





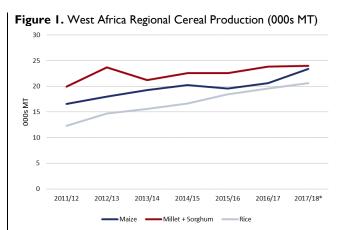
REGIONAL SUPPLY AND MARKET OUTLOOK

December 28, 2017

West Africa

KEY MESSAGES

- For the fourth consecutive year, aggregate regional cereal production (milled rice, maize, and millet/sorghum) is projected to increase during the 2017/18 marketing year (MY). This trend is supported by favorable agro-climatic conditions, increased area planted, improved seeds, and agricultural programs and policies. Above average regional production will contribute to filling local deficits (Figure 1-2). Rice and maize production have expanded, while millet and sorghum production have stagnated (Annex 1-4).
- West Africa is expected to have a gross marketable surplus of 2.2 million metric tons (MMT) of cereals. The region remains structurally-deficit with respect to rice,



Source: Authors' calculations based on National Crop Assessments/ CILSS data.

- despite growth in rice production and decreasing regional rice imports. Rice and wheat Imports will persist from well-supplied international markets (Annex 5).
- During the second half of MY 2016/17, staple food prices unexpectedly increased across much of the central basin. This
 was driven by localized deficits and early depletion of stocks due to atypically high demand from Niger (normally be filled
 by Nigeria). At the beginning of MY 2017/18, staple food prices remain above the recent five-year average. The
 depreciation of local currencies across the region's coastal countries and resulting impacts on the cost of imports also
 contribute to higher prices. Staple food prices will be above average in most countries throughout MY 2017/18, except
 in Chad. Nigeria's macroeconomic situation has slowly improved, but prices remain elevated and inflation remains high.
- Pastoral conditions are characterized by below average forage and water availability in the major livestock producing countries (Senegal, Mauritania, Mali, Burkina Faso, Niger, and Chad). The pastoral lean season is expected to begin early.
 High projected cereal prices will contribute to relatively low livestock to cereal terms of trade (ToT).
- Cereal harvests in the Greater Lake Chad basin are expected to be below average, with major deficits anticipated in the typically surplus-producing Far North Region of Cameroon. Several markets remain closed or function at reduced levels across the basin. Prices are expected to be elevated. Many households will remain in need of humanitarian assistance through the 2017/18 lean season (Annex 6).
- Regional institutional procurement is expected to take place at normal levels across the region, except in Niger where
 the planned institutional purchase quantities will be above average. Local and regional procurement may be feasible,
 primarily in the Central Basin, but could drive projected prices higher.

ABOUT THIS REPORT

The Famine Early Warning Systems Network (FEWS NET) monitors trends in staple food supply and price trends in countries at risk of food insecurity. The Regional Supply and Market Outlook report provides a summary of regional staple food availability, surpluses and deficits during the current marketing year, projected price behavior, implications for local and regional commodity procurement, and essential market monitoring indicators. FEWS NET gratefully acknowledges partner organizations, national ministries of agriculture, national market information systems, regional organizations, and others for their assistance in providing the harvest estimates, commodity balance sheets, as well as trade and price data used in this report.



CURRENT SITUATION

Regional Production for 2017/18

- Despite a good start of season and generally average seasonal rainfall levels, many areas across the Sahel received below average rainfall during the second half of rainy season (Figure 3-4). Preliminary estimates from the technical consultation of the West Africa regional system for the prevention and management of food crises (Dispositif régional de prévention et de gestion des crises alimentaires, PREGEC) show aggregate cereal production (including milled rice, maize, and millet/sorghum) at 68.3 MMT for 2017/18, six percent above 2016/17, and 14 percent above average.
- Cereal production increased compared to average in all three of the region's trade basins (Table 1). Rice and maize production is well above average, while millet and sorghum production is stagnant at average levels in the region, except in the northern part of the Western basin. This trend is mainly driven by the decrease in the share of area devoted to millet production, as farmers have switched to higher yielding and more profitable crops. At the national level, most of the region's major cereal producing countries (Nigeria, Mali, Niger, Côte d'Ivoire, Ghana, and Guinea) have reported above average harvests, that are comparable to those of the previous year. In contrast, harvests in Burkina Faso and Chad are expected to be near average. Elsewhere, minor cereal producing and structurally-deficit Mauritania, Guinea-Bissau, and The Gambia expect below average harvests. Cape Verde, which produces only five percent of its requirements (about 86,000 MT on average), reported nation-wide crop failure. In the Far North region in Cameroon (neighboring the Eastern basin and Lake Chad areas), production is projected to be well below the previous year and the average due to local dry spells at critical periods of the growing season and the resulting weaker yields.
- In addition to cereals, cash crop production is generally favorable. Groundnut production is estimated at 8.3

Figure 2. West Africa Regional Gross Commodity Balance (000s MT)

10,000
8,000
4,000
2,000
2,000

■ 2016/17 ■ 2017/18* ■ 2012/13-2016/17 Average

Source: Authors' calculations based on National/CILSS and World Bank data.

Millet + Sorghum

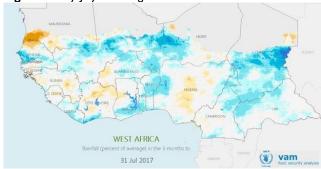
Figure 3. May-July 2017 regional rainfall

Maize

-2,000

-4,000

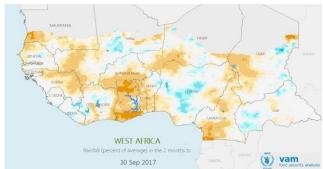
-6,000



Note: May to July 2017 was categorized as Phase 1: Overall good rainfall conditions spread across the region as a whole.

Source: WFP (2017).

Figure 4. August-September 2017 regional rainfall



Note: Late July to September 2017 was categorized as Phase 2: drier than average conditions spread across many areas of the region. However, floods and landslides affected Sierra Leone and Nigeria.

Source: WFP (2017).

MMT, up by 8 percent compared to the previous year, but similar to average. Cowpea production is estimated at 7.7 MMT which is stable compared to last year, but 27 percent above average. Tuber (cassava and yam) production has expanded substantially compared to earlier years, up by 7 to 12 percent compared to MY 2016/17 and 21 to 23 percent up compared to average, further reinforcing regional staple food supplies.

Regional market trends and anomalies

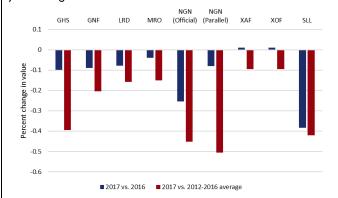
- Markets across the region are sufficiently supplied with staple foods. PREGEC-estimated overall regional cereal opening stocks for MY 2017/18 are about 3 MMT (1.2 MMT of rice, 331,000 MT of wheat, and 1.4 MT of coarse grains), slightly below last year but substantially above average. Nevertheless, in the central basin, producers and traders are retaining stocks due to uncertainty and speculation introduced by the early cessation of rains.
- Trade flows remain disrupted in conflict stricken Northern and Central Mali and the Greater Lake Chad basin. Chad also has suspended trade with Libya and the Central African Republic. In Northeast Nigeria, market functioning remains below average due to the persisting conflict. Most semi-urban markets in east central Borno State and along borders with neighboring countries are operating at minimal levels and many marketing routes remain inaccessible. However, most FEWS NET-monitored urban and semi-urban markets remain functional at near normal capacity due to an influx of population (IDPs, returnees, and host communities) and increased commodity flows during post-harvest period, coupled with intense security measures, particularly on the urban markets of Maiduguri, Biu (Borno State); Damaturu, Potiskum (Yobe state); Yola, Mubi (Adamawa state). Rural markets that are geographically remote from the

Table 1. 2017/18 Cereal production levels by trade basin compared to the 2012-2016 average

Trade Basin	Total cereals	Millet and sorghum	Maize and milled rice
Western (North)	A	•	A
Western (South)	A	•	A
Central	A	•	A
Eastern	A	•	A
Regional	A	>	A

Note: ▶denotes less than or equal to 10 percent change; ▲denotes greater than 10 percent increase; ▼denotes greater than 10 percent decrease.

Source: Authors' calculations based on National/CILSS data. **Figure 5.** Regional currency values compared to 2016 and five-year average



Source: Authors' calculations based on Oanda (official rates) and FEWS NET-Nigeria (Bureau de Change rates).

intense conflict zones in Adamawa and Yobe States are also operating at close to normal levels (**Annex 6**). Overall, the levels of market activity have improved since October 2016 in Gamboru, Ngala, Benisheikh, Monguno, Askira Uba, Dikwa (Borno state), Michika, Gombi, Song, Gulak (Adamawa state), Damagum, Buni Yadi, Geidam, and Babangida (Yobe state). Activity along key marketing corridors have improved in some areas as well, including Maiduguri to Monguno and to Konduga; Damaturu to Biu; Yolato Mubi; Mubi to Michika; and Damaturu to Geidam. In contrast, the level of market activity along the border between Northeast Nigeria and Far North Cameroon has deteriorated over the past year. Similarly, other markets in the zone remain inaccessible and are not functional.

- Following the recession in 2016 and early 2017, Nigeria's macroeconomic situation has started to show signs of improvement, with modest GDP growth during the third quarter of 2017, the first time since January 2016 (FEWS NET/WFP 2017). In addition, inflation has slowed, but remains elevated. The value of the Naira (NGN) remains over 40 percent below average vis-à-vis US Dollar (USD) at both official and parallel market rates. Elsewhere, regional currencies further depreciated vis-à-vis USD in 2017 and are substantially lower than their average levels due to continuing economic slowdown from lower global oil and mineral export prices, with the exception of both Western and Central African CFA francs (XOF and XAF) (Figure 5).
- The pastoral situation in the Sahel is characterized by below-average pasture and water availability due to long dry spells during the 2017/18 rainy season, especially in the agro-pastoral zones of Mauritania, Northern Senegal, and Northeastern Chad; and to a lesser extent in the Northern Lake Faguibine, Western Sahel, and Gourma regions of Mali, Sahel region of Burkina Faso; and Diffa and Tahoua regions of Niger (Figure 6-7). Livestock markets are in general well supplied. Trade levels remain marked by reduced demand due to Nigeria's (the region's largest livestock importer and consumer) macroeconomic situation and insecurity along key marketing corridors.

Figure 6. Areas affected by long dry spells and rainfall deficit in September 2017

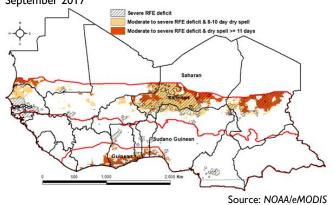
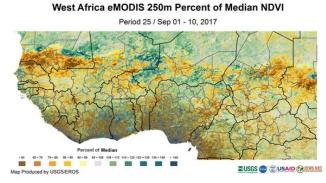


Figure 7. NDVI anomaly at the peak of vegetation development



Source: NOAA/eMODIS

Figure 8. Rice price levels in Nigeria compared to the previous

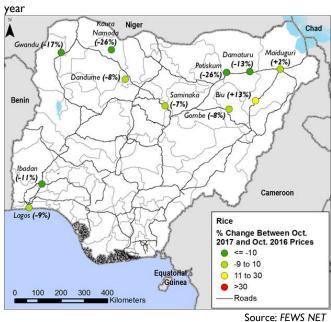
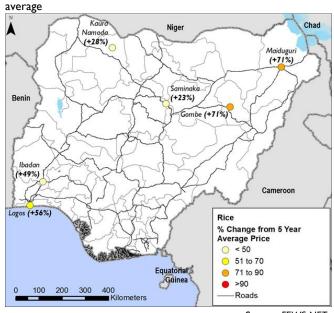


Figure 9. Rice price levels in Nigeria compared to the five-year



Source: FEWS NET

Figure 10. Percent change in millet prices compared to the five-year average

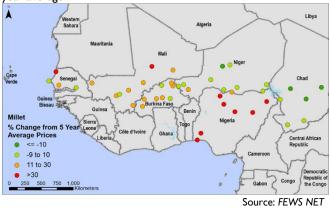
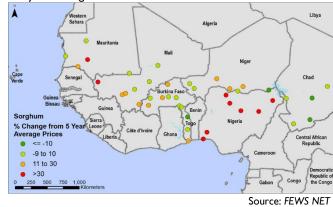


Figure 11. Percent change in sorghum prices compared to the five-year average



Current price trends and terms of trade

- Price trends vary considerably by marketing basin and by commodity. In Nigeria, cereal prices continued to decline during the post-harvest period, dropping below their respective 2016 levels. However, prices remain well above average across the country (Figure 8-9). In the Sahel, prices have declined less rapidly than usual at the end of the lean season and onset of MY 2017/18. While rice and maize prices are stable or below 2016 levels, millet and sorghum prices are elevated, except in Chad (Figure 10-11). This is reportedly due to the limited harvests in deficit zones, and limited release of stocks in face of public and private stocks' replenishments in surplus zones. For import-dependent coastal countries, prices are elevated on urban markets, which is driven by the depreciation of local currencies. Overall in the region with respect to the average, cash crop prices are generally more stable than cereals'.
- Regional cattle and small ruminant (sheep and goats) prices are in general stable or have declined compared to recent months given the prevailing low demand and trade levels. Only in Niger have prices increased in several markets, reportedly with the stability of the NGN increasing exports to Nigeria. Prices are generally below average in Chad, Mali, and Senegal. On the other hand, prices are stable to above-average in Mauritania, and are gradually stabilizing in Niger. Small ruminant to cereals ToT are below average in Mali, Niger, and Chad (Figure 12).

Source: Authors' calculations based on SAP (Mali), SIM-Bétail (Niger), and FEWS NET-Chad

Figure 13. Projected trade flow anomalies

Mauritania

Mali

Commodity

All grains

Livestock & cash crops

Millet

Maize

Rice

Wheat

Average flow size

Large

Average

Medium

Above average

Small

Below average

Source: FEWS NET

OUTLOOK

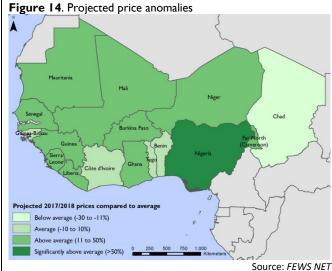
Regional commodity balances

- West Africa is expected to have a gross marketable surplus of 2.2 MMT of milled rice, maize, and millet and sorghum (Annex 1-4). This contrasts with the 585,000 MT surplus during the previous year and the 138,000 MT average deficit. As in a normal year, millet and sorghum production will not be sufficient to cover local requirements (Figure 2). The region remains structurally-deficit with respect to rice, despite steady growth in rice production and decreasing regional imports. Only Côte d'Ivoire and Mali have projected minor marketable rice surpluses. Maize is expected to record an aggregate marketable surplus, that will be higher than MY 2016/17. The region will also continue to import over 6.4 MMT of wheat grain from well supplied international markets (Annex 5), including about 4.3 MMT destined for Nigeria and a combined total of around 2.1 MMT destined for Senegal, Mauritania, Côte d'Ivoire, and Ghana.
- With respect to maize, the most important deficits expected will be in Niger. Nigeria maintains the region's largest sorghum and millet deficit. Substantial millet and sorghum deficits are also expected in typically surplus producing Burkina Faso due to slightly below average harvest performance. In addition, deficits will likely be higher than previous year and average in Chad, The Gambia, and Mauritania. Elsewhere, in the Far North region of Cameroon, deficits are atypically projected for all coarse grains, with implications for this areas capacity to export to the Eastern basin.

• The majority of regional cereal surpluses are expected to originate from the Central basin, which will remain the main source of regional trade flows destined for both the Eastern and Western basins (Figure 13). Trade in pulses and legumes in the region will remain dynamic, driven from major producing countries (Nigeria, Niger, and Burkina Faso). Planned institutional purchase quantities across most of the region are average and should have no major adverse market impacts if well distributed across time and space. However, the quantities planned for purchase by the Niger National Security Stock is higher than normal by almost a quarter, due to lower carryover stocks and the government's plan to reach more vulnerable population.

Regional market and price outlook

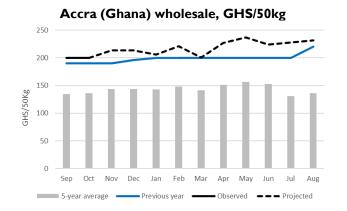
• Household stocks and market supplies will further increase as harvests continue throughout the region until early 2018. Prices will continue to decline seasonally, but will remain above average in several countries through the lean season (Figure 14). Imported and local rice prices are expected to remain above average in coastal countries. Maize prices are expected to be below last year and average levels in coastal countries, but slightly above average in the Sahel. Millet and sorghum prices, key staples in the Sahel, will be above average due to above average national deficits and above average demand for stock replenishment and for use as animal feed. Prices may start increasing earlier than normal in the Sahel,

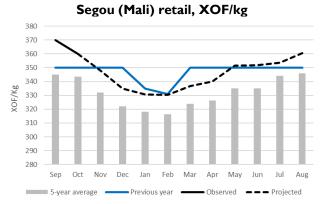


possibly around late February/March. In Nigeria, industrial grain demand (e.g., for poultry feed and food processing) will also influence demand and prices. Staple food prices will be highest in the Northeast, where food flows will remain restricted if insecurity and trade disruptions continue.

As for the pastoral situation, the limited forage and water availability are already under heavy pressure. This could lead to early transhumance (toward mostly coastal countries) and unusual livestock movements with the risk of conflicts in the transit corridors and host zones. An early pastoral lean season is anticipated in the Sahel, before the normal March/April period. At that time, there is expected to be a marked decrease in animal body conditions, while the supply of animals increases simultaneously – especially in the Western basin where there will be an excess supply. Cross-border trade volume will be significant, especially with new year's festivities and Ramadan in May, but overall demand will be below average. Thus, livestock prices will fall even further below average in some markets. And the increase in sheep prices, that is expected during the main June to August lean season because of *Tabaski* holiday, will not significantly improve the ToT, due to elevated grain prices. Cereal and livestock price projections on selected reference markets in the region are illustrated in the below figures (Figure 16-20).

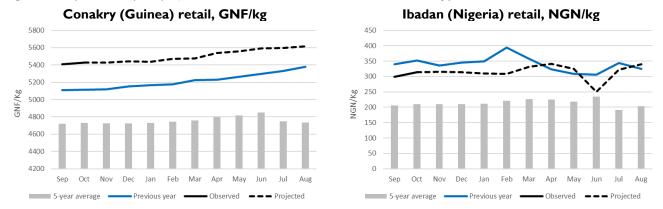
Figure 16. Local rice price projections in selected markets for the 2017/18 marketing year





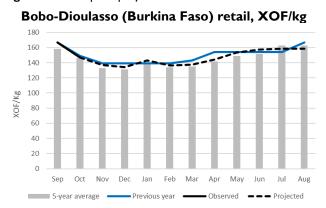
Source: Authors' estimates based on OMA and SRID/MOFA data (2017).

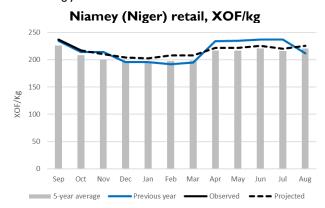
Figure 17. Imported rice projections in selected markets for the 2017/18 marketing year



Source: Authors' estimates based on Institut National de la Statistique and FEWS NET (2017) data.

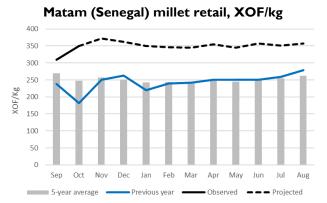
Figure 18 Maize price projections in selected markets for the 2017/18 marketing year

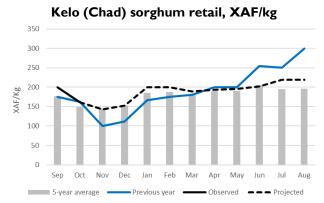




Source: Authors' estimates based on SIMA and SONAGESS (2017) data.

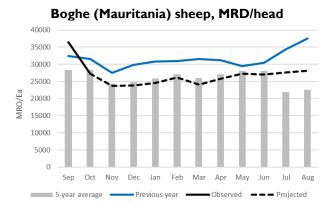
Figure 19 Sorghum and millet price projections in selected markets for the 2017/18 marketing year

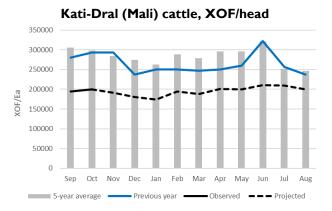




Source: Authors' estimates based on SIM/CSA and FEWS NET (2017) data.

Figure 20 Livestock price projections in selected markets for the 2017/18 marketing year





Source: Authors' estimates based on FEWS NET and SAP (2017) data.

FACTORS THAT MIGHT CHANGE THE OUTLOOK

Possible events over the next six months that could change the most-likely scenario.

Area	Event	Impact on market outcomes
	Actual 2017/18 cereal production levels are significantly lower than suggested by preliminary estimates	 Market supply levels will be lower than currently anticipated and households in rural areas will be less (more) market dependent. Much higher cereal prices than currently projected during the 2017/18 marketing year.
	Increase of maize and rice production further decrease of sorghum and millet production	Continuous upward trend in local cereal prices, especially in the Sahel.
All countries	Extended (in time and/or space) institutional purchases, particularly in countries lacking large exportable surpluses for the commodity purchased	Atypical institutional demand would likely push market prices to higher levels than currently anticipated.
	Significantly delayed start to the 2018 rainy season	 Traders might retain stocks as they would in a typical year in preparation for the new harvest, reducing market supplies during the peak of the agro-pastoral lean season. Market prices would rise to higher levels than projected. Livestock prices will continue to decrease due to worse animal body conditions.
	Armed conflict, political instability, localized violence.	 Disruption of market activities Localized price spikes
	Outdated per capita consumption norms	Given the growing maize grain quantities used for poultry feed in the region, maize's expected surpluses could be overestimated.

Area	Event	Impact on the market outcomes
Countries that rely heavily on imports from international markets (Mauritania, Senegal, Sierra Leone, Liberia, Cote d'Ivoire, Ghana, Benin, Nigeria, Gambia)	New domestic policies restricting imports Continued depreciation of local currencies against the USD	 Drastic reductions to imports from international markets. Traders increase regional market purchases. Reduced market supplies of imported products, which would put additional pressure on demand for locally produced commodities. Market prices would increase, for both imported and local products, to higher levels than currently anticipated in both affected countries, as well as neighboring countries where traders increase informal regional purchases. Reduction in imports from international markets. Traders increase regional cereal purchases. Market prices would increase, for both imported and local products, to higher levels than currently anticipated in both affected countries, as well as neighboring countries where traders increase regional purchases.
Mali, Nigeria, Chad, Niger, Burkina Faso, Central African Republic and neighboring countries	Worsening civil insecurity or political instability	 Increased number of IDPs and refugees in neighboring countries. Closure of borders of neighboring countries. Significant reduction of market functioning, decrease in flows, very low supplies in local markets. Very low grain flows from Nigeria to Niger, Chad and Far North Cameroon. Atypical price movements. Disruption of livestock trade. Reduced access to food by poor households in deficit areas. Severe deterioration of household livelihoods and food and nutrition security. Persistent and worsening levels of food insecurity in the Lake Chad basin, Central and Northern Mali.
Mauritania, Mali	Obstacles to the transhumance of livestock to Mali and Senegal	 Early deterioration of cattle body conditions. Significant deterioration in the price of livestock causing loss of income by pastoralist households. Reduced access to food by poor households in deficit areas that could experience premature a rise in prices - rising demand. Deterioration of household livelihoods and food and nutrition security. Possible conflicts around rare water and pasture areas.

MARKET MONITORING INDICATORS FOR THE 2017/18 MARKETING YEAR

The analysis presented in this report relies mostly on aggregate production and trade figures and price data, but does not consider in much detail anticipated sub-national anomalies. Therefore, a certain number of key indicators should be monitored over the remainder of the marketing year.

Indicator	Justification
Currency fluctuations	Levels of currencies throughout the region vis-à-vis the USD may influence import and export parity prices, especially for rice in coastal countries.
Final crop production estimates	Significant changes in 2017/18 crop production estimates compared to preliminary estimates could significantly change the supply outlook. Furthermore, poorly distributed sub-national production could negatively affect marketing and trader behavior.
Stock levels	Stock quantities (including their retention and release) affect market supply/demand variations and prices.
Staple price levels	Given expectations for market anomalies elevated prices over the coming months, the following areas should be monitored closely for atypical food security conditions:
	 Northeast Nigeria and neighboring areas of Chad, Niger, and Far North Cameroon. Mali's Western Sahel and North/Central. Mauritania's rainfed zone.
Consumption norms	The existing per capita consumption norms in the region need updates for more precise balance sheets.
Other cereal uses	To further enhance national and regional balance sheets, growing cereal demand quantities for poultry and fish production and feed should be regularly monitored and quantified.
Institutional purchases and humanitarian assistance	Institutional purchases (both in time and space) and humanitarian assistance (both cash and in-kind) could have an important impact on markets and prices.
Pastoral situation and livestock trade.	The pastoral situation and livestock prices should be monitored in the Sahel, as livestock is the main asset and livelihood for rural households, and also given the current critical state.
Civil insecurity	Market access and functioning should be observed in Northeast Nigeria and neighboring areas of Chad, Niger, and Far North Cameroon as well as Central and Northern Mali.
Nigeria's macroeconomic situation	Nigeria's last year recession, which was its worst in recent decades, has had strong national and regional impacts and the resulting direct and indirect effects should be continuously monitored.
Policy and economic developments in the region	Key policy, social, and macroeconomic events, at both national and international levels, could have significant regional market impacts.

Annex I. West Africa Total Cereal (maize, millet, sorghum, and rice) Supply Projections 2017/18 (MT)1

G	No.	2045/47	5-year Average (2012/13-	2017/18	% change over one	% change over 5-year	Change	Change 5- year
Country	ltem	2016/17	2016/17)	forecast	year	average	year	average
Benin	Harvest ²	1,456,367	1,284,473	1,666,527	14%	30%	A	A
Benin	Requirements ³	1,050,544	994,810	1,079,684	3%	9%		
Benin	Self-sufficiency	139%	129%	154%	11%	20%		
Burkina Faso	Harvest	3,757,304	3,789,034	3,750,449	0%	-1%		
Burkina Faso	Requirements	3,473,933	3,280,037	3,575,112	3%	9%		
Burkina Faso	Self-sufficiency	108%	116%	105%	-3%	-9%		
Cape Verde	Harvest	4,796	4,677	3	-100%	-100%	▼	•
Cape Verde	Requirements	88,452	86,347	89,586	1%	4%		
Cape Verde	Self-sufficiency	5%	5%	0%	-100%	-100%		
Chad	Harvest	2,363,820	2,273,107	2,345,742	-1%	3%		
Chad	Requirements	2,249,900	2,115,962	2,318,303	3%	10%		
Chad	Self-sufficiency	105%	107%	101%	-4%	-6%	•	•
Côte d'Ivoire	Harvest	2,257,331	2,116,165	2,436,234	8%	15%		
Côte d'Ivoire	Requirements	1,749,240	1,664,598	1,793,232	3%	8%	•	•
Côte d'Ivoire	Self-sufficiency	129%	127%	136%	5%	7%		
Gambia	Harvest	132,163	156,071	97,809	-26%	-37%	•	▼
Gambia	Requirements	334,059	314,638	344,076	3%	9%	•	>
Gambia	Self-sufficiency	40%	50%	28%	-28%	-43%	•	▼
Ghana	Harvest	2,017,937	2,013,205	2,251,190	12%	12%	A	A
Ghana	Requirements	2,508,558	2,400,023	2,563,368	2%	7%	•	
Ghana	Self-sufficiency	80%	84%	88%	9%	5%	•	>
Guinea	Harvest	2,069,355	1,915,095	2,208,987	7%	15%	•	A
Guinea	Requirements	1,602,342	1,525,774	1,644,678	3%	8%	•	>
Guinea	Self-sufficiency	129%	126%	134%	4%	7%	•	•
Guinea Bissau	Harvest	134,068	133,350	127,345	-5%	-5%		•
Guinea Bissau	Requirements	310,787	295,739	318,469	2%	8%	•	•
Guinea Bissau	Self-sufficiency	43%	45%	40%	-7%	-11%	•	•
Liberia	Harvest	184,348	160,924	163,686	-11%	2%	▼	
Liberia	Requirements	586,768	558,557	601,896	3%	8%	•	•
Liberia	Self-sufficiency	31%	29%	27%	-13%	-6%	▼	•
Mali	Harvest	6,639,502	5,416,737	7,153,781	8%	32%	•	
Mali	Requirements	3,801,110	3,585,262	3,917,140	3%	9%		<u> </u>
Mali	Self-sufficiency	175%	151%	183%	5%	21%	•	<u> </u>
Mauritania	Harvest	195,674	200,623	175,954	-10%	-12%	▼	
Mauritania	Requirements	318,240	301,154	326,880	3%	9%	•	•
Mauritania	Self-sufficiency	61%	67%	54%	-12%	-19%	_	_
Niger	Harvest	4,943,075	4,370,179	4,949,830	0%	13%		<u>▼</u>
Niger	Requirements							
_	Self-sufficiency	4,832,325	4,482,969	5,019,975	4%	12%		
Niger	sen-summency	102%	97%	99%	-4%	1% mates, national sta		

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¹ Data for the 2017/18 marketing year are FEWS NET estimates as of December 2017; ► denotes less than or equal to 10 percent change; ▲ denotes greater than 10 percent increase; ▼ denotes greater than 10 percent decrease.

² Considers production estimates minus post-harvest losses and seed requirements. A conversion factor of .85 is applied to raw production estimates for all products except rice. Rice is expressed in milled equivalent, using .55 as the conversion factor.

³ The commodity requirement estimates in this report consider human consumption requirements only.

Annex I (continued). West Africa Total Cereal (maize, millet, sorghum, and rice) Supply Projections 2017/18 (MT)

Country	ltem	2016/17	5-year Average (2012/13- 2016/17)	2017/18 forecast	% change over one year	% change over 5-year average	Change one year	Change 5-year average
Nigeria	Harvest	19,175,032	18,608,602	20,485,528	7%	10%	>	•
Nigeria	Requirements	20,806,574	19,758,369	21,350,375	3%	8%		>
Nigeria	Self-sufficiency	92%	94%	96%	4%	2%	>	>
Senegal	Harvest	1,607,909	1,268,582	1,908,044	19%	50%		
Senegal	Requirements	2,565,009	2,424,259	2,636,695	3%	9%	>	•
Senegal	Self-sufficiency	63%	52%	72%	15%	38%		
Sierra Leone	Harvest	712,128	665,892	831,114	17%	25%		
Sierra Leone	Requirements	861,498	825,165	880,080	2%	7%	>	•
Sierra Leone	Self-sufficiency	83%	81%	94%	14%	17%		
Togo	Harvest	1,032,898	1,011,064	1,126,045	9%	11%	•	A
Togo	Requirements	959,154	912,489	982,893	2%	8%	>	•
Togo	Self-sufficiency	108%	111%	115%	6%	3%	>	>
Regional Total	Harvest	48,678,912	45,383,101	51,678,263	6%	14%	•	A
Regional Total	Requirements	48,010,041	45,439,804	49,352,856	3%	9%	•	•
Regional Total	Self-sufficiency	101%	100%	105%	3%	5%		•

Annex 2. West Africa Maize Supply Projections 2017/18 (MT)⁴

Country	ltem	2016/17	5-year Average (2012/13- 2016/17)	2017/18 forecast	% change over one year	% change over 5-year average	Change one year	Change 5- year average
Benin	Harvest	1,169,962	1,061,972	1,374,081	17%	29%	•	A
Benin	Requirements	659,384	624,402	677,674	3%	9%	•	•
Benin	Self-sufficiency	177%	170%	203%	14%	19%		A
Burkina Faso	Harvest	1,362,146	1,297,739	1,401,659	3%	8%		•
Burkina Faso	Requirements	537,404	507,409	553,056	3%	9%	>	>
Burkina Faso	Self-sufficiency	253%	256%	253%	0%	-1%	>	>
Cape Verde	Harvest	4,796	4,677	3	-100%	-100%	▼	▼
Cape Verde	Requirements	67,158	65,559	68,019	1%	4%		>
Cape Verde	Self-sufficiency	7%	7%	0%	-100%	-100%	•	•
Chad	Harvest	377,212	340,020	337,099	-11%	-1%	▼	•
Chad	Requirements	178,800	168,156	184,236	3%	10%	>	>
Chad	Self-sufficiency	211%	202%	183%	-13%	-10%	▼	▼
Côte d'Ivoire	Harvest	822,117	757,708	871,444	6%	15%		A
Côte d'Ivoire	Requirements	558,785	531,746	572,838	3%	8%	>	•
Côte d'Ivoire	Self-sufficiency	147%	142%	152%	3%	7%	>	>
Gambia	Harvest	26,354	27,508	19,739	-25%	-28%	▼	▼
Gambia	Requirements	16,808	15,831	17,312	3%	9%	•	•
Gambia	Self-sufficiency	157%	174%	114%	-27%	-34%	\blacksquare	▼
Ghana	Harvest	1,205,338	1,252,343	1,375,323	14%	10%	A	•
Ghana	Requirements	1,297,530	1,241,391	1,325,880	2%	7%	•	•
Ghana	Self-sufficiency	93%	101%	104%	12%	3%		>
Guinea	Harvest	650,706	595,781	694,693	7%	17%	•	A
Guinea	Requirements	114,453	108,984	117,477	3%	8%	•	•
Guinea	Self-sufficiency	569%	547%	591%	4%	8%		>
Guinea Bissau	Harvest	5,047	5,587	5,619	11%	1%	A	•
Guinea Bissau	Requirements	20,471	19,480	20,977	2%	8%	•	•
Guinea Bissau	Self-sufficiency	25%	29%	27%	9%	-7%	•	>
Liberia	Harvest	0	0	0	N/A	N/A	N/A	N/A
Liberia	Requirements	18,928	18,018	19,416	3%	8%		>
Liberia	Self-sufficiency	0%	0%	0%	N/A	N/A	N/A	N/A
Mali	Harvest	2,389,677	1,708,142	2,918,500	22%	71%	A	A
Mali	Requirements	389,382	367,271	401,268	3%	9%	•	>
Mali	Self-sufficiency	614%	465%	727%	19%	56%		A
Mauritania	Harvest	11,940	11,588	8,368	-30%	-28%	▼	▼
Mauritania	Requirements	8,840	8,365	9,080	3%	9%	•	>
Mauritania	Self-sufficiency	135%	139%	92%	-32%	-33%	\blacksquare	▼
Niger	Harvest	6,103	6,284	5,383	-12%	-14%	▼	▼
Niger	Requirements	150,339	139,470	156,177	4%	12%	>	
Niger	Self-sufficiency	4%	5%	3%	-15%	-24%	•	▼

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⁴ Data for the 2017/18 marketing year are FEWS NET estimates as of December 2017; ► denotes less than or equal to 10 percent change; ▲ denotes greater than 10 percent increase; ▼ denotes greater than 10 percent decrease.

Annex 2 (continued). West Africa Maize Supply Projections 2017/18 (MT)

Country	Item	2016/17	5-year Average (2012/13- 2016/17)	2017/18 forecast	% change over one year	% change over 5-year average	Change one year	Change 5- year average
Nigeria	Harvest	8,158,606	8,346,521	9,420,550	15%	13%		
Nigeria	Requirements	5,917,466	5,619,353	6,072,125	3%	8%	•	>
Nigeria	Self-sufficiency	138%	149%	155%	13%	4%		>
Senegal	Harvest	340,393	229,546	354,670	4%	55%	•	A
Senegal	Requirements	190,212	179,774	195,528	3%	9%	•	>
Senegal	Self-sufficiency	179%	128%	181%	1%	42%	•	A
Sierra Leone	Harvest	10,671	22,991	12,307	15%	-46%	A	•
Sierra Leone	Requirements	15,114	14,477	15,440	2%	7%	•	>
Sierra Leone	Self-sufficiency	71%	159%	80%	13%	-50%		▼
Togo	Harvest	702,862	672,216	785,937	12%	17%	A	A
Togo	Requirements	499,072	474,791	511,424	2%	8%	>	>
Togo	Self-sufficiency	141%	142%	154%	9%	9%	>	>
Regional Total	Harvest	17,243,929	16,340,623	19,585,375	14%	20%	A	
Regional Total	Requirements	10,640,146	10,104,477	10,917,927	3%	8%	>	>
Regional Total	Self-sufficiency	162%	162%	179%	11%	11%	<u> </u>	A

Annex 3. West Africa Millet and Sorghum Supply Projections 2017/18 (MT)⁵

			5-year Average (2012/13-	2017/18	% change over one	% change over 5-year	Change one	Change 5- year
Country	Item	2016/17	2016/17)	forecast	year	average	year	average
Benin	Harvest	131,620	115,441	139,932	6%	21%		A
Benin	Requirements	212,344	201,079	218,234	3%	9%		
Benin	Self-sufficiency	62%	57%	64%	3%	12%		
Burkina Faso	Harvest	2,183,578	2,310,628	2,149,676	-2%	-7%		
Burkina Faso	Requirements	2,322,353	2,192,732	2,389,992	3%	9%		
Burkina Faso	Self-sufficiency	94%	105%	90%	-4%	-15%	<u> </u>	V
Chad	Harvest	1,844,872	1,782,117	1,854,159	1%	4%		
Chad	Requirements	1,922,100	1,807,677	1,980,537	3%	10%		>
Chad	Self-sufficiency	96%	99%	94%	-2%	-5%	•	•
Côte d'Ivoire	Harvest	99,766	90,041	106,191	6%	18%		
Côte d'Ivoire	Requirements	72,885	69,358	74,718	3%	8%		
Côte d'Ivoire	Self-sufficiency	137%	130%	142%	4%	9%	•	•
Gambia	Harvest	78,981	96,755	61,588	-22%	-36%	\blacksquare	▼
Gambia	Requirements	195,393	184,033	201,252	3%	9%		
Gambia	Self-sufficiency	40%	53%	31%	-24%	-42%	▼	▼
Ghana	Harvest	338,101	364,441	378,849	12%	4%		•
Ghana	Requirements	288,340	275,865	294,640	2%	7%		>
Ghana	Self-sufficiency	117%	132%	129%	10%	-3%	>	•
Guinea	Harvest	223,091	224,019	223,091	0%	0%	•	•
Guinea	Requirements	25,434	24,219	26,106	3%	8%	>	•
Guinea	Self-sufficiency	877%	925%	855%	-3%	-8%	>	•
Guinea Bissau	Harvest	26,540	28,846	30,919	17%	7%	A	•
Guinea Bissau	Requirements	48,386	46,043	49,582	2%	8%	>	•
Guinea Bissau	Self-sufficiency	55%	63%	62%	14%	0%		•
Mali	Harvest	2,720,327	2,478,998	2,628,799	-3%	6%	•	•
Mali	Requirements	2,039,620	1,923,799	2,101,880	3%	9%	>	•
Mali	Self-sufficiency	133%	129%	125%	-6%	-3%	•	•
Mauritania	Harvest	69,697	61,750	42,865	-38%	-31%	▼	▼
Mauritania	Requirements	106,080	100,385	108,960	3%	9%	•	•
Mauritania	Self-sufficiency	66%	62%	39%	-40%	-36%	\blacksquare	•
Niger	Harvest	4,840,191	4,297,553	4,879,480	1%	14%	•	A
Niger	Requirements	4,295,400	3,984,862	4,462,200	4%	12%	•	
Niger	Self-sufficiency	113%	108%	109%	-3%	1%	•	•
Nigeria	Harvest	6,719,711	6,593,908	6,636,928	-1%	1%	•	•
Nigeria	Requirements	9,162,528	8,700,933	9,402,000	3%	8%	>	•
Nigeria	Self-sufficiency	73%	76%	71%	-4%	-7%	•	•
Senegal	Harvest	704,874	625,178	949,250	35%	52%	A	A
Senegal	Requirements	1,125,421	1,063,666	1,156,874	3%	9%	•	•
Senegal	Self-sufficiency	63%	59%	82%	31%	40%		
Sierra Leone	Harvest	63,102	52,257	48,030	-24%	-8%	▼	•
Sierra Leone	Requirements	60,456	57,906	61,760	2%	7%	•	•
Sierra Leone	Self-sufficiency	104%	90%	78%	-25%	-14%		

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⁵ Data for the 2017/18 marketing year are FEWS NET estimates as of December 2017; ► denotes less than or equal to 10 percent change; ▲ denotes greater than 10 percent increase; ▼ denotes greater than 10 percent decrease.

Annex 3 (continued). West Africa Millet and Sorghum Supply Projections 2017/18 (MT)

Country	Item	2016/17	5-year Average (2012/13- 2016/17)	2017/18 forecast	% change over one year	% change over 5-year average	Change one year	Change 5- year average
Togo	Harvest	254,629	261,190	257,995	1%	-1%	•	>
Togo	Requirements	280,728	267,070	287,676	2%	8%	•	>
Togo	Self-sufficiency	91%	98%	90%	-1%	-8%	•	>
Regional Total	Harvest	20,299,080	19,383,122	20,387,752	0%	5%	•	•
Regional Total	Requirements	22,157,468	20,899,625	22,816,411	3%	8%	>	>
Regional Total	Self-sufficiency	92%	93%	89%	-2%	-4%	•	>

Source: Authors' calculations based on FEWS NET/WFP estimates, national statistics, and CILSS (2017) data.

Annex 4. West Africa Rice (milled) Supply Projections 2017/18 (MT)⁶

			5-year Average (2012/13-	2017/18	% change over one	% change over 5-year	Change one	Change 5- year
Country	Item	2016/17	2016/17)	forecast	year	average	year	average
Benin	Harvest	154,785	107,060	152,513	-1%	42%		A
Benin	Requirements	178,816	169,329	183,776	3%	9%		
Benin	Self-sufficiency	87%	63%	83%	-4%	31%	•	A
Burkina Faso	Harvest	211,580	180,666	199,115	-6%	10%		•
Burkina Faso	Requirements	614,176	579,896	632,064	3%	9%		•
Burkina Faso	Self-sufficiency	34%	31%	32%	-9%	1%	>	>
Cape Verde	Harvest	0	0	0	N/A	N/A	N/A	N/A
Cape Verde	Requirements	21,294	20,787	21,567	1%	4%	>	>
Cape Verde	Self-sufficiency	0%	0%	0%	N/A	N/A	N/A	N/A
Chad	Harvest	141,736	150,969	154,483	9%	2%	•	>
Chad	Requirements	149,000	140,130	153,530	3%	10%	>	•
Chad	Self-sufficiency	95%	108%	101%	6%	-7%	>	>
Côte d'Ivoire	Harvest	1,335,448	1,268,416	1,458,600	9%	15%	•	A
Côte d'Ivoire	Requirements	1,117,570	1,063,493	1,145,676	3%	8%	•	>
Côte d'Ivoire	Self-sufficiency	119%	119%	127%	7%	7%	>	>
Gambia	Harvest	26,828	31,809	16,482	-39%	-48%	▼	▼
Gambia	Requirements	121,858	114,773	125,512	3%	9%	•	>
Gambia	Self-sufficiency	22%	28%	13%	-40%	-53%	•	•
Ghana	Harvest	474,499	396,421	497,018	5%	25%		A
Ghana	Requirements	922,688	882,767	942,848	2%	7%	>	>
Ghana	Self-sufficiency	51%	45%	53%	3%	17%	•	
Guinea	Harvest	1,195,558	1,095,294	1,291,203	8%	18%	•	A
Guinea	Requirements	1,462,455	1,392,571	1,501,095	3%	8%	•	>
Guinea	Self-sufficiency	82%	79%	86%	5%	9%	•	>
Guinea Bissau	Harvest	102,481	98,918	90,807	-11%	-8%	▼	
Guinea Bissau	Requirements	241,930	230,216	247,910	2%	8%	•	>
Guinea Bissau	Self-sufficiency	42%	43%	37%	-14%	-15%	•	•
Liberia	Harvest	184,348	160,924	163,686	-11%	2%	▼	
Liberia	Requirements	567,840	540,539	582,480	3%	8%	•	•
Liberia	Self-sufficiency	32%	30%	28%	-13%	-6%	•	•
Mali	Harvest	1,529,498	1,229,597	1,606,482	5%	31%		A
Mali	Requirements	1,372,108	1,294,192	1,413,992	3%	9%	>	•
Mali	Self-sufficiency	111%	95%	114%	2%	20%	•	A
Mauritania	Harvest	114,036	127,284	124,721	9%	-2%	•	<u> </u>
Mauritania	Requirements	203,320	192,404	208,840	3%	9%	•	•
Mauritania	Self-sufficiency	56%	66%	60%	6%	-10%	•	
Niger	Harvest	96,782	66,342	64,966	-33%	-2%	V	•
Niger	Requirements	386,586	358,638	401,598	4%	12%	•	<u> </u>
Niger	Self-sufficiency	25%	18%	16%	-35%	-13%	_	-

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⁶ Data for the 2017/18 marketing year are FEWS NET estimates as of December 2017; ► denotes less than or equal to 10 percent change; ▲ denotes greater than 10 percent increase; ▼ denotes greater than 10 percent decrease.

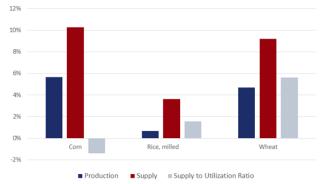
Annex 4 (continued). West Africa Rice (milled) Supply Projections 2017/18 (MT)

Country	Item	2016/17	5-year Average (2012/13- 2016/17)	2017/18 forecast	% change over one year	% change over 5-year average	Change one year	Change 5- year average
Nigeria	Harvest	4,296,716	3,668,173	4,428,050	3%	21%	▶	A
Nigeria	Requirements	5,726,580	5,438,083	5,876,250	3%	8%	>	>
Nigeria	Self-sufficiency	75%	67%	75%	0%	12%	>	
Senegal	Harvest	562,642	413,857	604,124	7%	46%	•	A
Senegal	Requirements	1,249,376	1,180,819	1,284,293	3%	9%	•	>
Senegal	Self-sufficiency	45%	35%	47%	4%	34%	•	A
Sierra Leone	Harvest	638,355	590,643	770,777	21%	30%	A	A
Sierra Leone	Requirements	785,928	752,782	802,880	2%	7%	>	>
Sierra Leone	Self-sufficiency	81%	78%	96%	18%	22%		A
Togo	Harvest	75,408	77,658	82,113	9%	6%	•	>
Togo	Requirements	179,354	170,628	183,793	2%	8%	•	•
Togo	Self-sufficiency	42%	46%	45%	6%	-2%	>	>
Regional Total	Harvest	11,140,699	9,664,032	11,705,139	5%	21%	•	A
Regional Total	Requirements	15,300,879	14,522,048	15,708,104	3%	8%	>	>
Regional Total	Self-sufficiency	73%	67%	75%	2%	12%	•	

Annex 5. La Niña and Global Cereal Supplies

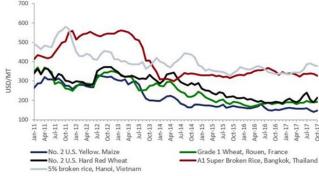
- Global commodity markets remain well supplied with rice, wheat, and maize (Figure 21). These supplies are expected to remain above average in 2017/18. Current season crop assessments point to generally favorable conditions globally (World Bank). However, supply will decline marginally compared to 2016/17 levels due to reductions in area planted for major producers. Stock-to-use ratios are projected to reach multi-year highs for wheat and rice, but decrease marginally for maize. Key supply side risks for the global cereal market include high energy prices, government policies influencing production and trade, as well as weather patterns in major producing and exporting countries.
- Global commodity prices were largely stable for most of 2017, and are expected to maintain this trend through the end of year (Figure 22). A marginal increase is projected for cereal prices in 2018, driven by tighter maize supplies (World Bank). Prices will, however, remain below average.
- A La Niña advisory issued in November 2017, is expected to continue through early 2018 (approximately February – April) with a 65 to 75 percent probability (NOAA). The impact of this forecast will vary geographically (Figure 23).
- FEWS NET will continue to monitor the global commodity situation in the coming months as global 2018 commodity supply estimates by the USDA, International Grains Council (IGC), the FAO, and AMIS are updated.

Figure 21. Global Market Indicators, 2017/18 compared to 2012-2016 average



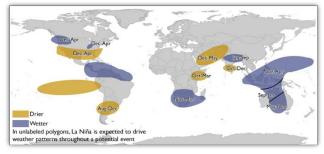
Source: Authors' calculations based on USDA, 2017.

Figure 22. Global Commodity prices (USD/MT) 2011-2017



Source: Authors' calculations based on USDA, 2017 and World Bank, 2017.

Figure 23. Forecast La Niña impacts, November 2017 - early 2018



Source: FEWS NET.

Source: FEWS NET

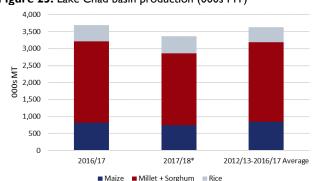
Annex 6. The Greater Lake Chad basin

CURRENT SITUATION

- The areas comprising the markets of Greater Lake Chad basin, the focus of this annex, include Northeast Nigeria (Borno, Yobe, and Adamawa States), Diffa region in Niger, Western and Southwestern Chad (regions of Bahr el Gazal, Hadjer Lamis, Kanem, Lac, Mayo Kebbi Est, and Moyo Kebbi Ouest), and Far North region of Cameroon (Figure 24). In this zone, the 2017/18 crop season was marked by near-normal rainfall distribution and levels. However, reported prolonged dry spells and early cessation of the rainfall were reported, with significant deficits and reduced yields in Diffa region of Niger, Far North region of Cameroon, and some parts of Northeast Nigeria.
- Aggregate cereal production in the Lake Chad basin is expected to be about 3.3 MMT, which is slightly below last year and the average (Figure 25). About 60 percent of production comes from Northeast Nigeria, 20 percent from Far North Cameroon, 18 percent from Western and Southwestern Chad, and 2 percent from Diffa. While the aggregate cereal production is projected to be average in Western and Southwestern Chad, it will be lower in Northeast Nigeria, and considerably below average in Diffa and Far North Cameroon.
- The security situation remains fragile, especially in Northeast Nigeria where several markets are not functional or functioning at reduced levels with limited access (Figure 26). Elsewhere, the situation is calmer than last year, but there are still attacks in areas like Diffa, where cereal and livestock trade routes are slowed down and traders are using longer and costlier

Figure 24. Greater Lake Chad basin regions Lake Chad Basin Major Towns N Roads **NIGER** Barh el Gazel CHAD Diffa Monguno O N'Djaména Maiduguri NIGERIA Far North CAMEROON 150 200

Figure 25. Lake Chad basin production (000s MT)



Source: Authors' estimations based on national statistics

alternative routes. Also, cross-border trade flows between Chad and Northeast Nigeria remain interrupted, hindering market supplies. Likewise, the Far North Cameroon markets of Kolofata and Fotokol on the Nigerian border are not functional, and livestock exports from Far North Cameroon to Nigeria are hampered because of border closures. Nevertheless, informal livestock flows from Cameroon to Mubi market in Adamawa state has increased substantially in the recent months.

Although declining, there are still several hundreds of thousands of internally displaced populations (IDPs) in the four countries who are supported by humanitarian assistance, including general food distributions and cash-based transfers. According to International Organization for Migration (IOM) and governmental sources, IDPs in the Lake Chad basin as of late November 2017 amount to 2,258,977 people (Nigeria: 1,713,771; Niger: 129,015; Chad: 174,204; Cameroon: 241,987).

As of October 2017, prices were decreasing seasonally, as harvests are ongoing and market demand is at an annual low.
 Nevertheless, prices are up to 150 percent above average in Northeast Nigeria. Elsewhere, due to insufficient quantities on markets, millet/sorghum prices are above average, while maize prices are stable or lower (except in Diffa). The NGN to XOF exchange rate remains below average and does not favor cash crop exports to Nigeria. Livestock markets and prices remain impacted by the absence of export traders to Nigeria, as they have been for the past three years.

OUTLOOK

- The Greater Lake Chad basin is projected to have an average gross cereal deficit of about 898,000 MT, including a deficit of 448,000 MT for the main local staple millet/sorghum. For the upcoming MY 2017/18, the deficit is expected to increase by over 50 percent, up to 1.4 MMT, including about 842,000 MT for millet/sorghum (Figure 27). Only Diffa region in Niger is expected to have a minor surplus (about 21,000 MT, which is still 40 percent below average). Otherwise, Northeast Nigeria is projected to have a deficit of about 1.1 MMT, slightly above average. For Western and Southwestern Chad, the deficit could reach 143,000 MT, close to 50 percent above average. And Far North Cameroon, which has had an average surplus of more than 90,000 MT in the past, expects a deficit of about 246,000 MT.
- The limited staple harvests in the zone will make households' stocks deplete earlier and supplies will be below normal in most markets. Thus, staple prices will be above average for the most during the marketing year (Figure 28-29). Insecurity and related market disruptions will likely persist, impacting markets functioning and traders' access through the lean season, despite some minor localized improvements. The lower NGN value as well as restrictions along the borders and corridors will continue to negatively affect trade flows at below their normal state. Conflict and security measures will also impact livestock movement toward pasture and forage areas, further affecting animal body conditions and pastoralists' revenues.
- The expected heavy reliance on markets, due to lower households' stocks, and projected above-average

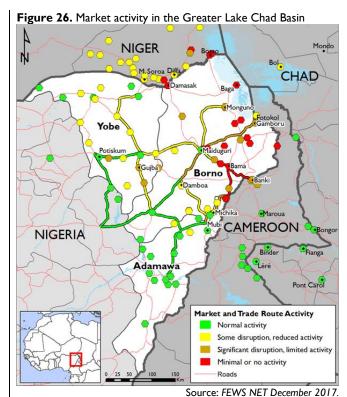


Figure 27. Lake Chad basin gross commodity balance (000s MT)

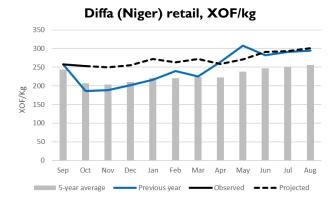
0 -100 -200 -300 -500 -600 -700 -800 -900 Maize Millet + Sorghum Rice ■ 2016/17 ■ 2017/18* ■ 2012/13-2016/17 Average

Source: Authors' calculations based on national statistics, CILSS, and CH data

prices will likely affect food availability and access. This could leave several households in need of humanitarian assistance. Humanitarian food distributions (in-kind) could improve household-level food availability, reduce market reliance, and therefore potentially contain expected price increases.

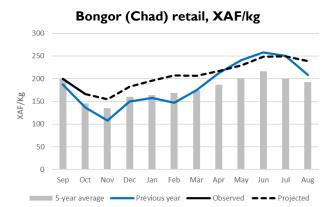
Figure 28. Maize price projections in selected markets for the 2017/18 marketing year

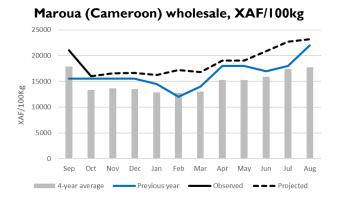




Source: Authors' estimates based on FEWS NET and SIMA data (2017).

Figure 29. Sorghum price projections in selected markets for the 2017/18 marketing year





Source: Authors' estimates based on FEWS NET and DRADER data (2017).