Focus on Fertilizer Costs
Senegal | Ghana | Nigeria | Niger

Price and costs data by AfricaFertilizer.org, IFDC, WAFA, Argus, and Afrigum. Estimates made using prices for granular urea from Nigeria, as of May 2020.

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FOCUS ON FERTILIZER PRICES AND COSTS

COVID-19 situation

The number of new cases of COVID-19 has surged by 26% from last week, with a significant increase in 7 countries (Benin, Cape Verde, Cote d'Ivoire, Ghana, Liberia, Mali, Mauritania), for a total of 46,230 cases as of June 9.

This may lead more countries to reconsider their health policies, as Cote d'Ivoire, which has just announced an extension of the state of emergency until June 30 and a strengthening of the measures in place.

Food Security & Agribusiness

While agricultural commodity prices remain stable in the region, and rainfall is above normal, AGRA notes in its Food Monitor that food stocks are low. Production conditions are favorable, particularly in the southern parts of the region (Côte d’Ivoire, Ghana, Togo, Nigeria).

According to McKinsey, agricultural exports, which generate between $35 and $40 billion in revenues, could fall by $5 billion in 2020, affecting almost all major speculation. In West Africa, cocoa could lose $2bn, to the detriment of Côte d'Ivoire and Ghana.

A World Bank report estimates that the economies of sub-Saharan African countries will contract by 2.7% in 2020, the first in 60 years.

Fertilizer Supply and Demand

Several governments have launched new requests that will support fertilizer supply and boost food production. This is the case in Mali (around 150 kt of NPK, DAP and urea) and Côte d’Ivoire (12kt urea and 6kt NPK) for their rice initiatives, or in Nigeria with 50 kt of AmSul for the private market, in Mauritania (19 kt urea) or Guinea (urea and NPK 15-15-15).

According to Argus and Afrigom, deliveries are underway to supply blending plants and markets in Côte d’Ivoire and Senegal (DAP, urea), Ghana or Togo (urea, NPK).

CORAF reports a foreseeable shortage of certified seeds of maize, sorghum, millet, cowpea and groundnut for the 2020 agricultural season. Only the demand for rice is covered.

Fertilizer Costs and prices

International prices remain low and stable. Subsidies and programs, such as the PFI in Nigeria, keep the price of urea around $275 per ton at farm gate, and always below $400 per ton.

Domestic fertilizer distribution costs vary from +50-70% of the FOB price (Senegal, Togo, Cote d'Ivoire, Nigeria, Burkina), to +123% in Niger.
In addition to the review of the distribution cost structure presented in the June 5 bulletin for urea and NPK 15-15-15 in 6 countries, we analyze here the cost structure of key fertilizers up to the "distributor" position in 2 additional countries (Nigeria and Niger), and for all NPK blend fertilizer formulations produced in Ghana and Senegal under government subsidy programs and interventions.

Nigeria

Thanks to the local production, Nigeria has the lowest cost of commercially available urea in the ECOWAS region at 360 USD per Ton. The PFI largely builds on this endowment to bring cheaper NPK 20-10-10 to the Nigerian Farmer. The chart below shows the impact of PFI. Under normal conditions, the NPK 20-10-10 would reach farmers at a much higher cost. But, The PFI intervention pushes the NPK price below that of urea at 275 USD.

Niger

of Urea (Nigeria), Niger is forced to import its fertilizers from overseas as a result of insecurity in the region. This situation can be explained by the insecurity issue in the region. In addition to the long route that the fertilizer has to take to reach the country, Niger is one of the rare countries in the region to impose a Value Added Tax on fertilizer. Because of these two factors, fertilizer prices are high in Niger. Luckily, the subsidy is bringing fertilizer to cost similar to what we observe in other countries in the region.

Senegal

At about 430 USD per ton of Urea, Senegal has the lowest commercial price of fertilizer in the UEMOA. Senegal can achieve these low costs thanks to local production and the downward pressure of subsidized fertilizer on the commercial one.

Indeed, the country is one of the highest subsidizers in the ECOWAS regions. It subsidizes more than three quarters of its market at a high rate. For instance, subsidized Urea costs 275 USD, the lowest price in the whole ECOWAS region with Nigeria and Ghana.

Ghana

Ghana appears to have one of the most efficient, logistic chains in the region. As it is able to bring fertilizer at a relatively cheap cost even in the private market. In addition, the PFJ is reducing the cost of the fertilizer to make it more accessible with the perverse effect of spillover in the Burkina Faso Market through smuggling. The PFJ is reducing the cost of fertilizers to make it more affordable and accessible to the Ghanaian farmers. Though this has
exacerbated the spillover of subsidized fertilizers into neighboring Burkina Faso.

While there are significant variations from one country to another, costs are generally relatively well controlled.

Costs for urea in the 8 countries analyzed ranged from $319 in Senegal to $475 in Niger. At $330 to $360 per ton delivered in most countries, domestic costs add between 50% and 85% to the current FOB price.

With a cost of around $350 per ton of urea delivered in Kaduna, Nigeria, the only producer and consumer country, is on the average for the region.

The model used also allows us to break down the costs by category in each of these 8 countries (transport costs, port costs, duties and taxes, storage costs, financial costs, and operational costs).

On average, the FOB price represents nearly 60% of the final cost of urea delivered to wholesale warehouses in the fertilizer consumption areas. While logistics costs (sea and land transport, handling) account for about 20% of the costs, operational costs (gross margins, salaries, taxes, incidentals, on-site handling, etc.) are limited to about 12%. Financial costs, duties and taxes are estimated at around 7% of the total cost, with significant variations from one country to another.

Assumptions used
- Average FOB price for the month of May 2020 of granulated urea from Nigeria, DAP from Morocco, and standard MOP from Baltic/Black Sea.
- Transport costs to the main consumption areas for each crop/country (e.g. Kaduna for urea and cereal formulas in Nigeria, Tamalé in Ghana).
- Other costs (taxes, transportation costs, bagging and blending costs, interest rates, etc.) adjusted to May 2020

Legend
- FOB Free on Board
- CIF Cost, Insurance and Freight
- FOT Free on Truck
Early 2021 stock build-up

Argus has been monitoring international and domestic fertilizer prices over the years and its correlation with the price of natural gas. The production cut dispute between Saudi Arabia and Russia amid low demand caused by economic slowdowns in response to COVID-19 saw international oil prices trading at an all-time low.

The highly correlated FOB prices of urea have decreased by -20pc since May 2019 as compared to May 2020 for both Baltic prilled and Nigerian granular urea, while P and K fertilizer prices have declined as well. Experts are expecting the prices to remain low in the upcoming quarters.

Unfortunately, the fertilizers used in the 2020 planting season were acquired through tenders floated in 2019. As a result, domestic fertilizer retail prices in member states are not reflective of prevalent low international FOB prices.

However, while it is too late for the 2020 planting season, this might be an opportunity worth taking advantage of for the next season. Indeed, Importers could build-up stocks in anticipation of the 2021 planting season to guarantee minimal prices for farmers. If one was to follow that route, they should carefully, calculate the additional cost that would be incurred in the form of storage cost and financial cost.

Financial consequences of stock build-up

The most significant costs associated with early stock buildup are financial cost of capital and storage cost.

For our analysis, We used the case of Ghana, where PFJ subsidy program is heavily impacted by high interest rates. Therefore, in light of the current urea FOB price of 216 USD/ton for Granular urea from Nigeria and an average bank interest rate of 20%, we simulated the wholesale price of urea at the importer’s warehouse.

Assuming urea was acquired now it would add an additional 6 months to the credit duration and storage cost. These 6 months would translate into about 20 USD per ton in financial cost alone. In addition, storing fertilizer over the same period would add about 10 USD per ton.

In other words, an importer deciding to stock up using today favorable conditions would profit from his decision if the urea price was to reach 246 USD per ton or more at the time he would normally buy the product. For perspective, the urea FOB price was at 247 USD in August last year.

Another factor to consider in making this decision is certainty of market availability. In this respect Ghana is the ideal environment as the PFJ, which makes up more than 80% of the urea market is likely to continue. The government of Ghana’s attitude is also conducive to the kind of reflection presented in this article. Indeed the Government is making efforts to pay suppliers on time and incite them to place orders in advance by floating their tender early.

The Government proactive approach in these two areas, can reduce uncertainties and burden on the private sector and indirectly secure farmers access to fertilizers at a better price.

Can West Africa benefit from low international prices for its farmers for the 2021 campaign?
Seeds are the starting point for agricultural production; therefore, in this pandemic time, seed delivery is among the essential services that must continue to operate to support the current and subsequent production cycles. It is, therefore, crucial that farmers have access to agricultural inputs promptly. Another critical issue with restrictions to movement is the impact on the availability of migrant labour depended on by many communities and countries.

According to a forecast from the National seed Committees of Member States of ECOWAS and CILSS, a shortage of certified maize, sorghum, millet, cowpea and groundnut is going to be observed during the 2020 cropping season.

According to available data, less than 10,000 metric tons of sorghum and millet certified seeds are produced in 2020 compared to a demand of about 100,000 metric tons and about 70,000 metric tons are available against a need of close to 200,000 metric tons. As for maize, about 70,000 metric tons are available against a need of close to 200,000 metric tons. As for groundnut, less than 5,000 metric tons of certified seeds are available compared to a need of about 250,000 metric tons, this a significant staple across communities in the Sahel region of West Africa. The most acute shortage is recorded in cowpea. Cowpea demand across eight countries is projected at 150,000 metric tons. But less than 2,800 metric tons are available for the 2020 cropping season.

This does not augur a bright future for farmers depending on cowpea and groundnut for livelihoods.

The only bright spot is in the rice sector, where over 350,000 metric tons are available against a need of about 225,000 metric tons.

The spread of COVID-19 in West Africa and the Sahel, and social barrier measures to contain the pandemic and its spread, could affect the 2020/2021 cropping season, particularly the timely supply of certified seed to producers if certain measures are not taken by their governments and development partners.

Read the full articles at

- www.coraf.org/2020/05/15/covid-19-has-further-complicated-access-to-quality-seeds-experts-suggest-ways-to-ease-the-burden-on-farmers/ (May 15, 2020)
The number of new cases of COVID-19 has rebounded by 26% from last week, with a significant increase in 7 countries (Benin, Cape Verde, Cote d’Ivoire, Ghana, Liberia, Mali, Mauritania), for a total of 46,230 cases as of June 9. This may lead more countries to reconsider their health policies, as Cote d’Ivoire, which has just announced an extension of the state of emergency until June 30 and a strengthening of the measures in place.

### COVID-19 ECOWAS REGIONAL UPDATE

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<th>Country</th>
<th>Total Confirmed</th>
<th>Total Recovered</th>
<th>Total Deaths</th>
<th>Active Cases</th>
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**Total**

- Total Confirmed: 44,101
- Total Recovered: 20,049
- Total Deaths: 854
- Active Cases: 23,198

Source: ECOWAS for the 15 States and Johns Hopkins for Chad and Mauritania

https://www.ecowas.int/covid-19/the-status-within-ecowas-member-states/

https://coronavirus.jhu.edu/map.html
About the West Africa Fertilizer Watch

In response to the COVID-19 pandemic, the West Africa Fertilizer Association (WAFA), the International Fertilizer Development Center (IFDC) and its AfricaFertilizer.org (AFO) initiative have launched the West Africa Fertilizer Watch on April 10th, 2020. The West Africa Watch has been greatly appreciated by private sector businesses all along the value chain, public sector and development partners responsible for policy and food security interventions, including Government Ministries, Regional Economic Communities (ECOWAS, CILSS, UEMOA), and the African Union as a valuable tool to monitor actions and analyze data to help in decision making related to fertilizer availability and use.

More info on IFDC website

About WAFA, IFDC & AfricaFertilizer.org

The West African Fertilizer Association (WAFA) is a non-profit private sector initiative established to address the challenges of the fertilizer industry in West Africa. Representing all the ECOWAS countries, the member companies combine resources to find solutions to market challenges and promote best practices in fertilizer production and use in order to optimize the region’s potential for crop production and food security. Established in 2016, the association has 58 member companies in 11 different countries.

An independent non-profit organization, IFDC works throughout Africa and Asia to increase soil fertility and develop inclusive market systems. Combining science-backed innovations, an enabling policy environment, holistic market systems development, and strategic partnerships, the organization bridges the gap between identifying and scaling sustainable agricultural solutions, resulting in improved household food security and enriched family livelihoods around the world. Using an inclusive approach, IFDC employs locally driven solutions that are environmentally sound and impact oriented that bring change at local, regional, and national levels.

The AfricaFertilizer.org (AFO) initiative is the premier source for fertilizer statistics and information in Africa. It is hosted by IFDC and supported by several partners, key among them being IFA, Argus Media, and Development Gateway. Since 2009, AFO has been collecting, processing, and publishing fertilizer production, trade, and consumption statistics for the main fertilizer markets in sub-Saharan Africa. AFO has an extensive network of fertilizer industry players in the main fertilizer trade corridors and maintains key information on the major producers, their production facilities and capacities, importers/suppliers, various distribution channels, and agricultural service suppliers (laboratory services, research, credit providers, and warehousing/storage services).