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Paix – Travail – Patrie

MINISTERE DE L'AGRICULTURE ET DU
DEVELOPPEMENT RURAL

SECRETARIAT GENERAL

DIRECTION DES ENQUETES ET DES
STATISTIQUES AGRICOLES



REPUBLIC OF CAMEROON
Peace – Work – Fatherland

MINISTRY OF AGRICULTURE
AND RURAL DEVELOPMENT

SECRETARIAT GENERAL

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SURVEYS AND STATISTICS

Quarterly monitoring newsletter on agricultural inputs: fertilizers and plant protection products

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Domestic supply of nitrogen fertilizers has dropped by 38% and potassium fertilizers by 86% over the year, while imports of complex fertilizers have risen slightly (+18%). Against this backdrop, a drop in fertilizer supplies between the third and fourth quarters of 2022 was observed in all markets, and major urea supply failures were noted. Nevertheless, retail prices remained stable in most markets at the end of 2022. Supply constraints for the first quarter of 2023 mainly concern ammonium sulphate.

With the volume of herbicide and insecticide imports falling sharply in 2022 compared to 2021, there are supply risks on all the markets surveyed, except for liquid insecticide on Buea, Mamfe and Muyuka markets. Only herbicide prices rose between the third and fourth quarters of 2022, particularly on Yaounde 1 and Manga markets, where they increased by more than 20%. Low volumes of insecticide forecast for early 2023 come at a time of high consumption. Supplies will therefore need to be monitored during the 1st quarter of 2023.

FERTILIZERS

Despite lower world prices at the end of 2022, fertilizers are still more expensive than in 2021

The year 2022 was marked, on the one hand, by the Russian-Ukrainian conflict, which led to sanctions on the Russian and Belarusian economies, and on the other by the export restrictions imposed by China. In addition, the recovery of the Chinese economy in 2022 after the main phase of Covid-19 has triggered an increase in demand for raw materials and agricultural inputs.

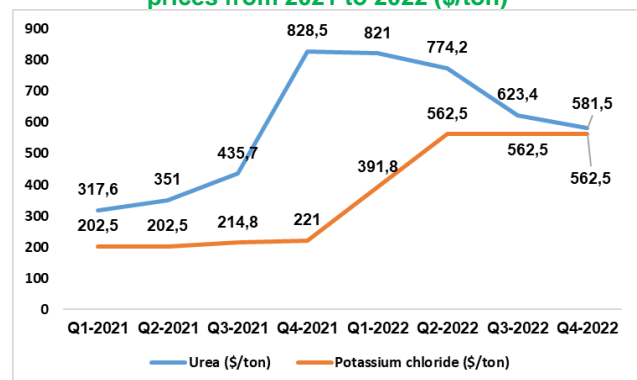
According to World Bank statistics, after soaring at the start of 2022, fertiliser prices have fallen over the end of the year, but historically remain at high levels. Drop in prices can be explained in part by low demand, as European and American farmers, the main consumers of fertilisers, cut back on fertiliser use due to lack of sufficient and affordable access to these inputs. On the supply side, there have also been disruptions from Russia (Cameroon's main fertiliser supplier) and Belarus.

The **price of a ton of urea** reached its peak in the fourth quarter of 2021, up to USD 828.5 per ton. In 2022, urea prices began to fall back to USD 581.5/t.

Before stabilizing at USD 562.5 per ton, **potassium chloride (MOP)** prices rose by 200% in the first two quarters of 2022.

As fertilizers are purchased on a forward basis, the impact of this drop on Cameroon's economy may not be noticeable until the second quarter of 2023.

Figure 1: Trends in international urea and potassium chloride prices from 2021 to 2022 (\$/ton)



Source: World Bank, 2023

Drop in supplies of nitrogen and potassium fertilizers on domestic markets

Despite the upturn in imports that began in the second quarter of 2022, the year-to-date supply of fertilizers has fallen to 131,877 tons, compared with 201,705 tons in 2021. This decrease is mainly due to a drop of around 80,000 tons in nitrogen and potassium fertilizers.

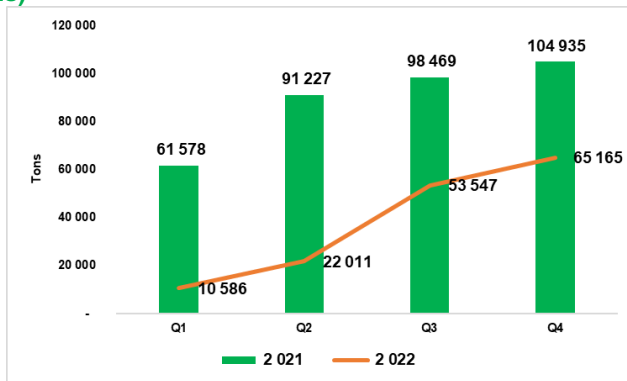
The drop of 35% in total volumes is greatly influenced by very high prices as observed in the second quarter of 2022 compared with the fourth quarter of 2021.

For **nitrogen fertilizers** (urea and ammonium sulphate), volumes imported during the 4th quarter of 2022 were 11,618 tons, giving a total quantity imported of 65,165 tons.

Imports of complex fertilizers in the fourth quarter of 2022 were low (2,000 tons), but the year-to-date figure is 9,000 tons higher than in 2021.

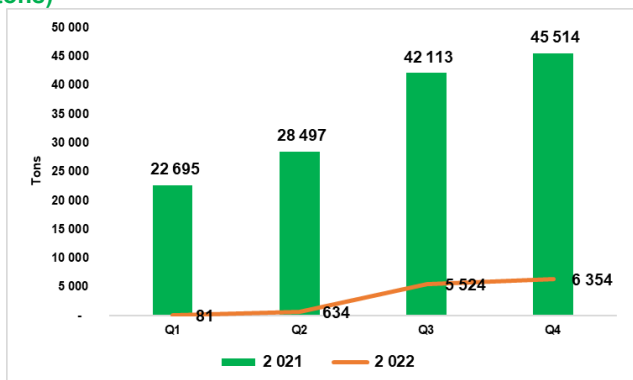
Imports of **potassium fertilizers** have fallen to 800 tons over the quarter (compared with 4,890 tons in the previous quarter). The year-to-date figure is 9,100 tons in 2022.

Figure 2 — Cumulative imports of nitrogen fertilizers (tons)



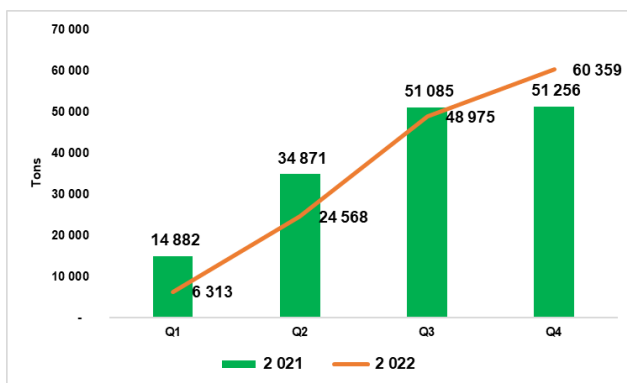
Source: MINFI/DGD, 2022

Figure 3 – Cumulative imports of potassium fertilizers (tons)



Source: MINFI/DGD, 2022

Figure 4 — Cumulative imports of complex fertilizers (tons)



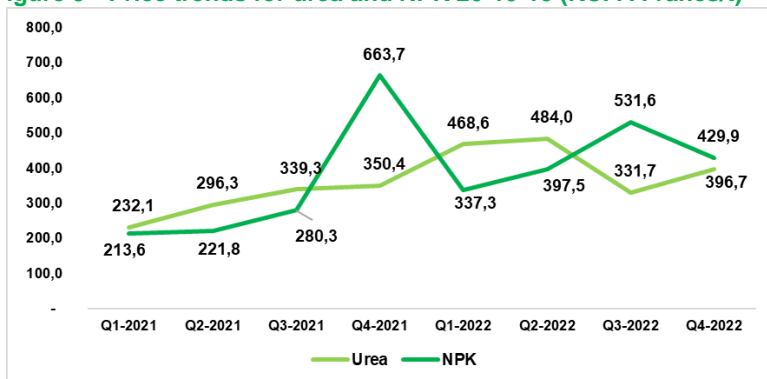
Source: MINFI/DGD, 2022

Prices delivered to the port of Douala almost doubled (+85% as compared to the first quarter of 2021), remaining well above pre-crisis prices.

After a peak of 484,000 CFA Francs/t in the second quarter of 2022, **urea** slightly declines in the third quarter of 2022 (331,700 CFA Francs/t) before rising again in the fourth quarter (397,000 CFA Francs/t).

For **NPK 20-10-10**, after the sharp drop in the first quarter of 2022 following the peak in the last quarter of 2021, import prices have experienced an upward trend, despite a slight drop in the last quarter of 2022 to 430,000 CFA Francs/t.

Figure 5 – Price trends for urea and NPK 20-10-10 (KCFA Francs/t)



Source: MINFI/DGD, 2022

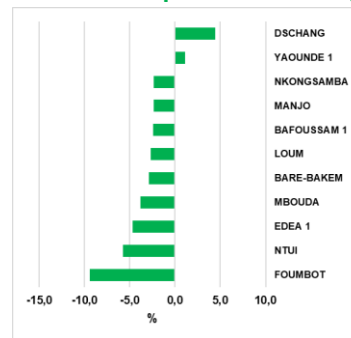
Stable Retail Price for Solid Fertilizers in most markets

Retail urea prices were stable overall between the third and fourth quarters of 2022, ranging from 700 CFA Francs/kg in Bertoua 1 to 870 CFA Francs/kg in Batouri.

Prices are low in some markets: Foumbot (-9%), Ntui (-6%), Edea 1 (-5%).

A few increases have been observed locally: Dschang (4%) and Yaounde 1 (1%).

Figure 6 – Urea retail price trends between the third and fourth quarters of 2022 (%)

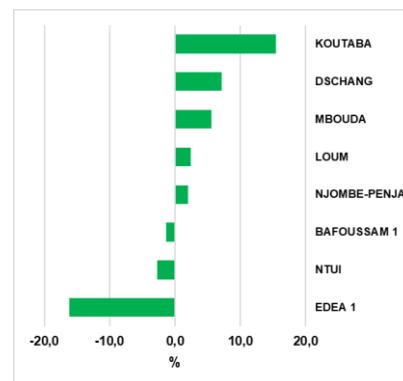


Retail prices for ammonium sulphate are also fairly stable in 15 of the 23 markets monitored. Prices per kilogram range from 460 CFA Francs to 940 CFA Francs.

Prices are low in Edea 1 (-16%), Ntui (-3%) and Bafoussam 1 (-1%). The sharp drop in prices at Edea 1 is partly designated by the end of fertilisations.

By contrast, prices have risen sharply in the markets of Koutaba (15%), Dschang (7.1%) and Mbouda (6%). This trend can partly be vested to the strong demand for this fertiliser due to the introduction of market garden crops.

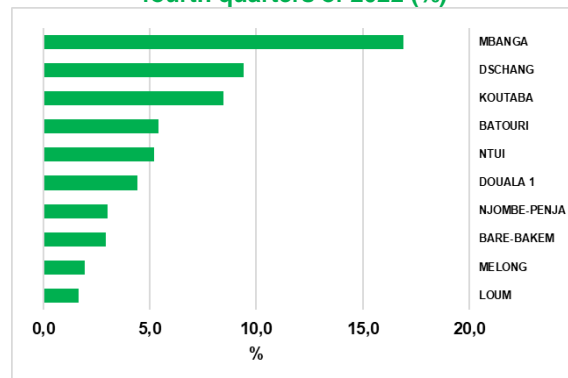
Figure 7 – Ammonium sulphate retail price trends between the third and fourth quarters of 2022 (%)



Out of 23 markets surveyed, **retail prices for NPK 20-10-10** remained stable in 13 markets. Prices ranged from 560 CFA Francs/kg in Sangmelima to 760 CFA Francs/kg in Batouri.

Bigger increases were recorded in Mbanga (+17%), Dschang (+8%) and Koutaba (+7%) due to the introduction of market garden crops.

Figure 8 – NPK 20-10-10 retail price trends between the third and fourth quarters of 2022 (%)

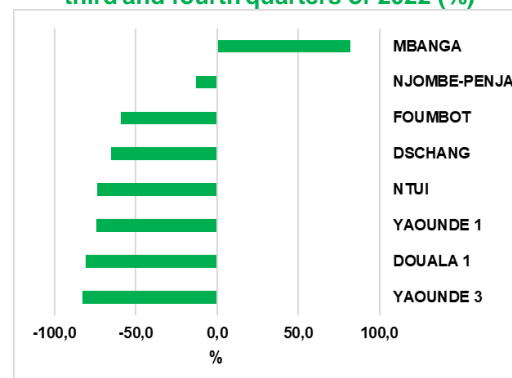


The price of special cocoa/coffee fertilizers ranged from 740 CFA Francs/kg in Zoetele to 4,100 CFA Francs/kg in Yaounde 3. This difference is due to the multiplicity of formulations for this group.

Prices remained stable in 15 of the markets monitored and dropped to 7 markets. Bigger drops were observed in Yaounde 3 and Douala 1.

The only noticeable increase was in Mbanga, where prices almost doubled.

Figure 9 – NPK special cocoa-coffee price trends between the third and fourth quarters of 2022 (%)

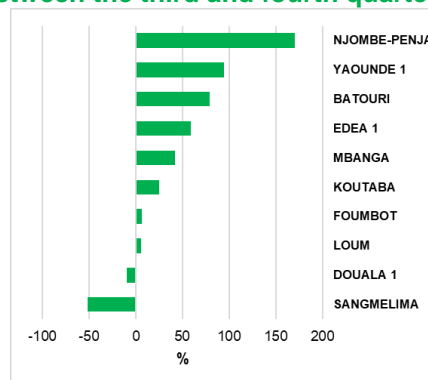


The 'other special fertilizers' group is highly heterogeneous, with prices varying according to formulation. Price per kilogram of these fertilizers ranged from 780 CFA Francs/kg in Melong to 4264 CFA Francs/kg in Yaounde 3.

While prices remained stable between the third and fourth quarters of 2022 on 13 out of 23 markets surveyed, significant increases were recorded in Njombe-Penja, Yaounde 1 and Batouri. The only significant drop was in Sangmelima (-52%).

In this group of fertilizers, significant variations are generally due to changes in marketed products.

Figure 10 – Evolution of detailed prices of other special fertilizers between the third and fourth quarters of 2022 (%)



Lower supply of fertilizers in the fourth quarter of 2022

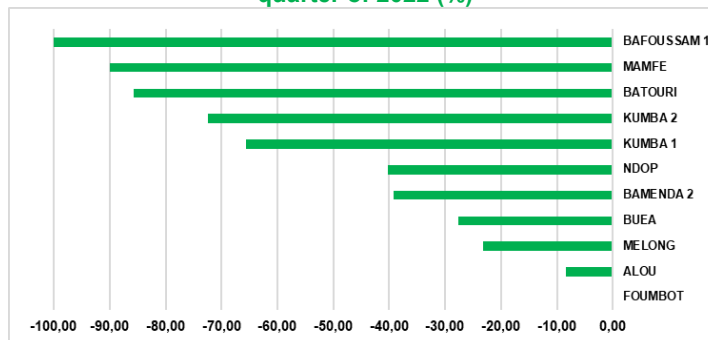
Out of 33 markets surveyed, 19 recorded a low **supply in urea**. This lower supply was extremely high in Manjo, Nkongsamba 1 and Bamenda 3 localities, where supplies halved. In absolute terms, quantities supplied to Foubot fell by 74 tons, and those to Bamenda 2 fell by 30 tons. Conversely, supplies increased in seven markets: Tubah, Tiko, Alou, Mbanga, Zoetele and Bertoua 2.

Out of 33 markets, 22 had no **urea supply** issues.

Supply issues were noticeable in Bafoussam 1 and Mamfe localities where almost all orders were not supplied.

These issues are due to lower imports compared with the same period last year.

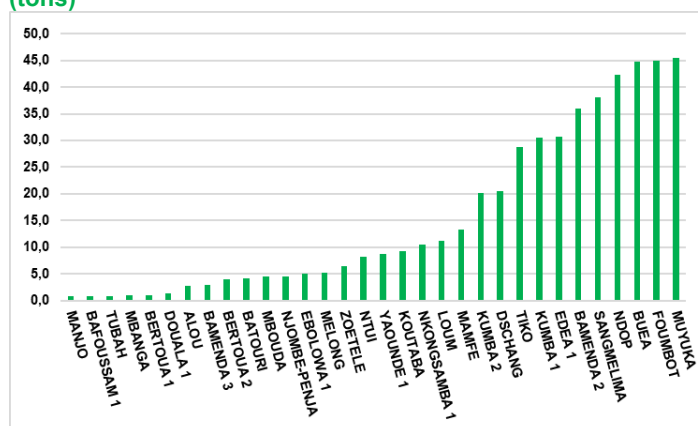
Figure 11 – Proportion of non-supplied urea volumes in the fourth quarter of 2022 (%)



Out of 33 markets surveyed, **forecasts on urea availability** are fewer than 10 tons in 18 markets, including 12 markets with forecasts of fewer than 5 tons.

These low availability forecasts are partly because 30% of agro-dealers did not intend to place an order in the first quarter of 2023. Whereas the reason is the presence of sufficient stock in markets in Buea and Foubot, agro-dealers generally cite low demand to explain their choice. On the other hand, eight markets have forecasts of between 30 and 45 tons available.

Figure 12 – Forecast on urea availability for the first quarter of 2023 (tons)

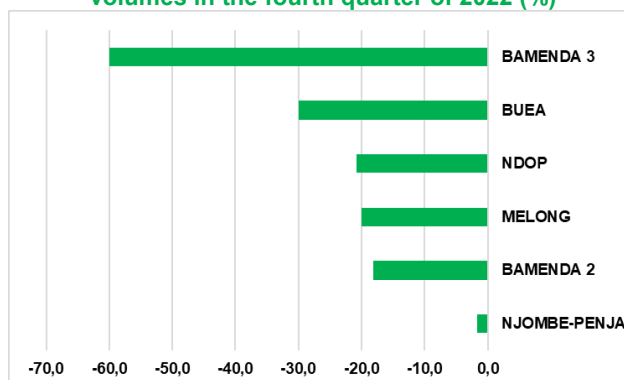


Out of 33 markets monitored, **ammonium sulphate supplies** are generally low in 15 markets. They are halved in Manjo, Nkongsamba 1, Dschang and Ebolowa 1 markets. In addition, Foubot and Manjo markets recorded discounts of 13 and 10 tons respectively. Only Tiko market carried out a major restocking of around 100 tons.

In most markets, there is no shortage of ammonium sulphate. Out of 33 markets surveyed, supplies were made in 28 markets.

Bamenda 2 and Sangmelima markets have the highest proportions of non-supplied quantities.

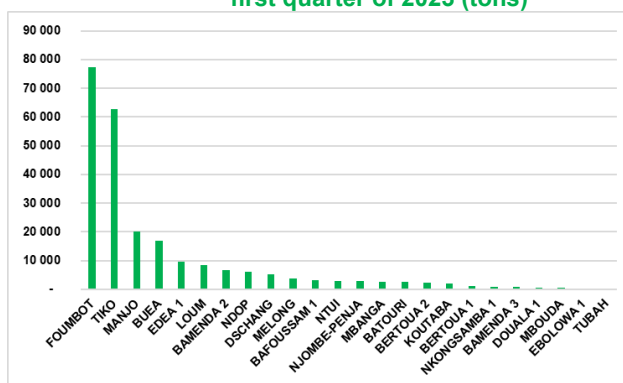
Figure 13: Proportion of non-supplied ammonium sulphate volumes in the fourth quarter of 2022 (%)



Ammonium sulphate availability forecasts are below 5 tons in 15 of the markets surveyed, and between five and 10 tons in Edea 1, Loum, Bamenda 2, Ndop and Dschang. Only Foubot and Tiko markets have greater stocks.

More than half of the distributors do not intend to place orders in the first quarter of 2023, especially those in the South-West region. Their main reason was that demand was low at the time. However, some of them mentioned that their supplier has no ammonium sulphate.

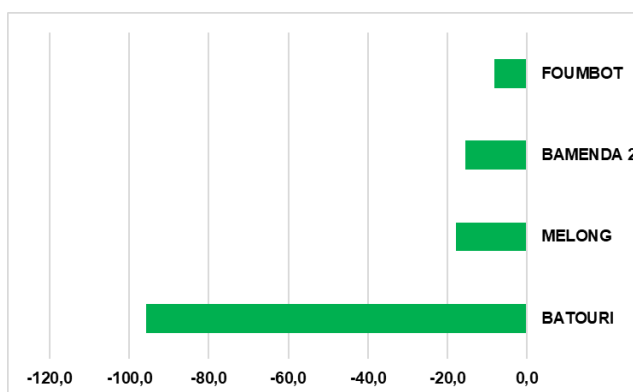
Figure 14 – Forecast on ammonium sulphate availability for the first quarter of 2023 (tons)



Out of 33 markets surveyed, **supplies of NPK 20-10-10** between the 3rd and 4th quarters of 2022 fell in 12 markets. These discounts are significant (over 70%) in Bamenda 3, Manjo, Foubot and Bamenda 2. Quantities supplied to markets in Foubot and Ndop fell by 98 tons and 38 tons respectively in the fourth quarter. In contrast, supply increases were noticed in 10 markets, with significant increases in Dschang, Mbouda, Njombe Penja and Bertoua 2.

There were few **delivery** problems, with only four contracts reporting delivery failures. An example worth mentioning is the Batouri site, where over 95% of orders have not been supplied.

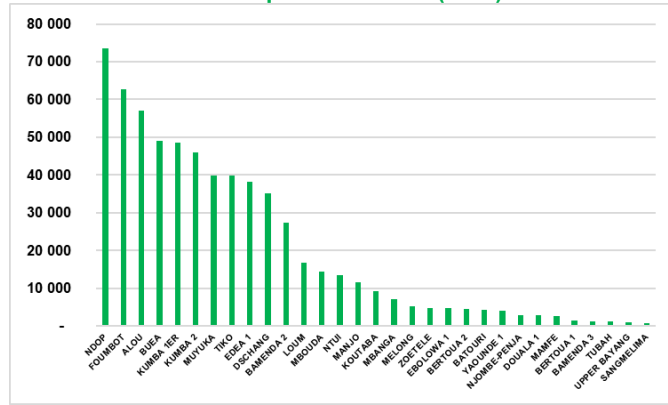
Figure 15: Proportion of non-supplied NPK 20-10-10 volumes in the fourth quarter of 2022 (%)



Forecasts on **NPK 20-10-10 availability** are fairly high in Ndop (74 tons), Foubot (63 tons) and Alou (57 tons) markets. By contrast, markets in Bertoua 1, Bamenda 3, Upper Bayang, Tubah and Sangmelima have the lowest forecasts (less than two tons) for the first quarter of 2023.

A third of distributors intended not to place orders in the first quarter of 2023 due to low demands. In Buea market, the reason given is the availability of bigger stocks.

Figure 16: Forecast on NPK 20-10-10 availability for the first quarter of 2023 (tons)

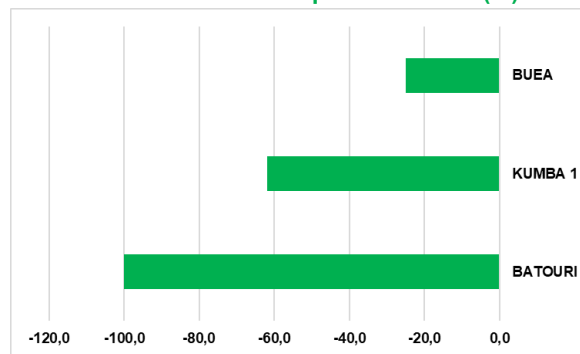


Supplies of special NPK cocoa have dropped in a dozen markets surveyed. These reductions were generally moderate, except in Bamenda 2, Sangmelima and Mbanga markets. The Mbanga market recorded a reduction of 10 tons.

As concerns other markets, supplies were identical to those of the previous quarter, except for Dschang, Loum and Zoetele markets, which carried out significant restocking.

Generally, there are fewer problems with supplies of **special NPK cocoa**, except for Batouri and Kumba 1 markets.

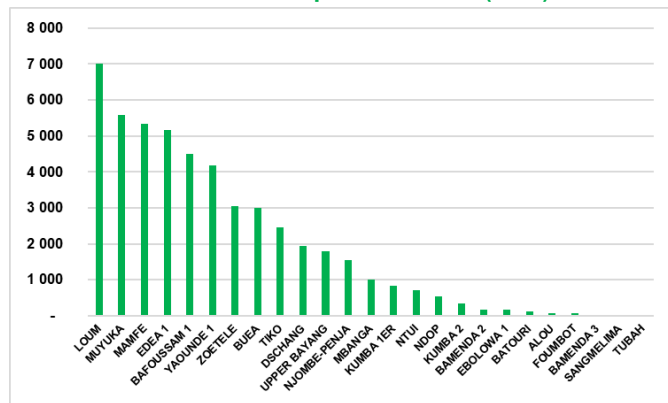
Figure 17: Proportion of non-supplied volumes of special NPK cocoa in the fourth quarter of 2022 (%)



Forecasts on the availability of special NPK cocoa are fairly high in Ndop (seven tons), Foubot (six tons) and Alou (five tons) markets. Conversely, they are low (less than 0.5 tons) in Kumba 2, Bamenda 2, Ebolowa 1, Batouri, Alou, Foubot, Sangmelima, Bamenda 3 and Tubah markets. More than a third (40%) of the agro-dealers monitored do not intend to place orders in the first quarter of 2023. They are located mainly in the West and South-West regions.

However, supply levels are considered satisfactory by distributors who have not placed orders, while others anticipate low demands.

Figure 18: Forecast on the availability of special NPK cocoa for the first quarter of 2023 (tons)



Supplies of 'other special NPK' fertilisers in solid form halved between the third and fourth quarters of 2022 in Mbanga, Bamenda 2 and Buea markets. Supplies have rather doubled in Loum market.

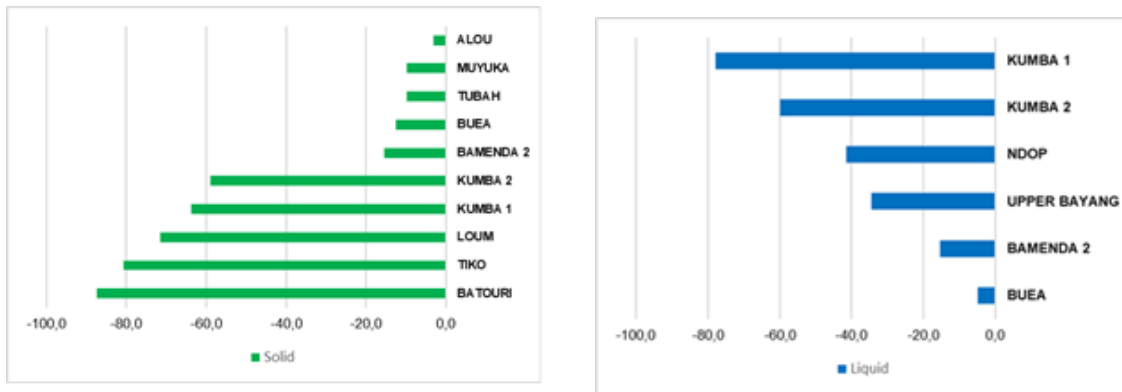
Moreover, supplies of **'other special NPK' fertilisers in liquid form** fell by half in Dschang and Foubot markets over the same period. By contrast, prices rather doubled in Zoetele market.

There are some problems with the supply of **other special NPK in solid form**.

Figure 17 shows that the difference between quantities ordered and those supplied of 'other special NPK' fertilizers in solid form is quite bigger (almost 60%) in Batouri, Tiko, Loum, Kumba 1 and Kumba 2 markets.

In liquid form, this gap is quite wide in Kumba 1, Kumba 2, Ndop and Upper Bayang markets.

Figure 19: Proportion of non-supplied volumes of 'other special NPK' fertilisers in the fourth quarter of 2022 (%)

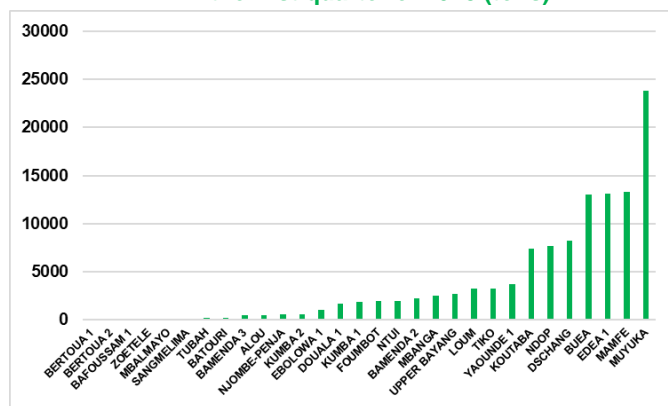


Forecasts on the availability of other special NPK fertilisers are generally fairly low (less than two tons) on 13 markets surveyed, and even zero on 4 markets.

Only seven markets show significant forecasts of available sales, such as Edea 1, Mamfe and Muyuka.

More than a quarter (27%) of the agro-dealers monitored do not intend to place orders in the first quarter of 2023. They are located mainly in the West and Littoral regions.

Figure 20: Forecast on the availability of other special NPKs for the first quarter of 2023 (tons)



Low demand is generally mentioned by distributors, who do not intend to restock, even in markets where availability forecasts are low, such as Bafoussam 1.

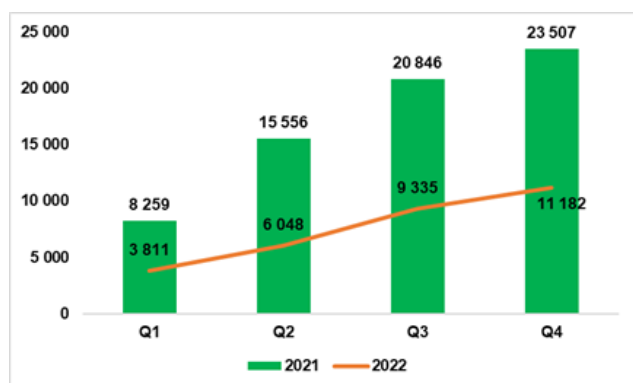
PLANT PROTECTION PRODUCTS

Tremendous drop in the volume of imports of herbicides and insecticides in 2022

From 23,507 tons in 2021 to 11,182 tons in 2022, quantities of herbicides imported have fallen by more than 50%. The same applies to insecticides, where cumulative volumes imported fell by 56%. In fact, whatever the quarter, imports in 2022 were always lower than in 2021. Volumes of herbicides and insecticides fell by 31% and 52% respectively in the fourth quarter.

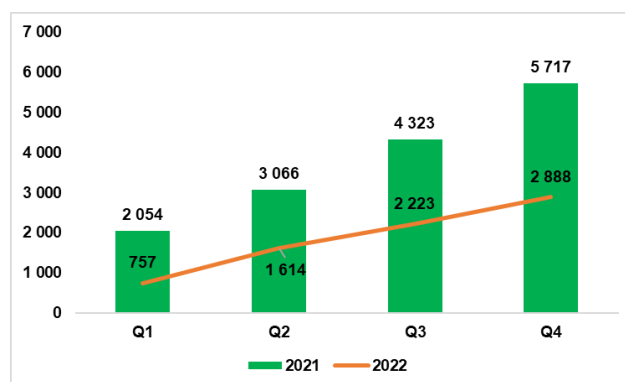
There are a number of reasons for this, especially the rising costs of international transport and of manufacturing herbicides and insecticides in Asia and Europe.

Figure 21 – Cumulative imports of herbicides (tons)



Source: MINFI/DGD

Figure 22 – Cumulative imports of insecticide (tons)

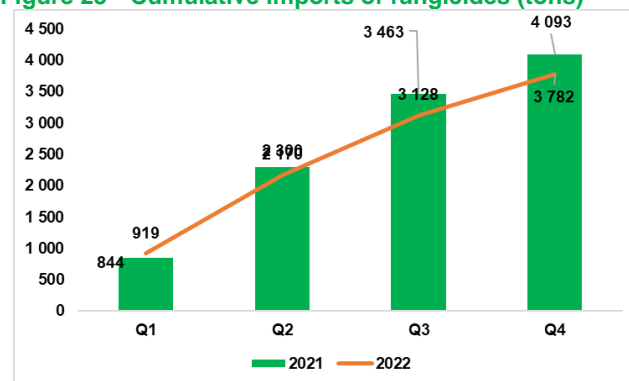


Source : MINFI/DGD

Imports of fungicides fell slightly by 311 tons between 2021 and 2022.

Unlike herbicides and insecticides, fungicides are essential for cocoa and coffee production. This explains the relative stability of imports over the 4 quarters of the year.

Figure 23 – Cumulative imports of fungicides (tons)



Source: MINFI/DGD

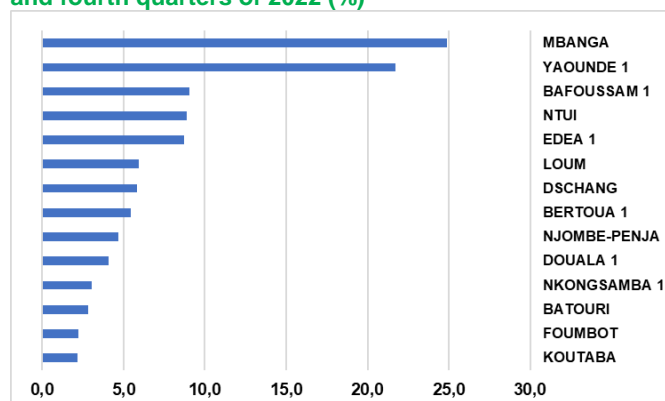
Widespread rise in herbicide prices

Outside Yaounde 1 market (6,700 CFA Francs), the **average price of a litter of herbicide** in the 4th quarter of 2022 varies between 4,000 CFA Francs and 6,000 CFA Francs.

Between the third and fourth quarter, average price per litter of herbicide rose in most of markets surveyed (15 out of 23 markets). Bigger increases were noticed in Mbanga (25%) and Yaounde 1 (22%). This may likely be due to fall in imports, which leads to pressure on prices during periods of high consumption.

However, herbicide prices did not increase between the third and fourth quarters of 2022 in Bare-Bakem, Manjo, Bertoua 2 and Mbalmayo. This stability could either be due to low use or to anticipation on the part of users (farmers or farmers' organisations).

Figure 24 – Liquid herbicide price trends between the third and fourth quarters of 2022 (%)



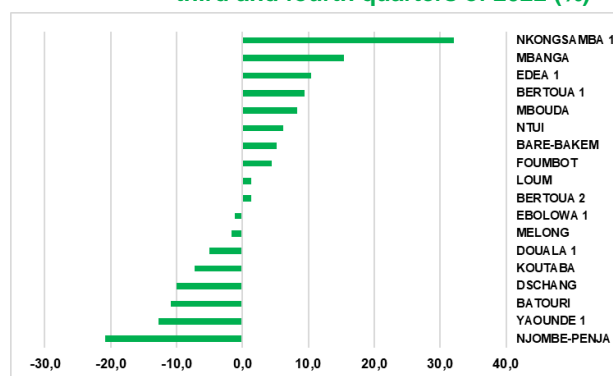
Average price per kilogram of fungicides in the 4th quarter of 2022 ranged from 4,000 CFA Francs in Melong to 15,000 CFA Francs in Zoetele.

This price heterogeneity is broadly marked by a diversity of products in the shopping basket and the choice of distribution methods.

Prices rose moderately in Bertoua 2, Loum and Foubot markets. Greater increases (over 10%) were observed in the Mbanga and Nkongsamba 1 markets.

Only four markets (Njombe-Penja, Yaounde 1, Batouri and Dschang) recorded significant decreases (between 10% and 20%). Prices on all other markets were stable.

Figure 25 – Solid fungicide price trends between the third and fourth quarters of 2022 (%)



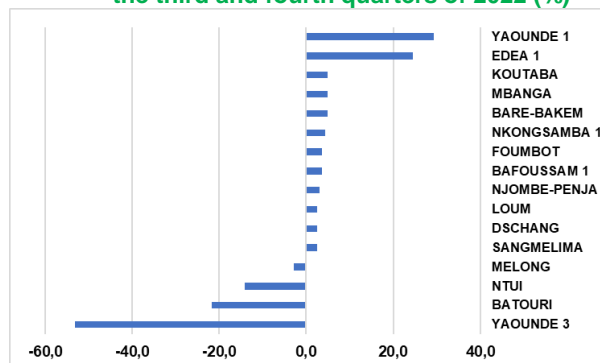
Average price of a litter of insecticide in the fourth quarter of 2022 ranged from 4,800 CFA Francs in Douala 1 to 10,000 CFA Francs in Zoetele.

This price heterogeneity is broadly marked by a diversity of products in the shopping basket and the choice of distribution methods.

Insecticide prices were relatively stable between the third and fourth quarters in most of markets surveyed, except Yaounde 1, Edéa 1, Ntui, Batouri and Yaounde 3.

It is likely that on Yaounde 1 and Edéa 1 markets, retailers already passed on the insecticide price increases linked to the reduction in supplies.

Figure 26 – Liquid insecticide price trends between the third and fourth quarters of 2022 (%)



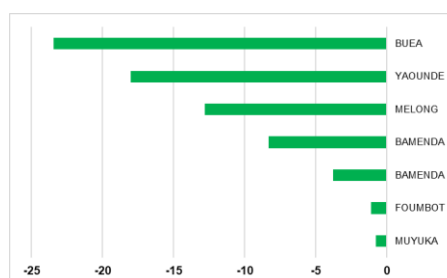
General decline in supplies between the third and fourth quarters 2022

Overall, fungicide supplies in the fourth quarter were lower than in the third quarter. They fell by at least half in the Ntui, Mamfe, Loum and Foubot markets.

Only two markets, Koutaba and Batouri, recorded significant supplies, with 2.2 tons and 1.7 tons respectively. This drop is not due to non-supplies.

This period corresponds to the end of the cocoa and coffee production cycle and to low pathogen pressure. Consumption of fungicides during the fourth quarter is much lower than at other times of the year, and retailers anticipated this drop in demand.

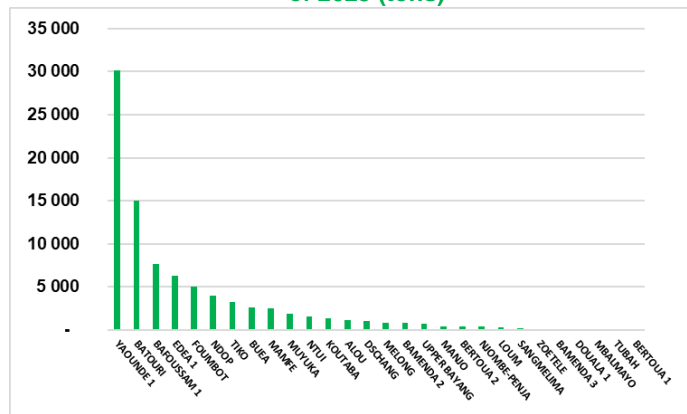
Figure 27 – Proportion of fungicide volumes not supplied in the fourth quarter 2022 (%)



Fungicide availability forecasts for the first quarter of 2023 are low, and out of the 33 markets surveyed, 22 may run out of fungicide stocks.

Intentions not to restock are low, accounting for 27% of retailers monitored and generally located in the West and South-West. They are mainly explained by low demand due to low pathogen pressure and sufficient stocks.

Figure 28 – Forecast availability of fungicides in the first quarter of 2023 (tons)

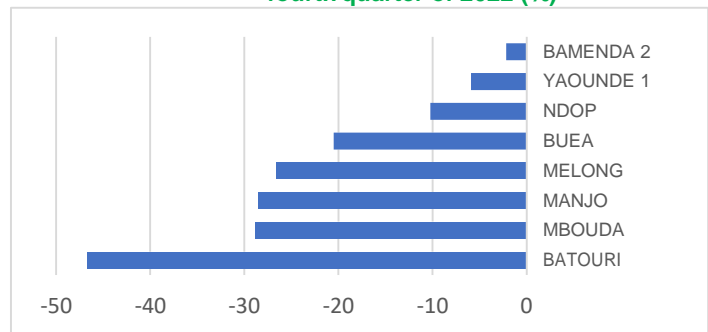


Overall, **herbicide supplies** in the fourth quarter were lower than in the third quarter. They fell by more than half in the Manjo, Fombot, Bamenda 2, Ndop, Douala 1 and Buea markets. On the other hand, supplies more than doubled in the Njombé-Penja and Batouri markets.

As with fungicides, this fall in supplies can be explained by the low use of herbicides at this time of year. In the few markets where supplies are up, they are being replenished from stocks that were zero at the end of the third quarter of 2022.

Overall, there were no problems with herbicide supplies. Only a few difficulties were encountered in Batouri, Mbouda and Manjo. But these supply discrepancies had no impact, particularly in Batouri.

Figure 29 – Proportion of herbicide volumes not supplied in the fourth quarter of 2022 (%)

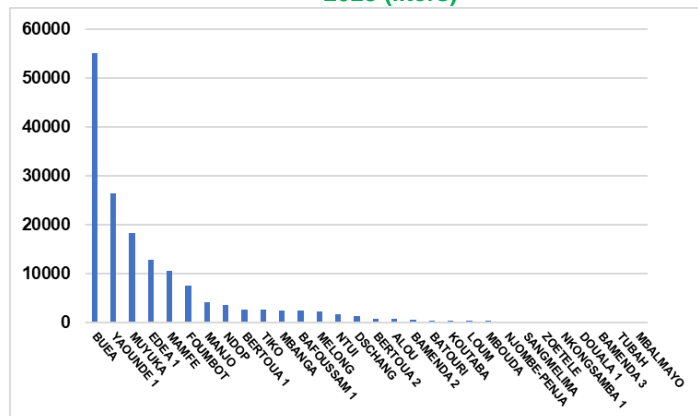


Forecasts for the availability of **solid herbicides** are low, and almost all markets could have no stocks of solid herbicides in the first quarter of 2023.

Liquid herbicides will be available in quantities of fewer than 1,000 liters in 15 markets and between 1,000 liters and 10,000 liters in 10 markets.

Intentions not to place orders are low (26 retailers out of 133). It would appear that stock levels envisaged for the first quarter of 2023 are in line with retailers' ability to sell.

Figure 30 – Forecast availability of herbicides in the first quarter of 2023 (liters)

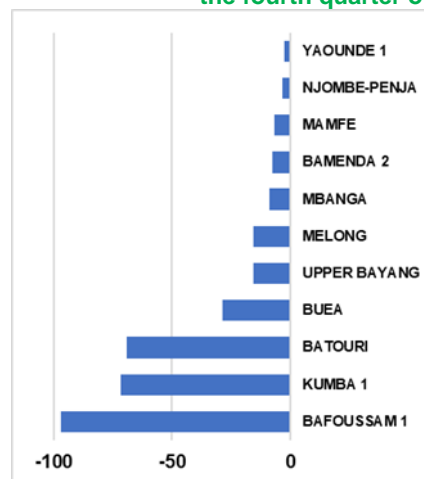


There was no general trend in **insecticide supplies** between the third and fourth quarters 2022. Supplies fell by more than half in Dschang, Foumbot, Manjo, Loum, Bafoussam 1, Bamenda 2, Kumba 1 and Buea markets.

On the other hand, supplies tripled in Njombe – Penja and Koutaba markets. They almost doubled in Zoetele and Mamfe markets.

There were no problems with the supply of **liquid insecticide** in 21 of the 33 markets surveyed. Some difficulties were encountered in Bafoussam 1, Kumba 1 and Batouri.

Figure 31 – Proportion of volumes of insecticide not supplied in the fourth quarter of 2022 (%)

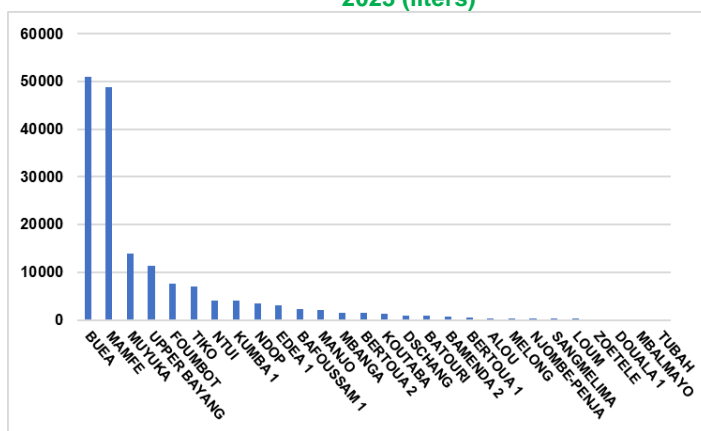


For the first quarter of 2023, **forecasts for liquid insecticides** are low (less than 1,000 liters) or absent in 15 of the 33 markets surveyed.

It is not about renewing stocks, as the number of retailers unwilling to order is low (31 out of 133), but rather adapting stock levels to demand.

On the other hand, *agro-dealers* in Buea are planning to purchase nearly 51,000 liters of liquid insecticides, followed by those in Mamfe (49,000 liters) and Muyuka (14,000 liters) markets.

Figure 32 – Insecticide availability forecast for the first quarter of 2023 (liters)



STATISTICAL DATA

Table 1: Quarterly prices of solid fertilizers (CFA Francs/kg)

Year 2022	Urea			Ammonium sulphate			NPK 20-10-10			NPK Coffee/Cocoa			Other special NPKs		
Quarter 4	Av	Max	Min	Av	Max	Min	Av	Max	Min	Av	Max	Min	Av	Max	Min
CENTRE															
NTUI	726	800	560	600	600	600	700	700	700	2650	3000	2500	2778	6000	2500
YAOUNDE 1	796	880	720	-	-	-	697	800	600	1824	2500	720	1711	2500	840
YAOUNDE 3	760	760	760	580	580	580	700	700	700	4100	4100	4100	4264	5200	3600
MBALMAYO	-	-	-	-	-	-	-	-	-	-	-	-	3000	3000	3000
EAST															
BERTOUA 1	700	700	700	669	778	560	660	660	660	-	-	-	-	-	-
BERTOUA 2	760	760	760	500	500	500	700	700	700	-	-	-	-	-	-
BATOURI	870	900	840	700	700	700	760	800	700	-	-	-	1327	2500	740
LITTORAL															
LOUM	864	1000	800	512	520	500	723	840	650	813	840	770	885	920	840
MANJO	840	840	840	-	-	-	700	700	700	-	-	-	-	-	-
MBANGA	-	-	-	-	-	-	723	760	680	1625	2500	700	850	850	850
MELONG	789	840	760	505	520	500	691	840	640	-	-	-	780	880	680
NKONGSAMBA 1	840	840	840	500	500	500	700	700	700	-	-	-	-	-	-
NJOMBE-PENJA	750	750	750	565	778	470	698	800	640	1641	3000	720	2052	2500	760
EDEA 1	859	900	840	587	640	560	700	720	600	1333	4500	700	1311	4500	660
DOUALA 1	900	920	880	615	640	590	710	760	660	3480	4500	2800	3055	5000	860
WEST															
MBOUDA	793	875	750	507	560	480	699	760	650	-	-	-	2500	2500	2500
DSCHANG	779	860	500	525	560	490	673	700	640	2108	2500	800	800	800	800
BAFOUSSAM 1	800	800	800	470	470	470	-	-	-	770	780	760	-	-	-
FOUMBOT	758	1051	600	553	940	460	687	840	620	2013	2500	1800	1807	4000	650
KOUTABA	817	880	750	543	600	480	684	720	660	-	-	-	1697	2500	660
SOUTH															
SANGMELIMA	-	-	-	-	-	-	560	NS	NS	-	-	-	2500	2500	2500
ZOETELE	-	-	-	-	-	-	-	-	-	740	750	730	3000	3000	3000
EBOLOWA 1	976	1000	960	-	-	-	-	-	-	-	-	-	-	-	-

-: Not computable: products not sold within this period

NS: Non-significant: number of values insufficient for calculation

Groupings

Urea N [45–46] P [0] K [0]

Ammonium sulphate N [14–31] P [0] K [0]

NPK 20-10-10 N [20–21] P [9–11] K [9–11]

Special coffee/cocoa: N P K 15-15-30, N P K 6-15-28, N P K 9-5-5

Other special NPKs: comprised of about sixty products in liquid or solid form.

Table 2: Quarterly prices of liquid fertilizers (CFA F/l)

Year 2022	NPK Coffee/Cocoa			Other special NPKs		
Quarter 4	<i>Av</i>	<i>Max</i>	<i>Min</i>	<i>Av</i>	<i>Max</i>	<i>Min</i>
CENTRE						
NTUI	-	-	-	7 350	12 000	4 000
YAOUNDE 1	-	-	-	5 556	7 500	3 500
EAST						
BATOURI	6 500	6 500	6 500	3 667	4 500	2 500
BERTOUA 1	-	-	-	6 000	6 000	6 000
BERTOUA 2	-	-	--	6 500	6 500	6 500
LITTORAL						
MBANGA	9 000	12 000	6 000	6 000	6 000	6 000
NJOMBE-PENJA	5 000	5 000	5 000	5 940	10 000	4 400
EDEA 1	-	-	-	7 233	11 000	4 500
DOUALA 1	-	-	-	4 500	4 500	4 500
WEST						
DSCHANG	-	-	-	9,250	10,000	9,000
BAFOUSSAM 1	-	-	-	13,500	13,500	13,500
FOUMBOT	-	-	--	3,391	8,000	1,800
KOUTABA	-	-	-	4,000	4,500	3,500
SOUTH						
SANGMELIMA	-	-	-	13,500	15,000	12,000
ZOETELE	-	--	-	9,500	10,000	9,000

-: Not computable: products not sold within this period

NS: Non-significant: number of values insufficient for calculation

Table 3: Quarterly prices of plant protection products in solid form (CFA Francs/kg)

Year 2022	Herbicides			Insecticide			Fungicides		
Quarter 4	Av	Max	Min	Av	Max	Min	Av	Max	Min
CENTRE									
YAOUNDE 1	12,000	14,000	10,000	10,000	10,000	10,000	11,661	16,000	4,000
YAOUNDE 3	13,000	15,000	10,000	10,000	10,000	10,000	10,643	16,000	3,800
MBALMAYO	10 000	10 000	10 000	-	-	-	9 125	16 000	4 000
EAST									
BATOURI	10 000	10 000	10 000	-	-	-	10 109	18 000	1 000
BERTOUA 1	-	-	-	-	-	-	4 417	4 500	4 000
BERTOUA 2	10 000	10 000	900	-	-	-	5 357	9 500	3 500
LITTORAL									
LOUM	10 667	14 000	8 000	-	-	-	6 397	14 000	3 500
MANJO	-	-	-	-	-	-	12 375	18 000	5 500
MBANGA	12 000	12 000	12 000	-	-	-	4 333	4 500	4 000
MELONG	-	-	-	-	-	-	3 933	4 000	3 800
NKONGSAMBA 1	-	-	-	-	-	-	8 100	18 000	5 500
NJOMBE-PENJA	10 667	12 000	8 000	12 500	20 000	5 000	8 550	12 000	4 500
EDEA 1	9 600	12 000	8 000	8 286	10 000	7 000	7 888	14 000	3 500
DOUALA 1	14 222	20 000	10 000	34 000	34 000	34 000	8 938	14 000	4 500
WEST									
MBOUDA	-	-	-	-	-	-	9,273	12,000	8,000
DSCHANG	-	-	-	-	-	-	10,909	12,000	7,000
BAFOUSSAM 1	16,000	16,000	16,000	-	-	-	8,350	13,000	3,500
FOUMBOT	11,412	14,000	8,800	13,216	40,000	4,000	6,541	30,000	3,100
KOUTABA	13,000	14,000	12,000	13,750	15,000	10,000	5,663	12,000	3,000
SOUTH									
SANGMELIMA	11,333	15,000	4,000	-	-	-	11,524	15,000	4,000
ZOETELE	13,167	15,000	12,000	10,000	10,000	10,000	15,154	17,000	15,000
EBOWA 1	14,000	14,000	14,000	11,000	12,000	10,000	13,949	18,000	10,000

-: Not computable: products not sold within this period

NS: Non-significant: number of values insufficient for calculation

Groupings

Herbicides: comprised four molecules, mainly topped by Glyphosate

Fungicides: comprised nine molecules, mainly topped by Mancozeb and Metalaxyl-M

Insecticide: comprised six molecules, mainly topped by: midaclopride, Cypermethrine, Lambda cyhalothrine,

Table 4: Quarterly prices of plant protection products in liquid form (liter)

Year 2022	Herbicides			Insecticide			Fungicides		
Quarter 4	Av	Max	Min	Av	Max	Min	Av	Max	Min
CENTRE									
YAOUNDE 1	5,498	10,000	2,500	9,265	NS	5,000	-	-	-
YAOUNDE 3	6,706	NS	4,500	8,578	NS	3,500	10,833	17,000	6,500
MBALMAYO	5 167	5 500	5 000	7 833	12 000	5 000	8 400	10 400	6 400
EAST									
BATOURI	4 997	5 500	3 200	8 077	25 000	2 000	-	-	-
BERTOUA 1	5 375	5 500	5 000	5 833	7 000	4 500	-	-	-
BERTOUA 2	4 583	5 500	4 000	6 417	7 000	5 000	7 500	7 500	7 500
LITTORAL									
BARE-BAKEM	4 757	5 000	4 500	6 833	8 000	6 000	-	-	-
LOUM	4 591	6 500	3 500	4 946	8 000	2 300	7 364	8 000	7 000
MANJO	4 755	5 000	4 500	7 000	7 000	7 000	-	-	-
MBANGA	4 638	5 000	2 500	5 944	8 000	3 700	-	-	-
MELONG	4 383	5 500	3 500	6 077	8 000	4 000	7 250	8 000	6 000
NKONGSAMBA 1	4 900	5 500	4 500	7 318	8 000	7 000	-	-	-
NJOMBE-PENJA	4 908	7 500	3 900	6 865	10 000	5 000	8 500	8 500	8 500
EDEA 1	4 862	7 000	2 000	14 476	NS	4,000	8,000	8,000	8,000
DOUALA 1	4 840	5 500	4 500	4 864	7 500	4 000	7 000	7 000	7 000
WEST									
MBOUDA	4,157	5,000	3,500	7,667	8,000	7,000	-	-	-
DSCHANG	4,965	5,000	4,500	5,615	8,000	4,000	-	-	-
BAFOUSSAM 1	4,518	5,000	3,500	5,492	9,000	4,000	7,333	8,000	7,000
FOUMBOT	4,467	5,500	3,500	6,022	NS	2,500	6,671	7,500	5,800
KOUTABA	5,013	7,400	3,500	6,018	10,000	2,800	7,000	7,000	7,000
SOUTH									
SANGMELIMA	5,905	6,000	5,500	5,000	5,000	5,000	-	-	-
ZOETELE	13,167	6,000	6,000	10,000	10,000	10,000	-	-	-
EBOLOWA 1	14,000	6,500	5,000	11,000	14,000	4,000	-	-	-

-: Not computable: products not sold within this period

NS: Non-significant: number of values insufficient for calculation

Groupings

Herbicides: comprised of four molecules, mainly topped by Glyphosate

Fungicides: comprised of nine molecules, mainly topped by Mancozeb and Metalaxyl-M

Insecticides: comprised of six molecules, mainly topped by: midaclopride, Cypermethrine, Lambda cyhalothrine,

Table 5: Commercial Availability of Solid Fertilizers (tons)

Year 2022	Urea			Ammonium sulphate			NPK 20-10-10			NPK Coffee/Cocoa			Other NPKs			
	Quarter 4	Avail	Forecast	Int0	Avail	Forecast	Int0	Avail	Forecast	Int0	Avail	Forecast	Int0	Avail	Forecast	Int0
CENTRE																
NTUI		13.5	0		2.9	2		13.5	0		0.7	0		2	0	
YAOUNDE 1		4.2	3		0	3		4.2	3		4.2	2		3.7	3	
EAST																
BATOURI		4.4	2		2.5	2		4.4	2		0.1	3		0	3	
BERTOUA 1		1.5	0		1.3	0		1.5	0		0	1		0.2	0	
BERTOUA 2		4.5	0		2.3	0		4.5	0		0	1		0	0	
LITTORAL																
LOUM		16.7	1		20	1		16.7	1		3.1	1		0	1	
MANJO		11.5	2		2.7	2		11.5	1		0	3		3.3	3	
MBANGA		7	0		3.7	0		7	0		1	0		2.5	0	
MELONG		5.4	2		0.9	2		5.4	2		0	4		0.5	4	
NKONGSAMBA 1		10.5	1		0.9	1			2			2			2	
NJOMBE-PENJA		3	1		2.9	2		3	3		1.6	2		13.1	0	
EDEA 1		38.1	0		9.5	0		38.1	0		5.2	0		1.7	0	
DOUALA 1		2.8	0		0.6	0		2.8	0		0.0	1		2.2	0	
NORTH WEST																
BAMENDA 2		27.3	0		6.7	1		27.3	0		0.2	3		0.5	0	
BAMENDA 3		1.3	0		0.9	0		1.3	1		0	0		0.2	0	
TUBAH		1.2	2		0.1	1		1.2	1		0	1		7.7	0	
NDOP		73.6	0		6.1	2		73.6	0		0.5	1		8.2	0	
WEST																
MBOUDA		14.5	1		5.1	2		14.5	0		0.0	2		0.0	2	
DSCHANG		35.2	0		3.3	3		35.2	0		1.9	3		1.9	3	
BAFOUSSAM 1		0.0	1		0.0	1		0.0	2		4.5	1		7.4	1	
FOUMBOT		62.6	4		77.4	4		62.6	3		0.1	7		0.1	4	
KOUTABA		9.2	1		2.0	1		9.2	1		0.0	2		0.0	1	
SOUTH																
SANGMELIMA		0.7	1		0.0	2		0.7	0		0.0	2		1.0	0	
ZOETELE		4.8	0		0.0	1		4.8	0		3.1	0		13.0	0	
EBOLOWA 1		4.8	0		0.4	4		4.8	2		0.2	2		23.8	1	
SOUTH WEST																
BUEA		49.2	6		17.0	6		49.2	6		3.0	6		3.3	6	
MUYUKA		40.0	0		0.0	7		40.0	0		5.6	1		0.5	0	
TIKO		39.9	0		62.6	1		39.9	0		2.5	0		13.3	0	
ALOU		56.9	2		0.0	3		56.9	0		0.1	0		2.7	0	
MAMFE		2.8	2		0.0	4		2.8	3		5.3	0		1.9	0	
UPPER BAYANG		1.1	5		0.0	5		1.1	4		1.8	0		0.6	1	
KUMBA 1		48.6	0		0.0	6		48.6	0		0.8	1		0.0	1	
KUMBA 2		46.0	0		0.0	4		46.0	1		0.3	1		0.0	0	

Avail Availability = stock t-1 + delivery t

Forecast Forecast = stock t + order intentions t+1

Int0 Number of distributors who have not considered any orders in t+1

Table 6: Commercial availability of plant protection products

Year 2022	Herbicide (100 liters)			Insecticide (100 liters)			Fungicide (100 liters)			
	Quarter 4	Avail	Forecast	Int0	Avail	Forecast	Int0	Avail	Forecast	Int0
CENTRE										
NTUI		17.2	0		41.4	0		1.5	1	
DOUALA 1		264.1	3		2220.5	3		30.2	4	
MBALMAYO		0.5	0		0.8	0		0	0	
EAST										
BATOURI		5.5	1		8.2	2		15	2	
DOUALA 1		28	0		5	0		0	0	
BERTOUA 2		8.4	0		14.3	0		0.4	0	
LITTORAL										
LOUM		4.2	0		2.1	0		0.2	0	
MANJO		41.6	0		20.8	0		0.4	0	
MBANGA		24.9	0		14.4	0		0	1	
MELONG		23.1	1		3	4		0.8	1	
NKONGSAMBA 1		2	1			2			2	
NJOMBE-PENJA		3.2	2		0	2		0	1	
EDEA 1		128.4	0		0.0	0		0.4	0	
DOUALA 1		1.4	0		3.0	0		6.3	0	
NORTH WEST										
BAMENDA 2		1.4	0		31.3	1		0.0	0	
BAMENDA 3		7.3	0		0.8	1		0.8	0	
TUBAH		1.3	0		6.6	0		0.1	0	
NDOP		0.6	0		0.3	0		0.0	0	
WEST										
MBOUDA		35.9	0		34.9	3		3.9	3	
DSCHANG		4.1	1		0.0	2		0.0	3	
BAFOUSSAM 1		13.4	1		9.2	0		1.0	0	
FOUMBOT		24.8	5		21.9	1		7.6	4	
KOUTABA		77.0	1		75.9	1		5.0	1	
SOUTH										
SANGMELIMA		4.5	0		12.0	1		1.3	0	
ZOETELE		3.0	0		2.7	0		0.2	0	
EBOLOWA 1		2.8	0		1.3	0		0.1	0	
SOUTH WEST										
BUEA		551.0	6		510.0	6		0.0	6	
MUYUKA		183.2	0		139.0	1		2.6	0	
TIKO		27.5	0		69.2	1		1.9	0	
ALOU		7.8	0		3.1	0		3.2	0	
MAMFE		107.1	0		488.8	0		1.1	3	
UPPER BAYANG		0.0	0		113.2	0		2.5	3	
KUMBA 1		0.0	0		40.8	0		0.7	0	
KUMBA 2		0.0	0		0.0	0		0.0	0	

Avail Availability = stock t-1 + delivery t

Forecast Forecast = stock t + order intentions t+1

Int0 Number of distributors who have not considered any orders in t+1

METHODOLOGICAL FRAMEWORK

Published quarterly, this report aims to provide a summary information on the availability and accessibility of fertilisers and plant protection products.

In the nearest future, prices analysis and commercial availability only concerns regions surrounding the coffee and cocoa basins i.e. Seven regions out of the 10 that makes up Cameroon. This geographical limitation to coffee and cocoa production areas has very little impact on results obtained for these regions insofar as products monitored are not specific to these crops.

External sources

International fertiliser prices are those disseminated through the World Bank's 'Commodity Price Data' website.

These are FOB awards.

Import volumes are gross volumes calculated from data provided by the Directorate General of Customs (DGD). The domestic availability (gross volume – export – non-agricultural use) is calculated only once a year. Import prices are calculated from custom values, these are CIF prices.

Business Survey of Retail Distributors

Price and commercial availability data are collected on a sample of 133 retailers (agro dealers) spread over 33 localities. The selection of retailers is made on the basis of forecasted volumes marketed such that units surveyed constitute a significant part of the volumes marketed by retailers (cut off at 80% of the volumes of a Division). However, in some cases the choice is made on the sole presence (especially when the number of distribution outlets is minimal).

Prices are collected monthly. These are prices confirmed by traders for each type of packaging available and sold during the reference month. Quarterly averages are calculated by reducing to metric units (kg or liter) for each locality of observation in order to obtain a critical number of observations.

Data on commercial availability is collected quarterly. These are also values stated by merchants regarding the status of open orders, inventories and replenishment forecasts. Quantitative variables are calculated for each locality but cannot be aggregated at higher levels (Division, Region).

**MINISTRY OF AGRICULTURE AND RURAL
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