



World Food Programme

SAVING LIVES
CHANGING LIVES



Haiti December 2023

WFP VAM Bulletin

Food security analysis



Key points



Around 8.2 million people were estimated to have insufficient food consumption in Haiti in November 2023 (prevalence of 70.8%). While the situation has slightly improved compared to the previous month (72.4% in October 2023, the highest rate recorded since WFP monitoring tool was set up in 2021), it remains alarmingly high.



While most basic food commodities are globally available throughout the country, the closure of the border with the Dominican Republic has had some tangible impacts on specific commodities, specifically in border departments such as the North-East.



Based on an analysis around the affordability of the minimum expenditure basket (MEB), it is estimated that between 30 and 35% of Haitians will not be able to afford to buy essential needs in the next 2 months if prices continue to rise.



The season has mostly been drier than average in Haiti and conditions have worsened from August to October, with severely dry conditions in the southern peninsula. In November, a tropical depression brought abnormally important amounts of rainfall, but given the timing (very late in the season) and the intensity (some croplands in the southern peninsula were damaged), such conditions are unlikely to improve perspectives of a drop in agricultural production.

1. FOOD SECURITY ANALYSIS [A]



Alarming levels of food consumption insufficiency throughout Haiti



8.2M
PEOPLE

with insufficient
food consumption
in November 2023

+0.77M INCREASE
FROM 3 MONTHS AGO

-0.05M DECREASE
FROM 1 MONTH AGO

After several months of relative stability in the percentage of households with insufficient¹ food consumption (comprised between 64% - 66% from May to September 2023), a sharp increase can be observed in October 2023 (Figure 2), reaching 72.4%, which is the highest national prevalence rate of food insufficiency ever recorded since WFP's monitoring tool has been running (September 2021). In November 2023, the prevalence rate remains alarmingly high, with 70.8% of households estimated to have insufficient food consumption at national level, which corresponds to approximately 8.2 million people².

This slight improvement at national scale conceals important disparities at department level (admin-1), as food consumption levels have deteriorated in most departments in November compared to the previous month, except for the West, South-East and Grande'Anse (as shown in Figure 1). The highest prevalence rates are found in Grande'Anse (82%) and North-East (81%).

Besides, the percentage of households using emergency or crisis coping strategies follows similar trends nationwide: after reaching the highest value ever recorded in September 2023 (67%), rates have gone downward to 64% in October and November 2023. This may certainly be linked to the closure of the border with the Dominican Republic that occurred mid-September and highly affected the country's food supplies.

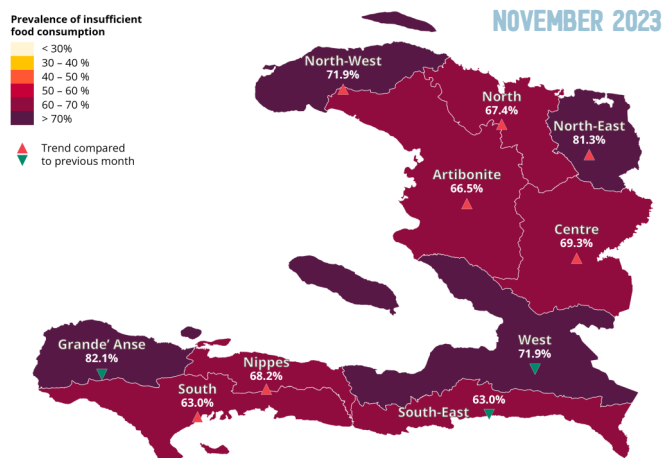


Figure 1. Prevalence (in % of households) of insufficient food consumption in Haiti as of November 2023. Source: WFP, Geopoll/HungerMap^{LIVE} (November 2023)

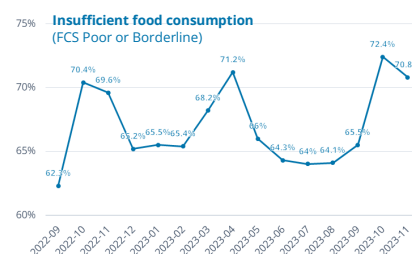


Figure 2. Monthly trend (in % of households) of insufficient food consumption in Haiti from November 2022 to November 2023.

Source: WFP, Geopoll/HungerMap^{LIVE} (November 2023)

FOCUS ON THE PORT-AU-PRINCE METROPOLITAN AREA



1.7M
PEOPLE

with insufficient
food consumption
in November 2023
in ZM-PAP

+0.01M INCREASE
FROM 3 MONTHS AGO

-0.12M DECREASE
FROM 1 MONTH AGO

In the Port-au-Prince metropolitan area (ZM-PAP), 1.7 million people (around 73% of households) are estimated to have insufficient food consumption in November 2023, compared with 69% at the start of the third quarter, in July 2023 (Figure 4). In line with the national findings, a slight decrease is observed in November 2023 compared to the previous month (October 2023), when a prevalence rate of 78% of households with poor or borderline food consumption was registered, the highest value recorded for ZM-PAP since WFP monitoring tool has been set up. This globally positive trend in the last month does not, however, concern the communes of Cité-Soleil (93%, which makes it the most severely affected commune out of the metropolitan area) and Delmas (71%).

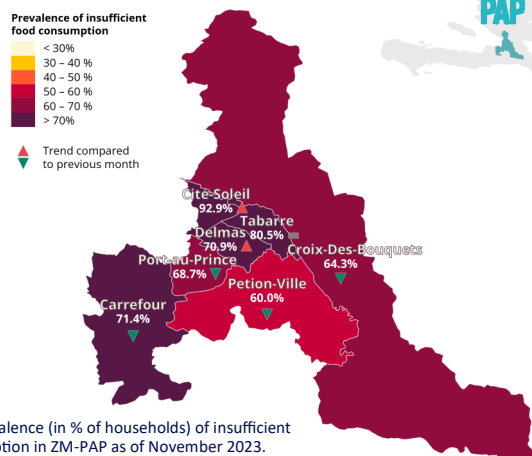


Figure 3. Prevalence (in % of households) of insufficient food consumption in ZM-PAP as of November 2023. Source: WFP, Geopoll/HungerMap^{LIVE} (Nov 2023)

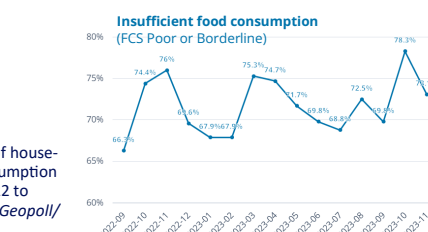


Figure 4. Monthly trend (in % of households) of insufficient food consumption in ZM-PAP from November 2022 to November 2023. Source: WFP, Geopoll/HungerMap^{LIVE} (Nov 2023)

¹ The food consumption is considered insufficient when the Food Consumption Score (FCS) is Poor or Borderline.
² Note that these numbers of people with insufficient food consumption are not comparable with IPC food insecure figures (refer to methodology section).

Some market disruptions due to the closure of border and insecurity

WFP collected data in Haiti's ten departments in November 2023 to monitor the availability of basic food items and household purchasing power, in addition to the CNSA's monitoring of food availability in the capital city of each department. For programmatic reasons, in line with these commune-level interventions and to account for the diversity within each department, WFP identified four to five markets per department to conduct the data collection. Results derived from the data, such as the median prices of basic food commodities by department are presented in Figure 5. During the month of November, 62% of the surveyed traders reported scarcity (low availability) of food products in all departments. The products most affected were beans (a seasonal product) and rice. The departments most affected by this shortage were those close to the border and/or those that mainly source from the Dominican Republic (DR) (Center, North-East, South-East and North). In fact, this shortage could be explained by the poor performance due to various negative factors such as gang violence (leading to the abandonment of certain production areas), low availability and high cost of agricultural inputs, etc., which tend to persist. The reasons for the shortage of the products mentioned are, among others and in order of priority :

- The high cost of food products;
- Difficulties with transportation;
- The trader didn't have the money in time to restock before the product ran out;
- The unavailability of the product at the time of demand from the supplier;
- Poor agricultural performance in some of the country's production zones.

EVOLUTION OF THE FOOD BASKET

In November 2023, the average cost of the food basket at national level is around 28,400 HTG (Haitian gourdes), 2% lower than in October 2023. The value of the basket in the departments of North-East, North, South-East and Nippes exceeds the national average (see Figure 6). The large

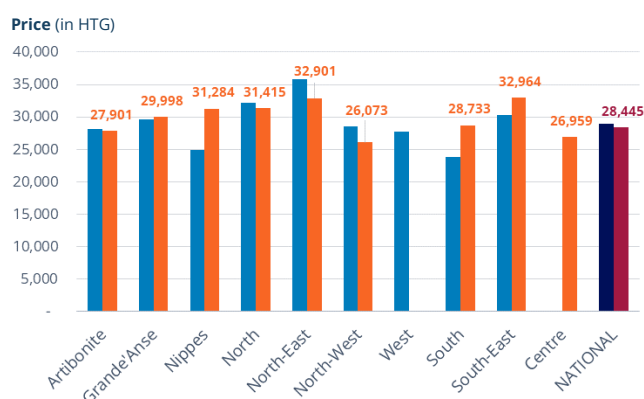


Figure 6. Average cost of food basket by department in Haiti, as of October 2023. Source: WFP Haiti (October 2023)

Department	Wheat flour	Rice	Maize	Sugar	Black beans	Red beans	Oil (per gal)
Centre	265	285	223	250	431	434	1116
Artibonite	278	269	238	240	457	475	1173
Nippes	334	257	296	291	513	519	1335
North	315	265	261	262	542	599	1245
North-East	337	252	261	279	561	694	1173
North-West	251	253	214	221	452	445	1142
South	283	255	225	249	471	550	1285
South-East	419	264	219	243	501	506	1419
Grande-Anse	242	239	246	231	571	722	1255

Figure 5. Median prices of basic food commodities by department in Oct 2023. Source: WFP

discrepancy in the North-East (24% above the national average) can most probably be explained by the closure of the DR border in mid-September 2023.

MARKET FUNCTIONALITY INDEX

In November 2023, WFP conducted an update of the Market Functionality Survey (MFI). Results are shown in Figure 7. Very good scores were observed for the dimensions *Assortment*, *Availability*, *Resilience*, *Competition* and *Access/Protection* in most departments across Haiti, except for the North, Centre, West and South-East, which face a medium to high level of risk for the *Availability* dimension due to the border closure and the insecurity situation in the metropolitan area. Besides, results of the updated MFI show very low scores (meaning very high levels of risk) for the *Price* dimension; this may be due to the high level of inflation the country has faced in recent years. Very low scores (very high levels of risk) were also observed for the *Infrastructure*, *Service* and *Quality* dimensions - which relate to more structural features of Haiti's markets. A comparative analysis of the situation between November 2023 and November 2022 in the departments that are most likely to be affected by the border crisis (North, North-East, Centre) and the commune of Cité-Soleil in the Port-au-Prince metropolitan area, reveals i) a significant drop in *Availability* scores in North, North-East and Cité-Soleil, and to a lesser extent in Centre; ii) a drop in *Supply chain resilience*, particularly marked in Cité-Soleil, but also in the North and North-East; iii) no significant change in the *Price* dimension, which remains very low; and iv) little change in the *Assortment* dimension.



Figure 7. Scores by department from the Market Functionality Index survey update conducted in November 2023. Source: WFP Haiti (Nov 2023)

1 Haitian out of 3 will soon not be able to afford to buy essential needs

An analysis on the affordability of the minimum expenditure basket (MEB) estimates that between 300 and 760 thousand Haitians won't be able to afford to buy essential needs in the next 2 months.

This analysis, based on survey and economic data, intends to answer the following question : how many additional people will not be able to cover their essential needs if prices continue to increase at the current pace? To answer that question, household expenditure data from the ENSSAN survey (*Enquête Nationale de Suivi de la Sécurité Alimentaire et Nutritionnelle*), collected in July 2023, and updated data on the Minimum Expenditure Basket (MEB) - derived from economic data such as inflation and currency exchange rate - are used. The MEB is the monetary threshold that households require to cover their essential needs through the market. More details about the methodology are provided at the end of this document (section Methodology, Box [D]).

In July 2023, 24.7 percent of the 11.9 million people living in Haiti could not afford the MEB. In span of three months only, it is estimated that an additional 333,000 people (2.8 percent of the population) would be in the same situation (see Table 1). The current level of inflation has eroded the purchasing power of households across the country, with an increase of 11 percent of the population unable to make ends meet between July and October. The departments of the South and Center are estimated to be the most affected, with an increase of 24 percent or more from July to October.

The analysis further explores the possible impacts on MEB cost by testing three scenarios for February 2024, and estimates the population that would be affected (i.e., who could not afford to buy essential needs) if the monthly inflation continues its upward trend. To do so, three scenarios for the period from October 2023 to February 2024

up to February 2024

	October 2023	Scenario 1 (5% increase CPI)	Scenario 2 (10% increase CPI)	Scenario 3 (15% increase CPI)
Consumer Price Index (CPI)	341.1	358.2	375.2	392.3
Inflation	22.8%	18.0%	23.6%	29.2%
MEB rural (in HTG)	12,410	13,031	13,651	14,272
MEB urban (in HTG)	17,750	18,638	19,525	20,413

Table 2. Minimum Expenditure Baskets (rural and urban) in the case of three scenarios for the period from October 2023 to February 2024. Source: IHSI, WFP.

are proposed (see Table 2): in case the Consumer Price Index (CPI) increases by 5 percent (corresponding to an annual inflation of 18%, the lower expected), 10 percent (the same increase as last year) or 15 percent (worst scenario, corresponding to an annual inflation of 29%). In the second scenario, the number of additional people for whom the MEB threshold would be too high is close to 500 thousand people, while in the third scenario it is close to 760 thousand people. These scenarios suggest that between 30 and 35 percent of Haitians will not be able to afford to buy essential needs in the market if prices continue to rise.



	Population	People who cannot afford MEB					Share of population (%)					Change from October 2023 (people)		
		July 2023	Oct 2023	Scenario 1	Scenario 2	Scenario 3	July 2023	Oct 2023	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Artibonite	1,885,883	346,387	384,874	415,664	451,586	487,507	18.4%	20.4%	22.0%	23.9%	25.9%	+30,790	+66,712	+102,633
Centre	814,642	195,649	242,875	268,174	283,354	308,653	24.0%	29.8%	32.9%	34.8%	37.9%	+25,300	+40,479	+65,779
Grand'Anse	506,416	278,845	293,595	302,726	316,071	328,714	55.1%	58.0%	59.8%	62.4%	64.9%	+9,131	+22,476	+35,119
Nippes	373,924	125,141	146,872	155,864	170,102	176,097	33.5%	39.3%	41.7%	45.5%	47.1%	+8,992	+23,230	+29,225
Nord	1,165,003	198,298	218,579	238,859	256,887	281,674	17.0%	18.8%	20.5%	22.1%	24.2%	+20,281	+38,308	+63,095
Nord-Est	430,081	180,296	202,833	215,980	232,882	238,517	41.9%	47.2%	50.2%	54.1%	55.5%	+13,147	+30,049	+35,684
Nord-Ouest	795,616	354,364	383,327	410,586	427,622	446,363	44.5%	48.2%	51.6%	53.7%	56.1%	+27,259	+44,296	+63,036
Ouest	4,399,102	1,011,845	1,119,267	1,192,037	1,297,726	1,398,218	23.0%	25.4%	27.1%	29.5%	31.8%	+72,770	+178,459	+278,951
Sud	844,639	80,056	100,745	114,238	128,630	152,917	9.5%	11.9%	13.5%	15.2%	18.1%	+13,493	+27,885	+52,172
Sud-Est	690,591	175,013	186,050	200,240	209,700	222,314	25.3%	26.9%	29.0%	30.4%	32.2%	+14,190	+23,650	+36,264
Total	11,905,897	2,945,894	3,279,016	3,514,367	3,774,559	4,040,972	24.7%	27.5%	29.5%	31.7%	33.9%	+235,351	+495,543	+761,956

Table 1. Estimation of people who cannot afford the cost of the Minimum Expenditure Basket in July 2023, October 2023 and in February 2024 according to three scenarios. Source: IHSI, WFP

4. SEASONAL MONITORING [E]



3 consecutive months of drier-than-average conditions in the South

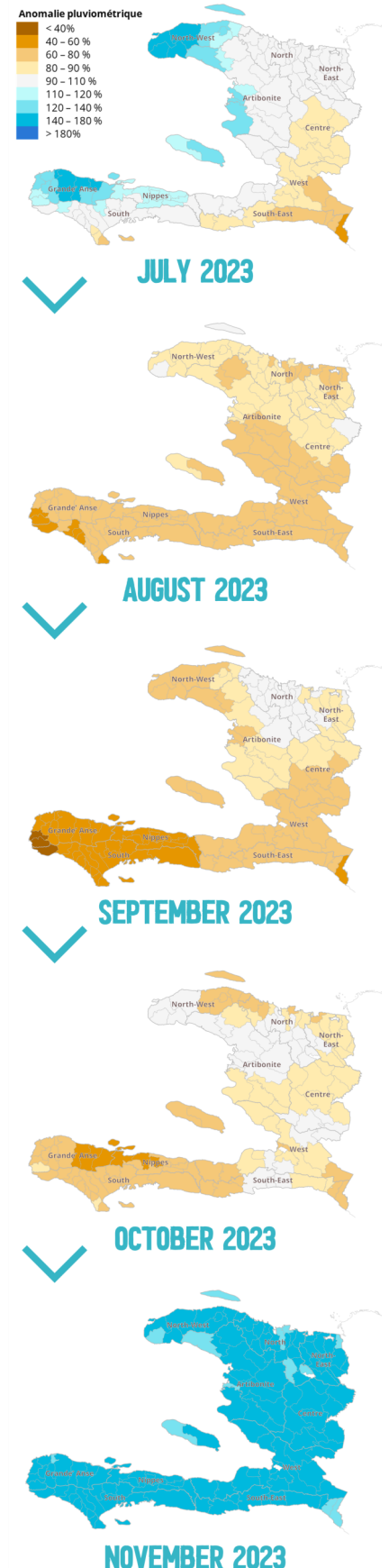
Haiti has endured typical El Niño impacts: so far, the rainfall season has been fairly poor, with drier than average conditions affecting most of the country since April, except for November when a tropical depression induced important rainfall amounts.

After a significant delay (March, April) in the onset of the main season, rainfall deficits have continued to accumulate throughout the season, more specifically in August, September and October. The maps below (Figure 8) show rainfall anomalies (percentage of average) in July, August, September, October and November 2023 (top to bottom). The rainfall anomaly map for July 2023 shows positive rainfall anomalies (represented in blue according to the legend on the map), more specifically in most of the departments of North-West, Grande'Anse and Nippes, and in some communes of Artibonite, where above-average precipitation levels were observed in the month of July (not necessarily restorative after such a delayed start to the rains, and followed by prolonged dry conditions). The other maps show that afterwards, dry conditions could be observed in most of the country in August, September and October, with particularly severe rainfall deficits detected in September 2023 in most communes of Grande'Anse, South and Nippes. Such deficits have severely affected those areas of the country, more particularly the departments of Grande'Anse, South, Nippes, South-East, but also West and North-West. The other departments are also impacted, but to a lesser extent.

During the month of November, a particularly intense rainfall episode affected most of the country due to a tropical depression: the rainfall anomaly map for that month (bottom of Figure 8) shows important positive anomalies (140%-180% of average) in the whole country (see peaks in Figure 9). Unfortunately, considering the timing (very late in the season, right before the start of harvests) and the amounts of rainfall (causing damage to croplands), those conditions are very unlikely to help compensate the impacts from prolonged rainfall deficits.

Such conditions are expected to have severe repercussions on the current agricultural season, which accounts for around 50% of the country's annual production.

It is important to note that the negative anomalies illustrated in Figure 8 maps are part of a wider picture : Haiti has been affected by a long multi-year cycle of abnormally dry conditions since 2013, and an El Niño episode has been confirmed in June 2023 (bringing drier and warmer conditions to the Caribbean during the main crop season). The reduction in precipitation, induced by the El Niño effect, combined with well-known long-term dry conditions may likely lead to decreased production of key food crops across the country. For that reason, seasonal conditions should be



WEATHER FORECAST

The rainfall situation is expected to be slightly above average in December 2023 and near-to-normal in the beginning of 2024, according to forecast datasets for the period of December-January-February (corresponding to the fall harvest period). While this may likely not compensate for the abnormally dry rest of the main season, if the forecasts of favorable rainfall verify, this could provide acceptable conditions for third cycle and off-season crops.

Source: Copernicus Climate Change Service

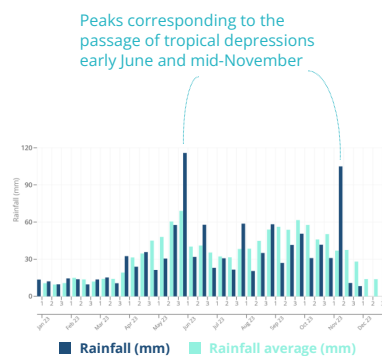


Figure 9. Rainfall values in 2023 (dark blue) and average values (cyan) per 10-day period, in Haiti. *Source: CHIRPS/UCSB, processed by WFP RAM-C*

Figure 8. Rainfall anomalies (percentage of average) by commune in July, August, September, October and November 2023, in Haiti. *Source: CHIRPS/UCSB, processed by WFP RAM-C*



Insecurity levels remain high in ZM-PAP and unfold in Centre

Violent events that occurred between 1st July and 1st Dec 2023 are spatially represented in Figure 10, by event type and number of fatalities involved. According to the data source (ACLED^[D]) most incidents are concentrated in the West department, more specifically in Port-au-Prince metropolitan area, but also in the town of Léogâne and in Fond Baptiste (commune of Arcahaie). Other insecurity hotspots are located in the departments of Artibonite (communes of Dessalines and Saint-Marc) and Centre (commune of Mirebalais), and to a lesser extent in Cap-Haïtien.

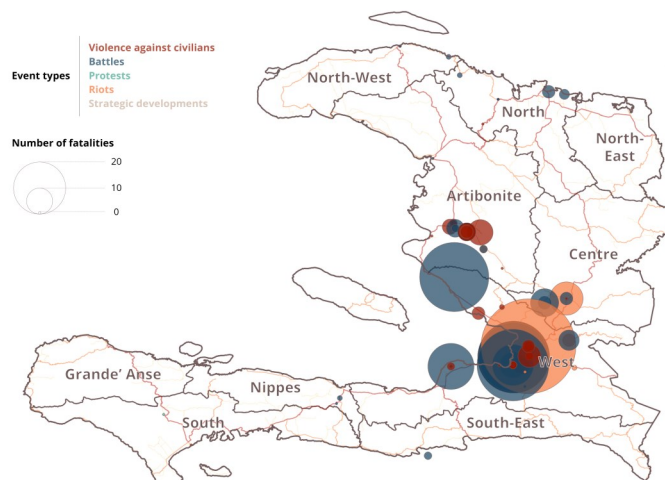


Figure 10. Violent events recorded in Haiti between 01 July 2023 and 01 December 2023. Source: ACLED (2023)

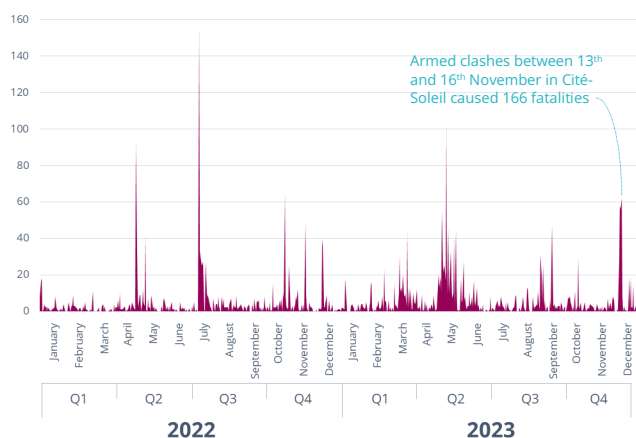


Figure 11. Daily number of fatalities caused by violent events from January 2022 to December 2023 in Haiti. Source: ACLED (2023)

Recently, the deadliest peak of violence in Haiti occurred in November 2023 (13th to 16th), as visible in Figure 11, showing the daily numbers of fatalities caused by violent events recorded by ACLED. Armed clashes then escalated between gangs in Cité-Soleil after the death of a leader, causing at least 166 fatalities in those four days, both civilians and gangsters. The burning of houses, the shooting of a health center and sexual violence were also reported. More deadly clashes broke out in Tabarre at the end of the same month. According to the data, the security situation has to have deteriorated at the end of the year, after a relative lull in July-August 2023.

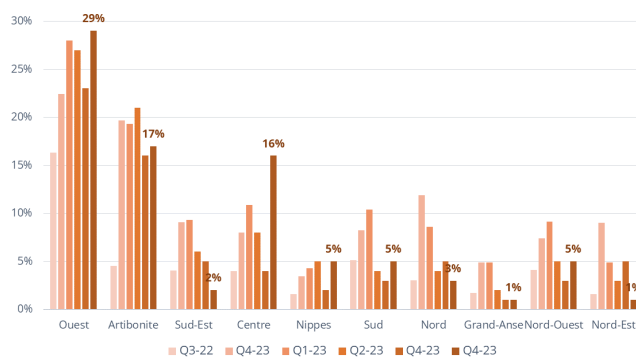


Figure 12. Percentages of households affected by violence and insecurity/conflict, limiting their capacity to secure livelihoods or get food, by department in Haiti, by quarter. Source: WFP, Geopoll/HungerMap^{LIVE} (Nov 2023)

WFP's real-time monitoring system (HungerMap^{LIVE}) collects information throughout the country about the perception of households regarding their security. Figures 12 and 13 show the percentages of households declaring that violence and insecurity limit their capacity in securing livelihoods or getting food, respectively by department at national level, and by commune at the level of PAP metropolitan area. The West department records the highest percentage value out of the country, with 29% households affected by insecurity in October-November 2023 (compared to 23% in the previous quarter and to 22% one year before). Artibonite is the second most affected department; 17% of households perceive the levels of violence as limiting for their livelihoods and access to food. A neat increase should be noted in the Centre department (16% in quarter 4 of 2023 compared to 4% in the previous one). In PAP metropolitan area, Cité-Soleil shows the highest percentage of households affected by insecurity (40%), with a strong increase compared to last quarter (23%), probably in link with armed clashes described with ACLED data above. In the communes of Croix-Des-Bouquets, Port-au-Prince and Tabarre, more than one household out of three also declare being impacted by insecurity levels in October-November 2023. Perceptions of insecurity impacts on livelihood and food have worsened in quarter 4 compared to the previous ones in most communes, except for Pétiön-Ville.

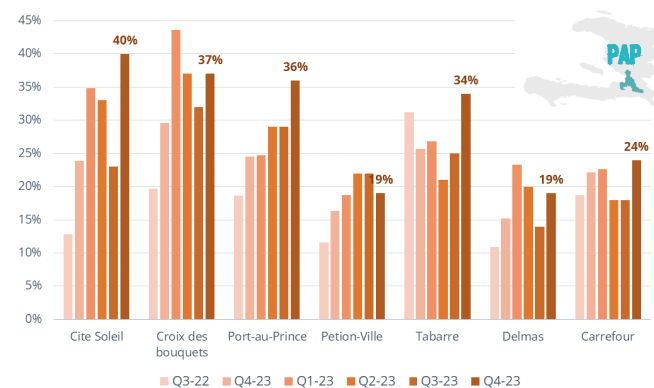


Figure 13. Percentages of households affected by violence and insecurity/conflict, limiting their capacity to secure livelihoods or get food, by commune in Port-au-Prince metropolitan area, by quarter. Source: WFP, Geopoll/HungerMap^{LIVE} (Nov 2023)



[A] WFP's continuous, near real-time monitoring system (HungerMap^{LIVE})

This system collects thousands of survey data points per day remotely, through live calls made from call centers around the world, including Haiti. The sample is 116 households per department, and 120 per commune in the Port-au-Prince metropolitan area, selected monthly by random telephone dialing, to be interviewed. These analyses enable to monitor some key food security indicators, such as insufficient food consumption or household coping strategies. Monitoring their evolution over time could thus constitute an alert mechanism for programmatic readjustments, as well as an advocacy tool. The prevalence rates of insufficient food consumption presented in this bulletin should not be compared to the proportion of food insecure people as provided by the IPC classification exercises - which consider many more indicators than insufficient food consumption and coping strategies.

Useful link : hungermap.wfp.org/

[B] Market price monitoring

Data collection for the market monitoring system is based on face-to-face surveys with retailers, considered as key informants (KIs). At least five KIs are surveyed for each product on the market in question. For these surveys, 343 merchants from 41 markets were surveyed in October 2023, and a total of 38 markets were surveyed in 38 communes for the month of November 2023, both covering nine of the ten country's departments. It is important to emphasize that the sample is not representative, given the constraints associated with market operations. As such, merchants are selected according to the "selected sample" sampling methodology. The selection of the food products takes into account the Minimum Expenditure Basket (MEB), and covers seven basic products : wheat flour, rice, maize, sugar, black beans, red beans and vegetable oil. It takes into account the energy requirements (2,100 kcal) for a household of five people.

Useful link : www.wfp.org/market-analysis

[C] Market Functionality Index (MFI)

The Market Functionality Index methodology is a standardized WFP approach to assess market functionality by assigning a score based on survey data. These surveys are organized around nine dimensions considered essential to gauge market functionality: assortment, availability, price, supply chain resilience, competition, infrastructure, service, food quality, and access and protection. Cereals, non-cereal foods, and non-food items are the three commodity categories considered, with a higher weighting for the cereals. A market is thus rated on a scale from 0 to 10, where full market functionality (MFI = 10) refers to a fully developed, efficient, and functional market. In most contexts where WFP operates, such scores are rarely achieved.

Useful link : www.wfp.org/publications/market-functionality-index-mfi

[D] Economic analysis (MEB)

The MEB is the monetary threshold that households require to cover their essential needs through the market. The composition was designed for a typical household of five people (two adults and three children). The multi-purpose transfer value of \$118 (84 \$ food and 34\$ non-food) was used as the MEB proxy for this exercise, recommended by the *Groupe de Travail sur les Transferts Monétaires en Haïti* (GTTM) in October as a minimum emergency multi-sectoral expenditure value for transfers. The MEB cost was adjusted in August 2023 (at the time of the ENSSAN survey) by applying the Oxford adult equivalence scale to account for economies of scale in sharing certain goods among household members to the expenditure data.

Useful link : <https://docs.wfp.org/api/documents/WFP-0000074198/download/>



[E] Climate analysis and seasonal monitoring

Climate and seasonal analyses are conducted by WFP RAM Climate and Earth Observation team. These analyses are based on medium-term records (since 1981) of precipitation, vegetation and temperature. Rainfall anomalies are derived from the Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS), produced by the University of California. These data combine satellite imagery with in situ station data to create precipitation time series. The SPI (standardized precipitation index), based on precipitation data, is a widely used index to characterize drought at different time scales. On short time scales, the SPI is closely related to soil moisture, while on longer time scales, it informs about groundwater availability. The Normalized Difference Vegetation Index (NDVI) is a common proxy used to monitor vegetation. NDVI data in use is from the MODIS Terra and Aqua satellites, which provide global coverage since 2000.

Useful link : dataviz.vam.wfp.org/seasonal_explorer/rainfall_vegetation/help

[F] Monitoring insecurity and violent events with ACLED database

The Armed Conflict Location & Event Data Project (ACLED) database compiles and analyzes disaggregated data for mapping crisis areas. It collects information on the dates, actors, locations, fatalities, and types of violent events reported around the world. This data is granular, near real-time, and is available to the public for free. It is important to note that there are limitations to using the ACLED database: it does not claim to be comprehensive and to collect all violent incidents, especially for areas that are difficult to access or have little information coverage. However, while this data is not a primary source for day-to-day monitoring of security and safety operations, it does provide important information on trends and possible geographic expansions of insecurity in crisis areas. ACLED database can be used to spatially represent recorded violent events and follow trends over time, but does not claim to be exhaustive.

Useful link : acleddata.com/about-acledd/



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