



Assessment of the Risks and Impact of the Russian-Ukrainian Crisis on Food Security in the ECOWAS Region

Key Findings

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I. BACKGROUND AND RATIONALE

For over a decade, food and nutrition crises have been hitting many West African countries with increasing frequency and scope. These crises were both structural and cyclical and illustrate the significant deterioration in the living conditions and livelihoods of households, and often in the nutrition of populations.

This food crisis, which is particularly aggravated in the Sahel, has exploded in recent years under the combined effect of the physical insecurity of citizens caused by terrorism, banditry, inter-community conflicts as well as climate change and the Covid 19 pandemic. As a result, this situation has caused significant displacements with more than 5 million internally displaced persons (IDPs) in the region, including 1.8 million in Burkina, 300,000 in Niger, more than 2 million in Nigeria and 400,000 in Mali and Chad along with the closure of several markets, health centers and schools. The continuing crisis affects livelihoods and disrupts trade flows and the mobility of people – including pastoral transhumance and a significant portion of the population in the Sahel is no longer able to cultivate and abandon their fields and villages.

ECOWAS countries are faced with fragile economic situations, rapid demographic growth, accelerated urbanization and governance challenges. These ECOWAS countries are not very resilient to both endogenous and exogenous shocks. Climate change and pandemics, such as Ebola and Covid-19, have had disastrous consequences, the effects of which are still perceptible. Travel and trade restriction measures enforced by countries due to the corona virus pandemic have severely affected economies and livelihoods in the countries. According to an ECOWAS study (Covid-19 impact, 2021), Covid-related restrictions have resulted in a sustained increase in the price of basic food combined with a reduction in the tax base of states. This reduction in the tax base has led to a large budget deficit of -6.4% in 2021. According to the same study, extreme poverty has increased by 3%, reaching 34% of the population.

It is therefore in this difficult context of increasing energy costs, costs of international transport logistics, and pandemic measures being put in place closing borders, all of which have led to generalized market price increases, that the Russo-Ukrainian conflict broke out in February 2022 continuing until the present day. A prolongation of the conflict could exacerbate the region's problems even further, with disastrous economic, food systems and political consequences.

Within this context, a sub-regional working group was established to lead on an analysis of the effects of the crisis

in Ukraine on the socioeconomic, food and nutritional situation in the ECOWAS region. The working group included representatives from FAO, WFP, ECOWAS, CILSS and UEMOA and supervise the work of technical experts of the concerned institutions.

II. OBJECTIVES

The assessment aims to provide evidence on the risks associated with the Russo-Ukrainian conflict in each of the 15 ECOWAS countries but also at the sub-regional level. On this basis, the specific objectives of the assessment study are to:

- Assess the risks associated with the Russian-Ukrainian conflict on agricultural production, trade and prices of agricultural products and the humanitarian risks that could arise in the 15 West African countries
- Identify and propose measures to mitigate the emerging food crisis in the region in order to better strengthen the resilience of the sub-region's agri-food systems.

III. RAPID ASSESSMENT METHODOLOGY

The assessment covered the 15 ECOWAS countries, namely: Benin, Burkina, Cabo Verde, Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Gambia, Niger, Nigeria, Senegal, Sierra Leone, and Togo. It used a combination of approaches to meet the objectives, including an extensive literature review and secondary data analysis.

The study targeted stakeholders from the public and professional sectors as well as the private sector and the community. In each country, WFP and FAO focal points collected both quantitative and qualitative data from April 25 to May 10, 2022, through direct semi-structured interviews. Data was collected using specific tools, including interview guides and data collection forms, from the ministries in charge of agriculture, trade, and finance for the public sector. The qualitative component of the questionnaire targeted private sector actors and civil society organizations to gather their experiences with the difficulties experienced in their respective sectors because of the crisis and their recommendations for addressing the situation. A triangulation was made between these different sources of data to better understand the potential risks of the Russian-Ukrainian crisis on the region.



Food Availability	Macroeconomic	Development & Humanitarian
<ul style="list-style-type: none"> Agricultural inputs, supply chain and access challenges. 	<ul style="list-style-type: none"> Energy crisis. 	<ul style="list-style-type: none"> Food security crisis.
<ul style="list-style-type: none"> Trade barriers, export bans. 	<ul style="list-style-type: none"> Economic and political instability. 	<ul style="list-style-type: none"> Increased population displacement.
<ul style="list-style-type: none"> Supply chain: ports, roads, storage. 	<ul style="list-style-type: none"> Growing debt. 	<ul style="list-style-type: none"> Risk of reduced funding availability for another crisis across the globe.



IV. KEY ASSESSMENT FINDINGS

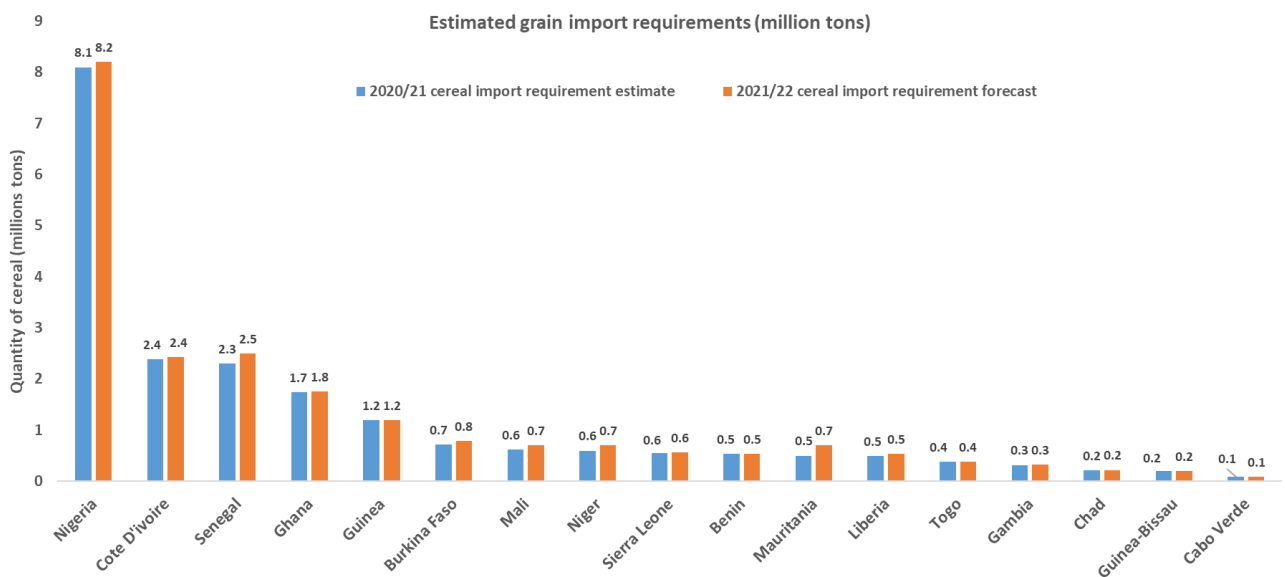
The assessment showed that the dependence of ECOWAS countries on the two countries in conflict makes them even more vulnerable to external fluctuations and threatens the socio-political environment.

ECOWAS is expected to import at least 22 million tons of cereals in 2022, a 5% increase over 2021

Cereal import requirements are estimated at about 22 million for West Africa and are up from last year. Wheat

imports for 2021/2022 are projected at 8.6 million tons and carryover stocks are estimated at 800 thousand to 1 million tons, or 9 to 12% of import requirements. 46% of wheat flour comes from the Black Sea region, mainly Russia and Ukraine. Some countries are particularly dependent because the share of wheat imports from Russia represents a very high share of total imports. These are Mauritania (80%), Cameroon and Benin (68%), Senegal (52%) and Togo (45%).

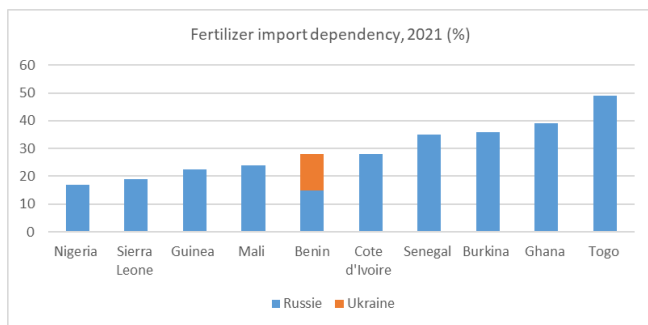
Graph 1: Estimated Grain Import Requirements



Source: FAO

Although ECOWAS countries use less fertilizer than those in Europe or Asia, they remain dependent on imports from Russia and Ukraine. Russia supplied more than 50 percent of potash imports to Côte d'Ivoire, Mali, Niger, Senegal, and Sierra Leone. It is estimated that the region will face a fertilizer deficit of between 1.2 and 1.5 million tons, or between 10 and 20 million tons of grain equivalent. In other words, the region could experience a loss of cereal production of about a quarter of the production recorded in 2021 (73 million tons).

Graph 2: Dependence on fertilizer imports from Ukraine and Russia



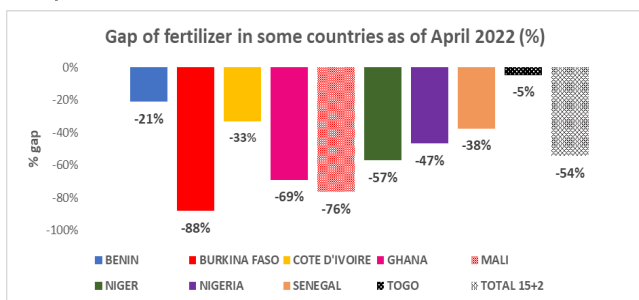
Source: ECOWAS FAO WFP assessment on the impact of the crisis in Ukraine-April 2022

INCREASED RISK OF FERTILIZER SHORTAGES

The requests of the countries having provided data and the situation of the international market of fertilizers and availability, the main proposals for the valuation of the production capacities and availability of supply of existing fertilizers were made by the ENGRAIS/USAID Project. In West Africa and the Sahel, only 46% of fertilizer needs were covered as of April 30, 2022. In the very short term, the countries that are about to be the most affected by the shortage of fertilizer include Burkina Faso, Ghana and Mali.

The graph 3 below shows the gap between the demand for fertilizers in the 2022 agricultural campaign and current availability (as of April 2022). The results show that fertilizer needs are not fully covered, as the reported available stocks are far below the estimated needs in all countries. The deficit varies between -5% (Togo) to -88% (Burkina Faso).

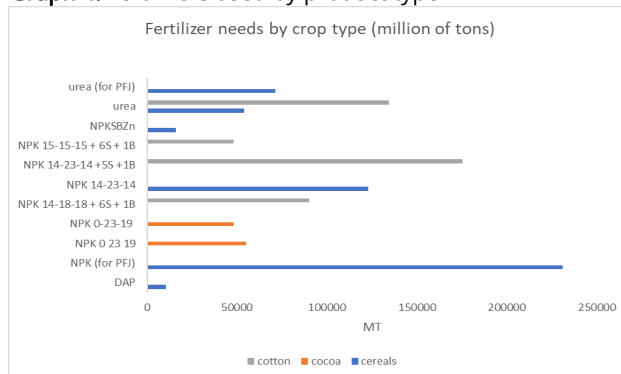
Graph 3: Fertilizer deficit per country



Source: ECOWAS FAO WFP assessment on the impact of the crisis in Ukraine-April 2022

The graph below illustrates the relative importance of the types of fertilizers used in the subregion. Some agricultural products are dependent on certain types of fertilizer. For example, cereal crops are heavily dependent on NPK fertilizer for PFJ (Planting for Food and Jobs programme), while cocoa uses mainly NPK 0-23-19.

Graph 4: Fertilizers used by product type



Source: ECOWAS FAO WFP assessment on the impact of the crisis in Ukraine-April 2022

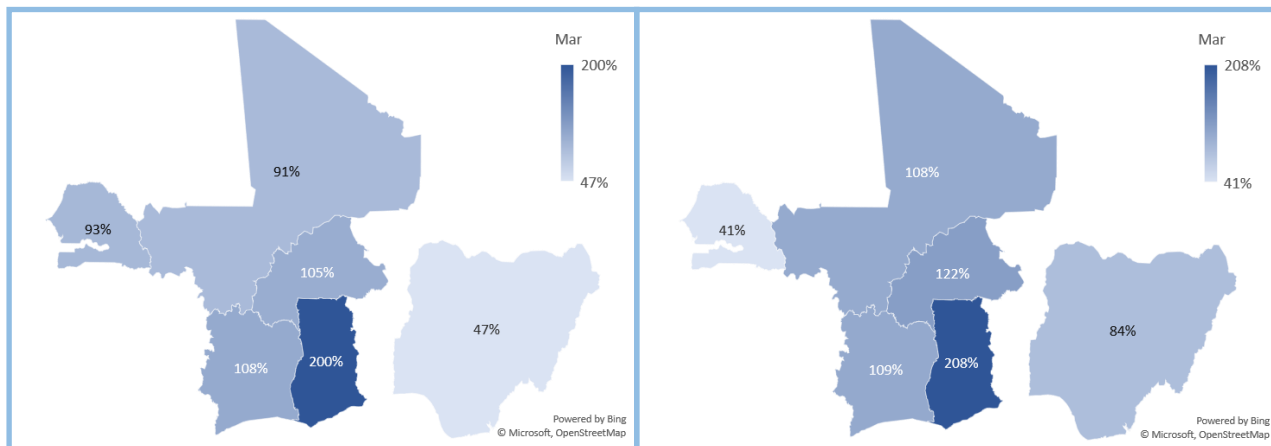
Shortage of certain types of fertilizers have impacted greatly their market price. Urea prices are still 2.5 times more expensive than its average price between 2016 and 2020 (USD 800 per ton against USD 300 over the previous period).

In Burkina Faso, the 50 kg bag of fertilizer varies between 30,000 FCFA and 35,000 FCFA. Burkinabé farmers have started using Urea from Nigeria, which recently entered the Burkina Faso market at a price of 28,000 FCFA per 50 kg bag. In Ghana, urea is becoming scarce where the use of ammonium sulphate has been considered as a substitute for this fertilizer. The Ghanaian Ministry of Agriculture has released approved subsidized input prices for the 2022 planting season.

The same applies to the prices of phosphate fertilizers (DAP, MAP, TSP, NPK) which remain expensive and difficult to find. For example, Côte d'Ivoire, which is the leading cocoa-producing country, has seen a variation in the price of NPK 0-23-19, which has gone from 14,000 FCFA per 50kg bag to 25,000 FCFA (+79). Urea doubled from 15,000 FCFA to 30,000 FCFA.

Potash is in short supply because ECOWAS is largely dependent on Russia and Belarus (20 to 50% depending on the country).

Map 1: Annual urea price variation March 2021 vs March 2022 (left) and compared to 5 years average (right)



Source: Africa Fertilizer

In some countries in the region, supply constraints have been identified. An example of this is Mali where about 100,000 tons was blocked at the Côte d'Ivoire and Senegal border (Africa Fertilizer, January 2022).

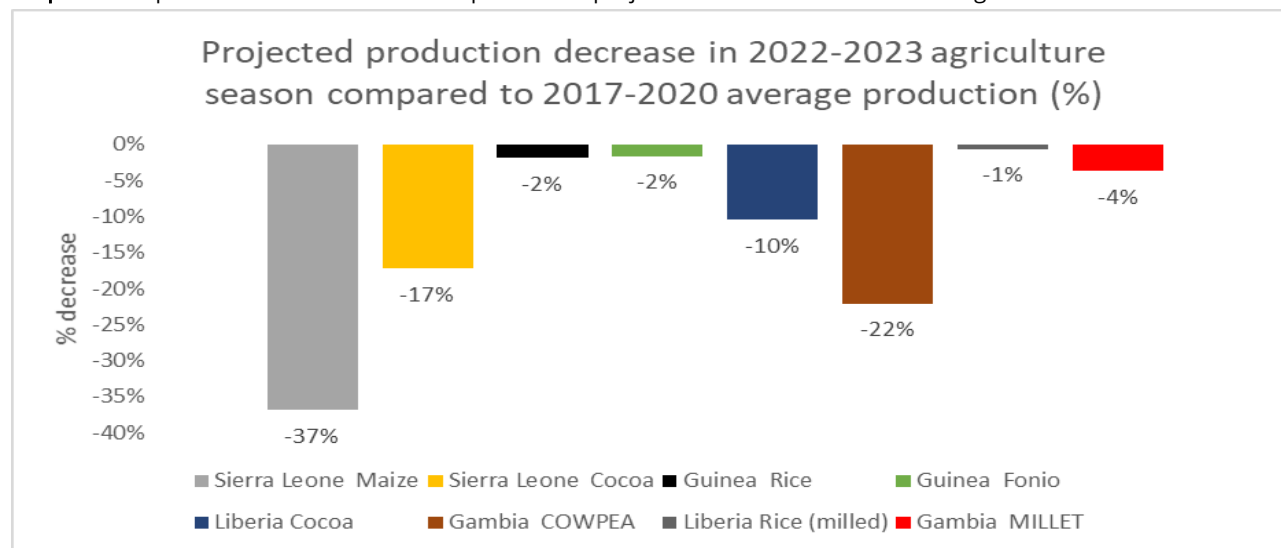
Additionally, fertilizer costs for cotton will also continue which will impact tax revenues of cotton-exporting countries (Burkina Faso, Côte d'Ivoire, Mali, Senegal).

If an adequate supply of these fertilizer categories is not assured, the immediate consequence would be a larger production deficit for the crops concerned. It is therefore expected that the elevated risk of reduced harvests will further drive-up food prices in our region.

On average the region is projected to experience 20% decline in agricultural production in 2022 compared to the 2017-2020 averages.

According to ECOWAS, total cereal production (maize, rice, millet, sorghum, fonio and wheat) expected in the Sahel and West African countries for the 2021/2022 agricultural season is around 73.3 million tons. This production is down by 2% compared to last year for all countries. In the Sahel, the cereal production has decreased by 11% compared to the five year average. The graph 5 show that projected agriculture production could decrease in some countries and this decline impact both food and cash crops.

Graph 5: Comparison of the 2022 and 2023 production projection with the 2017-2020 average



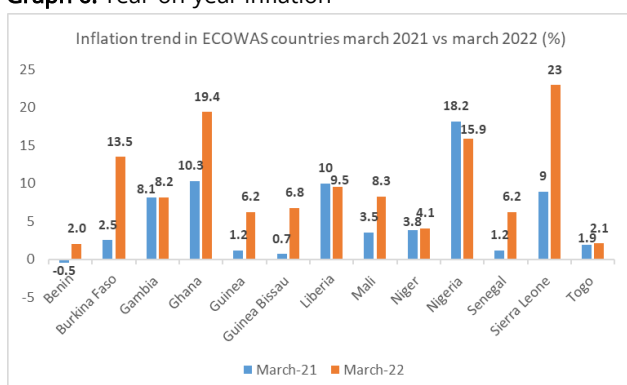
Source: ECOWAS FAO WFP assessment on the impact of the crisis in Ukraine-April 2022

The shortage of fertilizer could lead to a production decrease of 10 to 20 millions tons equivalent to almost 20% of 2021-2022 cereal production. These deficits are linked to several pre-existing factors but will be aggravated by the shortage of fertilizers induced by the conflict in Ukraine.

INFLATION AND CURRENCY DEPRECIATION

High inflation in Nigeria and the restricting measures on food exports from Nigeria, Benin, Burkina, and Mali are having a very negative impact on Niger, which has just experienced one of the worst agricultural seasons since 2005. As a result, food prices are extremely high. The FAO Food Price Index climbed 12.6% in March 2022 compared to February 2022 and reached its highest level since its inception in 1990. This increase is mainly due to the record levels reached by the increase in the sub-indices of all food products, namely vegetable oils, cereals, meat, sugar, and dairy products. Current inflation is closely linked to food inflation with the increase in food prices. Inflation is contributing to the erosion of household purchasing power, deteriorating the terms of trade, and affecting all socio-economic categories.

Graph 6: Year-on-year inflation



Source: ECOWAS FAO WFP assessment on the impact of the crisis in Ukraine-April 2022

Looking at the evolution of exchange rates of major currencies in the region with the U.S. dollar, compared to the average levels of the previous year, several currencies have depreciated. The Nigerian Naira (NGN) at the Bureau de Change (BDC) level depreciated further (-14%). Other smaller but significant depreciations at the interbank level concerned the Sierra Leonean Leone (SLL) (-9%), the CFA francs of BCEAO (XOF) and the Cape Verdean escudo (CVE), which are pegged to the euro (-5%). However, during the same period, the Liberian dollar (LRD) and the Guinean franc (GNF) appreciated.

Compared to the average for the previous five years, all other currencies are below their average value, except for the GNF, which appreciated slightly. The largest depreciations were in the SLL, the Ghanaian cedi (GHS), and the NGN (interbank and bureau de change rates).

INCREASED RISK OF ANOTHER DEBT CRISIS MORE SEVERE THAN THAT OF THE 70S AND 80S

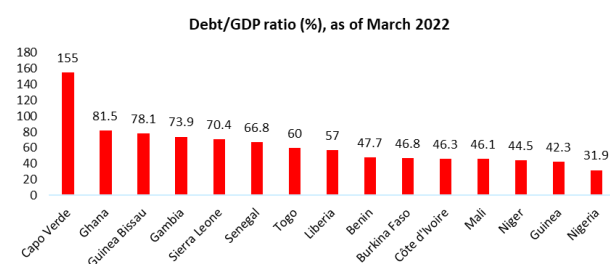
At the macroeconomic level, the budget deficit in the

subregion widened in 2020, mainly because of spending related to the effects of COVID 19, which led to a shortfall in revenue, a shrinking tax base due to the economic contraction, and a decline in imports and exports. One of the measures implemented by countries to cope with public spending has been the use of debt, which has had economic and political repercussions in the subregion.



The graph below illustrates the level of indebtedness of countries in the region. Countries have had to borrow heavily in order to cope with the consequences of the COVID 19 pandemic. According to the ECA report on "The Future 2021 of ECA and IMF Data, Regional Economic Outlook for Sub-Saharan Africa, April 2021", some ECOWAS countries including Cabo Verde, Ghana, Gambia, Sierra Leone have even been classified as high debt burden countries.

Graph 7: Debt/GDP ratio as of March 2022



Source: Regional Economic Outlook for Sub-Saharan Africa, April 2021, ECA, The Future 2021 of ECA and IMF Data

In Cabo Verde, Ghana, Guinea Bissau, The Gambia and Sierra Leone, the debt to GDP ratio exceeds the 70% ceiling defined in the West Africa Economic and Monetary Union (WAEMU) convergence pact.

WIDESPREAD INCREASE IN THE PRICE OF BASIC FOODS

SUPPLY VERSUS DEMAND

The regional cereal supply is particularly low this year compared to last year. West Africa in March 2022 achieved total cereal production (maize, rice, millet, sorghum, fonio and wheat) of 73 million tones for the 2021-2022 campaign, i.e., a decrease of 2.2% compared to the previous campaign. It varies according to the basins and speculations. Indeed, imported cereals, particularly rice and wheat, are currently the most available compared to local cereals.

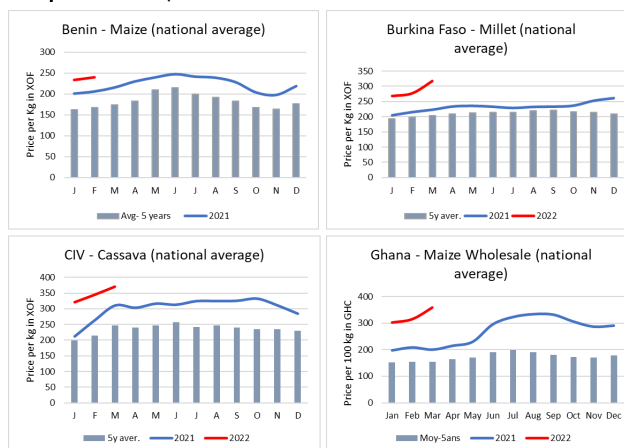
In the eastern basin, agricultural production was relatively low (-4%). However, it was catastrophic in Niger (-39%) compared to the 5-year average, but relatively good in Benin (+6%) and Nigeria (+2%). This basin includes four areas of food insecurity that are disrupting the functioning of the markets: the Liptako-Gourma area (West Niger, North Benin), the central zone of Nigeria, South Niger, and the Lake Chad area. This makes the eastern basin the one most affected by civil insecurity. The high inflation in Nigeria and the measures restricting the exit of food from Nigeria, Benin, Burkina, and Mali are having a very negative impact on Niger, which has just had one of the worst agricultural campaigns since 2005. As a result, food prices are extremely high.

In the Central Basin, local cereal supply is very low because cereal production has fallen by about 15% for Mali and 10% for Burkina Faso compared to the previous season. The measures taken by the countries (Burkina, Benin, Mali, and Côte d'Ivoire) to restrict grain exports have completely disrupted cross-border flows. This has made it impossible to regulate supply with the usual flows from Ghana and Côte d'Ivoire. Internal flows are also disrupted because of the civil unrest in Mali and Burkina (about 2 million IDPs for these two countries). The embargo on Mali has aggravated the situation. Demand is particularly high causing some shortage for millet (-26%), sorghum (-24%), and maize (-1%). Demand for maize is in high demand by the brewery and poultry industries, whose numbers are growing rapidly. Ghana (a Basin country that has announced good production) is still affected by inflation and the high cost of living.

Local cereal prices have reached new highs in several countries in the subregion, supported by below-average market availability and conflict-related market disruption. These price increases compared to the five-year average are +43% for maize, +34% for millet, 27% for sorghum and 20% for rice. The largest price increases were observed in Burkina, Chad, Sierra Leone, Liberia, Ghana, Togo, Benin,

and Nigeria.

Graph 8: Food prices evolution in some countries



Source: WFP monitoring price data

The average of the last 5 years' prices is compared to the average prices of each product in 2021 and the 2022 first quarter. Price levels in the first quarter of 2022 are higher than the average of the last five years, but also above last year's prices. In some countries, for some products, an acceleration of price increases can be observed. The prices of the first quarter exceed by far in some countries the prices recorded during the peak of the lean season.

GRAIN PRICES

Grain price levels are particularly high this year. Compared to the average of the last 5 years for the same periods, prices are up **33 to 70% during the month of March 2022 against the 23 to 27%** increase observed last November at harvest time (+50 percentage points). Price increases are notable for all cereals. Local cereals are the most affected, particularly maize, which, despite relatively stable regional production, has been the most affected by the strong household demand for sorghum and millet, the cessation of cross-border flows, the retention of stocks pending intentional purchases, and breweries, poultry farms, and livestock feed manufacturing industries.

The price increases for millet and sorghum are essentially due to the significant drop in regional production because of rainfall problems and civil insecurity, which has prevented some areas from cultivating this year. Reduction in production is the result of declines recorded in the Sahelian countries of around 16% and 11% respectively compared to the previous campaign and the average of the last five years. The most pronounced declines compared to the last season are observed in Niger (-37.3%), Mali (-15%), Burkina Faso (-10%) and Chad (-9.1%). According to the basins, as mentioned above, the eastern basin is the one most affected by the price increase, followed by the central basin. In the western basin, the increase was relatively more moderate overall. However,

if we go down to the country level, the countries with the most spectacular increases are **Nigeria, Sierra Leone (62%), Togo (48%), Liberia, Mali, Burkina Faso, Benin, and Niger**. These are obviously relative price changes compared to their average levels over the past 5 years.

TUBER MARKET SITUATION

Tuber production was generally good for all crops with 203.8 million tons, up 5.4% compared to last year and 11% compared to the five-year average, which, unlike cereals, contributed to ensuring availability on the markets, except for sweet potatoes, which experienced a slight decline compared to the previous season's production.

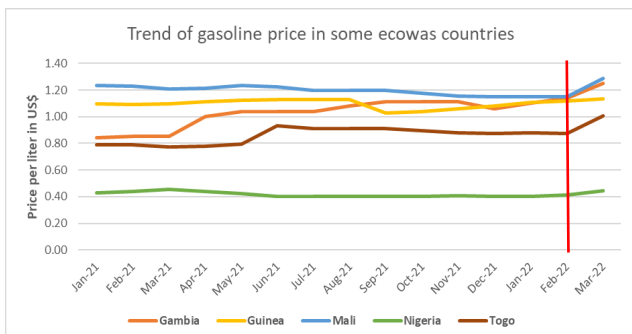
However, due to the general inflation in production and transport factors in the main tuber-producing countries, namely **Nigeria, Ghana, Côte d'Ivoire and Benin**, prices remained high mainly for **yam**, which is in demand in **Sahelian countries; cassava**, which is mainly processed into **Gari and Attiéké**, and is also in high demand in **Sahelian countries**.

The increase in the price for cassava ranges from 30 to 80 percent. Sierra Leone recorded the highest increase (73%). The increase in the price of sweet potato fluctuated between 60% and 80%. The highest price increase is recorded in The Gambia (78%). The price increase for yam ranged from 30% to 60%, with the highest increase observed in Ghana.

THE INCREASE IN THE PRICE OF HYDROCARBONS

The world is facing an inflationary crisis due to the rising costs of raw materials, fossil fuels, chemical inputs, and logistical transport (cf FAO food Price index). Fluctuations in world oil prices are affecting the economies of West African countries and leading to systematic increases in the price of raw materials and food. Already in March, hydrocarbon prices have begun to increase at an accelerated rate, as shown in the graph below in countries such as Mali, Niger, Togo, Nigeria, and Ghana.

Graph 9: Trend in gasoline price from January 2021 to March 2022



Source: ECOWAS FAO WFP assessment on the impact of the crisis in Ukraine-April 2022

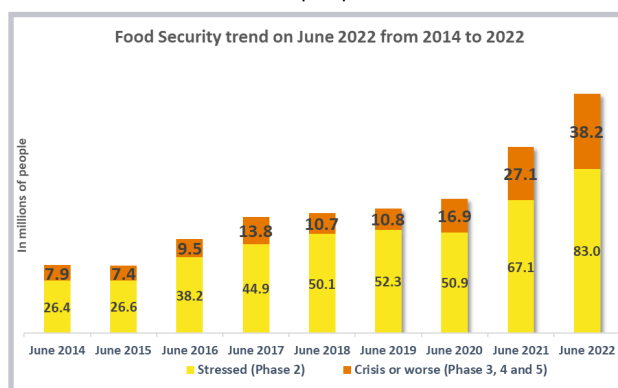
The combined impact of rising crude oil and freight is driving up transportation costs in the region. The increase in the cost of transport is reflected in the price of food

since the cost of transport represents on average 15 to 20% of the total cost of food in the region. The combined effect of the Ukrainian crisis and the high cost of transport will further fuel the increase in food prices. For example, in Cabo Verde, the cost of transport has increased by 60%.

WORSENING FOOD INSECURITY IN THE SUB-REGION

The findings of the Cadre Harmonisé on Food Security (March-May 2022) indicate that the food and nutrition situation may worsen during the projected period (June-August 2022) marked by the food gap for countries in the northern part of the region. The number of food insecure areas is increasing and expanding to new regions, resulting in high food insecurity rates. Compared to the 2021 lean season, severe food insecurity rates (corresponding to the crisis to worst phases) increase from 27.1% to 38.2%, an increase of 70%. It is important to note that these projections have not considered the effects of the Ukrainian crisis, which means that the proportions of food insecurity could be very alarming during the 2022 lean season.

Graph 10: Food security trend in ECOWAS countries from 2014 to 2022 (in millions of people)



Source: Cadre Harmonisé - CILSS and TC-CH data

IMPORTANT BARRIERS TO TRADE

Road hassles continue to undermine the flow of the regional markets. This jeopardizes the actions taken by regional political authorities building on cross-border trade fluidity for agricultural products to reduce food insecurity. ECOWAS and its partners, in collaboration with stakeholders, are monitoring harassment on the main international corridors. This includes the number of checkpoints (police, customs, gendarmerie, and others) on the routes, the illegal amounts paid by transporters and the time lost by transporters due to these checkpoints. Even if these checkpoints are very important in a context of insecurity or to control the exit of food products, they may have negative impact on cross-border flows and reduce the exchanges with the rest of the world and weakens the regional integration.

There is an average of **59 checkpoints per corridor of 1.152 km**. This corresponds to **4 to 13 checkpoints per 100 km**. **Illicit payments range from US\$205 to US\$1435 per trip**. There is an increase of 7 to 8% between 2021 and 2020. This also results in an estimated time loss of 74 to 291 minutes per trip.

V. RECOMMENDATIONS

TO IMPROVE ACCESS TO FOOD AND ENSURE MARKETS FUNCTION WELL:

Given the extraordinary scale of the situation, it is important to take both short-term measures to address the emergency as well as medium- and long-term ones.

SHORT TERM MEASURES:

- Removing the barriers to trade and stop export bans as we should reduce the pressure on markets by increasing supplies of food and fertilizers.
- Supporting local food production, facilitating smallholders' access to fertilizers produced and stocked locally.
- Encouraging low-tech irrigation schemes in dry and rural areas, especially in the Sahel, as well as large-scale irrigation systems to help decrease smallholders' dependency on rains.
- Promoting the increase of existing production capacities of private sector companies that are producing fertilizers in the region.
- Re-directing immediately some of the resources to scale up support to the most vulnerable households (food insecure and/or internally displaced people) through the expansion of social protection systems to help mitigate the impacts of rising food and oil prices.

MEDIUM-LONGER-TERM MEASURES:

- Deliberately initiating changes in dietary habits to reduce imports of foods that are produced far away from our region. This should start as early as school age when children benefit from school meals while at school.
- Shortening global supply chains by investing in regional and local production, transformation, and agro-processing capacities.
- Increasing investments into the agricultural sector and, at least, reaching the Malabo declaration target.
- Supporting the private sector in increasing food transformation and production of fertilizers locally and regionally.
- Promoting climate-smart agriculture and the use of organic fertilizers while supporting the development of local and regional value chains.

- Reinforcing national and regional stock food reserves to be more effective in responding to these shocks.
- Promoting regional integration and further leveraging the African Continental Free Trade Area.

TO GUARANTEE GOOD FOOD PRODUCTION

SHORT-TERM MEASURES:

- Subsidize and control the price of fertilizer and seed inputs
- Promote good agricultural practices to improve nutrient use, in particular the adoption of improved seeds by farmers
- Expand the use of fertilizer manufacturing plants in Nigeria and Senegal to their full capacity
- Increase smallholder farmers' access to fertilizer by improving communication about its availability and encouraging the release of local fertilizer stocks.
- Redirecting available financial resources to address urgent food issues.

MEDIUM-LONGER-TERM MEASURES:

- Encourage the development of regional fertilizer manufacturing plants to reduce dependence on imports
- Shorten the global food chain by investing in local production and processing.
- Consolidate regional and national fertilizer reserve stocks for use in the event of a shock.
- Build a strategic stock of staple food crops
- Diversify the food basket with perennial crops
- Develop the use of organic fertilizer inputs as a supplement where possible
- Build systems and capacity for large-scale use of organic inputs
- Shorten the global food chain by investing in local production and processing.
- Adopt a distribution mechanism of Hydrocarbon products that is effective, to curtail the cases of diversion of the petroleum products and running a regular functional refinery.



