



- Fertilizer: Definition
- Importance in Agriculture
- Fertilizer use in Nigeria
- Fertilizer Industry
- Fertilizer Supply Chain
- Government Intervention
- Government Distribution Programme
- Presidential Fertilizer Initiative





FERTILIZER

DEFINITION

Fertilizer Is any material of natural or synthetic origin (other than living materials) that is applied to soils or to plant tissue to supply one or more plant nutrients essentials to the growth of plants.

CLASSIFIED

- 1. According to efficiency
 - (i) Straight (ii) Auxiliary Substance
- 2. According to Origin
 - (i) Mineral Fertilizers (ii) Manure
- 3. According to phase
 - (i) Solid (ii) Liquid





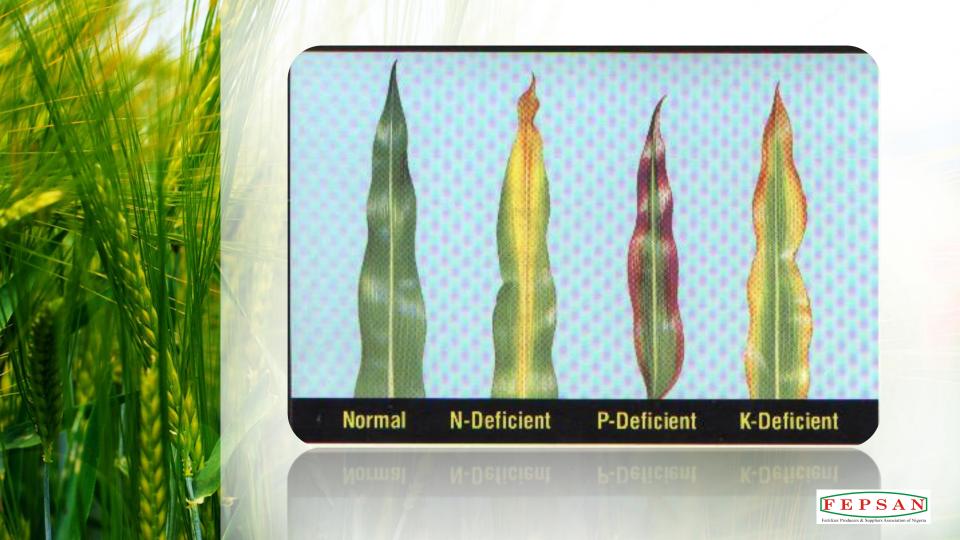
IMPORTANCE IN AGRICULTURE

- Nitrogen is important for forming chlorophyll and amino acids in cells.
- Phosphorus food storage and movement
- Pottasium essential for CO2 uptake.
- For enriching the soil nutrients for enhanced productivity.









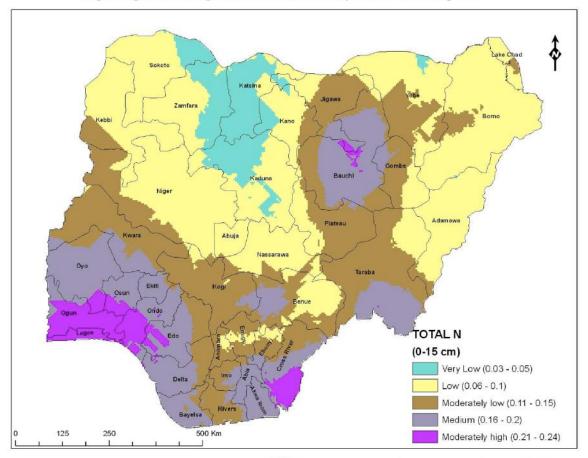


FERTILIZER USE IN NIGERIA

- Recommended average is 120kg/nutrient/ha by FAO.
- Sub Saharan Africa excluding South Africa has the lowest use rate in the world as at 2006 less than 9% Which explains the low yield of crops.
- African heads of state met in Abuja in 2006 to address this and made the famous Abuja Declaration which aims to increase fertilizer use to 50 kg per hectare by 2015.
- Nigeria, by estimates today uses about 23kg per hectare. Fertilizer use still very low. That's in part why yields of crops are also low on a National Average.



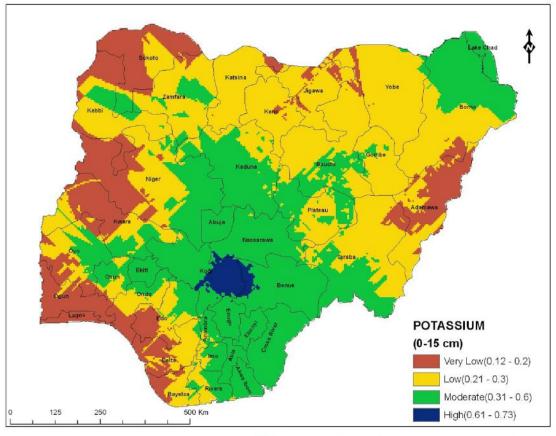
Map of Nigeria Showing different Total N fertility classes for the topsoil.







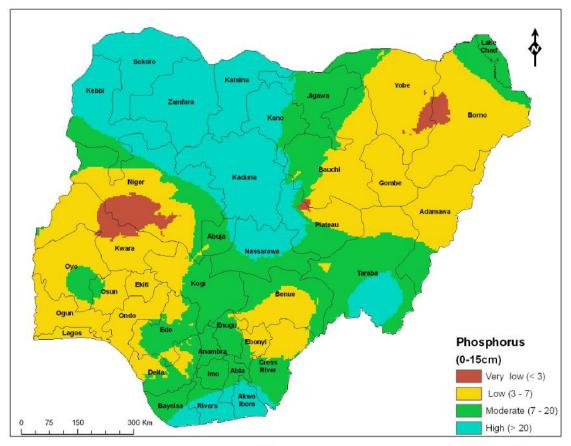
Map of Nigeria Showing different Potassium fertility classes for the topsoil.







Map of Nigeria Showing different Phosphorus fertility classes for the topsoil.









FERTILIZER USE IN NIGERIA

Example

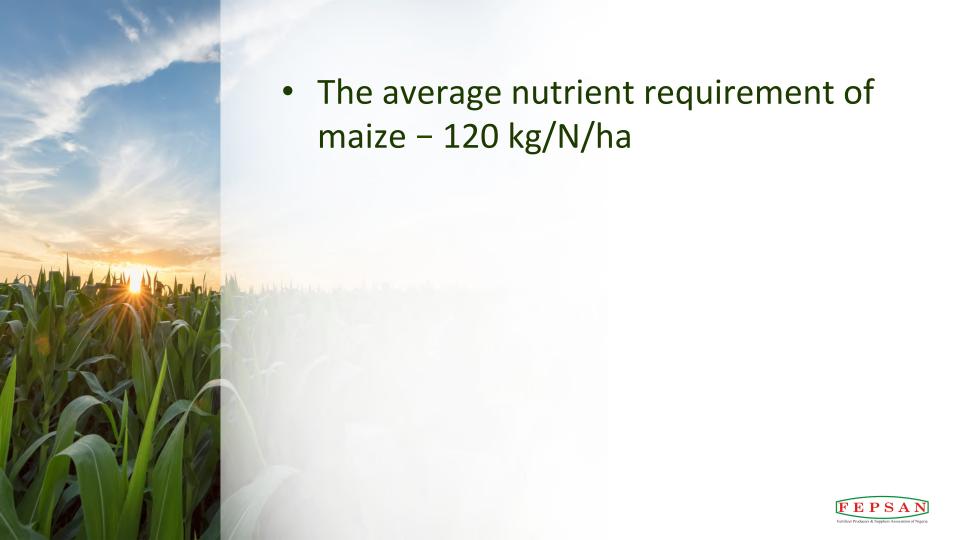
- Deficiency in Nitrogen (N) very critical for growth of cereals (rice, maize, millet) that form part of National staple
- The average nutrient requirement of Rice –
 120kg N/ha
- To yield 1 ton of rice you need to apply:

Nitrogen (N) 15 - 20 kg

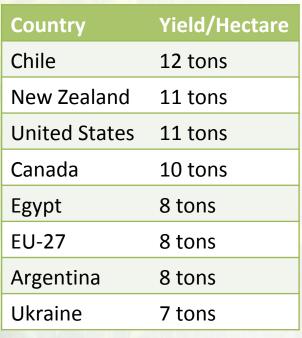
Phosphorus (P) 2-3 kg

Potassium (p) 15-20 kg





The impact can be seen in the poor yields of crops compared to other Countries. Maize



Country	Yield/hectare
Saudi Arabia	6 tons
Iraq	6 tons
Brazil	5 tons
South Africa	5 tons
Pakistan	5 tons
Ethiopia	3 tons
Indian	3 tons
Nigeria	2 tons

Source: United States Department of Agriculture. USDA 2018





FERTILIZER INDUSTRY

- i. DEMAND estimates put it at more than 6 million tons per annum conservatively.
- Arable land 76,200,000 hectares.
- Land under cereal production alone is 17,342, 468 hectares. At recommended application rate will be about 6 million tons of fertilizers to be conservative. This excludes oil palm, Cassava, Yams, Legumes etc.



ii. CONSUMPTION

Year	Consumption (MT)
2009	629,657
2010	892,876
2011	481,641
2012	863,607
2013	1,213,959

Year	Consumption (MT)
2014	874,709
2015	617,897
2016	959,364
2017	1,564,816
2018	1,490,000

Source: Africafertilizer.org





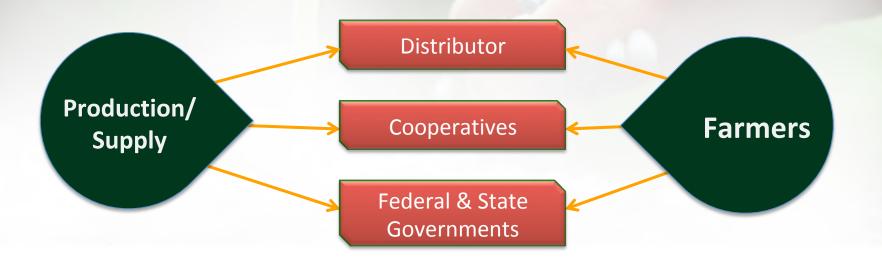
III. PRODUCTION/SUPPLY

Year	Import	Production N&P	Export
2009	654,413	0	0
2010	886,436	80,649	18,950
2011	353,576	155,822	18,950
2012	502,040	383,770	18,950
2013	1,086,986	250,000	50,000
2014	755,414	170,491	38,000
2015	429,341	282,361	82,440
2016	597,089	695,000	329,630
2017	808,862	2,079,928	659,603
2018	na	2,432,436	837,436

Source: Africafertilizer.org



Fertilizer Supply Chain



Enablers — Logistics, Government Policies, Access to Credit





. Production – Local production

3 Urea Plants – Dangote, Indorama, Notore

1 Superphosphate Plant – Superphosphate

28 Blending Plants

300 Distributors and thousands of Retailers Imports ongoing.

II. Factors Affecting Supply of Fertilizers

- Logistics
- Policies
- Access to Credit
- Output Market



GOVERNMENT INTERVENTION

NATIONAL AGRICULTURAL POLICIES.

- Price stabilization policy 2006-2011
- Agriculture Transformation Agenda 2012 2015
- Agricultural Promotion Policy 2016 2020

NOTE:

- Agriculture is on the concurrent legislative list so Federal and State Government are constitutionally empowered to draw up agricultural programmes. Both subsidize inputs
- Government intervention in the fertilizer industry is usually part of a holistic input distribution programme. The assumption is that Nigerian Farmers are mainly subsistent and require support in the form of input subsidies. Input subsidies were suspended between 1997 and 2001.

GOVERNMENT INTERVENTION

 Programmes inadvertently created problems in the fertilizer industry that affects the timely delivery of affordable fertilizers at the right quality to farmers which negatively affects productivity.



Government DISTRIBUTION PROGRAMMES

CHALLENGES

- Late delivery
- Unintended beneficiaries
- Price distortion in market
- Crowding out private sector investments
- Late payment of suppliers.



Agriculture Transformation Agenda (ATA) 2012 – 2015

The growth enhancement Support-focused on a private sector led approach.
 However subsidy was still involved. The concept was good but late payment of funds as well as other challenges made the payment too expensive for good

Agricultural Promotion Policy (APP) 2016 - 2020

 The present approach is to attempt to revive local production and allow the private sector lead in the distribution of fertilizers across the country. The initiative is called the presidential fertilizer initiative PFI a policy under the Agriculture Promotion Policy of President Muhammadu Buhari



PRESIDENTIAL FERTILIZER INITIATIVE (PFI)

- ISSUES
- This was started in 2016 by President Muhammadu Buhari in partnership with FEPSAN in line with the APP.
- Prior, Nigeria relied heavily on importation even though there was local capacity to produce and blend fertilizer limited by the policy environment.
- In 2016, Nigeria had 38 blending plants mostly moribund for NPK BUT only 11 were functional and producing at less than 10% aggregate capacity.
- Cost of subsidies were over \$200 Million
- PFI aims to revive local blending of NPK Fertilizer in Nigeria by Creating the enabling environment for the private sector to invest in local production.



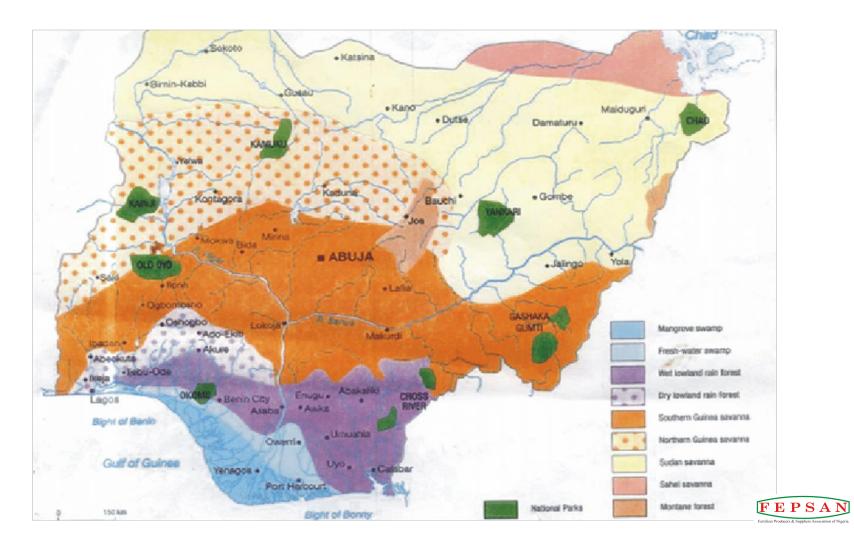
PRESIDENTIAL FERTILIZER INITIATIVE (PFI)

 Partnership with raw material production plants local and abroad was established. Of key importance is that of the partnership with the kingdom of Morocco the highest producer of phosphates in the world. The discount in production cost led to drop in prices for the farmers.

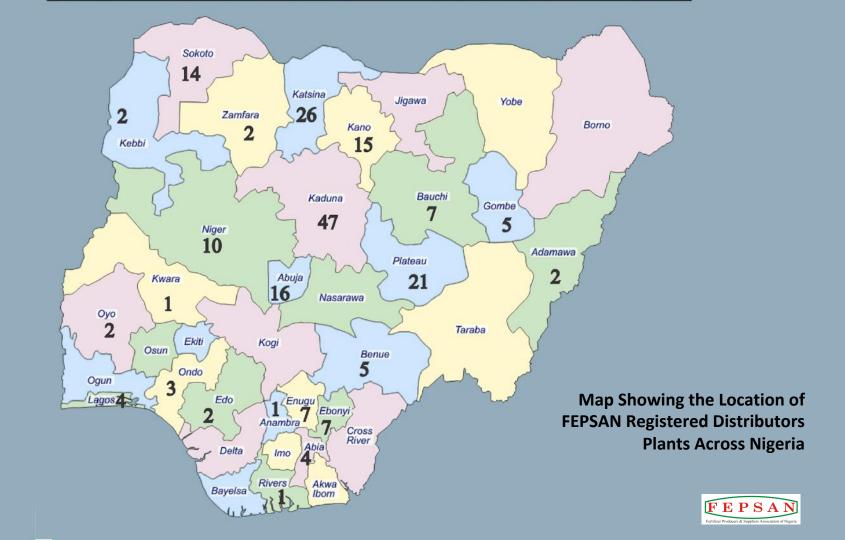
IMPACT

- Private Sector have increased production plants from 11 to 24 in just 2 years
- About \$200 Million saved.
- Over 100,000 jobs created











PFI

- Consumption has increased under this arrangement with the highest fertilizer statistics seen outside subsidy programme.
- Farmers have access to fertilizer locally produced
- Farmers can attest to quality and timely availability of Products
- Government has saved \$200 Million in subsidy claims.



















