



May 2020

# Sahel 6 - Hotspot Exercises Overview



## OVERVIEW OF HOTSPOT EXERCISES

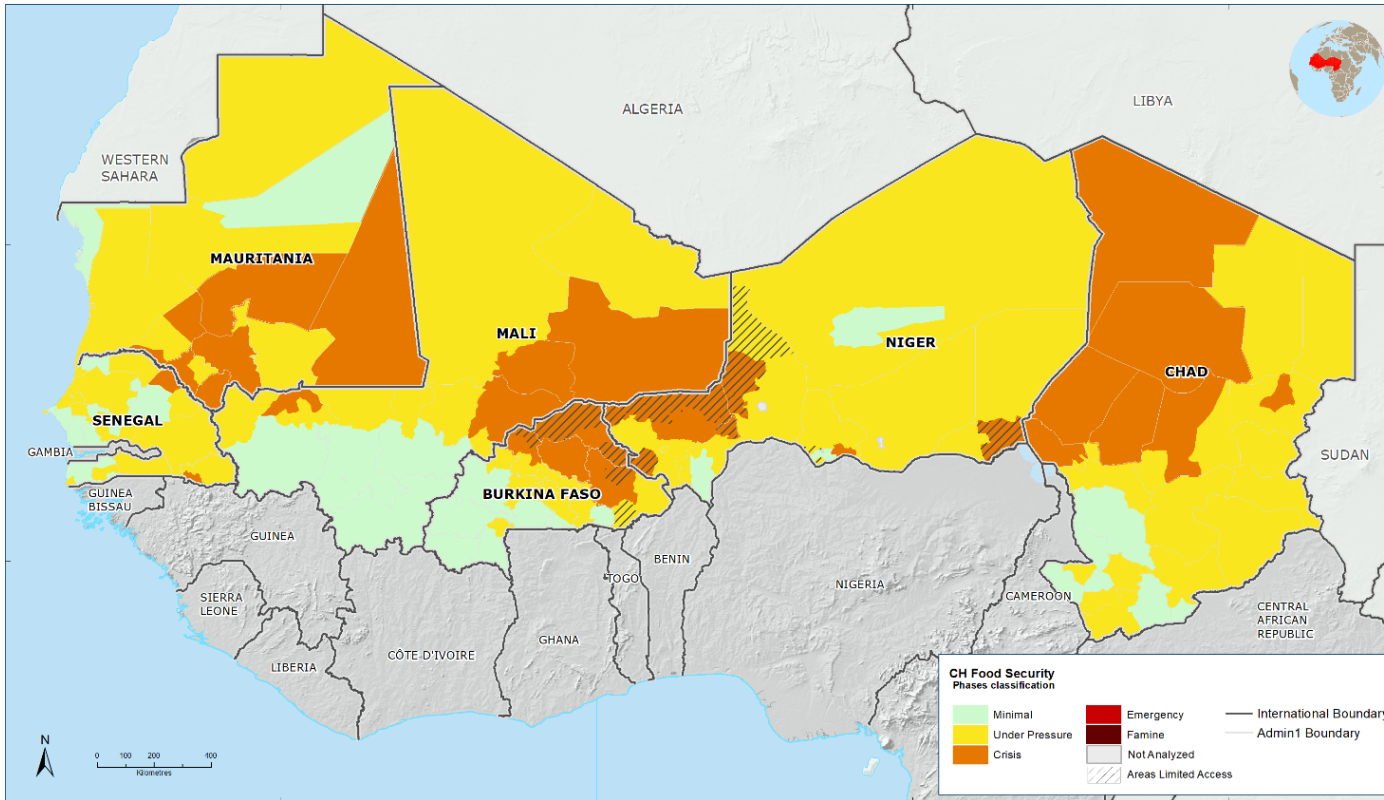
The hotspot analysis is a way to classify areas based on available food security and nutrition analysis and, through so doing, to highlight the areas that should be taken into consideration or prioritized first. However, the hotspot does not take into consideration things like access issues or country-specific conditions. Two hotspot exercises have been conducted and are presented in this document. The first is without COVID-19 impact and the second is with COVID-19 impact. Each exercise includes a food security priority hotspot, a nutrition priority hotspot, and a joint food security and nutrition priority hotspot.

- 1. Lean Season Hotspot Analysis CH projected (pages 3-4)**
- 2. Lean Season Hotspot Analysis with COVID-19 impact (pages 5-7)**
- 3. Nutrition Hotspot Analysis without COVID-19 (pages 8-9)**
- 4. Nutrition Hotspot Analysis with COVID-19 (pages 10-11)**
- 5. Joint Food Security and Nutrition Hotspot Analysis with COVID-19 (pages 12-13)**



# Sahel 6 - 2020 Lean Season (Jun-Aug) CH Projected Food Insecurity

March 2020 Cadre Harmonisé projected phase classifications for lean season: June—August 2020



Source: Cadre Harmonise March 2020

**7.9 million** people are projected to be in emergency and crisis food security situations (CH phase 3—5)

**0.5 million** people are projected to be in emergency food insecure (CH phase 4)

**7.4 million** people are projected to be in emergency food insecure (CH phase 3)

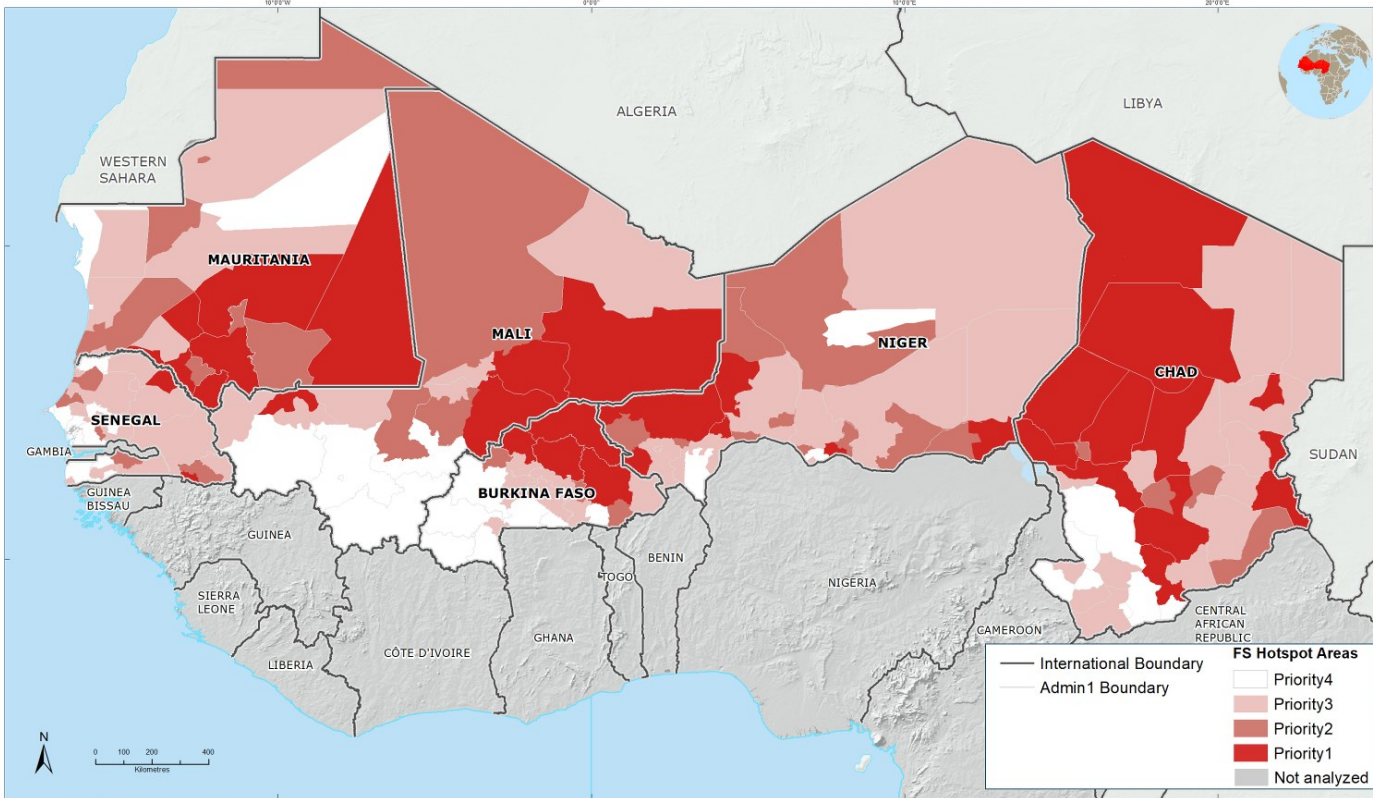
## SUMMARY

The Cadre Harmonisé analysis was conducted in March 2020 and provides estimates of the projected number of food insecure for the coming lean season (Jun-Aug 2020) without taking into consideration the impact of COVID-19. For the six countries in the Sahel, 7.9 million are projected to be food insecure, with half a million severely food insecure (emergency, phase 4).



# Sahel 6 - 2020 Lean Season Hotspot Analysis CH projected

Food Security Hotspot Areas based on CH and IDP data



Source: Cadre Harmonise March 2020; IDP figures—IOM, Protection cluster Niger, CONASUR

## SUMMARY

Based on WFP's Sahel 2018 response methodology, this food security hotspot analysis (see page 4 for methodology) classifies food security hotspot areas using the March 2020 Cadre Harmonisé (CH) results and most recent figures of internally displaced people to identify areas with high absolute number and/or high relative burdens of food insecure and/or displaced people. Out of the 7.9 million people projected to be in emergency and crisis food security situations (CH phase 3—5) in Sahel 6, 4.2 million people are in priority 1 areas; 1.2 million people are in priority 2 areas; 1.9 million people are in priority 3 areas and 0.6 million people are in priority 4 areas.

out of the **7.9 million** people projected to be in emergency and crisis food security situations (CH phase 3—5) in the Sahel 6, the following hotspot areas were classified:

**4.2 million** people in priority 1 areas

**1.2 million** people in priority 2 areas

**1.9 million** people in priority 3 areas

**0.6 million** people in priority 4 areas



# Sahel 6 - 2020 Lean Season Hotspot Analysis CH projected

Breakdown of Number of Projected Food Insecure People (CH phase 3 - 5) by Hotspot Classification and Country

Country	Priority 1	Priority 2	Priority 3	Priority 4	Total number of CH (phase 3—5)	IDPs
Burkina Faso	1,640,711	78,754	273,748	158,754	<b>2,151,967</b>	779,741
Chad	615,157	78,443	272,949	50,806	<b>1,017,355</b>	208,382
Mali	749,321	215,281	140,150	236,721	<b>1,341,473</b>	218,536
Mauritania	409,326	114,456	17,503	67,897	<b>609,182</b>	0
Niger	676,522	498,685	807,498	29,669	<b>2,012,365</b>	225,987
Senegal	100,692	170,578	432,805	62,652	<b>766,727</b>	0
<b>Total</b>	<b>4,191,729</b>	<b>1,156,197</b>	<b>1,944,644</b>	<b>606,499</b>	<b>7,899,069</b>	<b>1,432,646</b>

## Food Security Hot Spot Methodology

Using the phase classification and estimated number of persons in phases 3-5 from the 2020 projected estimate of the March 2020 Cadre Harmonisé exercise and most recent IDP figures from IOM + OCHA + CONASUR + Protection Cluster Niger, the following criteria was used to classify areas:

*Priority 1:* All administrative 2 areas where: CH phase 3/4/5 OR number of individuals in CH phase 4  $\geq$  5000 OR high concentration of IDPs ( $\geq$  30% of population)

*Priority 2:* All remaining administrative 2 areas where: CH Phase 2 AND 10 - 19.99% of the population are in CH phase 3/4/5 OR medium concentration of IDPs (10% - 29.99% of population) OR more than 5,000 IDPs

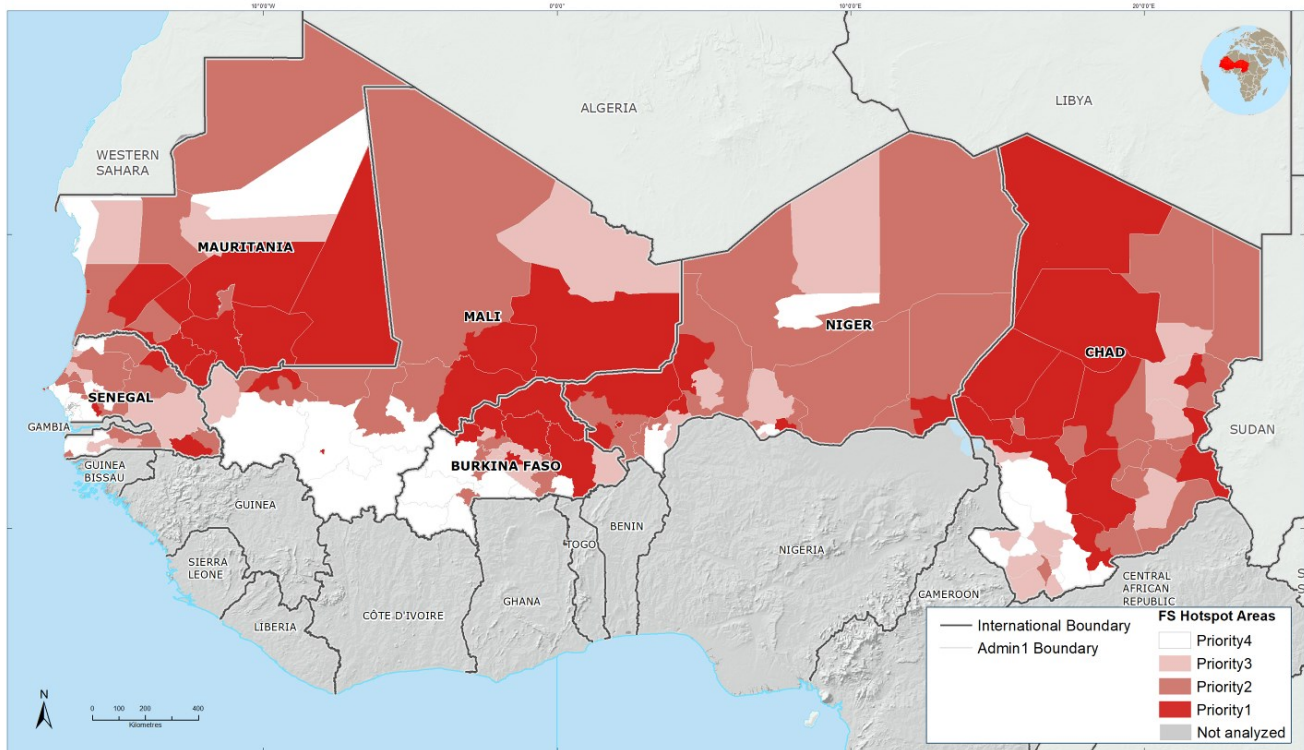
*Priority 3:* All remaining CH Phase 2 admin2 areas

*Priority 4:* remaining administrative 2 areas (Phase 1 areas not meeting above criteria)



# Sahel 6 - 2020 Lean Season Hotspot Analysis with COVID-19 impact

Food Security Hotspot Areas based on CH, IDP data and COVID-19



Source: CH Mar 2020; IDPs—IOM, Protection cluster Niger, CONASUR; urban poor—INFORM, Africapolis + authors calcs

## SUMMARY

In a paper entitled "Economic and market impact analysis of COVID-19 on West and Central Africa" (April 2020), WFP RBD estimated the potential impact of COVID-19 in the region, based on 2 key assumptions: that cities would be hard-hit by the virus, and that there would be an increase in food insecurity in both urban and rural areas due to mitigation measures and slow down of economic activities that negatively affect livelihoods, market prices, purchasing power, etc. In urban areas, it was assumed that the most at risk would be urban poor living in densely settled areas (informal settlements or slums). In order to integrate the COVID-19 impact into the food security hotspot analysis, an additional 20% of the people in phase 2 were added to phase 35 figures and the capital cities were automatically included in priority 1 during the classification (see page 7 for details on methodology). Once the classification was complete, the urban poor in these areas were added to the estimated at-risk population in three scenarios: **scenario 1** includes 30% of urban poor in countries that already analyzed urban areas in the CH exercise (BFA, MRT, MLI, SEN, NER) and 50% of urban poor in countries that did not (Chad); **scenario 2** includes 10% or 30% of urban poor; and **scenario 3** includes 5% or 20% of urban poor.

**Scenario 1:** out of the **15.2 million** people estimated to be at risk of food insecurity (lean season + COVID-19) in the Sahel 6, the following hotspot areas were classified:

- 7.9 million** people in priority 1 areas
- 3.8 million** people in priority 2 areas
- 1.5 million** people in priority 3 areas
- 2.0 million** people in priority 4 areas

**Scenario 2:** out of the **13.4 million** people estimated to be at risk of food insecurity (lean season + COVID-19) in the Sahel 6, the following hotspot areas were classified:

- 6.9 million** people in priority 1 areas
- 3.6 million** people in priority 2 areas
- 1.3 million** people in priority 3 areas
- 1.6 million** people in priority 4 areas

**Scenario 3:** out of the **12.9 million** people estimated to be at risk of food insecurity (lean season + COVID-19) in the Sahel 6, the following hotspot areas were classified:

- 6.6 million** people in priority 1 areas
- 3.5 million** people in priority 2 areas
- 1.3 million** people in priority 3 areas
- 1.5 million** people in priority 4 areas



# Sahel 6 - 2020 Lean Season Hotspot Analysis with COVID-19 impact

**Scenario 1:** 30% of urban poor in countries where urban areas were analysed during the CH (BFA, MLI, MRT, NER, SEN) and 50% in countries that did not (Chad)

	priority1			priority2			priority3			priority4			Grand Total			IDPs
	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	
Burkina Faso	2,343,006	314,985	2,657,991	266,952	48,802	315,754	248,388	44,458	292,846	330,482	150,620	481,103	3,188,829	558,866	3,747,694	779,741
Chad	876,244	452,832	1,329,076	263,613	86,453	350,066	329,968	185,680	515,648	163,570	118,388	281,958	1,633,395	843,353	2,476,748	208,382
Mali	1,044,596	350,562	1,395,157	498,903	98,596	597,499	73,523	25,661	99,184	456,011	156,207	612,218	2,073,033	631,026	2,704,059	218,536
Mauritania	690,180	265,267	955,447	64,314	22,838	87,152	2,643	2,754	5,397	12,009	23,800	35,810	769,147	314,659	1,083,806	0
Niger	973,741	142,492	1,116,233	1,615,141	114,038	1,729,179	343,223	35,954	379,177	83,984	71,421	155,405	3,016,088	363,905	3,379,994	225,987
Senegal	315,046	164,342	479,388	711,708	38,550	750,258	157,294	27,256	184,550	276,737	148,096	424,833	1,460,785	378,244	1,839,029	0
<b>Grand Total</b>	<b>6,242,812</b>	<b>7,933,292</b>	<b>7,933,292</b>	<b>3,420,632</b>	<b>409,276</b>	<b>3,829,908</b>	<b>1,155,039</b>	<b>321,764</b>	<b>1,476,803</b>	<b>1,322,794</b>	<b>668,533</b>	<b>1,991,327</b>	<b>12,141,277</b>	<b>3,090,052</b>	<b>15,231,330</b>	<b>1,432,646</b>

**Scenario 2:** 10% of urban poor in countries where urban areas were analysed during the CH (BFA, MLI, MRT, NER, SEN) and 30% in countries that did not (Chad)

	priority1			priority2			priority3			priority4			Grand Total			IDPs
	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	
Burkina Faso	2,343,006	104,995	2,448,001	266,952	16,267	283,219	248,388	14,819	263,208	330,482	50,207	380,689	3,188,829	186,289	3,375,117	779,741
Chad	876,244	271,699	1,147,943	263,613	51,872	315,485	329,968	111,408	441,376	163,570	71,033	234,603	1,633,395	506,012	2,139,407	208,382
Mali	1,044,596	116,854	1,161,449	498,903	32,865	531,768	73,523	8,554	82,077	456,011	52,069	508,080	2,073,033	210,342	2,283,375	218,536
Mauritania	690,180	88,422	778,602	64,314	7,613	71,927	2,643	918	3,561	12,009	7,933	19,943	769,147	104,886	874,033	0
Niger	973,741	47,497	1,021,238	1,615,141	38,013	1,653,154	343,223	11,985	355,208	83,984	23,807	107,791	3,016,088	121,302	3,137,390	225,987
Senegal	315,046	54,781	369,827	711,708	12,850	724,558	157,294	9,085	166,379	276,737	49,365	326,103	1,460,785	126,081	1,586,867	0
<b>Grand Total</b>	<b>6,242,812</b>	<b>684,248</b>	<b>6,927,061</b>	<b>3,420,632</b>	<b>159,480</b>	<b>3,580,112</b>	<b>1,155,039</b>	<b>156,770</b>	<b>1,311,809</b>	<b>1,322,794</b>	<b>254,414</b>	<b>1,577,208</b>	<b>12,141,277</b>	<b>1,254,912</b>	<b>13,396,189</b>	<b>1,432,646</b>



# Sahel 6 - 2020 Lean Season Hotspot Analysis with COVID-19 impact

**Scenario 3:** 5% of urban poor in countries where urban areas were analysed during the CH (BFA, MLI, MRT, NER, SEN) and 20% in countries that did not (Chad)

	priority1			priority2			priority3			priority4			Grand Total			IDPs
	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	New Phase35	Urban poor at risk	Total at risk	
Burkina Faso	2,343,006	52,497	2,395,503	266,952	8,134	275,086	248,388	7,410	255,798	330,482	25,103	355,586	3,188,829	93,144	3,281,973	779,741
Chad	876,244	181,133	1,057,377	263,613	34,581	298,194	329,968	74,272	404,240	163,570	47,355	210,925	1,633,395	337,341	1,970,736	208,382
Mali	1,044,596	58,427	1,103,023	498,903	16,433	515,336	73,523	4,277	77,800	456,011	26,034	482,046	2,073,033	105,171	2,178,204	218,536
Mauritania	690,180	44,211	734,391	64,314	3,806	68,120	2,643	459	3,102	12,009	3,967	15,976	769,147	52,443	821,590	0
Niger	973,741	23,749	997,489	1,615,141	19,006	1,634,147	343,223	5,992	349,215	83,984	11,904	95,888	3,016,088	60,651	3,076,739	225,987
Senegal	315,046	27,390	342,436	711,708	6,425	718,133	157,294	4,543	161,837	276,737	24,683	301,420	1,460,785	63,041	1,523,826	0
<b>Grand Total</b>	<b>6,242,812</b>	<b>387,407</b>	<b>6,630,220</b>	<b>3,420,632</b>	<b>88,385</b>	<b>3,509,016</b>	<b>1,155,039</b>	<b>96,953</b>	<b>1,251,992</b>	<b>1,322,794</b>	<b>139,047</b>	<b>1,461,841</b>	<b>12,141,277</b>	<b>711,791</b>	<b>12,853,068</b>	<b>1,432,646</b>

## Food Security with COVID-19 Hot Spot Methodology

Using the phase classification and estimated number of persons in phases 3-5 from the 2020 projected estimate of the March 2020 Cadre Harmonisé exercise, the most recent IDP figures from IOM + OCHA + Protection Cluster Niger, and the capital city, the following criteria was used to classify areas:

*Priority 1:* All administrative 2 areas where: CH phase 3/4/5 OR  $\geq 20\%$  of the population are in CH phase 3-5 (increased to reflect impact of COVID-19\*\*) OR number of individuals in CH phase 4  $\geq 5000$  OR high concentration of IDPs ( $\geq 30\%$  of population) OR capital city

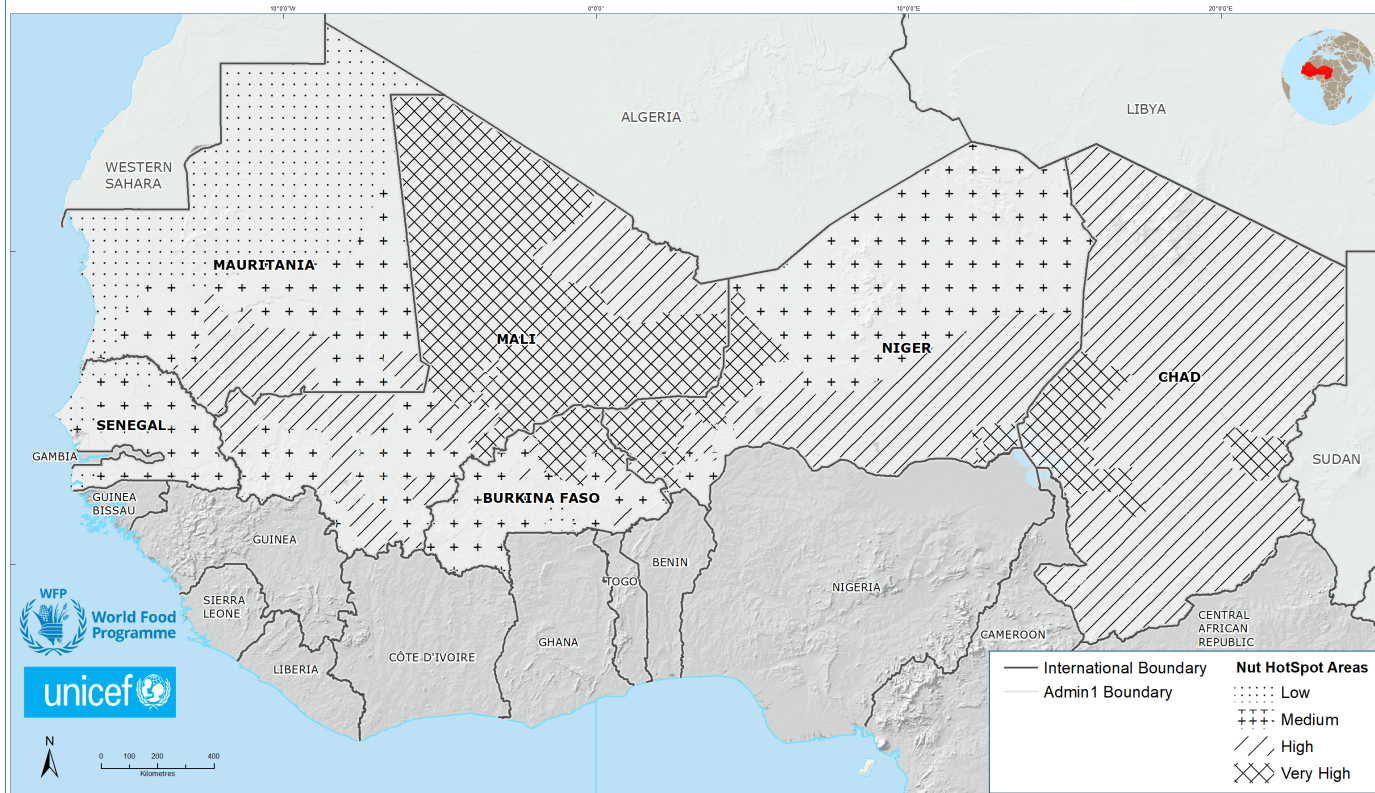
*Priority 2:* All remaining administrative 2 areas where: CH Phase 2 AND 10 - 19.99% of the population are in CH phase 3/4/5 (increased to reflect impact of COVID-19\*\*) OR medium concentration of IDPs (10% - 29.99% of population) OR more than 5,000 IDPs

*Priority 3:* All remaining CH Phase 2 admin2 areas

*Priority 4:* remaining administrative 2 areas (areas not meeting above criteria)

\*\*20% of phase 2 were added to phase35 to reflect estimated impact of COVID-19 on the number of food insecure ("New Phase35" in tables)

### Nutrition Hotspot Areas



Sources: UNICEF/WFP; INFORM; CH Mar 2020; IOM, Protection cluster Niger, CONASUR

out of the **4.86 million** estimated children under 5 with Global Acute Malnutrition (GAM):

**0.81 million** children are in Very High priority areas

**2.72 million** children are in High priority areas

**1.13 million** children are in Medium priority areas

**0.21 million** children are in Low priority areas

**SUMMARY** The number of U5 children expected in Global Acute Malnutrition has been revised according to the predicted deterioration of Food Security conditions (Cadre Harmonisé, March 2020) in the Sahel countries that may impact the nutrition status of already fragile populations. Consequently, a total of 4,865,712 children under 5 years old could be at risk of global acute malnutrition compared to the 4,537,937 initially planned in early 2020. This analysis (see next page for methodology) is based on the projected re-estimation of the number of U5 children expected in Global Acute Malnutrition according to the predicted deterioration of Food Security conditions (CH, March 2020) in the Sahel countries. It classifies nutrition hotspot areas using GAM and Stunting prevalence data, latest data available on IDPs, the index from Inform Sahel (Sept. 2019), Human Hazard, Socio-Economic vulnerabilities and Access to Health services and SAM prevalence. Out of the 4.86 million estimated children with GAM, 0.81 million children are in Very High areas; 2.72 million children are in High priority areas; 1.13 million children are in Medium priority areas and 0.21 million children are in Low priority areas





# Sahel 6 - 2020 Lean Season Hotspot Analysis

## Nutrition



Estimated Number of GAM U5 children by Nutrition Hotspot Classification and Country

Country	VERY HIGH Priority Areas	HIGH Priority Areas	MEDIUM Priority Areas	LOW Priority Areas	Total
Burkina Faso	112,394	28,595	381,052	13,636	<b>535,677</b>
Chad	386,730	1,324,360			<b>1,711,090</b>
Mali	138,510	206,796	307,905		<b>653,211</b>
Mauritania		82,263	59,453	31,135	<b>172,851</b>
Niger	175,583	1,075,045	194,480		<b>1,445,108</b>
Senegal			185,844	161,931	<b>347,775</b>
<b>Total</b>	<b>813,217</b>	<b>2,717,059</b>	<b>1,128,734</b>	<b>206,702</b>	<b>4,865,712</b>

Estimated Number of SAM U5 children by Nutrition Hotspot Classification and Country

Country	VERY HIGH Priority Areas	HIGH Priority Areas	MEDIUM Priority Areas	LOW Priority Areas	Total
Burkina Faso	38,578	9,631	105,727	2,520	<b>156,456</b>
Chad	110,328	365,965			<b>476,293</b>
Mali	44,968	58,045	68,255		<b>171,268</b>
Mauritania		23,793	19,289	12,028	<b>55,110</b>
Niger	57,056	375,686	46,111		<b>478,853</b>
Senegal			58,489	38,318	<b>96,807</b>
<b>Total</b>	<b>250,930</b>	<b>833,120</b>	<b>297,871</b>	<b>52,866</b>	<b>1,434,787</b>

### Nutrition Hot Spot Methodology

The following data was used at Admin 2 Level (except in Chad where analysis is at Admin 1) : Indicators: Stunting prevalence; theoretical GAM prevalence recalculated based on projected GAM Burden | Risk factors: Latest data available on IDPs , Index from Inform Sahel (Sept. 2019), Human Hazards, Socio-Economic vulnerabilities and Access to Health services | Deterioration factors: SAM prevalence recalculated based on projected SAM Burden. Weights were created for each indicator and summed to create scores. The following thresholds were used to convert scores to hotspot categories:

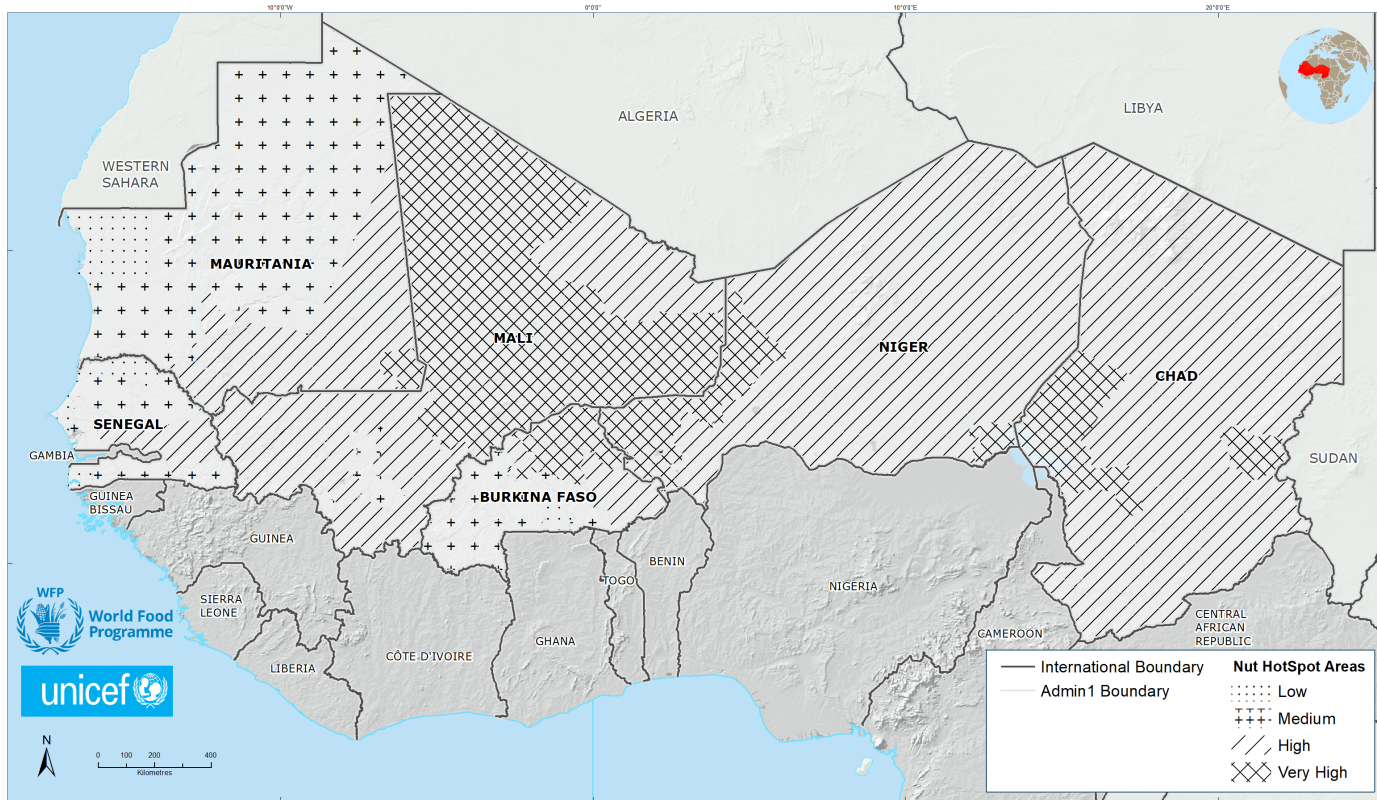
VERY HIGH priority areas: score  $\geq$  19;

HIGH priority areas: score from 14.4 to 18.9

MEDIUM priority areas: score from 9.8 to 14.3

LOW priority areas: score  $\leq$  9.7

## Nutrition Hotspot Areas



Sources: UNICEF/WFP; INFORM; CH Mar 2020; IOM, Protection cluster Niger, CONASUR

out of the **5,35 million** estimated children under 5 with Global Acute Malnutrition (GAM):

**0.98 million** children are in Very High priority areas

**3.51 million** children are in High priority areas

**0.68 million** children are in Medium priority areas

**0.17 million** children are in Low priority areas

**SUMMARY** The number of U5 children expected in Global Acute Malnutrition has been revised according to the predicted deterioration of Food Security conditions (Cadre Harmonisé, March 2020) and the plausible multiform impacts of COVID-19 in the Sahel countries that may impact the nutrition status of already fragile populations. Consequently, a total of 5,347,833 children under 5 years old could be at risk of global acute malnutrition compared to the 4,537,848 initially planned in early 2020. This analysis (see next page for methodology) is based on the projected re-estimation of the number of U5 children expected in Global Acute Malnutrition according to the predicted deterioration of Food Security conditions (CH, March 2020) in the Sahel countries. It classifies nutrition hotspot areas using GAM and Stunting prevalence data, latest data available on IDPs, the index from Inform Sahel (Sept. 2019), Human Hazard, Socio-Economical vulnerabilities and Access to Health services and SAM prevalence. Out of the 5.35 million estimated children with GAM, 0.98 million children are in Very High areas; 3.51 million children are in High priority areas; 0.68 million children are in Medium priority areas and 0.17 million children are in Low priority areas.



# Sahel 6 - 2020 Lean Season Hotspot Analysis

## Nutrition with COVID-19 impact



Estimated Number of GAM U5 children by Nutrition Hotspot Classification and Country

Country	VERY HIGH Priority Areas	HIGH Priority Areas	MEDIUM Priority Areas	LOW Priority Areas	Total
Burkina Faso	141,789	91,994	320,886	14,488	<b>569,157</b>
Chad	427,890	1,465,309			<b>1,893,199</b>
Mali	214,535	450,150	53,562		<b>718,247</b>
Mauritania	3,203	97,599	60,122	11,927	<b>172,851</b>
Niger	194,978	1,359,116	50,681		<b>1,604,775</b>
Senegal		47,410	200,032	142,162	<b>389,604</b>
<b>Total</b>	<b>982,395</b>	<b>3,511,578</b>	<b>685,283</b>	<b>168,577</b>	<b>5,347,833</b>

Estimated Number of SAM U5 children by Nutrition Hotspot Classification and Country

Country	VERY HIGH Priority Areas	HIGH Priority Areas	MEDIUM Priority Areas	LOW Priority Areas	Total
Burkina Faso	48,817	29,361	85,379	2,677	<b>166,234</b>
Chad	122,070	404,914			<b>526,984</b>
Mali	68,308	108,561	11,184		<b>188,053</b>
Mauritania	838	28,614	20,223	5,435	<b>55,110</b>
Niger	63,553	457,064	12,767		<b>533,384</b>
Senegal		16,867	52,996	38,501	<b>108,364</b>
<b>Total</b>	<b>303,586</b>	<b>1,045,381</b>	<b>182,549</b>	<b>46,613</b>	<b>1,578,129</b>

### Nutrition Hot Spot Methodology

The following data was used at Admin 2 Level (except in Chad where analysis is at Admin 1) : Indicators: Stunting prevalence; theoretical GAM prevalence recalculated based on projected GAM Burden and COVID-19 plausible impacts on Nutritional status of U5 Children | Risk factors: Latest data available on IDPs , Index from Inform Sahel (Sept. 2019), Human Hazard, Socio-Economical vulnerabilities and Access to Health services | Deterioration factors: SAM prevalence recalculated based on projected SAM Burden and COVID-19 plausible impacts on Nutritional status of U5 Children. Weights were created for each indicator and summed to create scores. The following thresholds were used to convert scores to hotspot categories:

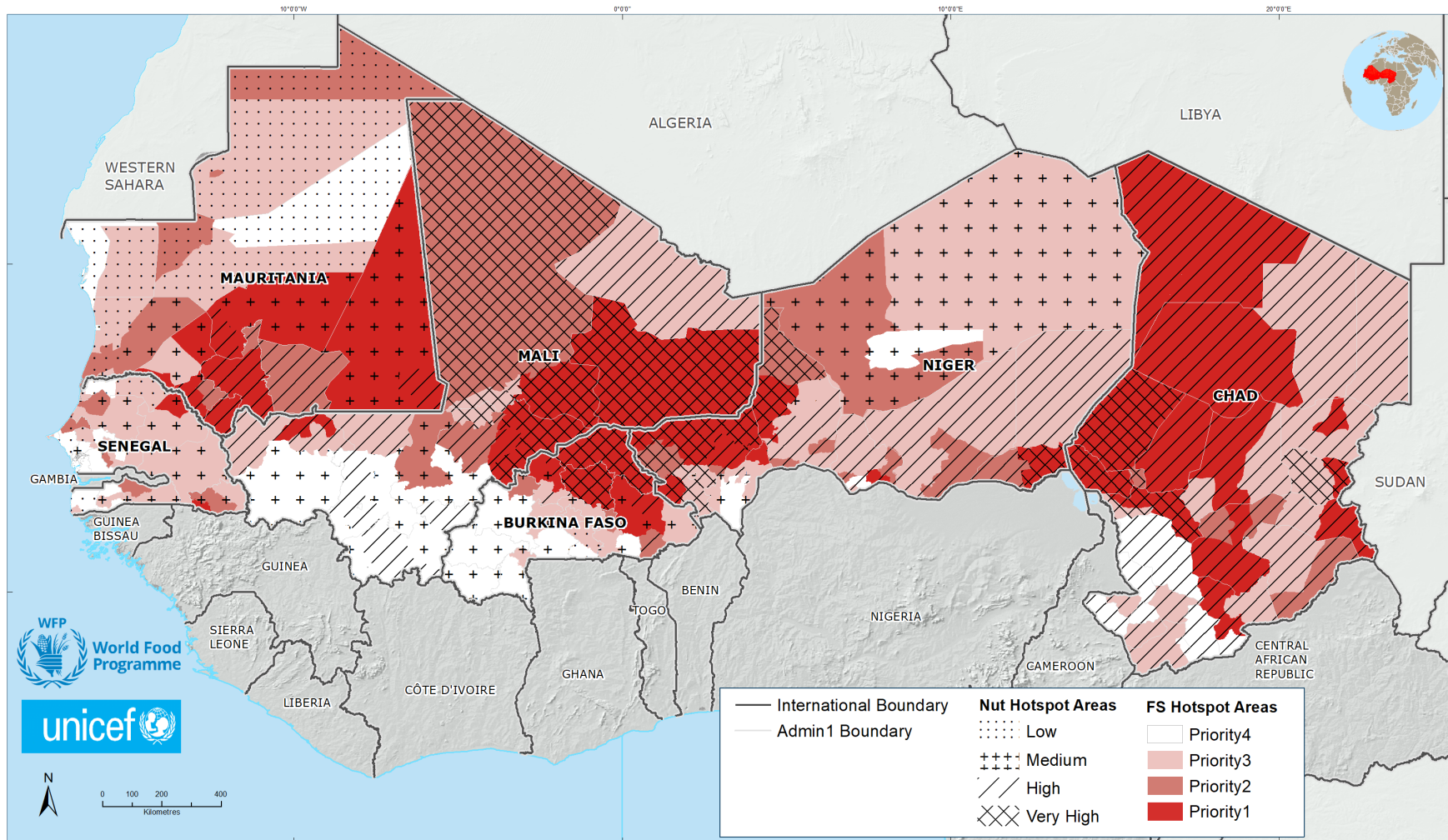
VERY HIGH priority areas: score  $\geq 19$ ;

HIGH priority areas: score from 14.4 to 18.9

MEDIUM priority areas: score from 9.8 to 14.3

LOW priority areas: score  $\leq 9.7$

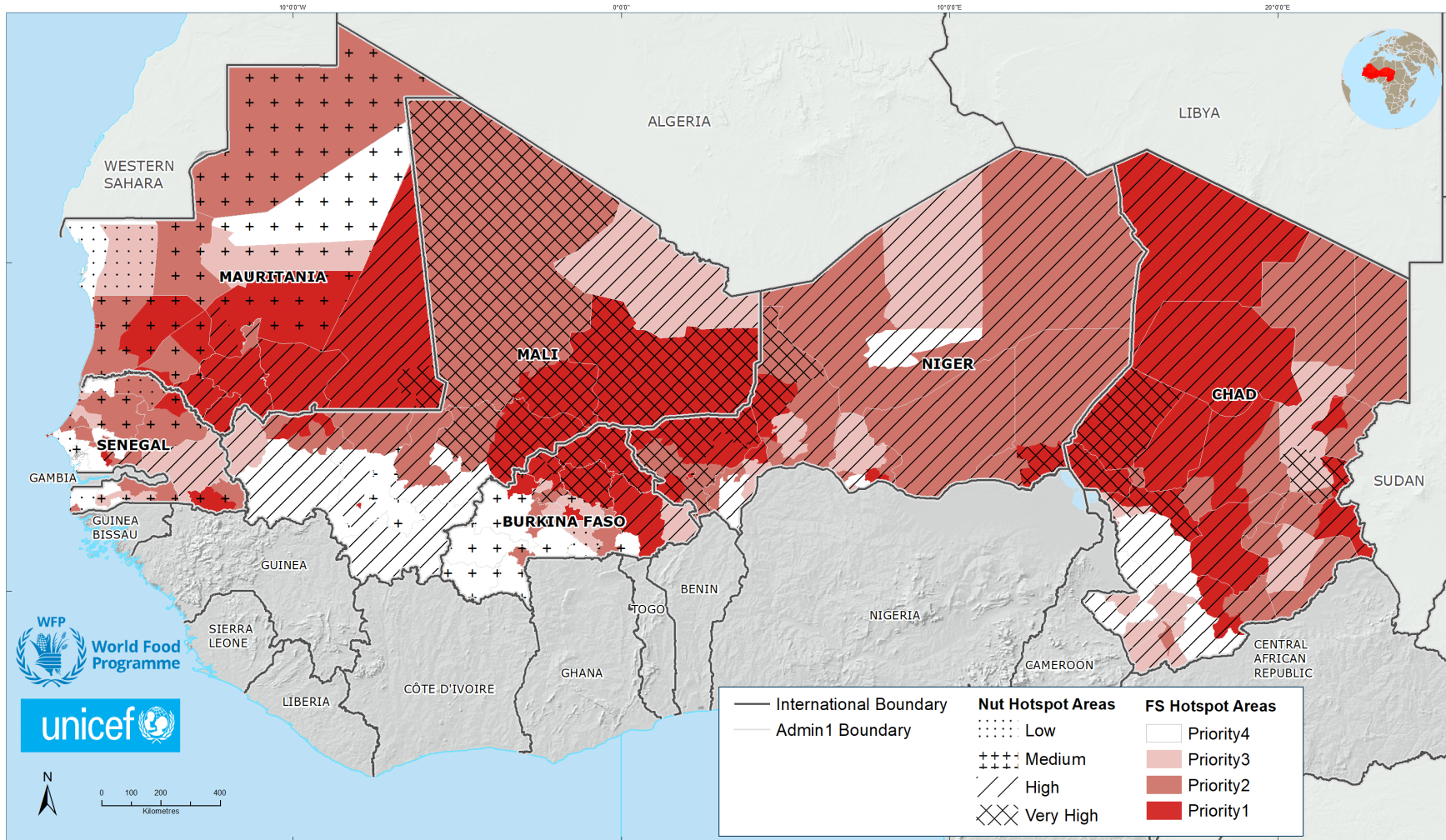
Overlay of Food Security and Nutrition Areas



## Joint Analysis

The map above overlays Food Security Hotspot Areas with Nutrition Hotspot Areas without COVID-19 impact

Overlay of Food Security and Nutrition Areas



## Joint Analysis

The map above overlays Food Security Hotspot Areas with Nutrition Hotspot Areas **with** impact of COVID-19.