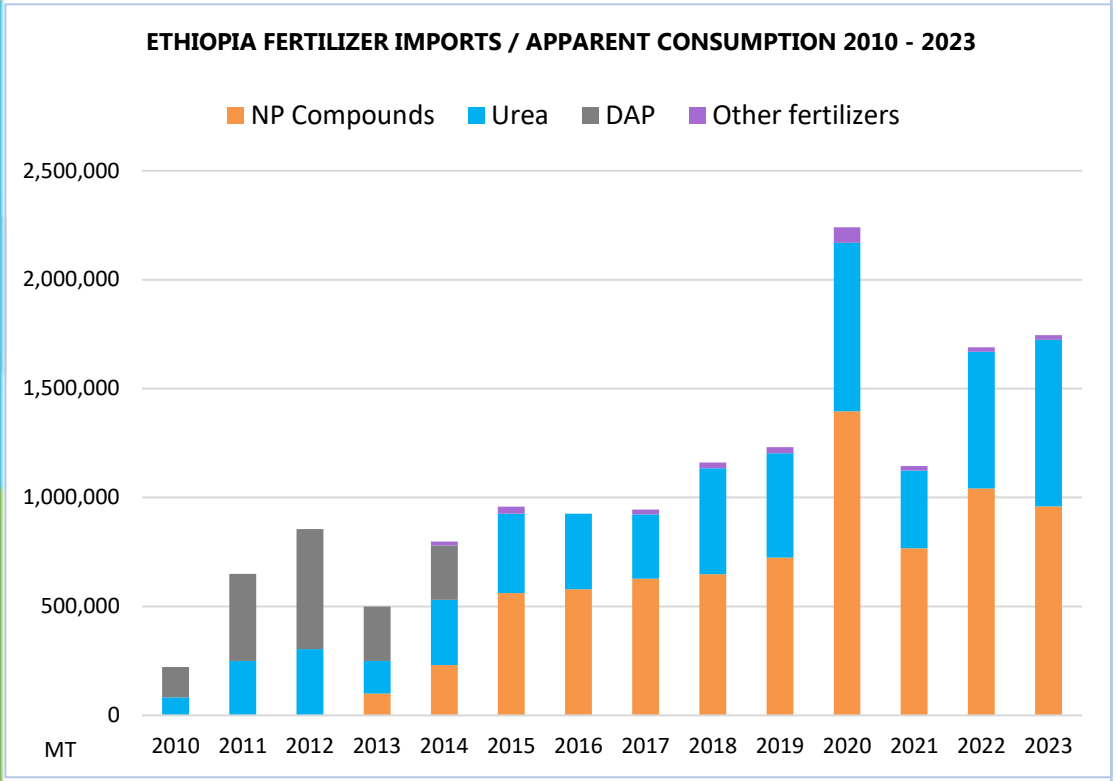
HS Code	Fertilizer Name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
3105510000	NP Compounds	-	-	-	100,000	230,702	561,500	579,630	628,132	647,576	724,025	1,395,238	767,094	1,042,552	959,345
3102100000	Urea	83,000	250,000	305,000	150,000	300,000	363,539	346,200	294,000	486,809	479,096	775,277	356,874	626,000	765,222
3105300000	DAP	138,500	400,000	550,000	250,000	250,000	-	-	-	-	-	1	-	0	26
	Other fertilizers	-	-	-	-	16,912	33,010	-	22,534	26,337	27,654	69,755	21,030	21,037	20,435
Total (MT)		**221,500**	**650,000**	**855,000**	**500,000**	**797,614**	**958,049**	**925,830**	**944,666**	**1,160,722**	**1,230,775**	**2,240,271**	**1,144,998**	**1,689,590**	**1,745,028**

Calendar year: Jan - Dec



Comments

- Over 90% of the fertilizers imported and used in Ethiopia are done through the Ethiopian Agricultural Businesses Corporation (EABC), with distribution to farmers facilitated through cooperatives.
- Historically, Ethiopia relied on the importation and use of Urea and DAP fertilizers. However, starting in 2013, there was a shift towards replacing DAP with NP compounds, and by 2015, the transition was complete, moving from Urea & DAP to Urea & NP compounds.
- Available data from 2017 shows a small but growing market of other fertilizers including Calcium Ammonium Nitrate (CAN), Calcium Nitrate, NPK and Potassium Nitrate.
- These fertilizers are predominantly imported by private companies in the horticultural sector, specializing in export production.
- The average annual imports in Ethiopia over the past 5 years is around 1.6 million MT.

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Fertilizer Import on Dashboard

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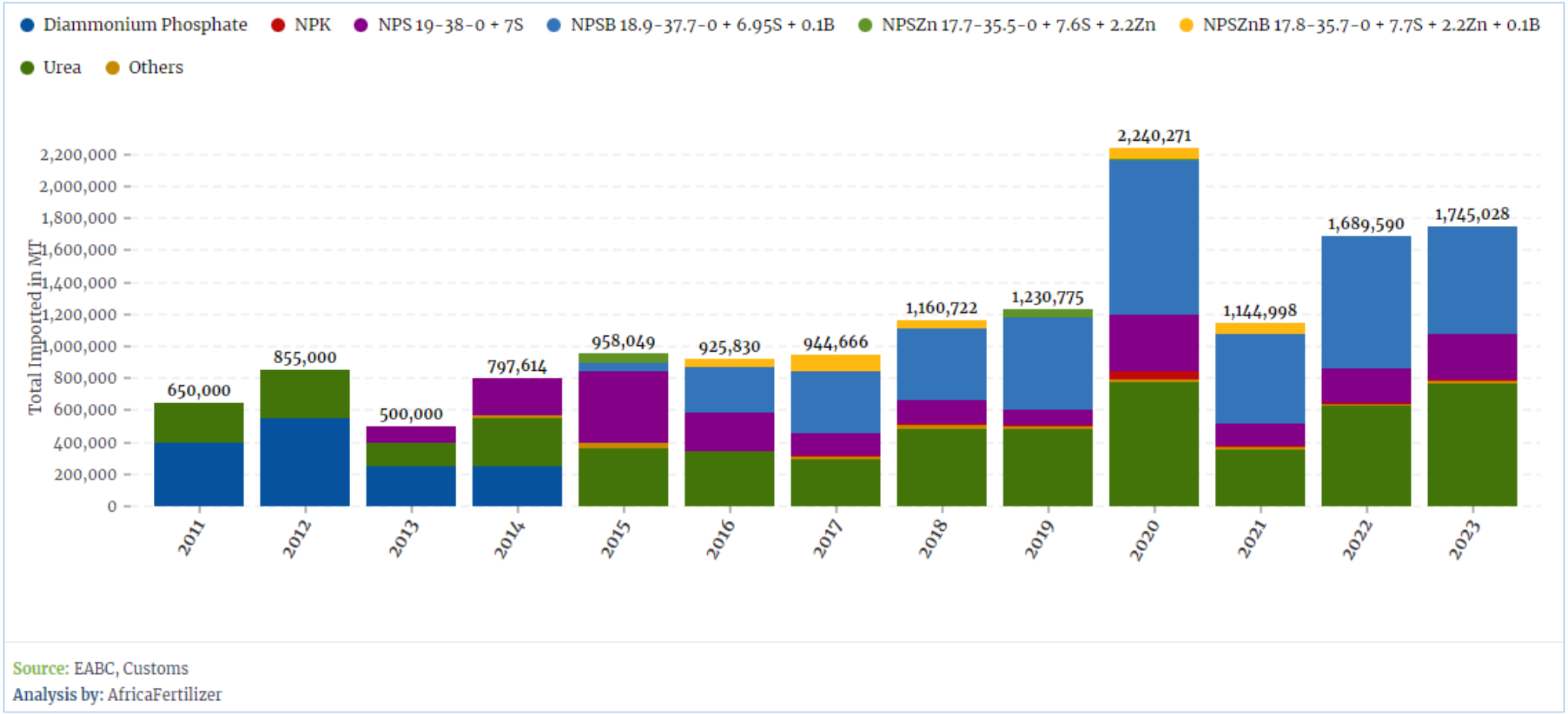

https://viz.africafertilizer.org/#/ethiopia/availability

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NP Compounds Analysis

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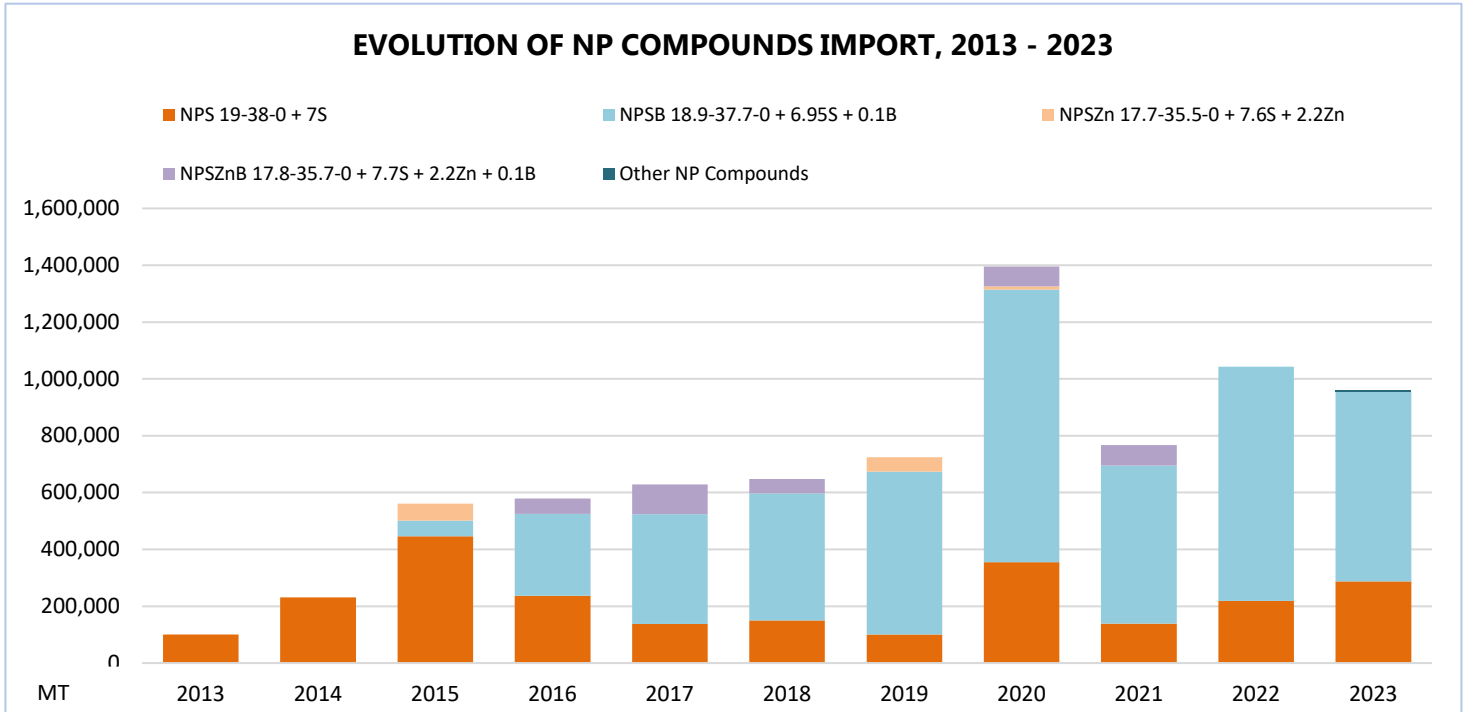
HS Code	Fertilizer Name	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
3105510000	NPS 19-38-0 + 7S	100,000	230,702	446,500	237,200	138,102	150,000	100,000	354,567	139,258	218,894	287,685
3105510000	NPSB 18.9-37.7-0 + 6.95S + 0.1B	-	-	55,000	288,000	385,600	447,576	574,025	960,000	555,988	823,658	666,893
3105510000	NPSZn 17.7-35.5-0 + 7.6S + 2.2Zn	-	-	60,000	-	-	-	50,000	11,713	-	-	-
3105510000	NPSZnB 17.8-35.7-0 + 7.7S + 2.2Zn + 0.1B	-	-	-	54,430	104,430	50,000	-	68,959	71,848	-	-
3105510000	Other NP Compounds	-	-	-	-	-	-	-	-	-	-	4,767
Total (MT)		**100,000**	**230,702**	**561,500**	**579,630**	**628,132**	**647,576**	**724,025**	**1,395,238**	**767,094**	**1,042,552**	**959,345**

Calendar year: Jan - Dec



Comments

- NP compounds used in Ethiopia contain either Boron, Zinc, or Sulphur, depending on the type.
- These serve as basal fertilizers for all crops, while Urea is applied as a top-dressing fertilizer.
- Notably, the volumes have seen a steady rise since their introduction in 2013, averaging approximately 970,000 MT over the past five years, 2019 - 2023.

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Fertilizer Monthly Import

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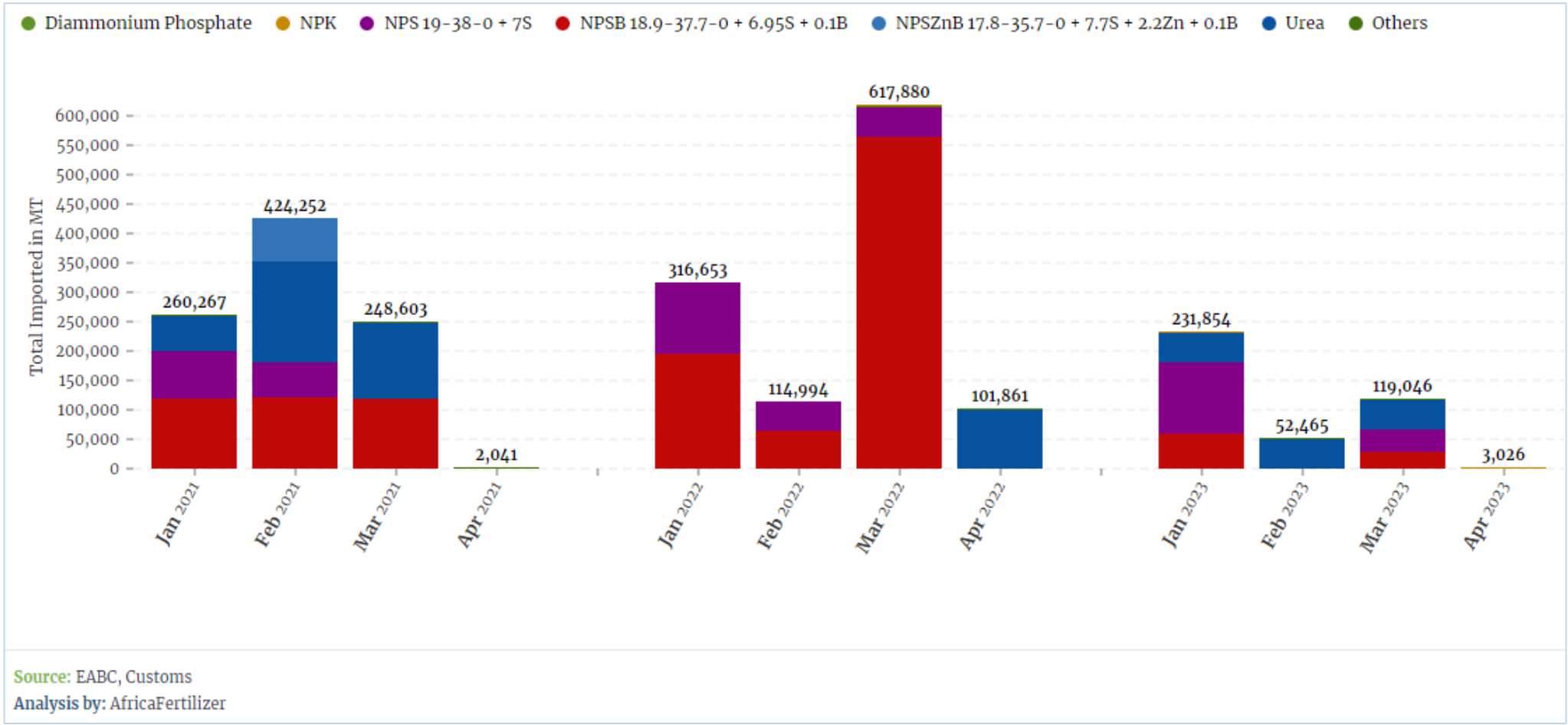
Quarter	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Q1	-	300000	428000	200,000	342,350	400,000	489,200	309,499	302,309	646,463	828,748	933,123	1,049,526	403,365
Q2	-	50000	150000	-	150,000	227,049	32,200	421,637	791,155	523,985	390,064	6,030	454,950	406,910
Q3	-	-	-	-	-	-	-	6,913	60,220	50,564	8,452	5,874	181,016	494,670
Q4	221500	300000	277000	300,000	305,264	331,000	404,430	206,617	7,038	9,762	1,013,007	199,971	4,097	440,083
Total (MT)	**221,500**	**650,000**	**855,000**	**500,000**	**797,614**	**958,049**	**925,830**	**944,666**	**1,160,722**	**1,230,775**	**2,240,271**	**1,144,998**	**1,689,590**	**1,745,028**

Comments

- The two main agricultural seasons in Ethiopia are the Belg (minor) season, primarily from February/March to May/June, and sometimes extending to August in some regions, and the Meher (main) season, mostly from July/August to February. There are overlaps in both the Belg and Meher periods depending on the region. The irrigation season typically starts from October to January.
- The estimated fertilizer utilization share is 55% for Meher, 25% for Belg and 20% for the irrigation season.
- Historically, fertilizer imports have occurred from the fourth quarter (Q4) through the second quarter (Q2), with the highest imports recorded in the first quarter (Q1). During Q3, imports tend to be lower, given that fertilizer application is either concluded for the minor season or commencing for the major season, and the country is already expected to have an adequate supply.
- In 2023, approximately 400,000 MT of fertilizers were imported each quarter.
- Major food crops include Teff, Wheat, Maize, Sorghum, and Barley. Major cash crops include Coffee, Pulses, Oilseeds, Flowers, and Khat.

Consecutive Import Periods on the Dashboard

ETHIOPIA



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Fertilizer Origins

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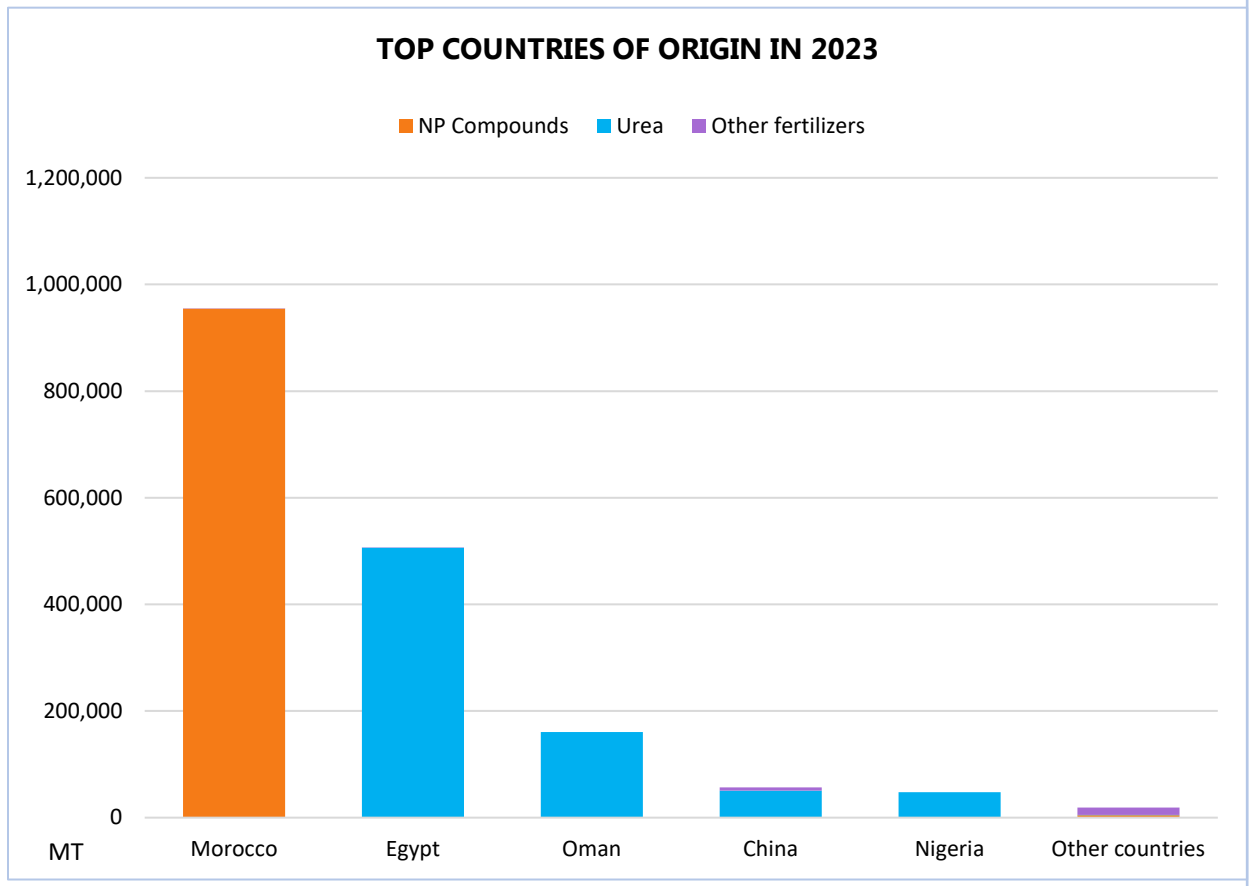

Comments

- The EABC imported all **NP compounds** from **Morocco** in 2023, accounting for **99.5%** of the total, while the **private sector** imported the remaining **0.5%** from **Turkey** and **China**.
- **Urea**, on the other hand, was sourced from various countries, including **Egypt (66.1%)**, **Oman (21.0%)**, **China (6.6%)**, **Nigeria (6.2%)**, and **other countries (0.1%)**.
- Out of the **20,461 MT** of other fertilizers imported by the **private sector**, most **NPK** were obtained from **Spain (4,816 MT)** and **the Netherlands (1,070 MT)**.
- **Calcium Nitrate** was primarily sourced from **China (1,927 MT)**, **Slovakia (1,376 MT)**, and **the Czech Republic (1,049 MT)**.
- Most **Potassium Nitrate** came from **China (579 MT)**, **Israel (332 MT)**, and **Jordan (286 MT)**.
- Additionally, **3,177 MT** of **Enhancers** containing secondary and micronutrients which comes in various forms including granules, powder and liquids were imported, with **2,136 MT** sourced from **China**.

Fertilizer Apparent Consumption on the Dashboard

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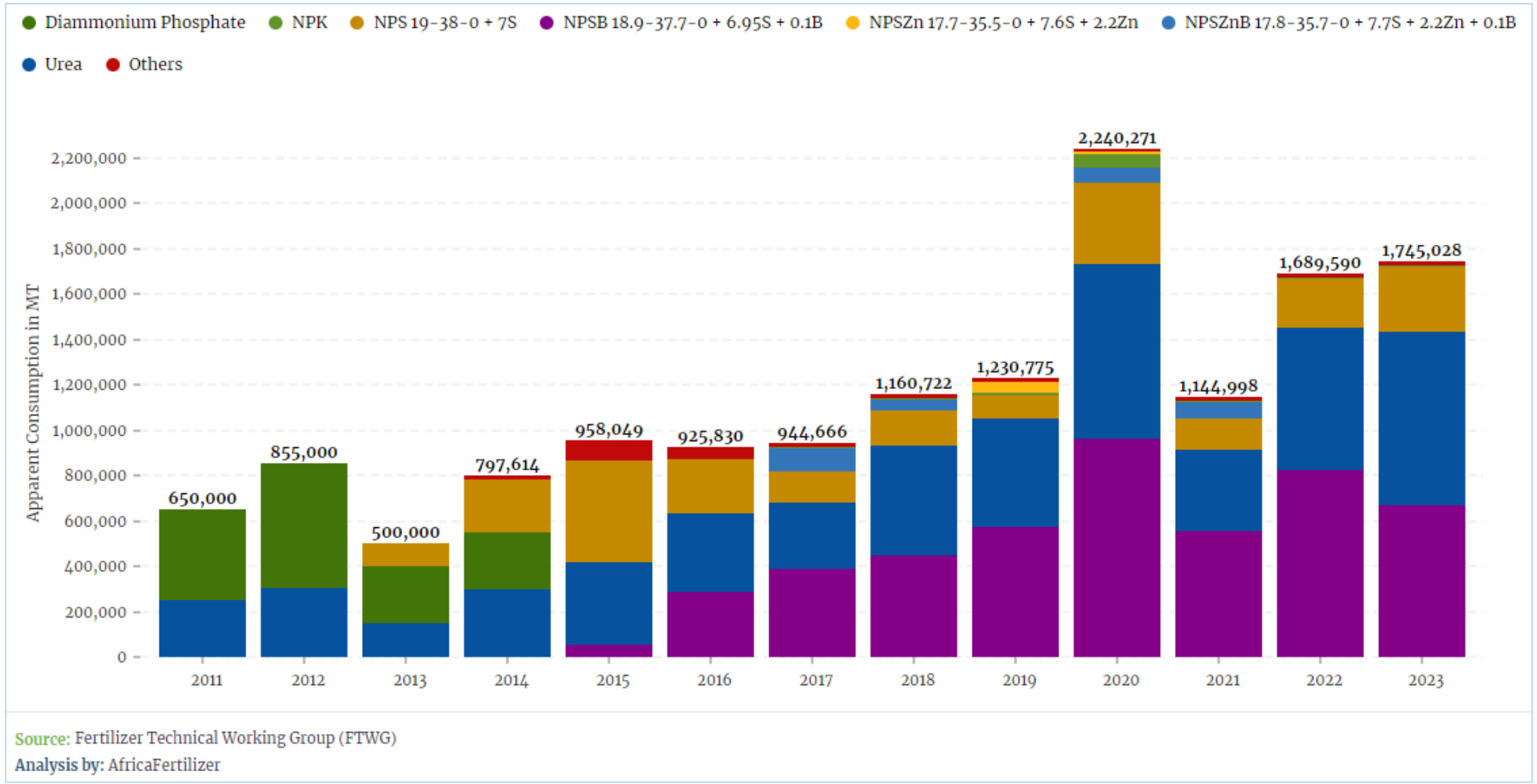

https://viz.africafertilizer.org/#/ethiopia/use

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Other comments

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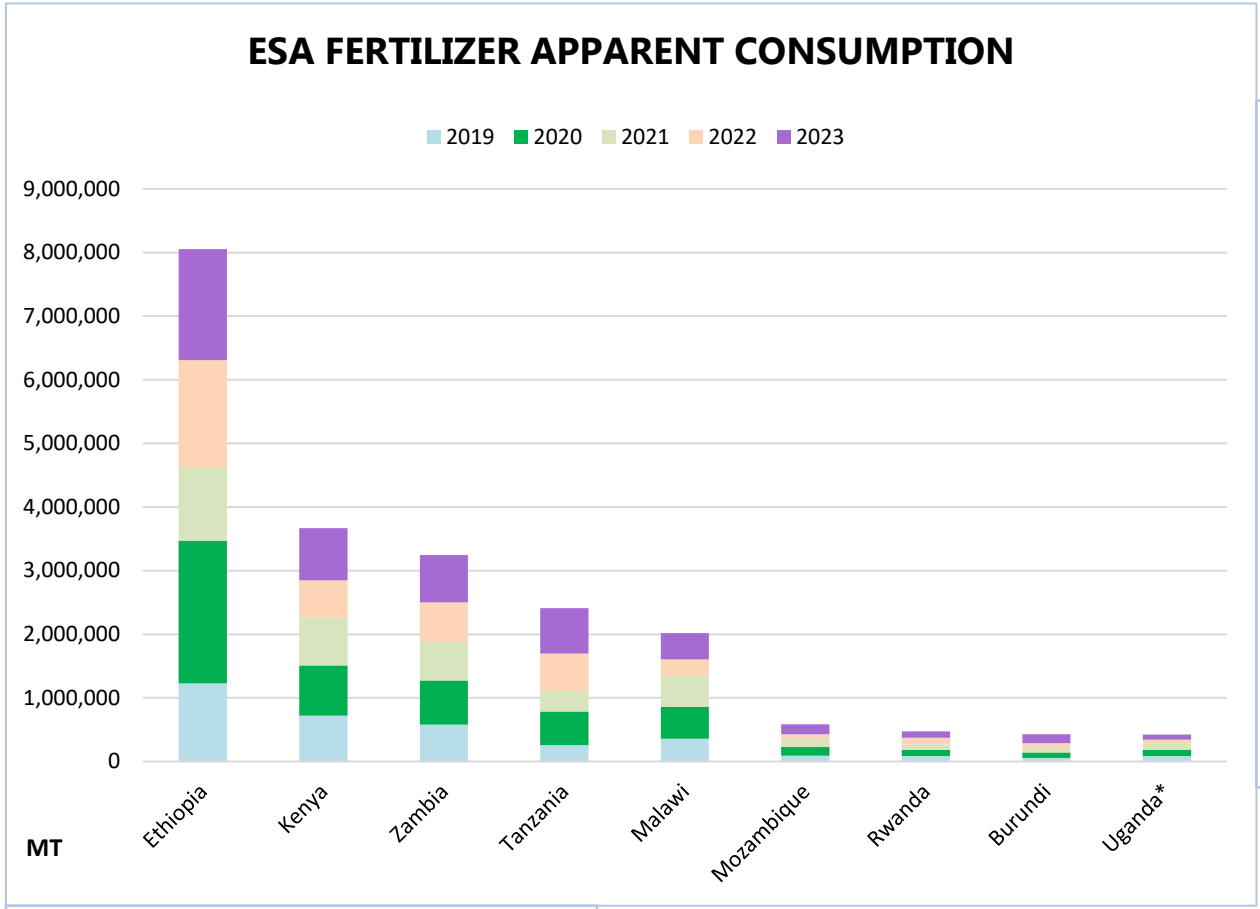

- Graph as of July 20, 2024
- Countries with (*) data yet to be validated

What is the reason behind Ethiopia's non-utilization of fertilizers containing Potassium (K)?

- The Ethiopian Soil Information System (EthioSIS) data in 2012 shows that, in the southern regions, soils abound in K, while in the western areas where coffee is cultivated, there is a deficiency of K. Furthermore, the NP compounds employed prove sufficient for achieving the desired crop yield.
- More than 90% of fertilizer imported by EABC is used for major cereal crops. According to a study by the Ethiopian Institute of Agricultural Research (EIAR), potassium (K) shows no positive response for these major crops.
- Private sector imports some volumes of NPK, MOP and SOP which contains Potassium (K).

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Some Key Workshop Discussions

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- The FTWG should find a way to track fertilizer carry-over stocks and add them to the dashboard when available. This is important because it will inform decision-makers at EABC during their procurement plan preparation. This will help supply the market with the right volumes and types of fertilizers, preventing oversupply or delays in the supply of the right types of fertilizers.

- Decision-makers need access to the latest international fertilizer market prices to guide them during the procurement period. This will help them negotiate better FOB prices with suppliers. The FOB data on the dashboard is currently updated with a one-month lag.

- Regarding data sources, the data was triangulated between the Ministry of Agriculture and Natural Resources (MoANR), Ethiopian Agricultural Businesses Corporation (EABC), and Ethiopian Customs Commission (ECC), all of which are legal institutions and reliable sources. There were a few discrepancies in the import volumes. ECC data is used for the FTWG validation as it captures information from MoANR, EABC, and other private importations. The ECC data has also passed through customs checkpoints and includes details such as arrival date, product type, actual quantity, country of origin, etc. Note that fertilizer is a tax-free item in Ethiopia.

- Include the list of companies providing fertilizer testing and inspection services on the dashboard. Taking fertilizer samples for laboratory testing and analysis to ensure they meet the required standards is crucial both before shipment and upon arrival at the destination port. Therefore, listing or mapping the names of accredited inspection laboratories locally and regionally will assist decision-makers in identifying the companies involved in the supply chain

- In 2012, the Ethiopian Soil Information System (EthioSIS) completed soil sampling and laboratory analyses for samples collected across the entire country. As a result, soil test-based fertilizer recommendations, particularly incorporating sulfur (S), boron (B), zinc (Zn), and other nutrients, were advised instead of blanket recommendations to address challenges caused by nutrient-deficient soils. However, it was also noted that 43% of the soils were affected by acidity, which significantly impacted crop production and nutrient use efficiency.

Summary of Fertilizer Statistics

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HS Code	Fertilizer Name	2017	2018	2019	2020	2021	2022	2023
3105510000	NPS 19-38-0 + 7S	138,102	150,000	100,000	354,567	139,258	218,894	287,685
3105510000	NPSB 18.9-37.7-0 + 6.95S + 0.1B	385,600	447,576	574,025	960,000	555,988	823,658	666,893
3105510000	NPSZn 17.7-35.5-0 + 7.6S + 2.2Zn	-	-	50,000	11,713	-	-	-
3105510000	NPSZnB 17.8-35.7-0 + 7.7S + 2.2Zn + 0.1B	104,430	50,000	-	68,959	71,848	-	-
3102100000	Urea	294,000	486,809	479,096	775,277	356,874	626,000	765,222
Sub Total 1		**922,132**	**1,134,385**	**1,203,121**	**2,170,515**	**1,123,967**	**1,668,552**	**1,719,800**
2834210000	Potassium Nitrate	2,655	3,349	3,146	2,691	1,698	1,670	1,501
3101000000	Organic Fertilizer	58	41	2	114	89	267	186
3102210000	Ammonium Sulphate	339	408	286	235	388	394	403
3102400000	Calcium Ammonium Nitrate	1,850	4,414	4,988	1,657	3,878	371	76
3102600000	Calcium Nitrate	4,060	3,794	3,426	3,666	3,237	7,696	5,596
3102900000	Other Nitrogen Fertilizer	1,852	1,543	722	589	604	418	306
3103100000	Single Super Phosphate	32	-	-	-	-	-	54
3103101000	Triple Super Phosphate	-	-	-	3	10	-	5
3104200000	Muriate of Potash	293	27	229	98	95	31	179
3104300000	Sulphate of Potash	440	598	723	350	417	570	439
2834292000	Magnesium Nitrate	-	-	-	-	-	-	190
3104900000	Other Potash fertilizer	57	0	0	96	24	50	20
3103900000	Other Phosphate fertilizer							58
3105200000	NPK	5,502	6,900	8,932	56,432	7,647	6,924	7,162
3105300000	DAP	-	-	1	1	-	0	26
3105400000	Monoammonium Phosphate	479	472	560	377	538	327	533
3102800000	Urea Ammonium Nitrate							48
3105600000	PK Fertilizer	710	776	571	562	597	442	386
3105510000	Other NP fertilizer							4,767
3105700000	NK Fertilizer	-	-	-	264	40	0	116
9999999990	Enhancers	4,207	4,015	3,851	2,621	1,769	1,877	3,177
Sub Total 2		**22,534**	**26,337**	**27,654**	**69,756**	**21,030**	**21,037**	**25,227**
Grand Total (MT)		**944,666**	**1,160,722**	**1,230,775**	**2,240,271**	**1,144,998**	**1,689,590**	**1,745,028**

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The **AfricaFertilizer** initiative is the leading source of fertilizer statistics and information in Africa.

AfricaFertilizer aims to provide clear, relevant and timely data and information on the fertilizer market in the Sub-Saharan African region, to support the implementation of continental, regional and national policies and regulations relating to agriculture and fertilizers in particular, and to promote the growth and development of competitive markets, for the benefit of the public and private sectors and fertilizer stakeholders worldwide.

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