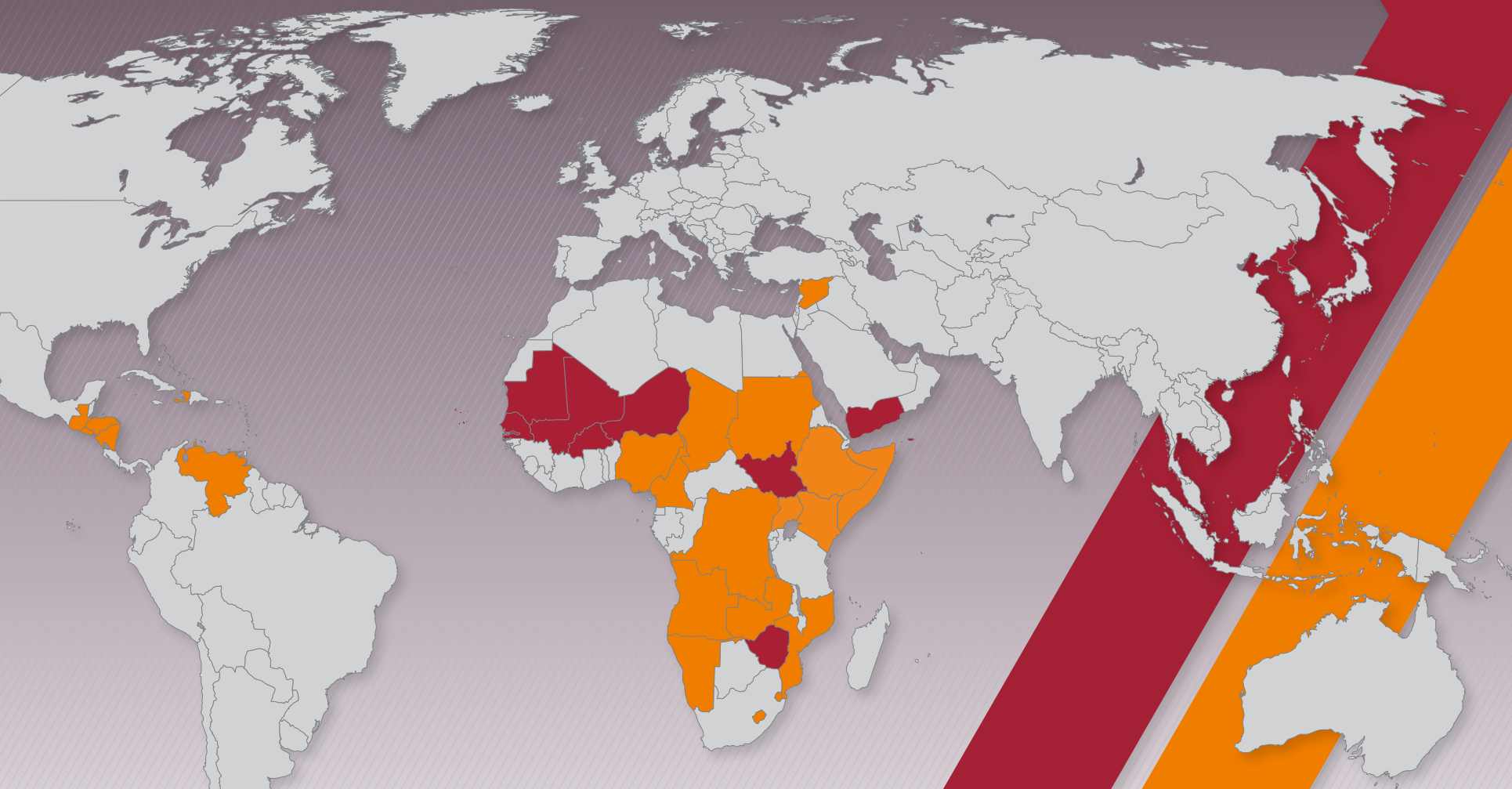




Food and Agriculture
Organization of the
United Nations

Early Warning Early Action Report on Food Security and Agriculture

2019
October–December



REQUIRED CITATION

FAO. 2019. *Early Warning Early Action Report on Food Security and Agriculture (October–December 2019)*. Rome.

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ISBN 978-92-5-131843-0

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Overview

Efficient humanitarian assistance requires anticipation. For FAO, this means harnessing risk information systems to act faster and avert acute hunger.

Qu Dongyu
FAO Director-General

The **Early Warning Early Action (EWEA) Report on Food Security and Agriculture** is produced by the Food and Agriculture Organization of the United Nations (FAO). It provides a quarterly forward-looking analysis of major disaster risks to food security and agriculture, specifically highlighting:

- potential new emergencies resulting from imminent disaster threats
- new developments in countries already affected by protracted crises which are likely to cause a further deterioration of food insecurity

This report is part of FAO's efforts to systematically link early warnings to anticipatory actions. By providing specific early action recommendations for each country, the report aims to prompt FAO and partners to proactively mitigate and/or prevent disasters before they start to adversely impact food security.

High risk

Countries are categorized as “high risk” when there is a high likelihood of a new emergency or a significant deterioration of the current situation with potentially severe effects on agriculture and food security.

On watch

Countries categorized as “on watch” instead have a comparatively more moderate likelihood and/or potential impact, requiring close monitoring.

This report represents a summary and a prioritization of analysis provided by FAO's corporate and joint multi-agency information and early warning systems:

- Global Information and Early Warning System on Food and Agriculture (GIEWS)
- Food Chain Crisis and Emergency Prevention System (FCC-EMPRES)
- Integrated Food Security Phase Classification (IPC) and *Cadre Harmonisé*

In addition to these, a number of other external sources are consulted. The list of sources is available on page vii.

Countries with ongoing emergency response efforts are not included in the report, unless there are signs of potential significant deterioration. An overview of countries worldwide with humanitarian response plans or emergency plans is provided on page vi.

More details on the risk ranking methodology and the early action recommendations are provided on page ii.

The *Global Report on Food Crises 2019* highlights that around 113 million people in 53 countries faced acute food insecurity in 2018. Urgent humanitarian assistance is required to save lives and protect livelihoods. For more information go to: www.fsinplatform.org/sites/default/files/resources/files/GRFC_2019-Full_Report.pdf

Methodology

Risk value

High risk

FAO and partners should start implementing early actions on a no-regrets basis

On watch

FAO should strengthen corporate monitoring, preparedness and plan for the implementation of certain low cost early actions

The countries and regions flagged in this report are selected through a consultative process led by early warning focal points from the EWEA, GIEWS, FCC-EMPRES and IPC teams. The main steps of the process are:

1. Shortlist countries flagged by FAO's corporate early warning systems, IPC and *Cadre Harmonisé*
2. Triangulate risk information with other datasets and external early warning systems
3. Verify and rank the final list of risks based on the following three criteria:
 - **Likelihood of occurrence** is classified into five levels (very unlikely, unlikely, moderately likely, likely and very likely). The term likelihood applies to the probability that, within the time period considered, either a new disaster risk or the significant deterioration of the situation will occur.
 - **Potential impact** is classified into five levels (negligible, minor, moderate, severe and critical). The impact is analysed both in terms of magnitude (the number of potentially affected people and/or geographical extent of the impact on agriculture, livelihoods and food security) and severity (the gravity of the impact on agriculture, livelihoods and food security, especially in relation to pre-existing vulnerability and food insecurity).
 - **Country capacity** to cope with and respond to potential disasters or deteriorated situations is also classified into five levels (very low, low, medium, high and very high). The Index for Risk Management (INFORM) is further applied to measure the coping capacity of a country.

Famine declared and famine likely

As per the IPC new guidelines, 'famine' classification is mentioned when famine is currently occurring in an area and at least 20 percent of the population (or 10 000 people) are facing catastrophic conditions. The new classification 'famine likely' is mentioned when famine is likely occurring and while evidence indicates a famine, it is not adequate to confirm or deny the condition. Furthermore, when further deterioration of the situation might lead to a risk of famine, this aspect is highlighted in the global risk map and narrative of the report as 'risk of famine'.

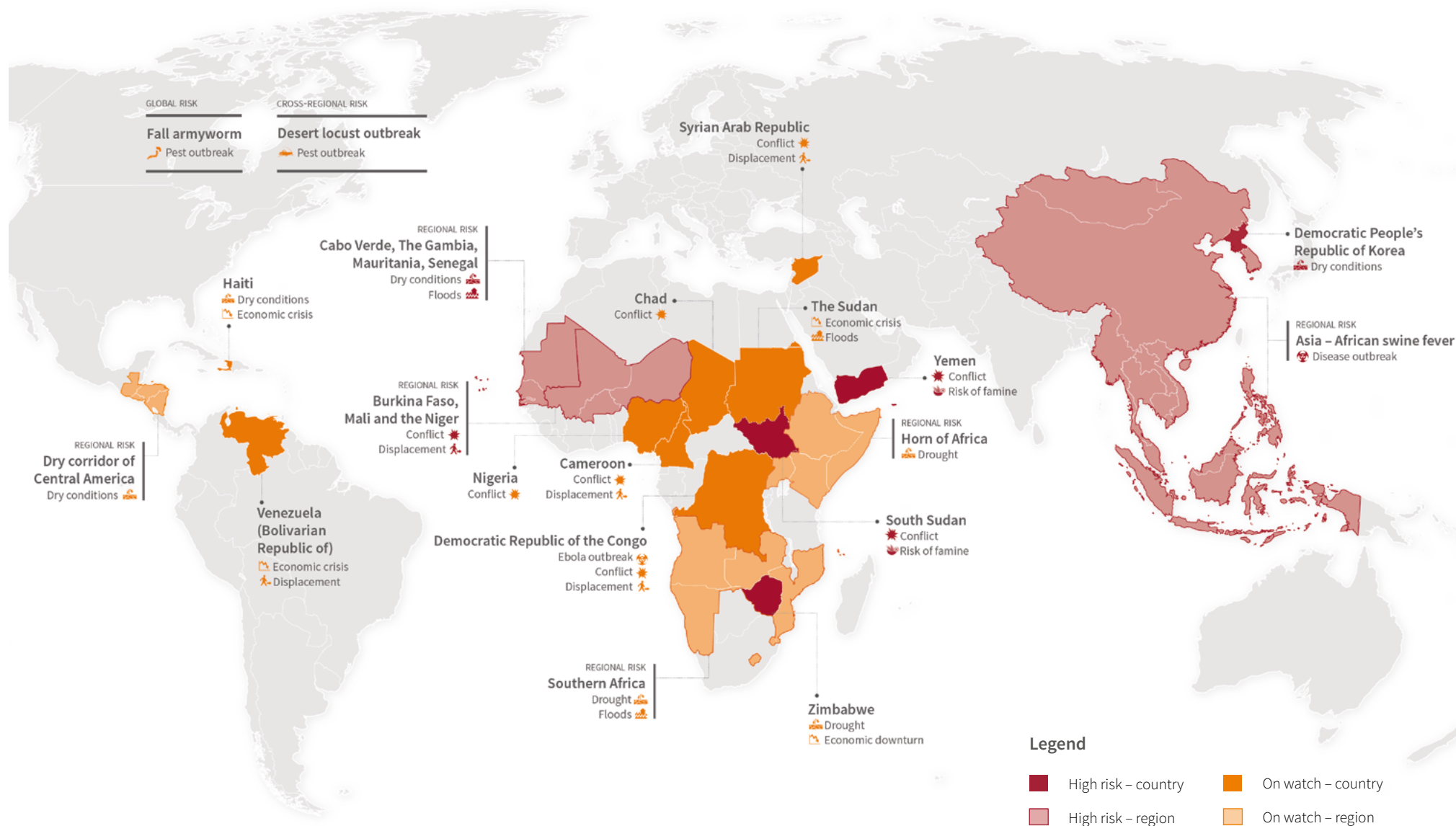
Recommendations for early actions

Early action recommendations are indicated for each risk that is featured in this report. They outline a range of the most appropriate interventions over the coming months which could prevent, mitigate or prepare for the potential impact of a specific disaster on the agriculture sector and livelihoods. The interventions are also sector specific and non-binding in nature. Early actions can vary from activities aiming to protect livelihood assets to planning and preparatory activities. The recommendations are developed by FAO through a consultative process involving technical experts and FAO country, subregional and regional offices.

Global risk map

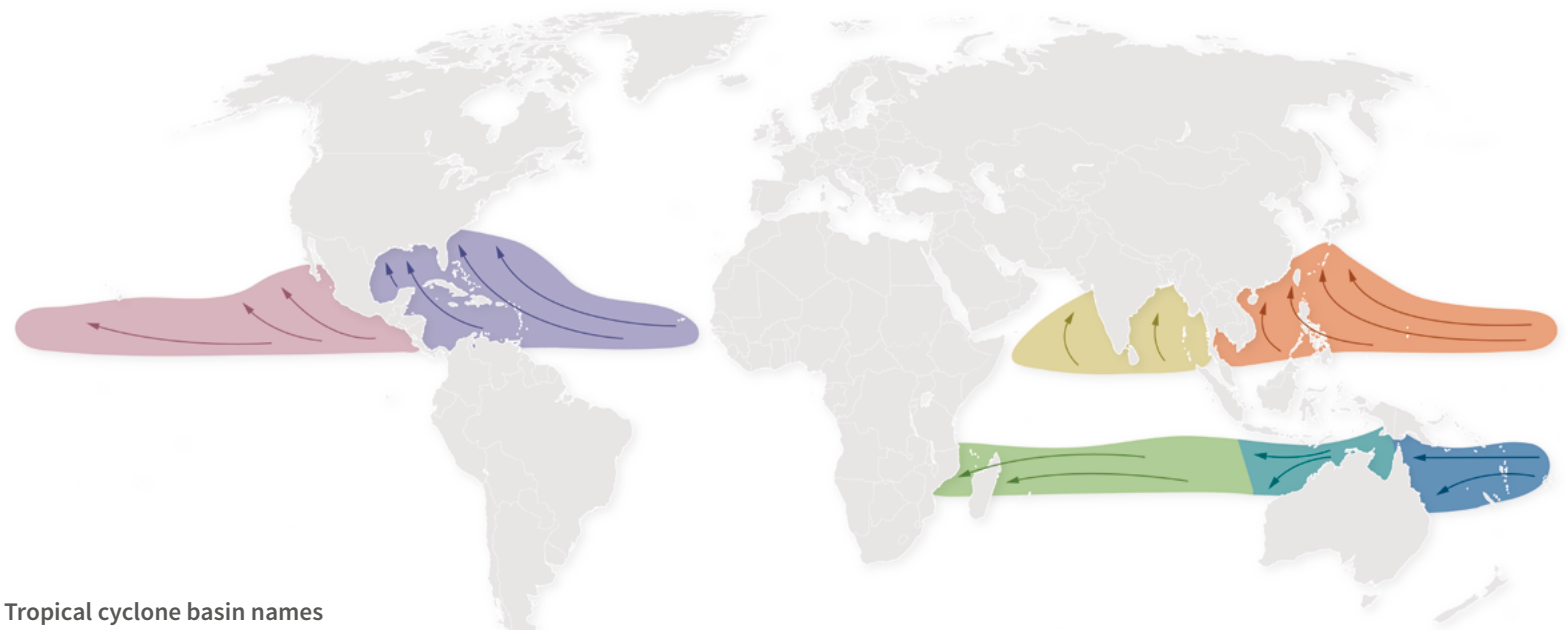
The map on page iii provides a visualization of major disaster risks to food security and agriculture in the indicated reporting period. When a new emergency or deterioration of the current situation is very likely and might have severe impacts, it is indicated as "high risk". In case of moderate to high likelihood and moderate and significant impact, the risk is listed as "on watch". Ongoing humanitarian crises, such as protracted emergencies, are not highlighted in this report unless a deterioration is likely.

Global risk map: October–December 2019



Cyclone seasonality

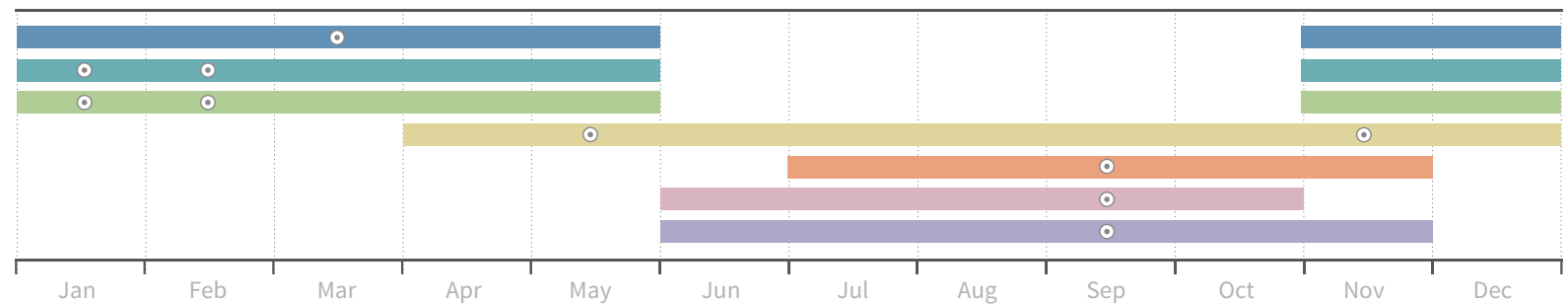
This map provides an overview of the timeline of cyclone formations and their historical tracks. There are seven tropical cyclone basins, with specific peak timings during the calendar year. When available, the seasonal forecast (below- or above-average cyclone activity) is also provided.



Tropical cyclone basin names

- North Atlantic Ocean, the Gulf of Mexico and the Caribbean Sea¹
- Northeast Pacific basin
- Northwest Pacific basin²
- North Indian basin
- Southwest Indian basin
- Southeast Indian/Australian Basin
- Australian/Southwest Pacific basin
- Peak

Seasonality calendar



¹ Tropical Storm Risk (TSR) slightly raises its forecast and anticipates North Atlantic hurricane activity in 2019 will be close to the long-term norm.

² TSR maintains its outlook issued in early July and anticipates the 2019 Northwest Pacific typhoon season will see activity slightly below the 1965–2018 climate norm.

Source: United States National Oceanic and Atmospheric Administration, 2019

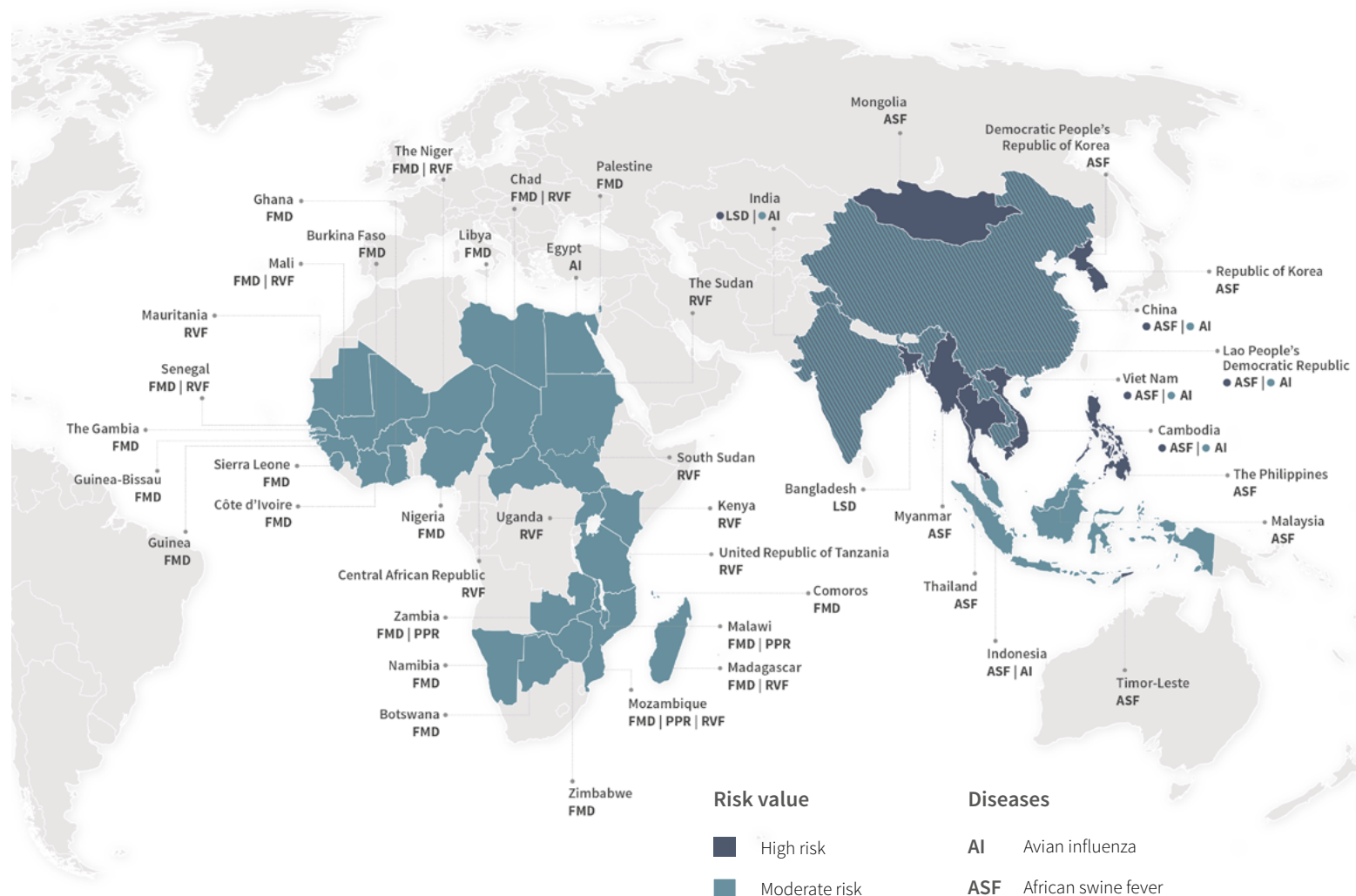
Animal health threats potentially affecting food security

This map highlights selected countries facing animal health threats during the reporting period.

Countries are only highlighted if the threat is considered to have the potential to impact food security.*

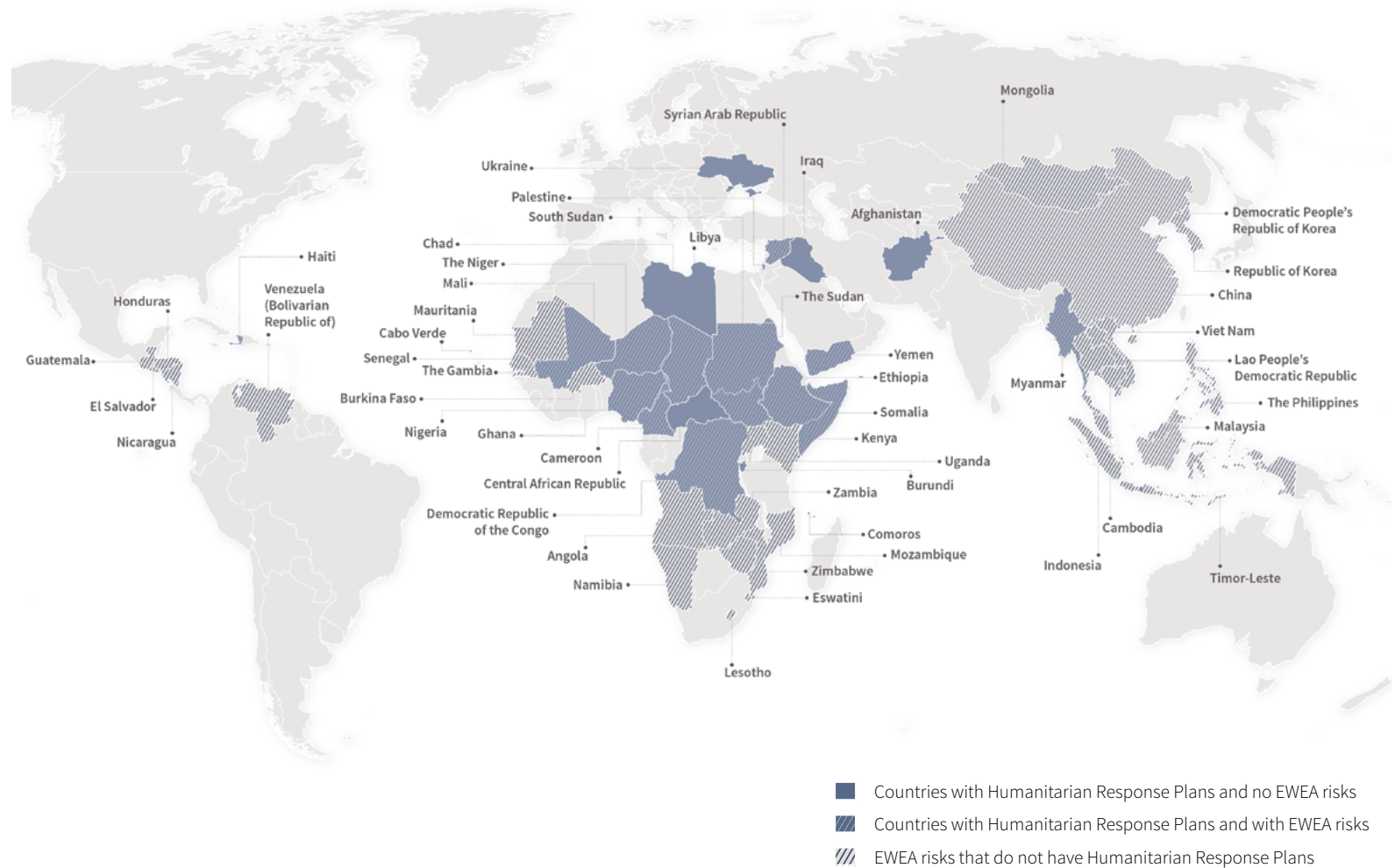
For a complete list of countries and threats, and more detailed information see:
www.fao.org/food-chain-crisis/early-warning-bulletin/en/

*The information used to compile this map was extracted from the Food Chain Crisis Management Framework (FCC) Early Warning Bulletin for the period October–December 2019. The information was compiled as of 1 October 2019. Please consult the bulletin for a more extensive analysis of threats to animal health globally.



EWEA risks within the wider humanitarian context

The EWEA report exclusively highlights new emergencies in food and agriculture and ongoing crises in which a potential significant deterioration is likely. The report does not cover ongoing crises with no indication of an upcoming deterioration. This map shows countries flagged by the report compared to countries with Humanitarian Response Plans in 2019, in which we do not foresee a marked deterioration.



Source: Global Humanitarian Overview 2019, OCHA



Sources of information

This report consolidates information provided by GIEWS, FCC-EMPRES and IPC, as well as from external sources of information. The analytical basis for the prioritization of countries and the major sources of information and data presented in the report are three main groups of datasets:

- countries requiring external assistance and the food security situation of low-income food-deficit countries*
- forecasting threats to the food chain affecting food security in countries and regions**
- IPC and *Cadre Harmonisé* acute food security analysis

Additional information and data presented in the report are consolidated from the following external sources (including but not limited to):

- reports and bulletins by agencies of the United Nations (UN), in particular the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), Office of the United Nations High Commissioner for Refugees (UNHCR), United Nations Children's Fund (UNICEF), World Food Programme's (WFP) Vulnerability Analysis and Mapping Unit and the World Meteorological Organization (WMO)
- updates from external sources including Index for Risk Management (INFORM), Famine Early Warning Systems Network (FEWS NET), International Research Institute for Climate and Society – Columbia University (IRI), Reliefweb, local and international media

*Crop Prospects and Food Situation Bulletin, and Crop and Food Security Assessment Missions (CFSAM), GIEWS

**Food Chain Crisis Early Warning Bulletin, FCC-EMPRES, Animal Production and Health Early Warning Systems Team

A total of 15.9 million people are facing severe food insecurity in Yemen, where the number of fronts in the conflict has increased. This will hinder food production, and could stem the flow of goods coming into the country, raising prices.

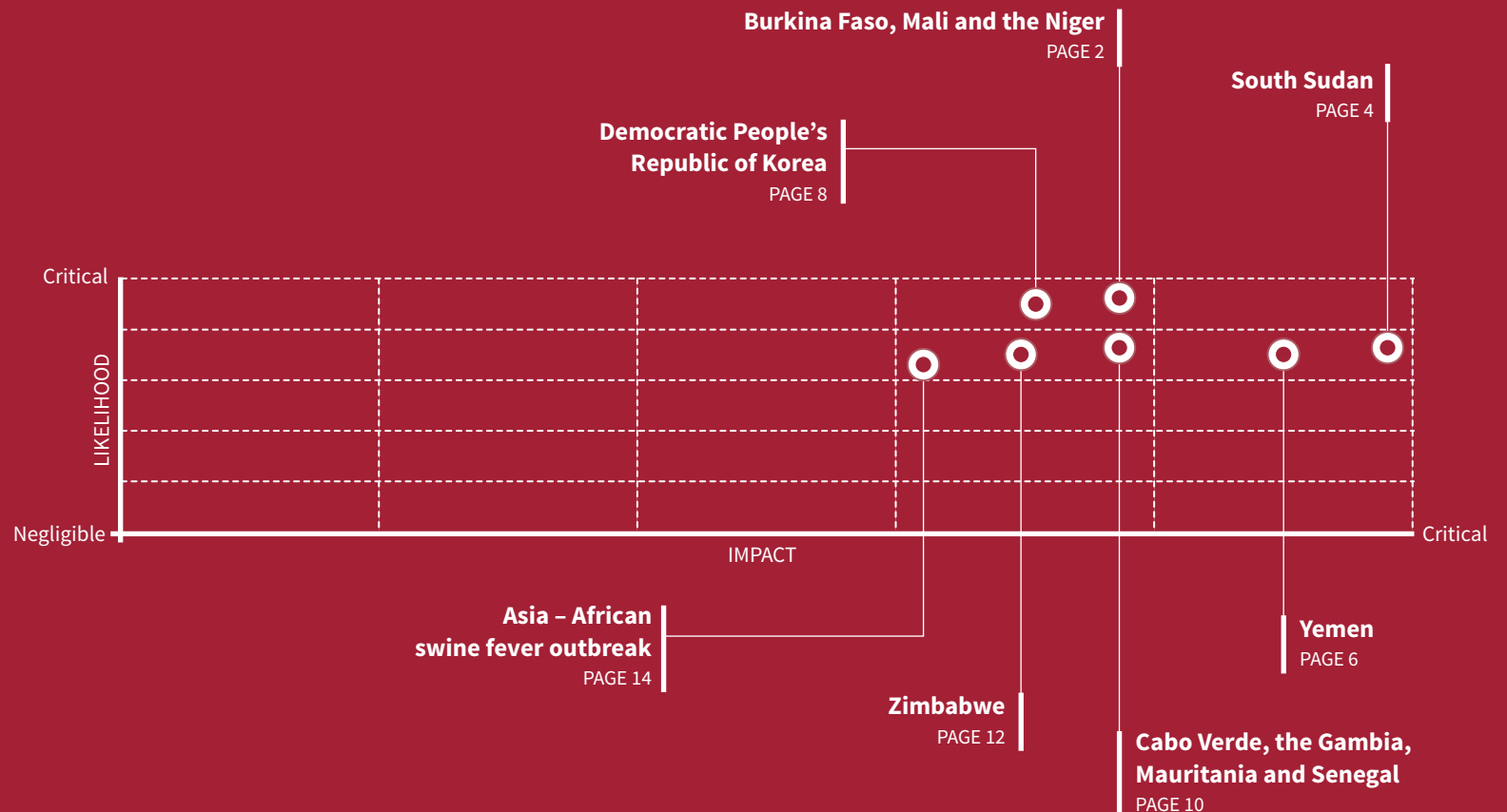


High risk

The matrix provides an overview of the ranking of risks featured in this report. The risks are prioritized based on the severity, likelihood and magnitude of their impact, while also balanced against the countries' individual coping capacity.

In order of intensity, for the period October–December 2019, the **high risk** section includes:

- Burkina Faso, Mali and the Niger
- South Sudan
- Yemen
- Democratic People's Republic of Korea
- Cabo Verde, the Gambia, Mauritania and Senegal
- Zimbabwe
- African swine fever outbreak in Asia





Burkina Faso, Mali and the Niger

High levels of insecurity affecting agropastoral activities and leading to increasing displacement and food insecurity



700 000 IDPs
as a result of escalation
of conflict



Risk overview

- High levels of insecurity in parts of Burkina Faso, Mali and the Niger affected agropastoral activities in June–September, which are crucial months for crop sowing and growth, as well as market functioning. Population displacements and food insecurity are also increasing. In affected areas, there is a high probability of reduced agricultural production at the end of 2019 and increased livelihood losses, particularly among displaced people who will require continued food assistance and livelihood support until the end of 2019 and beyond.
- Intercommunal and armed group violence has been extremely frequent in numerous regions of Burkina Faso (Sahel, North, East and increasingly in the Centre-North), Mali (Mopti and Gao), and western Niger (Tillabéri and Tahoua). As of October 2019, the unprecedented crisis had led to a sharp increase in the number of internally displaced people (IDPs) in these areas, with more than 700 000 IDPs and over 105 000 refugees.
- Insecurity has hampered access to fields for planting and weeding, as well as to agricultural inputs. In regions not affected by insecurity, the agricultural campaign has been progressing normally, although production could be impeded by irregular rains and dry spells at the start of the rainy season, as well as by floods that affected the Niger in early September. In several areas, state-led monitoring and control of animal and plant pests and diseases was often not possible. Certain regions

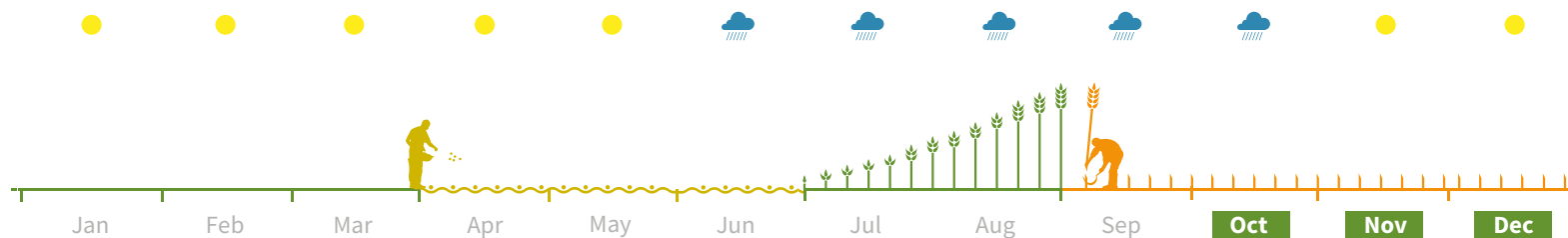
of the Niger – Agadez, Diffa, Tahoua and Zinder – registered an increase in pest outbreaks.

- Although pasture conditions and the availability of water sources have improved slightly thanks to adequate rainfall, overall access to these resources varies depending on the security situation. This has made it particularly difficult for the increasing number of displaced people to keep their small ruminants alive or cultivate land during the rainy season.



Potential impact

- In October–December, harvesting across the three countries should increase food availability and access. The end of the lean season is likely to contribute to reducing the aggregate number of people affected by food insecurity.
- Normal to above-average rainfall is expected for the end of the season in most areas of the three countries (African Centre of Meteorological Applications for Development), pointing to good crop production prospects and ensuring adequate regeneration of pasture and water resources. However, this will not likely be the case in areas affected by insecurity, given its adverse effect on agropastoral production, market functioning and displacement. Vulnerable displaced people will require food assistance and livelihood support in the last quarter of 2019 and in 2020.



High levels of insecurity in various regions of Burkina Faso, Mali and the Niger affected agropastoralism from June to September, which are crucial months for sowing and growing crops.

- This complex humanitarian crisis is likely to have long-lasting effects in the three countries, with a risk of potentially spreading further in the region, especially to Benin, Côte d'Ivoire, Ghana and Togo.
- Insecurity could disrupt traditional pastoralist migration movements occurring at the end of each year, as well as hinder access to natural resources.



Recommended early actions

From October to December, the following early actions are recommended in order to provide immediate livelihood support to displaced, host and refugee populations, as well as to contribute to reducing the risk of conflict over resources. In Burkina Faso, it is crucial to focus on boosting dry-season agricultural production, as well as to strengthen mechanisms focused on rapid evaluation of and response to the needs of affected people.

Crops

- Support home gardening through the distribution of vegetable seeds and agricultural inputs.

Livestock

- Promote commercial destocking for weak animals in areas with high concentrations of livestock and limited access to pasture.
- Provide water and feed to core-breeding stock, and establish feed stocks.
- Advocate for access to pasture and water for displaced populations' livestock, and support the seasonal migration of animals.

South Sudan

Severe levels of food insecurity persist due to the protracted crisis



More than **4.5 million** people severely food insecure despite the start of the harvest, to increase to **5.5 million** between January and April 2020



More than **1.3 million** children estimated to be acutely malnourished, including over **290 000** with severe acute malnutrition



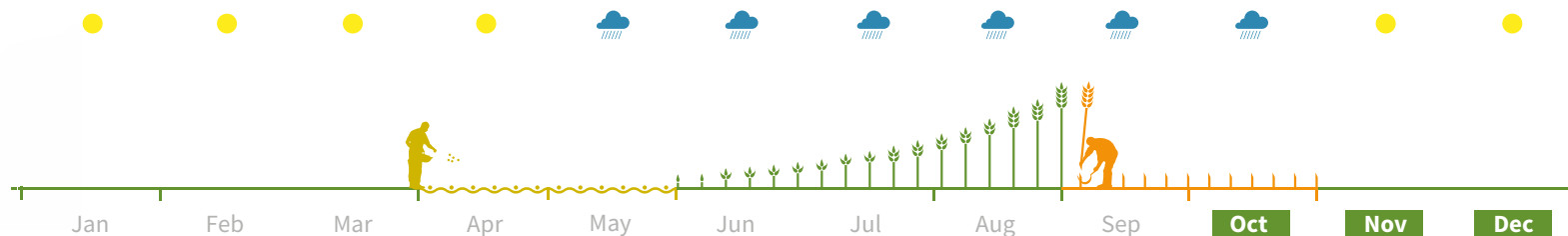
Risk overview

- Despite the start of harvest season, food insecurity remains at severe levels in South Sudan. This situation is driven by the widespread protracted crisis, large-scale displacements, increasingly frequent cattle raiding, intercommunal conflict, high food prices, market disruptions, the macroeconomic crisis, livestock disease outbreaks and asset depletion.
- The total food-insecure population in need of urgent humanitarian action is very concerning, with some 6.35 million people (54 percent of the population) facing Crisis or worse levels of acute food insecurity (IPC Phase 3 and above) in August 2019. These figures include 1.7 million people in Emergency (IPC Phase 4) and 10 000 people in Catastrophe (IPC Phase 5).
- Out of 79 counties analysed, 53 are classified as having Serious or worse levels of acute malnutrition (IPC Phase 3 and above). This figure includes 43 counties classified as Critical (GAM prevalence of 15.0–29.9 percent, IPC Phase 4) and one (Renk) Extremely Critical (GAM above 30 percent, IPC Phase 5).
- The intensity of the conflict eased with signing of a peace agreement in September 2018, especially in the Greater Bahr el Ghazal and Greater Upper Nile regions. Although this has enabled some returns of displaced populations, the situation remains volatile with fighting between various groups, cattle-raiding episodes and ambushes reported in July and August in parts of former Central Equatoria, Jonglei, Lakes and Upper Nile states. As a result, about 1.83 million people remain internally displaced.
- In the capital Juba, prices of sorghum and maize rose by about 15 percent in July after having been mostly stable during the previous months. Although lower generally than a year earlier, prices were still at exceptionally high levels and more than ten times those of July 2015.
- In southern bimodal rainfall areas, the late onset of seasonal rains meant planting started in April instead of March. However, above-average precipitation during the remainder of the growing period had a favourable impact on yields. In central and northern unimodal rainfall areas, above-average May–October seasonal rains are expected to boost yields but triggered widespread floods that affected 47 500 individuals and could result in localized crop losses. The flooding has also resulted in an increased infection of livestock, especially by waterborne and insect-borne diseases (East Coast fever, anthrax, worms).



Potential impact

- Due to relatively favourable rainfall conditions, first season harvests between October and January are expected to be similar to or above the five-year average, although still below pre-conflict levels due to population displacements, the high cost of inputs and destroyed agricultural assets. However, reduced localized production and inaccessible grazing land are likely in areas that experienced flash flooding.



Despite the start of harvests, food insecurity remains at severe levels in South Sudan. This is driven by the widespread and protracted crisis, large-scale displacements, increasingly frequent cattle raiding, inter-communal conflict, high food prices, market disruptions, the macroeconomic crisis, livestock disease outbreaks and asset depletion.

- The population facing severe food insecurity (IPC Phase 3 and above) is projected to decline temporarily to 4.54 million during the harvest period (September to December 2019), before quickly escalating again to 5.5 million between January and April.



Recommended early actions

Targeted action can help prevent a further deterioration of the food security situation, particularly in areas affected by conflict and flash floods. In the October–December period, early action should support off-season crop production and alternative income-generating activities. Furthermore, potential outbreaks of animal diseases following seasonal rains should be prevented by providing adequate support to vulnerable pastoralists.

Crops

- Distribute fast-maturing crop seeds (cowpea and vegetable) to vulnerable farmers in lowland areas with access to surface water or residual soil moisture from receding floodwater.
- Closely monitor crop diseases and pests and train farmers on mitigation measures (e.g. pheromone traps).

Fisheries

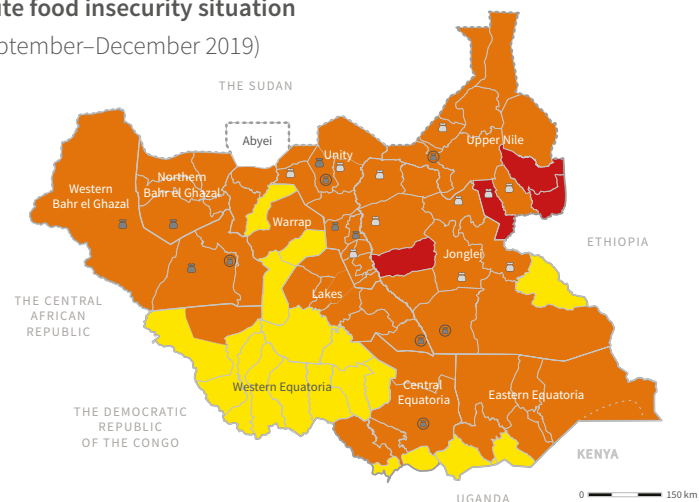
- Distribute fishing kits to severely food-insecure households in riverine and lake areas to support diversified diets and food production.

Livestock

- Strengthen solar vaccine cold chain networks and preposition vaccines and veterinary drugs in locations potentially affected by animal disease outbreaks.
- In order to prevent further animal disease outbreaks, conduct deworming, vaccination and animal treatment campaigns targeting vulnerable pastoralists' livestock through networks of community animal health workers.

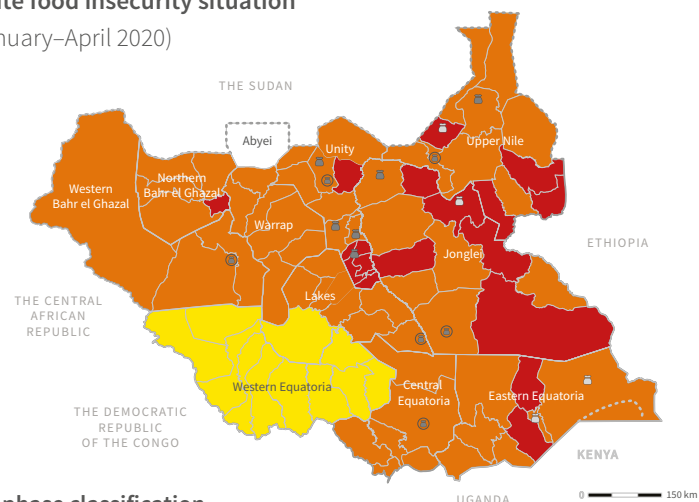
Acute food insecurity situation

(September–December 2019)



Acute food insecurity situation

(January–April 2020)



IPC phase classification

 Famine	 Not analysed	 At least 25% of households meet 25–50% of caloric needs from humanitarian food assistance
 Emergency	 Inadequate evidence	 At least 25% of households meet over 50% of caloric needs from humanitarian food assistance
 Crisis	 Displaced population in camps (colour depicts phase classification)	
 Stressed		
 Minimal		

Source: IPC, August 2019

high risk

Yemen

Conflict fronts multiplying, worsening prospects for a negotiated peace settlement



In the absence of Humanitarian Food Assistance, **20.1 million** people (**67 percent** of the total population) would be severely food insecure



28 percent increase in the national average cost of the minimum/survival food basket compared to last year

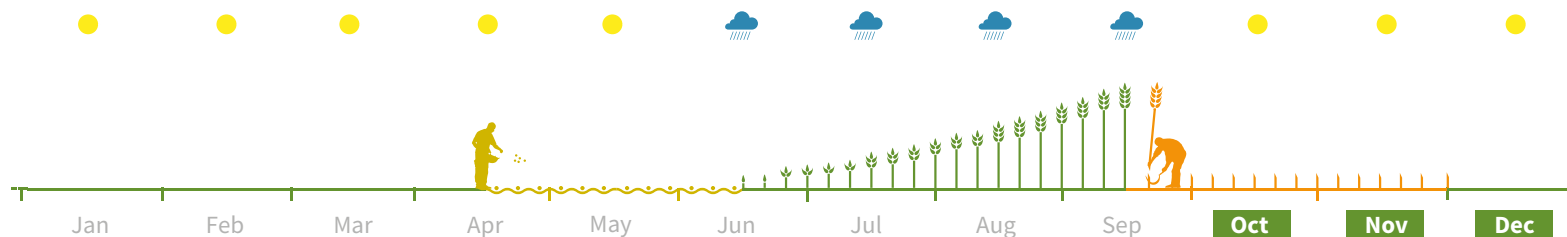


Risk overview

- The conflict in Yemen has seen multiplying fronts over the past months, with increased fighting breaking out in the southern part of the country. Any developments in the south could influence the outcome of the wider conflict.
- According to the latest IPC report issued in December 2018, while accounting for the current Humanitarian Food Assistance levels, 15.9 million people (53 percent of the total population) are facing severe food insecurity (IPC Phase 3 and above). Of greatest concern are the 65 000 people in Catastrophe (IPC Phase 5).
- In July 2019, IPC released a hotspot analysis that was conducted in April. The analysis covered 29 out of the 45 most food-insecure districts identified in the December 2018 analysis. The districts show a slight improvement in the acute food insecurity situation, with no populations in IPC Phase 5 compared to the 44 000 people in December 2018. However, 1 246 500 people are still severely food insecure (IPC Phase 3 and above). The improvement is mainly attributable to scaled-up efforts of humanitarian food and livelihood assistance, and household food availability. Despite the improvement, the situation remains at an alarming level in conflict-affected districts. The analysis does not assume that the 16 unassessed districts have the same levels of improvements.
- Desert locust swarms have reached the Red Sea and Gulf of Aden coasts. Good rains, which fell along the Red Sea coastal plain, are

likely to incite breeding from September onwards. The presence of hopper bands were witnessed in the interior of Yemen. By early September, hatching had begun and hoppers are forming bands. A substantial increase in numbers is expected, as more swarms form in the interior and breeding starts in coastal areas.

- In August, WFP announced that it would resume life-saving food aid distribution to 850 000 people in the Yemeni capital, Sana'a, following guarantees by the parties to the conflict that the supplies will reach those who need them most.
- Price volatility and depreciation of the Yemeni rial are affecting market functioning. As of July 2019, the national average cost of the minimum/survival food basket had increased by 28 percent compared to July 2018.
- The main cropping season in most cereal producing areas is between April and November. Cereal production in the Tihama region (the Red Sea coastal plain) has a summer season starting in May and ending in August, a main planting season starting in late August, and a harvest in November/December. Despite the generally favourable weather conditions, ongoing conflict and lack of inputs have continued to severely affect the agriculture sector, curtailing cereal output. Yemen is still largely dependent on imports from the international markets to satisfy its domestic consumption.



The conflict in Yemen has seen multiplying fronts over the past months, with increased fighting breaking out in the southern part of the country. Any developments in the south could influence the outcome of the wider conflict.



Potential impact

- The conflict is likely to continue on multiple fronts, which will hinder food production, and could stem the flow of goods coming into the country, raising prices.
- The resumption of WFP aid will likely improve the food security situation in areas in which the two-month break in food assistance took place. However, the conflict will continue to hinder efforts in delivering food assistance. IPC estimates indicate that in the absence of Humanitarian Food Assistance, about 20.1 million people (67 percent of the total population) would be facing severe food insecurity (IPC Phase 3 and above). This would include 240 000 people in Catastrophe (IPC Phase 5).



Recommended early actions

Agricultural activities should complement life-saving food aid distribution in order to provide livelihood support to vulnerable populations. In the October–December period, priority for early action should be given to areas where planting is still possible.

Crops

- Distribute good quality vegetable and crop seeds combined with agricultural tools and drip irrigation.
- Continue to provide solar supply systems (pumps and supply lines) for farming activities, to overcome the high cost and scarcity of fuel.

Livestock

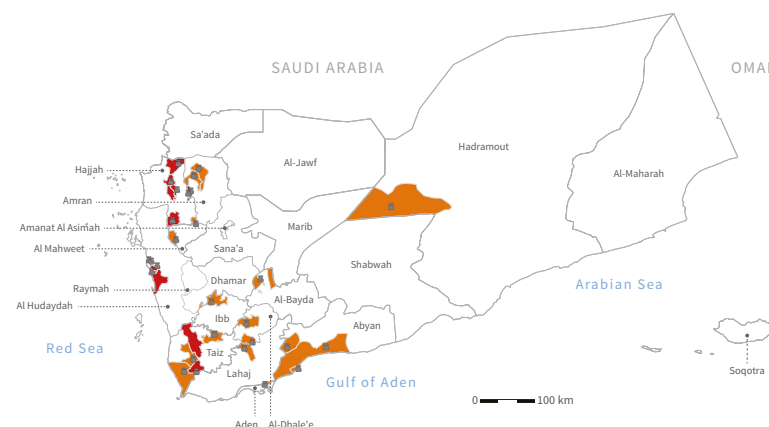
- Distribute animal feed and livestock supplements for livestock belonging to vulnerable households in conflict-affected areas.
- Distribute quality fodder seeds.
- Implement massive vaccination and treatment campaigns for cattle and small ruminants.

Cash+ and cash for work



- Provide cash+ assistance to the most vulnerable households in areas of acute food insecurity (IPC Phases 4 and 5).
- Provide conditional cash as an additional source of income, and to contribute to productive infrastructures damaged by conflict and natural disasters.

Acute food insecurity situation

(July–September 2019)



IPC phase classification

 Famine	 Not analysed	 At least 25% of households meet 25–50% of caloric needs from humanitarian food assistance
 Emergency	 Inadequate evidence	 At least 25% of households meet over 50% of caloric needs from humanitarian food assistance
 Crisis	 Displaced population in camps (colour depicts phase classification)	
 Stressed		
 Minimal		

Source: IPC, July 2019

high risk



Democratic People's Republic of Korea

Dry conditions have persisted during the critical 2019 main crop season and are likely to further compromise food security over the coming months



An estimated **10.1 million** food insecure people urgently require food assistance

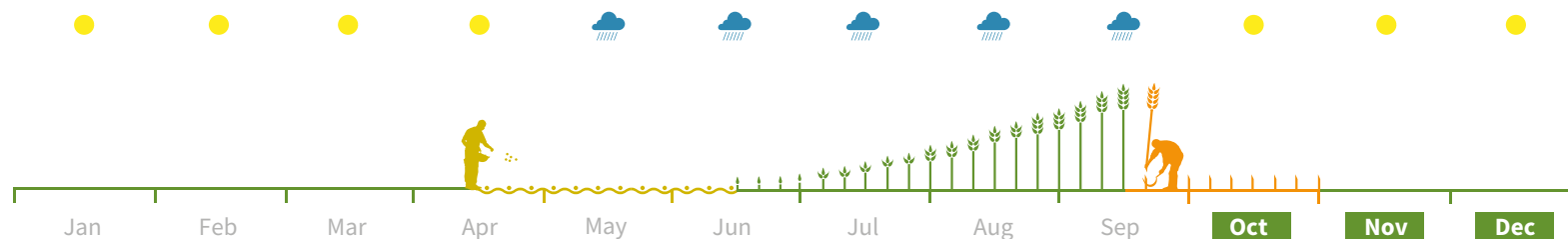


Only **56.3** mm of rain fell throughout the country from January to March 2019, the lowest since 1917



Risk overview

- Ongoing drought conditions are currently exacerbating an already challenging food security situation. Dry conditions have persisted throughout the first half of 2019, negatively impacting early season crops that were harvested in June and are key to alleviate the lean season from May to September.
- The rainy season in June–September is critical for the main season crops, which are due for harvest in September/October. This season has also been characterized by erratic spatial and temporal distribution of rains throughout much of the country. As a result, it has hampered planting and affected critical crop development. These climate events follow two consecutive years of dry conditions and erratic weather patterns, which have resulted in below-average cereal outputs in 2018.
- According to the FAO/WFP Rapid Food Security Assessment Mission Report released in May 2019, an estimated 10.1 million people (40 percent of the population) are food insecure and urgently require food assistance.
- The state media reported worrying conditions during the first half of 2019. It is estimated that only 56.3 mm of rain fell throughout the country from January to March 2019, which is less than half the average of 127 mm. This is the lowest quantity of rainfall recorded since 1917.
- According to Global Crop Monitoring System, the central and southern parts of the country are the most affected. In particular, the key rice and maize producing provinces, including North and South Hwanghae and parts of Pyongyang, showcased poor development of rain-fed maize crops, delayed rice growth and low water dam levels compared to July 2018. South Hwanghae province, commonly referred to as the country's breadbasket, only received 50 percent of average rainfall from April to July 2019 – a critical time for crop development for both the 2018/19 early season and the 2019 main season.
- The situation is exacerbated by the impact of ongoing international sanctions. Since September 2017, the United Nations Security Council unanimously approved resolutions 2375, 2371 and 2397, which impose a range of financial and trade restrictions, and have also made the entry of aid into the country difficult – particularly inputs to support agricultural activities.
- Further compounding the situation was the passing of Cyclone Lingling on 7 September. State media reported five casualties, with more than 460 homes and 458 km² of farmland either partially destroyed or damaged. North/South Hwanghae and South Hamgyong, which are now in their key harvest season, were the most heavily hit.



Dry conditions have persisted throughout the first half of 2019, negatively impacting early season crops that were harvested in June and are key to alleviate the lean season from May to September.

- According to FCC-EMPRES, in May 2019, the Democratic People's Republic of Korea confirmed the presence of the highly contagious African swine fever, which was first detected in Jagang province on the border with China. The livestock sector is highly vulnerable to disease outbreaks, which can spread quickly and widely, decimating livestock populations and further endangering food security.



Potential impact

- According to GLEWS, crop production this year is expected to drop to its lowest level in five years, which is likely to bring serious food shortages. This harvest is critical for food security and supply throughout the county. If dry conditions have compromised the outcome of this yield, it is likely that the food security situation will deteriorate even further and sharply increase humanitarian needs. This can have a serious impact on an already vulnerable population, which heavily relies on domestic production.



Recommended early actions

Early action is needed over the next three months to mitigate the effects of prolonged dry conditions on food security. Livelihood diversification and off-season production should be urgently supported throughout the reporting period, especially in provinces of Hamgyong, Hwanghae and Pyongan.

Crops

- Distribute seeds, tools and ready-to-install greenhouses to support off-season crop production among vulnerable households.

Livestock

- Distribute pigs and goats, alongside animal health treatments, to increase access to milk and meat products.
- Strengthen surveillance of African swine fever, particularly along the border with China.

Fisheries

- Support the establishment of shellfish and seaweed culture and harvesting in coastal areas, particularly in Kangwon province, to promote healthy and diversified diets.



Cabo Verde, the Gambia, Mauritania and Senegal

Drought and localized floods
are impacting agricultural
production and livestock for
another consecutive year



As of mid-August,
90 percent of
hydro-meteorological stations
in Mauritania had registered
a strong rainfall deficit
compared to the long-term
average (1981–2010)



Risk overview

- As several regional and international climate forecasts had predicted, the 2019 rainy season was negative up to the end of August in several countries along the Atlantic coast of West Africa, particularly in Cabo Verde, the Gambia, Mauritania and Senegal. While the first half of the season was marked by considerable delays in the start of rains, dry spells and severe rainfall deficits, significant rainfall occurred in late August–early September in several areas of Mauritania and Senegal, often leading to floods, which damaged crops and affected livelihoods.
- As of mid-August, 90 percent of hydro-meteorological stations in Mauritania registered severe rainfall deficits compared with the long-term average (1981–2010). Along with delayed rains and dry spells in affected areas, this had adverse effects on seed germination and crop growth for rainfed crops during the critical initial stages. Remote sensing tools such as FAO's Agricultural Stress Index pointed to high levels of vegetation stress in various departments of the Gambia and Senegal.
- Results of biomass remote sensing analysis for grasslands carried out by *Action contre la faim* were among the lowest in the last 20 years in several cross-border areas in southwestern Mauritania and northern Senegal.
- The situation is severe as most of these countries had already experienced one or several consecutive poor rainy seasons – Mauritania is facing its third, with adverse effects particularly in southwestern *wilayas*. Here, limited rainfall during previous years significantly affected the livelihoods of vulnerable

agropastoralists and led to early transhumance movements towards the south. Last year, the Gambia's cropping season was marked by the late onset of rains and long dry spells, which resulted in a 50 percent drop in crop production compared with the five-year average.

- Cabo Verde has been suffering from rainfall deficits, affecting the crop growth of maize and pulses.



Potential impact

- Given the poor temporal distribution of rains across this season – no rain for most of the season and localized floods towards the end – harvesting of rainfed agricultural production is expected to be delayed to the end of 2019. However, late rainfall may provide some opportunities for the recovery of irrigated and flood-receding crops.
- As of August, the prospects for a normal recovery of pasture and water resources are weak. Forecasts for the remainder of the season are uncertain, and strong rains have increased flooding and soil run-off. Limited pasture regeneration and availability of water could result in reduced livestock production and lead to weak purchasing power for agropastoralists relying on small-scale garden farming and small livestock rearing. Consequently, people with limited mobility of livestock could experience significant livestock and livelihood losses.

As predicted by several regional and international climate forecasts earlier this year, rainy seasons have been below average for numerous coastal countries in West Africa.

- Given the vast amount of land affected by rainfall and biomass deficits, there is a higher risk of strong concentration of livestock in areas with resources and earlier transhumance for pastoralists, which will increase the risk of animal diseases as well as conflict over resources.
- An early and difficult pastoralist lean season is likely at the beginning of 2020, mainly due to the high risk of livestock losses linked to reduced income and milk production for pastoral households. In addition, the number of people affected by severe food insecurity during next year's agricultural lean season (June–August 2020) is likely to increase.



Recommended early actions

The following early actions are recommended for October–December in order to prevent and mitigate the impacts of drought on vulnerable pastoralists and agropastoralists during the upcoming 2020 dry season, as well as to boost local food production during the off season.

Crops

- Support off-season home gardening in communities with access to water, as well as the cultivation of irrigated and flood receding crops, which is normally carried out in the last quarter of the year.
- In Cabo Verde, in synergy with government efforts, strengthen the utilization of groundwater resources and desalinization of water for irrigated crops, and support pastoralists through feed and water.

Livestock

- Provide livestock feed in areas with limited pasture and water to safeguard core-breeding stock.
- Ensure close monitoring of livestock markets and promote commercial destocking of weak animals in drought-affected areas where pasture and water resources are scarce.
- Boost local fodder production along river streams, pastoral wells and low-lying areas through the distribution of seeds and equipment.
- Support the provision of animal health services, particularly vaccinations and deworming.

Zimbabwe

Food security situation likely to deteriorate due to soaring food prices, reduced crop production and an economic downturn



Around **3.6 million** people food insecure (IPC Phase 3 and above) between October and December 2019



Cattle mortality rate at **18 percent** (13–15 points higher than normal)



Risk overview

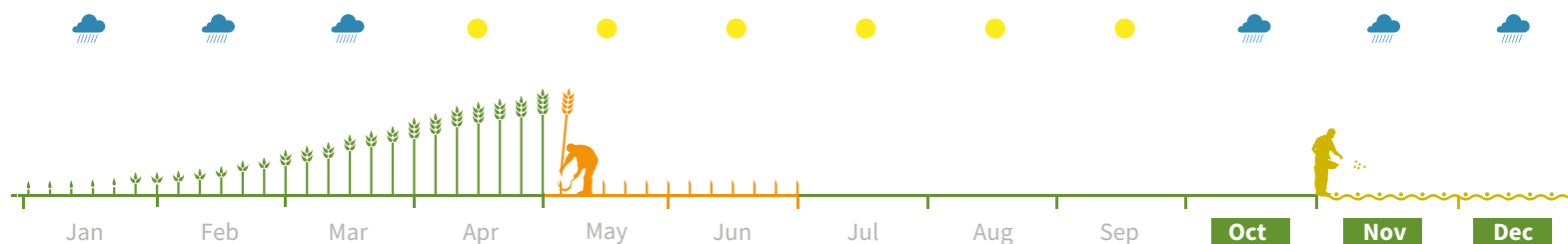
- The food security situation has deteriorated sharply since October 2018, due to a combination of abrupt and steep increases in food prices, a significantly reduced 2019 maize harvest (the primary food staple) and an economic downturn.
- Adverse weather conditions, including substantial rainfall deficits and the impact of Cyclone Idai in eastern provinces combined to cause a sharp decline in the 2019 maize output. Estimated at about 800 000 tonnes, the harvest is 40 percent below the five-year average, leading to substantial reductions in household food availability.
- The fall armyworm pest also affected crop production: according to the 2019 Zimbabwe Rural Livelihoods Assessment Report, the proportion of households reporting crop damage by fall armyworm increased from 36 percent in the 2016/17 cropping season to 58 percent in 2018/19.
- In addition to being affected by extreme dry conditions, households relying on livestock as their main source livelihood had to contend with an increase in livestock diseases and limited veterinary support. The national cattle mortality rate was at 18 percent, while acceptable rates for the country in an average year are considered to be between 3 and 5 percent. According to the IPC, 69 percent of livestock deaths registered during the 2018/2019 season were attributed tick-borne diseases and a lack of veterinary drugs.

- Household access to food has also been severely disrupted by substantial increases in food prices – between February and August 2019, the food price index rose by 200 percent.
- As of August 2019, almost 2.3 million people in rural areas were facing Crisis levels of food insecurity or worse (IPC Phase 3 and above) and required urgent assistance to protect their livelihoods. Most vulnerable households are considered to have depleted their food stocks while facing hyperinflation, further hampering their purchasing power and food access.



Potential impact

- The food security situation is expected to deteriorate between October and December 2019, with an estimated 3.6 million people likely facing Crisis (IPC Phase 3) or worse. Among these, more than 1 million people are likely to be in Emergency (IPC Phase 4).
- Looking further ahead, the national meteorological service points to a higher probability of near-average rainfall conditions between October and December 2019 and an increased likelihood of below-average rainfall between January and March 2020.
- Ongoing economic difficulties and the impact of the reduced domestic harvest are likely to sustain high food prices and limit labour opportunities in the coming months.



Since October 2018, the food security situation in Zimbabwe has deteriorated sharply as a result of fiscal challenges and foreign currency deficits. Severe weather conditions further compounded this economic downturn, affecting the 2018/2019 agricultural season.



Recommended early actions

In light of the high prevalence of acute food insecurity and the extensive impact on agricultural livelihoods, there is a need for early action to support farmers and livestock owners across the country to restore their production, incomes and assets between October and December 2019, ahead of the peak of the lean season.

Crops

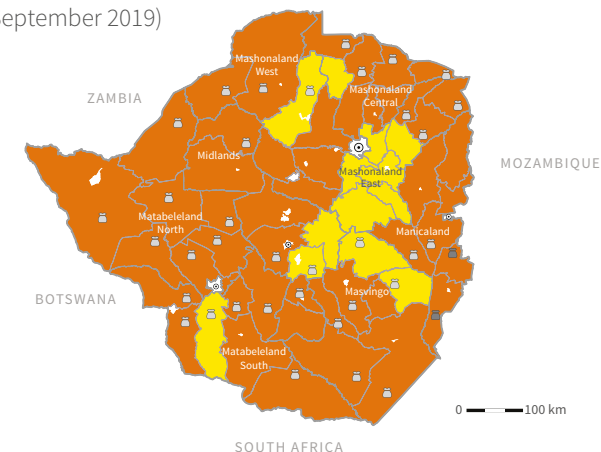
- Provide agricultural inputs (crop and vegetable seeds, hand tools and equipment) through direct, voucher and/or input trade fairs for main season, depending on prevailing local market prices and availability.
- Set up home gardens for short-cycle vegetable production and distribute seeds for off-season crops (cereal and legumes).
- Support natural biological control efforts rather than pesticides, such as the use of predators, parasitoids and entomopathogens (for example viruses or bacteria) to contain the spread of fall armyworm.

Livestock

- Conduct animal health campaigns to contain the spread of diseases through vaccinations and other treatments.
- Provide supplementary feed.

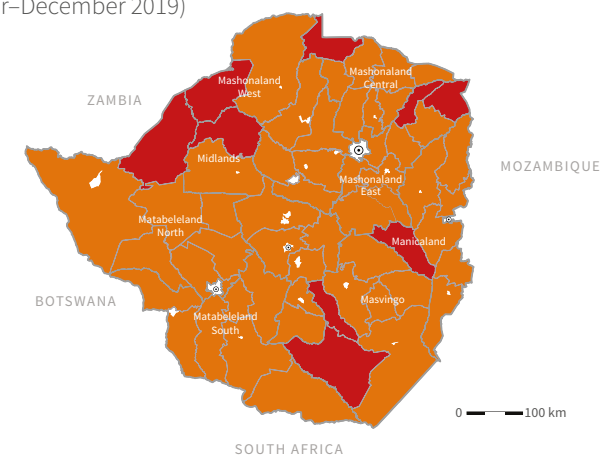
Acute food insecurity situation

(June–September 2019)





Acute food insecurity situation

(October–December 2019)



IPC phase classification

 Famine	 Not analysed	 At least 25% of households meet 25–50% of caloric needs from humanitarian food assistance
 Emergency	 Inadequate evidence	 At least 25% of households meet over 50% of caloric needs from humanitarian food assistance
 Crisis	 Displaced population in camps (colour depicts phase classification)	
 Stressed		
 Minimal		

Source: IPC, August 2019

high risk



Asia – African swine fever outbreak

African swine fever outbreak threatens to continue to spread across Asia



1.17 million pigs have died or been destroyed in China, **4.5 million** in Viet Nam, **25 000** in the Lao People's Democratic Republic and **115** in Mongolia



Risk overview

- African swine fever (ASF) is a viral disease that affects domestic and wild pigs with up to 100 percent fatality. In early August 2018, the Ministry of Agriculture and Rural Affairs of the People's Republic of China confirmed the country's first outbreak of ASF, which occurred in Liaoning Province. As of 5 September 2019, ASF has been reported in 32 of China's 34 provinces/administrative divisions.
- In January 2019, the disease was reported for the first time in Mongolia, with at least 11 outbreaks recorded in seven out of 21 provinces/cities. The virus was subsequently reported in Viet Nam in February 2019, and as of 31 August 2019, 6 083 outbreaks have been reported across all of the country's 63 provinces. In April 2019, the disease was reported in Cambodia, where it has spread to five of the country's 25 provinces. In May 2019, one outbreak of the disease was reported in Chagang Province in the Democratic People's Republic of Korea. In June 2019, the Lao People's Democratic Republic reported its first outbreak in Salavan Province, since then there have been 94 ASF outbreaks reported in 15 of the country's 18 provinces/cities. On 1 August 2019, the first ASF outbreak was confirmed in Myanmar and since then three ASF outbreaks have been reported in Shan State. On 9 September 2019, ASF was officially declared in Rizal Province in the Philippines, though the disease was detected in late July. The Republic of Korea reported its first ASF outbreak on 17 September in Paju, northwest of Seoul. Timor-Leste also reported its first outbreak on September 30.
- As a result, millions of pigs have died or been destroyed with over 1.17 million pigs culled in China; 4.5 million in Viet Nam; 25 000 in the Lao People's Democratic Republic; and 115 in Mongolia.



Potential impact

- The ASF virus is highly resistant to cold and hot temperatures and remains viable in dried or cured pork products. Smuggling of pork products such as sausages is difficult to control at all border points. The virus is also known to be resistant to many disinfectants.
- The detection of ASF in the Philippines shows that the risk of disease spread is not restricted to contiguous borders and that the virus can be introduced by sea transport. All countries in the region remain at risk of disease spread due to the connected pig value chains.
- The virus can have devastating socio-economic consequences, which could lead to food insecurity. Some farmers may lose entire herds of pigs and compensation is not always available. This can lead to a reluctance to report suspected cases of ASF to veterinary services. A country's trade may be impacted, which can generate imbalances between supply and demand, and destabilize prices of pork and pork products.
- As ASF continues to spread in the region, it is likely to have serious impacts on already fragile rural livelihoods and food security as the swine sector plays a key role as a source of animal protein in the region. Pigs are a crucial food source due to their fast growth, efficient feed conversion, quick turnover and high reproduction. Moreover, as consumers substitute pork for other animal proteins such as chicken, spillovers can materialize and increase the price of animal protein overall.

The information in the risk narrative is accurate as of 1 October 2019.

The ASF virus is highly resistant to cold and hot temperatures and remains viable in dried or cured pork products. The detection of ASF in the Philippines shows that the risk of disease spread is not restricted to contiguous borders and that the virus can be introduced by sea transport.



Recommended early actions

Preparedness and prevention

- Carry out preparedness activities including contingency planning, creating standard operating procedures and securing financial support, as well as developing capacities based on the principles of early warning, field detection and laboratory diagnosis, notification, early reaction and coordination, and relevant legislation.
- Update farm registries and pig inventories, including locations, to facilitate animal health interventions in the event of outbreaks.
- Implement pig value chains analysis, including other ASF risk-relevant information, at country and regional levels, making sure to consider the swill feeding value chain that can be linked to pig farms.
- Step up biosecurity practices along the pig value chains at the farm/herd level, and in the areas of transportation, market and slaughter facilities. Biosecurity measures include frequently cleaning and disinfecting farms and transport vehicles, and fostering improved husbandry practices and production systems.
- Conduct outbreak management to stop the spread of the virus, reduce the impact on the environment, and minimize economic losses as well as the impact on food security.
- Strengthen surveillance and monitor the transport of live pigs as well as pork products.
- Ensure that sustainable outbreak control strategies are developed in advance, in consultation with relevant private sector companies involved along the pig value chains. Private sectors are to be engaged in preparedness and prevention, outbreak management and longer-term control once the disease is present in a country.

Advocacy, awareness and communication

- A comprehensive risk communication and advocacy strategic plan is required to raise awareness and call for necessary actions to be undertaken by relevant stakeholders including veterinarians and auxiliary personnel, farmers, abattoir workers, intermediaries and other actors in the value chain. It is also necessary to communicate with stakeholders to create a sense of urgency around the issue and inform them how to take the next steps.
- There is a need to conduct and strengthen awareness raising and training activities targeting all relevant stakeholders including farmers, middlemen, abattoir workers, and other actors in the value chain, private and government veterinarians and auxiliary personnel.
- The main risk of spread lies in human actions (how pigs are raised and transported, how waste is handled, how disease can spread through swill, etc.) and this may be extended to those not directly involved in the swine industry, such as tourists or migratory workers who may take pork products with them when they travel. It is critical to raise the general public's awareness through outreach and appropriate media outlets, informing them of the risks of disease spread and how they can contribute.

Other complementary measures

- Strengthen proper disposal of food waste (e.g. in food services, airports and seaports), which may contain uncooked pork products, to minimize the likelihood of ASF virus contamination in the environment and the potential for it to enter the pig production system.

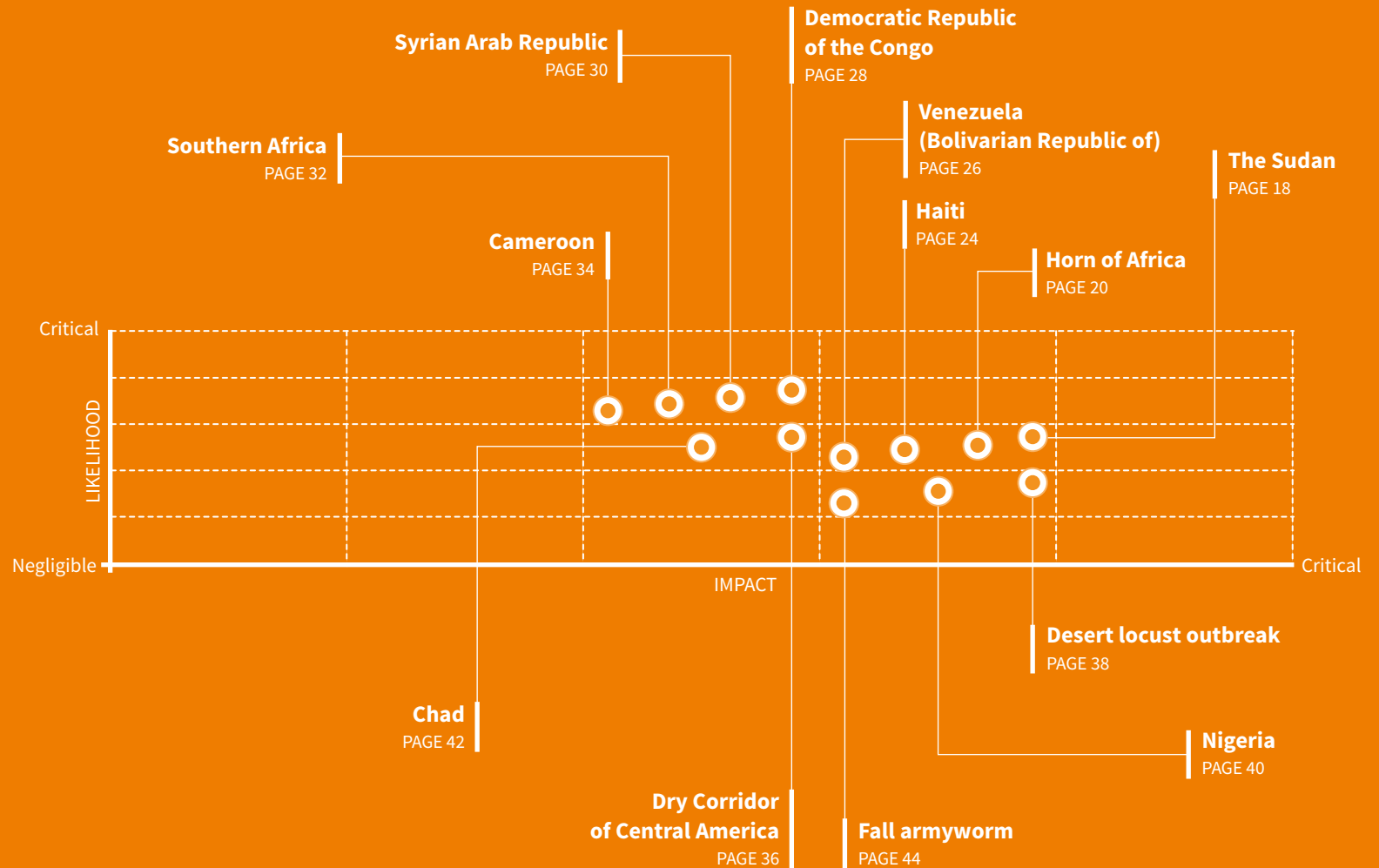
Food security in agropastoral and pastoral areas of Ethiopia, Kenya, Somalia and Uganda has been deteriorating due to multiple poor rainy seasons. A delayed onset and erratic distribution of the October–December rains in some areas could result in a prolonged pastoral lean season, while there are flood risks for other parts of the region.

On watch

The matrix provides an overview of the ranking of risks featured in this report. The risks are prioritized based on the severity, likelihood and magnitude of their impact, while also balanced against the countries' individual coping capacity.

In order of intensity, for the period October–December 2019, the **on watch** section includes:

- The Sudan
- Horn of Africa
- Haiti
- Venezuela (Bolivarian Republic of)
- Democratic Republic of the Congo
- Syrian Arab Republic
- Southern Africa
- Cameroon
- Dry Corridor of Central America
- Desert locust outbreak
- Nigeria
- Chad
- Fall armyworm



The Sudan

Significant macroeconomic challenges persist affecting food security across most of the country



5.8 million people
severely food insecure



245 000 people
affected by floods



Risk overview

- Macroeconomic challenges coupled with recent socio-political changes since late 2018 continue to affect food security in the Sudan. The difficult macroeconomic environment has resulted in reduced imports of fuel and agricultural inputs, which in turn have disrupted public services, staggered agricultural activities and increased food prices.
- As of September 2019, an estimated 5.8 million people are facing Crisis or worse levels of food insecurity (IPC Phase 3 or above) and are in need of urgent assistance. This figure is the highest on record since the introduction of the IPC analysis in the Sudan. Around 1 million people are facing Emergency levels of acute food insecurity (IPC Phase 4), with a further 4.8 million people in Crisis (IPC Phase 3).
- Economic difficulties are expected to persist despite the formation of the transitional government in August 2019. A two percent contraction in real GDP is projected for the remainder of 2019, however, a recovery in economic growth could be expected from 2020 onward, depending on the political transition. Increasing inflation rates illustrate the dire economic situation – the year-on-year inflation rate, estimated at about 48 percent in June 2019, increased to about 53 percent in July.
- In July 2019 cereal prices reached near-record or record levels in most markets. Prices for sorghum in El Gadarif and Khartoum markets – which are key producing and trading areas – were about 65 and 85 percent higher, respectively, than the already high levels of the previous year and more than five times their

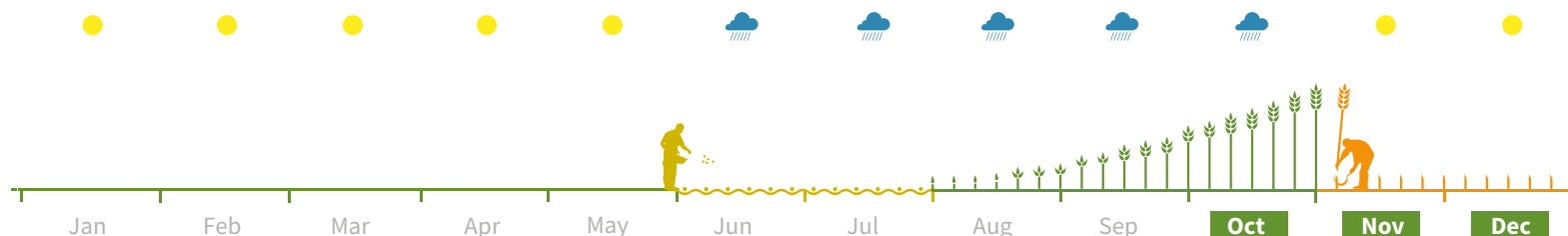
levels in October 2017. In the Darfur States prices for millet, the main cereal staple in the area, were 15–25 percent higher than the previous year and more than twice their levels compared to October 2017.

- The June–September 2019 rainy season was characterized by above average precipitation, with torrential rains triggering flooding in 15 states across the Sudan. While the rains are expected to boost crop yields, flooding poses a serious threat to livelihoods and infrastructure. As of September 2019, OCHA estimates that more than 245 000 people were affected, with approximately 48 000 houses destroyed or damaged. The floods have limited trade flows and damaged water points, and more than 2 000 heads of livestock are reported as lost.



Potential impact

- Fuel shortages and high prices for agricultural inputs and labour are likely to negatively impact the ongoing 2019/20 cropping season. Sowing summer crops (millet and sorghum), which traditionally begins in June and is completed in July, is anticipated to take longer, with a likely below-average planting in the most affected areas.
- In Darfur State, localized conflict, triggered by political instability, is constraining farmers' access to their fields, which is likely to have a negative impact on crop production and labour opportunities.



Macroeconomic challenges coupled with recent political changes in the Sudan continue to affect the humanitarian situation. Fuel shortages and high prices for agricultural inputs and labour are likely to negatively impact the ongoing 2019/20 cropping season.

- Forecasts from the United States National Oceanic and Atmospheric Administration (NOAA) predict above-average rainfall in the south of the country until October 2019. This could result in further localized crop losses, trigger displacements and increase the prevalence of water-borne diseases.



Recommended early actions

Early actions are recommended between October and December to support the winter season crop production and compensate for flood-induced crop losses, as well as to protect livestock assets of the most vulnerable communities facing Crisis or worse levels of food insecurity (IPC Phase 3 or above). Flood-affected households and areas in particular should be targeted due to their increased vulnerability.

Crops

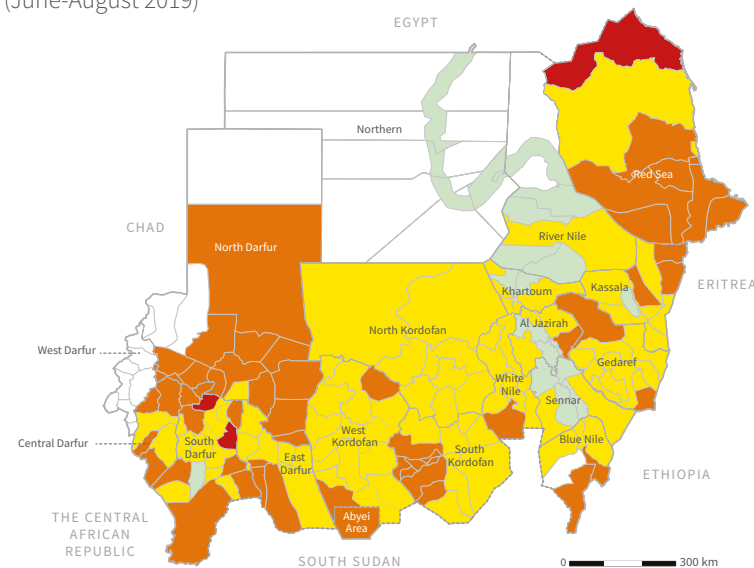
- Improve surveillance and control of plant pests, especially desert locust.
- Distribute vegetable and legume seeds to vulnerable farmers who have access to water for winter season cultivation, including flood-affected areas where soils have moisture-holding capacity.

Livestock

- Strengthen the surveillance of water and vector-borne animal diseases, including Rift Valley fever, lumpy skin disease, anthrax, black leg and botulism.
- Conduct livestock vaccination, deworming and treatment campaigns where incidences of animal diseases may increase.
- Construct sand dams to replenish underground water reserves in *wadis* and support rehabilitation of shallow wells for winter farming and livestock use during the dry season from December to April.
- Provide animal concentrate feed and mineral licks to improve milk and meat production and reproductive capacity.

Acute food insecurity situation

(June-August 2019)



IPC phase classification



Source: IPC, September 2019

Horn of Africa

Multiple poor rainy seasons with little time for recovery drive worsening food security and nutritional outcomes



Around **12.3 million** people severely food insecure

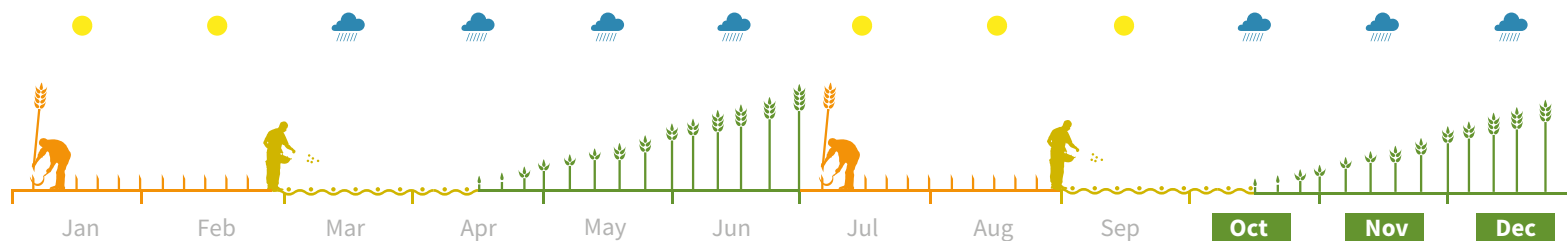


Lowest cereal harvest in decades recorded in southern Somalia



Risk overview

- Food security in agropastoral and pastoral areas of Ethiopia, Kenya, Somalia and Uganda has been deteriorating due poor March–May *Gu/Genna* long rains, which followed below-average 2018 October–December *Deyr* short rains. An estimated 4.3 million people are food insecure (IPC Phase 3 and above) in Kenya (2.6 million), Somalia (1.2 million), and Uganda (475 200). In addition, 8.1 million people are in need in Ethiopia, according to the latest Humanitarian Response Plan.
- IPC acute malnutrition analyses in Kenya and Somalia found widespread critical levels of malnutrition (GAM 15–30 percent). Extremely critical levels (GAM above 30 percent) were also observed in parts of Turkana and Marsabit counties in Kenya.
- In Somalia, the Food Security and Nutrition Analysis Unit (FSNAU) and the Famine Early Warning System Network (FEWS NET) report that the south of the country experienced the lowest *Gu* cereal harvest since 1995 (68 percent below the 1995–2018 average), while in the northwest *Gu/Karan* harvests are expected to be 44 percent below the 2010–2018 average. In agropastoral and marginal agricultural areas of central, southeast and coastal Kenya, long rain maize production is estimated by the Kenya Food Security Steering Group to be around 50–60 percent below average. FEWS NET projects Ugandan harvests to be about 30 percent below average.
- In pastoral areas, pasture and water deficits resulted in emaciated livestock and increased mortality rates, as well as a decline in milk production. Heavy May rains had some localized positive impacts, but these were short-lived. During the June–September dry season, a faster than normal depletion of rangeland resources and early onset of the lean season were observed.
- Cereal prices have also increased sharply, limiting access to food for many. In Kenya, maize prices surged by 60–90 percent between March and July in Kisumu, Nairobi and Nakuru markets, and in July were 50–80 percent higher than the same time last year. In Somalia, prices of maize and sorghum surged between May and July in some key southern markets (Baidoa, Dinsoor and Marka) and in July were between 15 and over 100 percent higher than a year earlier. In Ethiopia, maize prices increased in Addis Ababa, Bahir Dar, and Dire Dawa markets by 5–20 percent between May and July, when they were 20–30 percent above levels the previous year. In Uganda, maize prices surged in Kampala and Lira markets by almost 50 percent between March and May and then levelled off. However, July prices were still more than double those of the year before.
- Desert locusts have been observed in the Afar and Dira Dawa areas of Ethiopia and the northern coast of Somalia. Favourable conditions are likely to allow breeding to continue until at least September.



Food security has been deteriorating in agropastoral and pastoral areas of Ethiopia, Kenya, Somalia and Uganda due to the poor 2019 long/*Gu* rainy season, which followed erratic 2018 short/*Deyr* rains.



Potential impact

- In Kenya, the number of severely food-insecure people (IPC Phase 3 and above) will likely rise to 3.1 million by October 2019, while in Somalia 2.1 million people will be severely food insecure in the same period, including 439 000 projected to be in Emergency (IPC Phase 4).
- According to the Greater Horn of Africa Climate Outlook Forum, the October–December rains will likely be above average (45–55 percent probability) to average (25–30 percent probability), benefiting second season harvests and pastoral livelihoods. However, a delayed onset and erratic distribution – with dry spells of over ten days – are expected over southeast Ethiopia, eastern Kenya and Somalia. If these forecasts materialize, the delayed onset will result in a prolonged pastoral lean season and the dry spells will affect crop production in southern Somalia. There is also an increased risk of floods.
- Despite a favourable forecast, the risk of below-average rains is still significant (20–25 percent probability). Although not the most likely scenario, if poor rains were to occur the already alarming food security situation would further deteriorate.



Recommended early actions

Acting early between October and December would support the upcoming planting season and prevent crop and livestock damage and losses that could result from above-average rains and subsequent potential flooding.

Crops

- Assist farmers with livelihood packages, including cash (cash+) for the October–December cropping season.
- In case of severe flooding, provide farmers with seeds for replanting and vouchers to access supplemental irrigation services in riverine areas once floodwaters have receded.
- Conduct awareness campaigns, including through radio and SMS, to keep farmers updated on rain forecasts, flood risks and related good farming practices to secure a better harvest.
- Implement locust control in breeding areas of Ethiopia and northern Somalia.

Livestock

- Deliver livelihood assistance to highly vulnerable pastoralists alongside emergency cash assistance (cash+) to protect and restore livestock production and productivity.
- Conduct vector control to protect livestock against diseases carried by mosquitoes and biting flies, including Rift Valley fever, and advise veterinary services and livestock keeper communities to remain vigilant about the occurrence and spread of Rift Valley fever.

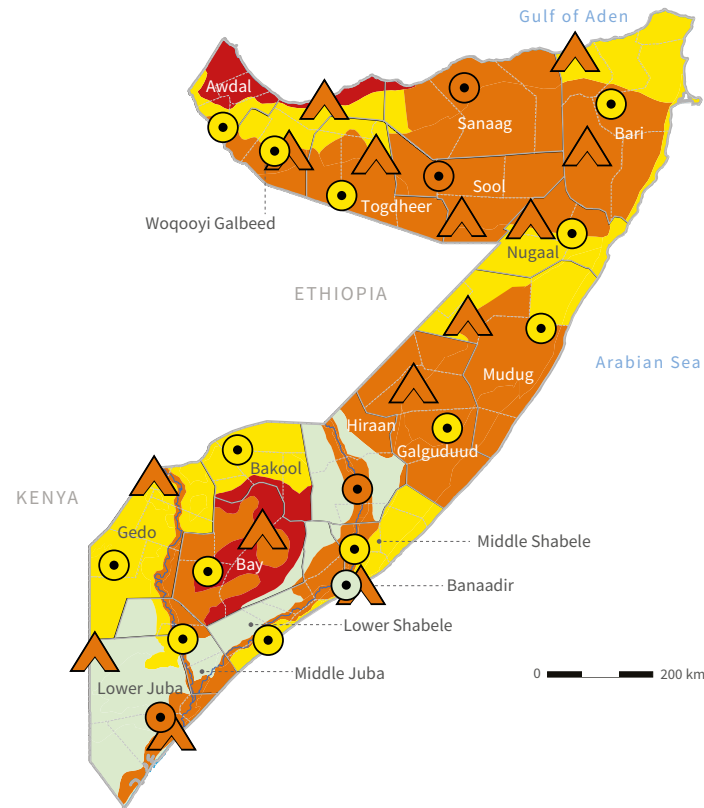
Worst-case scenario

Although considered a worst-case scenario given current forecasts, another below-average rainy season would have potentially devastating effects on food security and nutrition. Close monitoring of seasonal progress is required, but if the rains in October fail, the following early actions should be urgently implemented for vulnerable pastoralists:

- Improve access and availability of feed through feed banks and subsidized feed provision/supplementary feed.
- Promote cash/cash+ interventions in targeted areas to ensure food access and protect the livelihoods of vulnerable, drought-affected households, as well as rehabilitate community infrastructure.
- Provide protective livestock treatment where needed.

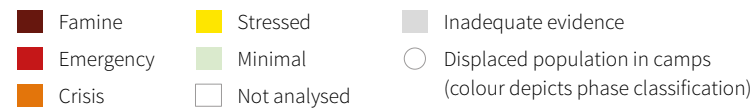
Acute food insecurity situation – Somalia

(October–December 2019)



Source: IPC, July 2019

IPC phase classification

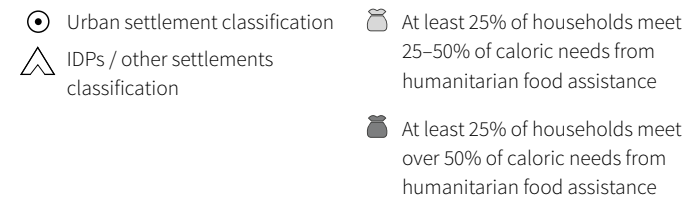


Acute food insecurity situation – Kenya

(August–October 2019)



Source: Kenya Food Security Steering Group, August 2019



Haiti

Political and economic instability and dry conditions affecting the main maize cropping season and fuelling food insecurity

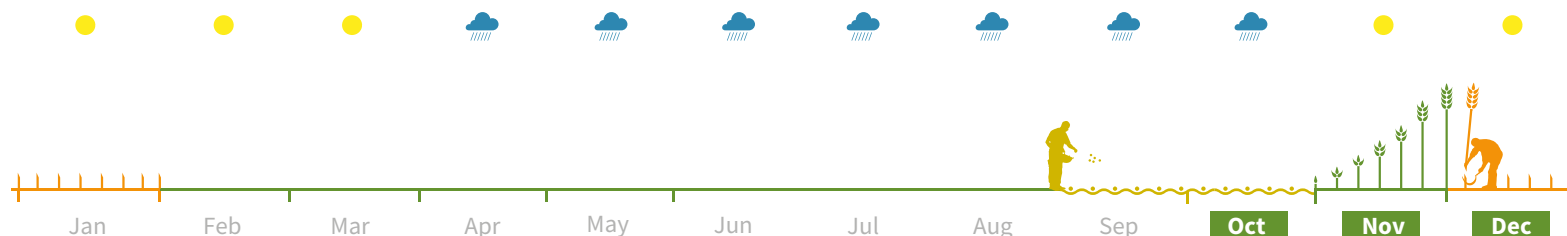


Over **2.5 million** people estimated to be severely food insecure between March and June 2019



Risk overview

- The ongoing macroeconomic crisis in Haiti is significantly impacting the purchasing power of the poorest households, affecting food security and contributing to civil unrest. The International Monetary Fund forecasts an average consumer price inflation of 14.9 percent in 2019, up from 13.5 percent in 2018, a trend accompanied by the continued depreciation of the national currency.
- The United Nations Children's Fund reports that during the first half of 2019 the security situation in Haiti became more precarious due to the ongoing political crisis, social unrest and gang violence. Large-scale protests involved high levels of violence in certain cases. At the end of September, at least four people died in some of the largest clashes in months.
- The latest IPC analysis (December 2018) estimates that more than 2 million people (29 percent of the population) faced Crisis (IPC Phase 3) and over 571 000 people (8 percent of the population) faced Emergency (IPC Phase 4) levels of food insecurity between March and June 2019, for a total of over 2.5 million people severely food insecure.
- According to GIEWS, cereal production in Haiti in 2019 is forecast to be below 2018 but above the 2014–2018 average, which was pushed down by low outputs from severe droughts in 2014 and 2015.
- The main maize harvest season typically ends in July but was affected by below-average rainfall during the planting and crop development stages, particularly in the southern and northern regions. Drought conditions affected the 2019 main maize cropping season and pasture availability in the Nord-Est department, while below-average vegetation health conditions had been observed in southwestern and northern regions. This could further aggravate the food security situation in these areas.
- In contrast, GIEWS estimates that vegetation conditions were deemed favourable in some areas of major maize producing departments, such as Artibonite, Centre and Sud-Est. However, prospects for the output of the main maize cropping season remain uncertain due to prolonged dry spells. Harvesting of the main rice cropping season typically takes place between September and November. Rainfall amounts and distribution were generally favourable in the key rice producing areas of Artibonite Department.
- Haiti is located on the path of seasonal hurricanes and is subject to extreme weather conditions during the hurricane season (June–November). The NOAA warned that conditions are now favourable for above-normal hurricane activity this season.
- The second maize cropping season will take place during the outlook period, with sowing beginning in September and harvesting taking place in December. The main rice harvest typically takes place between September and November, and the main sorghum harvest between October and December.



The ongoing macroeconomic crisis in Haiti is having a significant impact on the purchasing power of the poorest households, affecting food security and contributing to civil unrest.



Potential impact

- The macroeconomic crisis will contribute to further reduce households' already low purchasing power during the coming months. Mass protests and further flare-ups of violence remain key risks, with the potential to intensify over the coming months. This will affect the food security situation, and hinder access from humanitarian and development agencies.
- The NOAA and IRI expect above-average rainfall in Haiti between October and December 2019. This could favour prospects for the second maize cropping season as well as the main rice and sorghum seasons.
- According to GIEWS, cereal import requirements are forecast to be above average for the marketing year running from July 2018 to June 2019. Due to the weak local currency, the financial onus of high import requirements will further undermine the Government's balance of payments, hindering its ability to contain the ongoing crisis.



Recommended early actions

Action is needed to mitigate negative effects of below-average agricultural production and safeguard the assets and livelihoods of the most vulnerable. In October–December, early actions should focus on supporting access to inputs for crop production and livelihood diversification.

Crops

- Provide seeds and planting material for vegetable production, either through direct distribution or seed fairs.

Livestock

- Distribute feed, nutrient supplements, water collection tanks and small livestock to vulnerable livestock breeders.

Fisheries and aquaculture

- Provide inputs and technical assistance for fish farming as a livelihood diversification opportunity.

Venezuela (Bolivarian Republic of)

Economic crisis to continue
affecting livelihoods



About **5.3 million**
refugees and migrants
from Venezuela (Bolivarian
Republic of) are expected by
December 2019



7 million people
in need of assistance

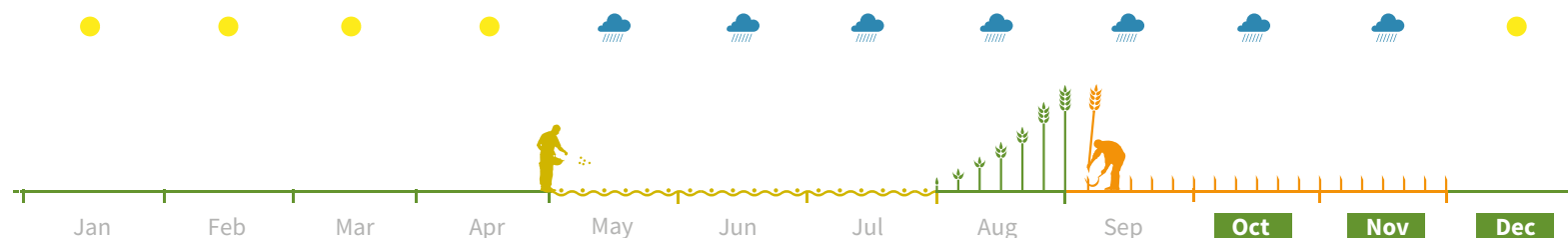


21 percent of the
population is currently
undernourished, up from
12 percent in 2014



Risk overview

- The International Monetary Fund estimates that the Venezuelan economy could shrink by 35 percent in 2019, and will continue to be affected by hyperinflation. The Venezuelan minimum wage is approximately USD 7 per month, which is insufficient to cover the basic needs of families.
- According to FAO's State of Food security and Nutrition in the World published in July 2019, Venezuela (Bolivarian Republic of) has seen an increase in the rate of undernourishment from 11.7 percent (3.7 million people) in 2012–2014 to 21.2 percent (6.8 million people) in 2016–2018. According to the Office of the United Nations High Commissioner for Human Rights, the latest economic sanctions are further exacerbating the effects of the economic crisis, and thus the humanitarian situation.
- A Humanitarian Response Plan (HRP) for July–December 2019 was launched, which builds on the scale-up strategy initiated in October 2018. The Plan focuses on three main objectives: (i) ensure the survival and well-being of the most vulnerable people by improving their access to essential goods and services; (ii) protect the most vulnerable groups by strengthening institutional and community mechanisms; and (iii) strengthen the resilience of the most vulnerable and contribute to the sustainability of essential services.
- The HRP aims to assist 2.6 million people – of the total 7 million in need – through the Water, Sanitation and Hygiene, Food Security and Livelihoods, Protection, Health, Education and Nutrition clusters. More specifically, under the Food Security and Livelihoods cluster 3.7 million people have been identified as in need of assistance and 300 000 are targeted.
- The implementation of activities within the HRP framework requires coordinated action among UN agencies, national actors, civil society and resource partners to be able to reach the targeted people. The Humanitarian Needs Assessment will be updated in the coming months.
- According to UNHCR and the International Organization for Migration, as of June over 4 million Venezuelans had left the country, the vast majority of whom are hosted in other Latin American countries. Colombia hosts some 1.3 million, followed by Peru (768 000), Chile (288 000), Ecuador (263 000), Brazil (168 000) and Argentina (130 000). Mexico and countries in Central America and the Caribbean are also hosting significant numbers of refugees and migrants from Venezuela (Bolivarian Republic of).



The International Monetary Fund estimates that the Venezuelan economy could shrink by 35 percent in 2019, and will continue to be affected by hyperinflation.



Potential impact

- Venezuela (Bolivarian Republic of) imports most of its food. However, food imports have declined significantly since 2014, and domestic food production has become increasingly important to sustain needs. Planting for the main maize cropping season started in May, with harvesting typically taking place between September and November. According to GIEWS, early production forecasts point to well below-average levels as planted areas continue to decline along with a lack of agricultural inputs (mostly imported) and increased production costs. The introduction of producer price ceilings on white and yellow maize has also discouraged planting.
- In terms of migration, current dynamics are likely to continue throughout 2019. According to the Regional Refugee and Migrant Response Plan, there could potentially be 5.3 million Venezuelan refugees and migrants by the end of December 2019.



Recommended early actions

The expected below-average harvest of maize, combined with the ongoing economic crisis, is likely to lead to a further deterioration of food security levels in Venezuela (Bolivarian Republic of). Early action between October and December should aim to support food production among small-scale farmers within the country to offset

the deficits and impacts on food security. They should also target the most vulnerable and food-insecure households, especially female-headed, as well as local farmer organizations, particularly in the states of Falcón, Lara, Mérida, Miranda, Portuguesa and Trujillo. Moreover, early actions should be taken to support Venezuelan migrants and host communities in bordering areas.

Crops

- Before the second planting season (November–January), provide critical means for immediate recovery/availability of food production, including short-cycle seeds (vegetables, tubers, pulses and legumes) and tools.
- Distribute maize (yellow and white) and rice seeds as well as post-harvesting equipment in preparation for the main cropping season starting in May 2020.

Livestock

- Before the end of 2019, conduct restocking and provide trainings on poultry production to contribute to restoring the livelihoods of the most vulnerable households.

Cross-cutting

- Continue to support Venezuelan migrants and host communities in bordering rural areas of neighbouring countries by boosting local food production and increasing income opportunities.

Democratic Republic of the Congo

Armed conflict continues to disrupt livelihoods across the country, while Ebola cases are on the rise in the east



As of September 2019, there were **3 168** confirmed and probable Ebola virus disease cases and **2 118** deaths



15.6 million people severely food insecure



Risk overview

- Food security in the Democratic Republic of the Congo remains alarming. The latest IPC results indicate that for July–December 2019, 15.6 million people are severely food insecure (IPC Phases 3 and 4) – up from 13.1 million in August 2018.
- The situation is most critical in the provinces of Ituri, Kasai, Kasai Central, eastern Kasai and Tanganyika, where between 12 and 15 percent of the population are classified in Emergency (IPC Phase 4).
- Insecurity remains the main cause of the deterioration of the food security situation, which includes violence perpetrated by armed groups and intercommunal conflicts that have led to population displacements. In addition, the increase in food prices, poor rainfall in certain localized areas and limited road infrastructure further exacerbate access to food and other basic services. This is particularly the case in Ituri, North and South Kivu and in the central and eastern parts of the country.
- During the Southern African Development Community (SADC) summit in Dar es Salaam in August 2019, President Tshisekedi committed to work in collaboration with other leaders to restore peace and stability in the eastern part of the country, through the establishment of a regional coalition.
- According to GIEWS, the ongoing conflict in the Kasai, North Kivu, South Kivu, Ituri and Tanganyika regions has continued to limit farmers' access to crop-growing areas and adversely affected planting in the southern provinces of the country, although crops benefited from adequate rains during the season in the

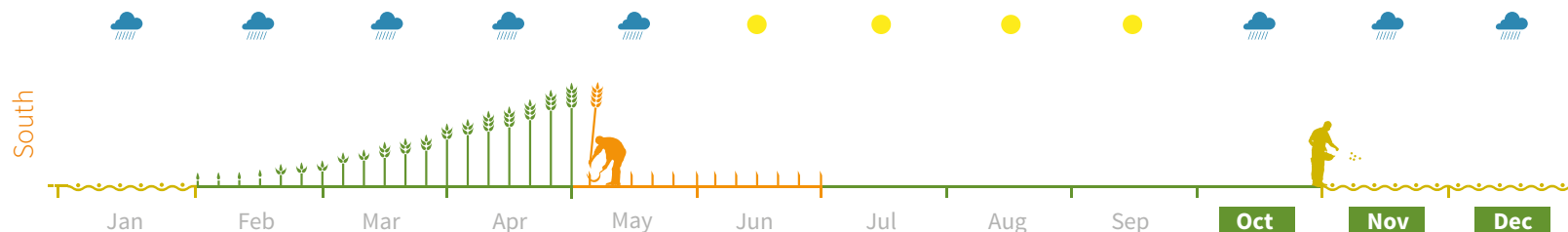
main producing areas. Agricultural production has also been affected by plant pests and diseases, such as fall armyworm.

- In the southern part of the country, the period from October to December coincides with the start of sowing activities and represents the lean period for farming households. In the northern and central provinces, households typically proceed with the main maize harvest.
- Since August 2018, the Democratic Republic of the Congo has been facing the second deadliest Ebola virus disease (EVD) outbreak on record. As of September 2019, 3 168 confirmed and probable cases and 2 118 deaths were reported. In August 2019, the virus spread to a third province with cases reported in South Kivu.
- Furthermore, in June 2019, three people were diagnosed with the virus in Uganda, representing the first cross-border cases since the outbreak began. The country has not recorded any further cases since then.



Potential impact

- Insecurity is likely to continue to trigger large-scale population movements, hindering access to crop and livestock production activities and severely affecting the food security and nutrition situation of affected populations.
- Furthermore, according to the 23rd Annual Southern Africa Regional Climate Outlook Forum held at the end of August 2019, the Democratic Republic of the Congo will generally receive



Food security in the Democratic Republic of the Congo has considerably deteriorated in comparison to 2018. IPC estimates that from July to December 2019, 15.6 million people will be acutely food insecure (IPC Phases 3 and 4), up from 13.1 million in August 2018. Conflict and insecurity are the main drivers of food insecurity in the country, compounded by the Ebola virus disease outbreak hitting eastern provinces.

below-average rainfall during October–December 2019. This could affect the main maize season.

- In July 2019, the World Health Organization announced that the current EVD outbreak in the Democratic Republic of the Congo represents a public health emergency of international concern after it was confirmed in Goma, the capital of North Kivu with a population of 1 million. This could further affect cross-border trade and population movements with neighbouring countries.



Recommended early actions

Conflict and the EVD outbreak are expected to further exacerbate food insecurity among vulnerable people in various provinces of the Democratic Republic of the Congo over the next few months. This can be mitigated through targeted early actions aimed at supporting agricultural production ahead of the main October–January season, as well as by supporting livelihood diversification.

Crops

- Distribute maize, sweet potato, cowpea and bean seeds ahead of the main agricultural season (starting in October), targeting the most vulnerable IDPs, returnees and host communities in Kasai, Central Kasai, Ituri, Nord Kivu (Bunia, Beni) and South Kivu.
- Distribute vegetable seeds, tools and processing units before the nursery preparation period (December) among IDPs, returnees, host communities and in EVD-affected villages of Ituri, Nord Kivu, South Kivu and the Kasai region.

Livestock

- Distribute small ruminants or pigs to sustain the livelihoods of conflict-affected and food-insecure people in Ituri and South Kivu provinces by November.

Fisheries and aquaculture

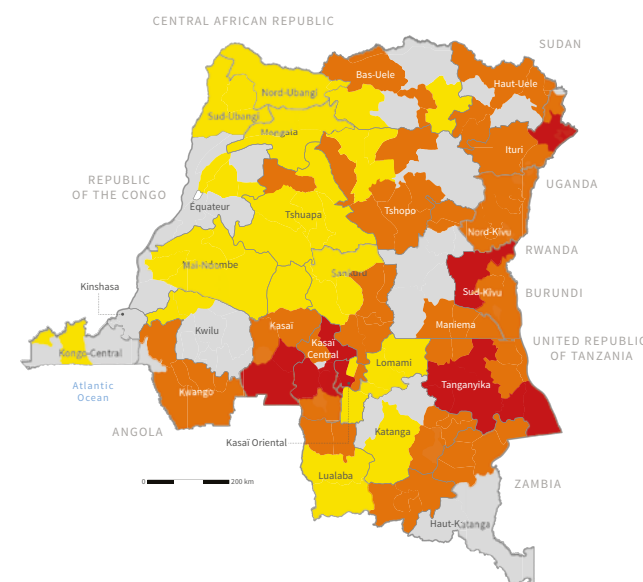
- Provide fishing kits and training for the most vulnerable fishers in the areas along Lake Kivu.
- Distribute fish conservation units to displaced people and host communities in Ituri, North Kivu and South Kivu to reduce post-harvest losses.

Cash

- Implement cash transfers and voucher schemes to enable access to agricultural inputs and food items in EVD-affected villages of Ituri, Nord Kivu and South Kivu by December.

Acute food insecurity situation

(July–December 2019)



IPC phase classification

Famine
 Crisis
 Minimal
 Insufficient data

Emergency
 Stressed
 Not analysed

Source: IPC, August 2019

Syrian Arab Republic

Military operations continue to affect food security in the northwest despite improvements in most of the country



About **6.5 million** food insecure people are in need of food and livelihood support

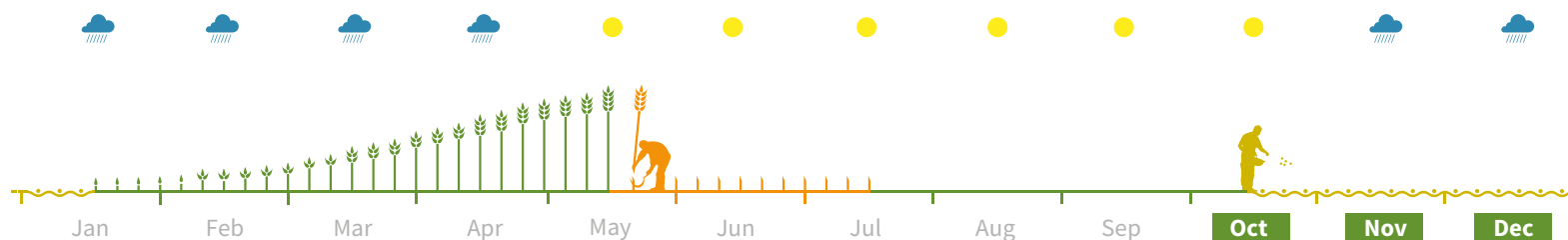


Over **1.3 million** IDPs in Idleb



Risk overview

- Even if the security situation in most areas across the Syrian Arab Republic has improved over the past months, the humanitarian situation remains severe in areas still affected by conflict such as the governorate of Idleb. The number of IDPs in the Syrian Arab Republic was estimated to be around 5.9 million in May 2019, down from 6.2 million in 2018. As of August 2019, more than 5.6 million Syrian refugees were registered in the region, a number that has not changed significantly since the beginning of 2018, according to UNHCR.
- According to a FAO/WFP CFSAM fielded in June 2019, the number of people estimated to be food insecure and in need of food and livelihood support is 6.5 million. The overall situation has improved compared to last year in almost all of the assessed areas. The most vulnerable governorates remain those where military operations are still ongoing, including Aleppo, Ar-Raqqa and Deir-ez-Zor. The governorate with the highest proportion of households with poor food consumption is Ar-Raqqa.
- The wheat harvest in the Syrian Arab Republic is typically completed in July. According to the CFSAM, ample and well distributed rainfall coupled with improved security resulted in a significant expansion of the cultivated area in 2019. Wheat production is estimated at 2.2 million tonnes this year, up from 1.2 million in 2018, but still close to 50 percent below the pre-crisis level of 4.1 million tonnes. Barley production in 2019 has exceeded pre-crisis levels and is estimated at 2 million tonnes, up from 0.4 million tonnes in 2018. This resulted from ample and well distributed rainfall, which improved the yield of barley, and increased harvested area due to better security.
- High production and transportation costs, and lack of quality inputs remain key challenges for farmers. Damage to infrastructure and services (e.g. irrigation and veterinary services) continue to constrain agricultural production and food availability.
- The security situation in northwestern Syrian Arab Republic has deteriorated significantly since late April 2019, and attacks on armed opposition groups in Aleppo, Idleb and Hama governorates escalated in July. Airstrikes and shelling killed more than 500 civilians from the end of April until the middle of August. Over 500 000 individual displacements in northwest Syrian Arab Republic were recorded between May and July. Population displacement is accelerating across affected areas in the northwest. Close to twice as many displacements were recorded in July in northern Hama and southern Idleb governorates compared to June, according to UNHCR.
- Although Idleb and Ar-Raqqa governorates were not included in the CFSAM due to constraints on access, the analysis reports that food security vulnerability continues to be particularly severe in those areas.



Ongoing military operations in northwestern Syrian Arab Republic are likely to fuel further displacement over the coming months, affecting food security. Despite nationwide improvements, damage to infrastructure and services continue to constrain agricultural production and food availability compared to pre-crisis levels.

- Infrastructure continues to be damaged by military operations. Attacks on water facilities over the past two months have affected the water supply of over 250 000 people, according to reporting by UNICEF.



Potential impact

- Ongoing military operations in northwestern Syrian Arab Republic are likely to fuel further displacements over the coming months, affecting food security. In the de-escalation area of Idlib Governorate there are an estimated 3 million people, including 1.3 million IDPs.
- According to reports, conditions for delivering humanitarian aid in northwestern Syrian Arab Republic are increasingly challenging, which will further exacerbate the humanitarian situation. In July, NGOs reported that camps were overcrowded with many people forced to sleep in the open air, and approximately 100 schools were hosting displaced people.



Recommended early actions

Continued support to conflict-affected people in northwestern Syrian Arab Republic is crucial to save lives and livelihoods before food security deteriorates further. Support to the 2019/20 planting season starting in October will play a crucial role in increasing food availability.

Crops

- Distribute crop seeds as soon as possible to the most vulnerable farmers, especially recent returnees.

Livestock

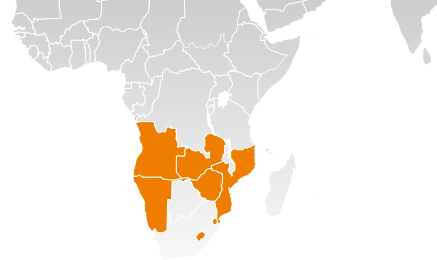
- Distribute animal feed to the most vulnerable households in order to limit animal mortality throughout the October–December period in areas where pasture is scarce.

Water

- Provide assistance to farmers for the establishment of water-users' associations in order to promote more efficient and community-based water resource management in agriculture.

Cash

- Conduct cash-based programmes in targeted areas to support the livelihoods of the most vulnerable conflict-affected people.



Southern Africa

Food security to deteriorate in areas affected by insufficient 2019 harvests, with risks of localized dry conditions in the latter half of 2019/20 cropping season



12.5 million people in the region will be severely food insecure up to March 2020



Regional cereal output is forecast to be **8 percent** below the five-year average



Risk overview

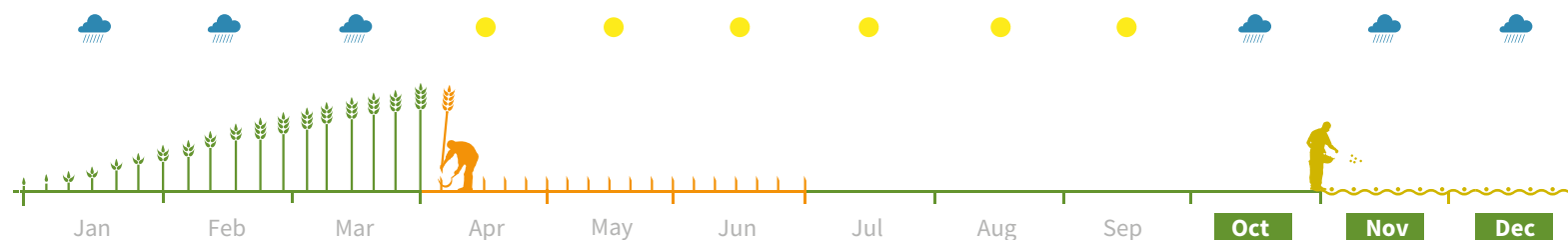
- Across Southern Africa, regional cereal output for 2019 is estimated to be about 8 percent below the five-year average. This is largely the result of adverse weather conditions, including the delayed start of seasonal rains and extensive dry periods caused by El Niño, as well as two major cyclones and economic challenges affecting some countries.
- According to GIEWS analysis released in July 2019, the countries registering the largest production decreases were Mozambique, Zambia and Zimbabwe. In particular, in Zimbabwe the maize harvest was estimated to be about 40 percent lower than the five-year average. Mozambique, which experienced landfall by Cyclone Idai in March and Cyclone Kenneth in April, registered significant crop losses in some of its most productive regions. Other countries such as Eswatini and Lesotho also registered deficits in terms of maize production, albeit to a lesser extent. As a result, national import requirements for 2019/20 are expected to increase.
- Rainfall deficits have also affected pasture productivity in the region, especially in Botswana and Namibia, leading to higher rates of livestock mortality. According to WFP, around 64 000 livestock died in Namibia between October 2018 and March 2019.

- At household level, adverse weather conditions caused important crop and livestock losses, leading to reduced food supplies from own production and lower income opportunities from crop and livestock sales. As of August, poor households in several parts of the region had consumed their own produce earlier than normal, reflecting the reduced harvests. These households will be relying on markets for food in the coming months, yet with reduced purchasing power.
- Based on the estimated decline in cereal production, import requirements have risen. Specifically, these are anticipated for Zimbabwe due to the multiple shocks affecting the country, including the volatile macroeconomic situation, and in Mozambique due to cyclone damage to the agricultural sector.



Potential impact

- Due to lower cereal output and reduced food supplies at household level, the lean season had been projected to start in August 2019. The number of food insecure in Southern Africa is projected to peak at 12.5 million people (excluding Angola and South Africa) during the lean period between January and March 2020, rising by more than 10 percent on a yearly basis.



Regional cereal output is forecast to be about 8 percent below the five-year average – largely due to adverse weather conditions, including the delayed start of seasonal rains and extensive dry periods because of El Niño, as well as two major cyclones and economic challenges affecting some countries.

- With regards to the upcoming main rainy season starting in October, the 23rd Annual Southern Africa Regional Climate Outlook Forum points to normal to above-normal rainfall between October 2019 and March 2020 for most of the region, except in the maize belt between eastern Mozambique and southwest Zambia, where average to below-average rain is expected between January and March. Poor rains in these areas at the beginning of 2020 could compromise harvests, even in areas that received adequate rainfall during the latter months of 2019.
- Forecasted above-average rains could increase prospects for the 2019/20 cropping season, however there is a risk of flash floods particularly in areas where prolonged dry conditions have affected soil quality, making it more susceptible to flooding and erosion.
- Furthermore, with the start of the rainy season there are large areas at risk of Rift Valley fever in north and central Mozambique and in a localized area of southern Madagascar, as reported by FCC-EMPRES.



Recommended early actions

Acting early is crucial to reverse increasing food insecurity ahead of the peak of the lean season, targeting the most vulnerable farmers and pastoralists especially in areas with harvest deficits. Early action should support vulnerable farmers to take advantage of the forecast above-average rains during the main planting season in October–November, with a particular focus on areas where insufficient rains are expected between January and March.

Water management

- Provide agricultural inputs including seeds, hand tools and equipment to allow timely sowing before the planting season (October 2019–February 2020, depending on the country), targeting severely food-insecure farmers in the Comoros, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Zambia and Zimbabwe in order to reduce the household food gap, restore food production capacity and diversify diets.

Livestock

- Provide supplementary stock feed and nutrient supplements to safeguard pastoral and agropastoral livelihoods in Eswatini, Lesotho, Namibia and Zimbabwe.

Water

- Establish and rehabilitate community watering points to enhance access to and availability of water for livestock and agricultural use, targeting severely food-insecure farmers and pastoralists in the Comoros, Eswatini, Lesotho, Malawi, Mozambique, Zambia and Zimbabwe.



Cameroon

High levels of conflict in North-West, South-West and Far North regions affecting the agricultural season and humanitarian access



4.3 million people in need of humanitarian assistance



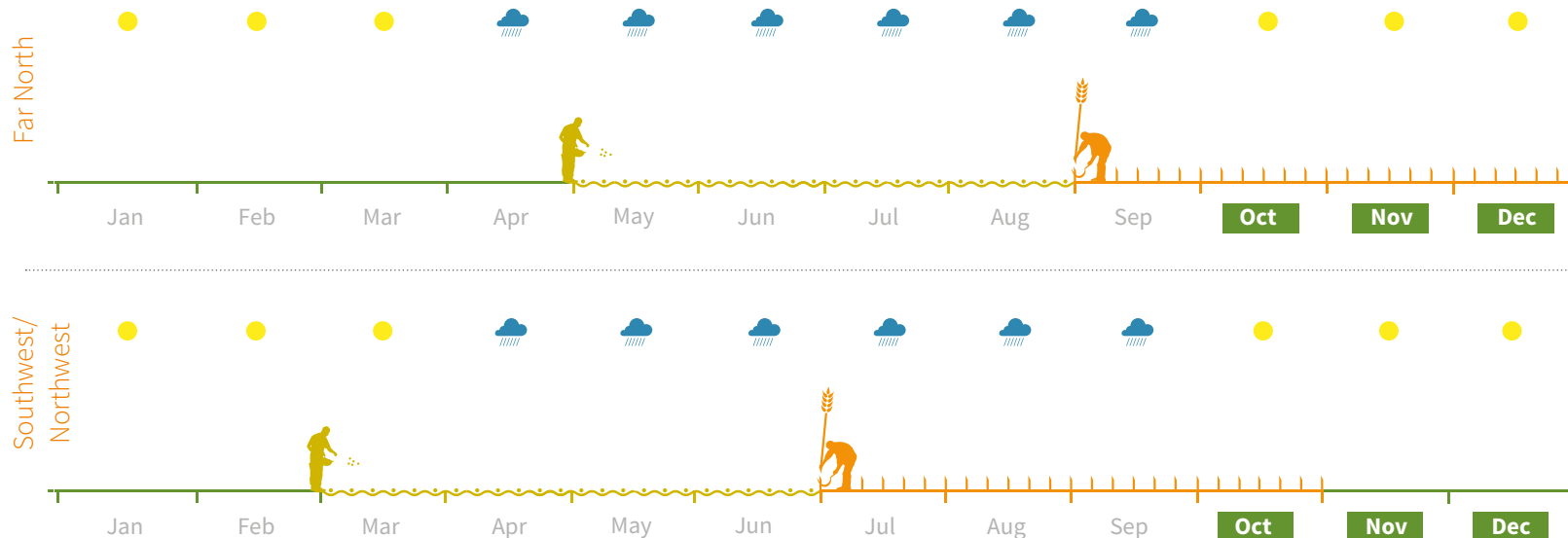
Over **536 000** IDPs due to conflict in North-West and South-West regions



Risk overview

- Insecurity has increased in recent months in the Far North region and remained very high in the North-West and South-West regions of the country. This has strongly affected agropastoral activities during the core months of the agricultural season (from June to September), which are dedicated to sowing and growing crops in the Far North and growing and harvesting crops in the North-West and South-West regions. Insecurity is also hindering the functioning of markets as well as humanitarian access to people in need.
- In the North-West and South-West regions, the conflict has severely affected agricultural activities in one of the key producing areas of the country. Due to the frequent and long “lock-down days” and insecurity along transport routes, the functioning of markets was severely disrupted throughout the season. For these same reasons, humanitarian access was considerably reduced.

- In the Far North region, increasing attacks by armed groups during July and August affected rural communities and markets. Humanitarian assistance during the lean season was hindered by insecurity and the suspension ordered by regional authorities of Logone-et-Chari. A cholera epidemic is also affecting vulnerable populations in the region.
- Overall, nearly 4.3 million people are in need of humanitarian assistance in the country. The conflict in the North-West and South-West regions has displaced over 430 000 people, with 47 000 refugees fleeing across the border with Nigeria. There are an estimated 263 000 IDPs in the Far North, alongside around 105 000 Nigerian refugees. Moreover, there are nearly 266 000 Central African refugees in the country as well as 306 000 returnees.
- In the Far North, localized dry spells affected the start of the rainy season. However, this was followed by normal to above-average rainfall across most of the country, with the exception of the southern and southwestern regions of Cameroon where considerable rainfall deficits prevailed.



Insecurity has increased in recent months in the Far North region and remained very high in the North-West and South-West regions of Cameroon. This has severely affected agropastoral activities during the core months of the agricultural season (June to September), which are dedicated to sowing and growing crops in the Far North and growing and harvesting in the North-West and South-West regions.



Potential impact

- At national level, thanks to a generally adequate rainy season, agricultural production and pasture development are likely to be near average, except in regions affected by insecurity where prospects are below average.
- In areas affected by conflict and armed violence (North-West, South-West and Far North regions), agricultural production is likely to be affected, thereby leading to increasing food insecurity into 2020. In the Far North, there is a high risk of increasing attacks by armed groups against farmers during the harvest period (October–December), as farmers are often attacked while in their fields and grazing areas.
- At the same time, high levels of food insecurity are prevalent due to widespread displacement as well as limited humanitarian access to vulnerable populations in need of food assistance.



Recommended early actions

The following recommended early actions for October to December are crucial to support harvesting activities, safeguard the livelihoods of displaced and vulnerable populations, and sustain off-season production for people in displaced sites or insecure areas with limited mobility or access to fields due to insecurity.

North-West and South-West:

- Provide improved seeds and agricultural tools to carry out home-gardening production.
- Scale up support to vulnerable households with pullets/layers to foster egg production.

Far North (department of Logone-et-Chari, Mayo-Danay, Mayo-Sava and Mayo-Tsanaga):

- Scale up support to vulnerable IDPs and very poor households among host communities through the provision of fish feed, fingerlings and small tools for fish farming households in order to increase production.
- Support refugees and host populations through the provision of veterinary care, livestock feed and water for livestock.
- Support vulnerable IDPs, host families, refugees and returnees through the provision of seeds for market gardening.



Dry Corridor of Central America

Localized dry conditions affecting food security of poorest households



About **50 000** families in some parts of the Dry Corridor of Guatemala lost up to **80 percent** of their maize crops

105 000 households at risk of food insecurity in Honduras

Over **70 000** households in El Salvador affected by lack of food and water



Risk overview

- During the 2019 *primera* season, irregular rainfall and above-average temperatures caused localized crop losses in the Dry Corridor of Central America – a region on the Pacific coast frequently affected by drought. The *primera* harvest is the main season for maize production and the most important for the majority of countries in the region, typically lasting from April to August.
- In Guatemala, despite an overall sufficient *primera* harvest, rainfall from May to August was below normal for the Dry Corridor. Approximately 50 000 families lost up to 80 percent of their maize production. The Government intervened by distributing food vouchers.
- In the Gulf of Fonseca, an area shared by Nicaragua, El Salvador and Honduras, July rainfall was between 25 and 50 percent below average. In Honduras, Vulnerability Assessment Mapping carried out in August 2019 in the Dry Corridor reported up to 72 percent loss of maize and 51 percent of beans. Basic grain reserves in August 2018 and 2019 were almost depleted and the risk of food insecurity will increase for an estimated 105 000 households up to the end of 2019. In September, the Government of Honduras declared an emergency due to the loss of staple crops.
- In the Dry Corridor of Nicaragua, July rainfall was significantly lower than average in several departments, contributing to a worsening food security situation. Poor households will continue to depend on markets to access basic non-food needs. Prices are likely to remain above average until January 2020, increasing pressure on their purchasing power. Localized maize crop losses were also experienced in the Dry Corridor of El Salvador. Over

70 000 households are estimated to be affected by a lack of food items and safe drinking water and are likely to resort to negative coping mechanisms. The eastern part of the country will remain vulnerable due to insufficient water resources.



Potential impact

- In areas of the Dry Corridor with below-average harvests during the *primera* season, the food insecurity situation is likely to worsen. Poor households and net food consumers will continue to have to depend on markets. According to FEWS NET, households in the Guatemalan Dry Corridor will continue to resort to negative coping mechanisms, even as sources of seasonal employment typically increase in October.
- NOAA and IRI project above-average rainfall in the Dry Corridor between October and December 2019. In Guatemala, regional forecasts point to above-average rainfall in production areas of the country up to the end of October, and in the Dry Corridor the beginning of sowing for the *postrera* season is proceeding regularly. In Nicaragua, regional forecasts for production areas point to near-normal conditions. In El Salvador, national projections point to normal rainfall up to November 2019, with slight anomalies in October.
- Above-average conditions could favour the upcoming *postrera* season, potentially improving the food security situation. However, with the end of El Niño-induced dry conditions and potential increased hurricane activity, some areas might be affected by floods.

In areas of the Dry Corridor of Central America affected by below-average harvests during the *primera* season, the food security situation is likely to worsen. Poor households and net food consumers will continue to depend on markets.



Recommended early actions

FAO acted early to mitigate the impact of El Niño-induced dry conditions on the *primera* agricultural season in Guatemala and Nicaragua by rehabilitating and establishing new water harvesting systems, distributing bean and vegetable seeds, and providing livestock kits. Food insecurity resulting from localized dry conditions calls for the continuation and scale up of actions in affected areas.

Crops

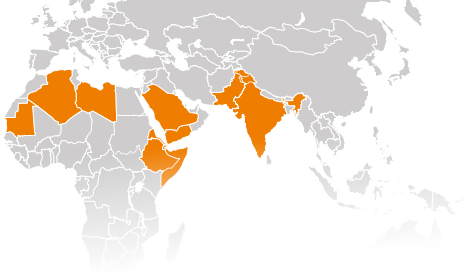
- Distribute bean seeds for the sowing of the *postrera* season, especially targeting vulnerable farmers in Guatemala (Baja Verapaz, Chiquimula, Jalapa and Zacapa districts).
- Distribute short-cycle seeds to support the September–December season in Nicaragua, especially in Chinandega, Estelí, Jinotega, León y Boaco, Madriz, Matagalpa and Nueva Segovia.
- Distribute basic grains and establish family gardens targeting the most vulnerable farmers in Honduras.
- Deliver agricultural kits for planting and production of short-cycle varieties before the beginning of the rainy season in El Salvador.

Livestock

- Support vulnerable livestock keepers in the Dry Corridor of Guatemala with ensiling corn and distribute sorghum seeds for fodder production.
- Promote animal vaccination campaigns in areas affected by localized dry conditions across the Dry Corridor.
- Promote prophylactic campaigns, establish protein banks as complementary fodder, and construct areas to protect animals from high temperatures in El Salvador, particularly in the eastern part of the country.

Water

- Continue the construction of reservoirs to collect water to ensure adequate sources for gardening activities.
- Conduct maintenance of rainwater reservoirs and irrigation drip systems in El Salvador before the beginning of the rainy season.



Desert locust outbreak

Substantial increase in desert locusts in Yemen, with outbreaks continuing in Ethiopia, India and Pakistan



Risk overview

- The desert locust outbreak appears to be currently most serious in India, Pakistan and Yemen. It could also deteriorate in Eritrea, Ethiopia and Saudi Arabia. In Yemen, swarms moved from the highlands and reached the Red Sea and Gulf of Aden coasts, while a few swarms migrated through Djibouti and reached Ethiopia. Adult groups formed on the northwest coast of Somalia and moved to eastern Ethiopia. Unusually good rains that fell along both sides of the Red Sea in Eritrea, Saudi Arabia and Yemen will allow early breeding to continue, causing locust numbers to increase and hopper bands to form that could threaten crops.
- In southwest Asia, a second generation of breeding has caused widespread hatching and numerous hopper groups and bands to form in the Thar Desert along both sides of the Indo-Pakistan border.



Potential impact

- A substantial increase in locust numbers is expected in Yemen, as a result of swarm laying and subsequent hatching in areas of recent rainfall on the Red Sea coastal plains and on the southern coast near Aden. The damage to crop production caused by the locust will continue to contribute to already severe food insecurity in the country.
- Early winter breeding will cause locust numbers to increase along the Red Sea coastal plains of southwest Saudi Arabia and Eritrea, and to a lesser extent in the Sudan and the northwest coast of Somalia. Control operations will be required in Saudi Arabia and Eritrea to reduce threats to agricultural areas.
- Breeding is expected to continue in northeast and eastern Ethiopia, which could extend to the Somali plateau in northern Somalia. There is a risk that small swarms from Yemen could cross and move southwards over Somalia and the Ogaden in southeast Ethiopia.
- Breeding will come to an end along both sides of the Indo-Pakistan border. Any locusts that are not detected or controlled will start to form swarms from October onwards. As ecological conditions dry out, the small swarms are expected to leave the summer breeding areas, mainly during November, and migrate west to Balochistan in southwest Pakistan and southeast Iran (Islamic Republic of) where seasonal predictions suggest unusual rains from October to December. Accordingly, the locusts are expected to seek shelter in the natural green vegetation that follows the rainfall and remain immature until temperatures warm up in early spring of 2020. If so, this will be an unprecedented opportunity for national locust teams in Pakistan and Iran (Islamic Republic of) to implement effective ground control operations to significantly reduce population levels and thus decrease the level of potential breeding during the upcoming spring.
- Due to the late arrival of seasonal rains, small-scale breeding may continue in the northern Sahel between Mauritania and western Eritrea during October and November, causing locust numbers to increase slightly. Breeding may also occur in southwest Libya and southern Algeria.

The information in the risk narrative is accurate as of 24 September 2019.

The desert locust situation appears to be currently most serious in India, Pakistan and Yemen. It could also deteriorate in Eritrea, Ethiopia and Saudi Arabia. A substantial increase in locust numbers is expected in Yemen, while early winter breeding will cause locust numbers to increase along the Red Sea coastal plains of southwest Saudi Arabia and Eritrea. When breeding will come to an end along both sides of the Indo-Pakistan border, swarms are expected to migrate to southwest Pakistan and southeast Iran (Islamic Republic of).



Recommended early actions

Early action is crucial to improve control and reporting of desert locust, and conduct surveys in all potential areas at risk, particularly in Eritrea, Ethiopia, India, Iran (Islamic Republic of), Pakistan, Saudi Arabia, Somalia and Yemen.

- Control operations should be maintained until summer breeding ends along both sides of the Indo-Pakistan border, most likely until at least November. In October, surveys should commence in southwest Pakistan and southeast Iran (Islamic Republic of) and continue throughout the winter and spring. Control operations may be needed during the winter.
- Survey and control operations should be carried out whenever and wherever possible in Yemen to monitor the situation and reduce locust populations.
- Survey and, if needed, control operations should be increased in Eritrea, Ethiopia, Saudi Arabia and northern Somalia.
- Equipment such as vehicles, sprayers, pumps and eLocust3 units should be checked, updated and repaired as necessary.
- National master trainers should conduct refresher-training courses for existing locust staff on desert locust survey, control and reporting.
- Contingency plans in India, Iran (Islamic Republic of) and Pakistan should be updated based on a thorough review of the spring and summer campaigns.
- Surveys should be maintained in the summer breeding areas of the northern Sahel between Mauritania and western Eritrea during October and November to detect any late breeding.

Nigeria

High levels of insecurity in northeast and northwest leading to new displacements and hindering humanitarian access



2 million people displaced by insecurity in Nigeria, of which **1.8 million** in Adamawa, Borno and Yobe states

100 000 IDPs in Katsina, Sokoto and Zamfara in the northwest



Risk overview

- In recent months there have been frequent attacks by armed groups across several northeastern and northwestern states in Nigeria. This has impeded agropastoral activities, the functioning of markets as well as humanitarian access to millions of people in need of food assistance during the lean season (June–September).
- In the northwestern states of Katsina, Sokoto and Zamfara, increasing intercommunal violence has led to large-scale displacements within the states and across the border into the Maradi region of the Niger. Recent estimates reported around 100 000 people as internally displaced and nearly 60 000 as seeking refuge in the Niger. Rural livelihoods have been severely affected, with homes, granaries and food supplies destroyed and increased cattle rustling.
- In the northeastern states, violence was rife against civilians as well as humanitarian actors during July and August, hindering humanitarian access to an estimated 1 million people in need. The situation was further compounded by floods in IDP camps in August.
- The ongoing violence has led to further displacement, compounding an already dire humanitarian situation. Overall, nearly 2 million people continue to be displaced by insecurity and conflict in Nigeria, of which 1.8 million in the three northeastern states of Adamawa, Borno and Yobe.

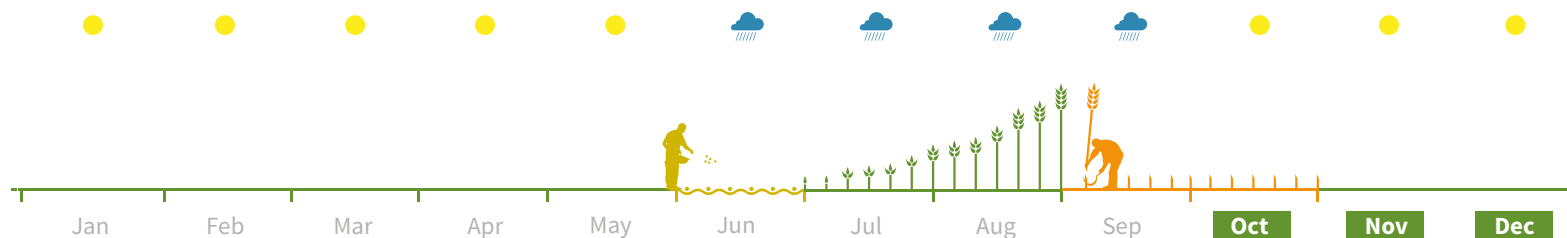
Humanitarian actors are facing renewed difficulties in accessing food-insecure people, which could result in significant consumption deficits and acute malnutrition.

- Tensions between farmers and herders in the centre and south of the country also remain high and risk increasing further in the next month during the seasonal migration of livestock.
- While central Nigeria experienced some rainfall delays at the start of the season, overall average to above-average rainfall was registered across the country, which could benefit agricultural production and pasture regeneration.



Potential impact

- The harvest season from October to December will boost both household food stocks and food availability in markets, while from late August the average or above-average rainfall registered should ensure a generally positive outcome in areas not affected by conflict.
- However, in conflict-affected areas where insecurity has affected agropastoral activities, the displaced, refugee and host populations will remain in need of humanitarian assistance and at risk of food insecurity. The situation will be particularly severe for the population in areas not accessible to humanitarian organizations.



In recent months, conflict and violence by armed groups have been high across northern Nigeria, particularly in eastern and western states. This has obstructed agropastoral activities, markets and humanitarian access to millions of people in need of food assistance during the lean season of June to September.



Recommended early actions

In the October–December period, early actions can safeguard the livelihoods of communities and displaced populations affected by insecurity by boosting off-season crop production and protecting key livestock assets.

Crops

- Support home-based livelihood activities among the most vulnerable households (micro-/backyard gardening and cash+).
- Provide women with vegetable seed kits in order to meet immediate household food needs, as well as cash crops (groundnut and sesame) for income.

Livestock

- Support vulnerable pastoralists and agropastoralists by restocking small ruminants (goats and sheep) and poultry to increase livelihood assets.
- Support state veterinary departments in organizing mass livestock vaccination and treatment campaigns in high-risk areas, combined with supplementary livestock feed interventions around nomadic areas.

Cash

- Scale up social protection support to returnees, IDPs and most vulnerable populations – particularly women and children – through conditional cash-based transfer interventions.

Chad

Localized insecurity and conflict jeopardize food security



133 000 IDPs



461 000 refugees hosted in Chad



Risk overview

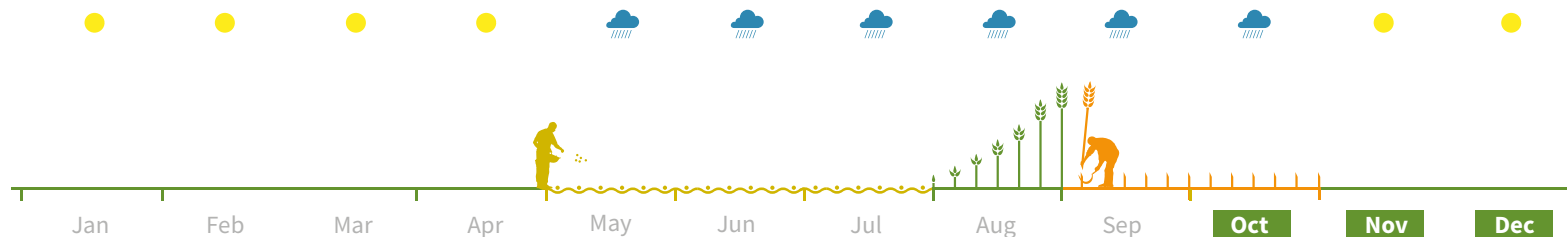
- During the key months of the main agropastoral and lean seasons (June to September), rural communities from various regions in Chad were affected by conflict and insecurity, increasing the risk of livelihood losses, reducing agropastoral production and undermining food security.
- In the Lac region, insecurity has remained high and recent attacks by armed groups led to new displacement and loss of livelihoods. In Tibesti, civil unrest limited food access for households as well as the trade of goods along routes. As of August the region was still under a state of emergency.
- The eastern regions of Ouaddai and Sila saw an increase in insecurity due to intercommunal tension and violence. In August, conflicts between nomadic camel herders and farmers along herder migration routes close to the border with the Sudan led to numerous deaths. As a result, the Government proclaimed a state of emergency in certain provinces.
- Overall, Chad hosts around 461 000 refugees, most of them either from the Sudan and based in the eastern region or from the Central African Republic and based in southern Chad. An estimated 133 000 IDPs are present in Chad.
- Overall, at national level the rainy season has been progressing well with an early start and above-average rainfall across most regions. However, certain areas were affected by irregular rainfall

and dry spells, including along the Abéché-Guéréda road. Moreover, floods in early September affected rural livelihoods, particularly in Ennedi.



Potential impact

- Conflict and insecurity are likely to further affect agropastoral livelihoods and crop production, thereby increasing needs and food insecurity in 2020. At the same time, rainy season results point to positive harvest prospects at national level, which could maintain aggregate food insecurity in 2020 at lower-than-average levels.
- However, the situation remains concerning for populations affected by insecurity and for large numbers of refugees, displaced people and host communities. In these areas, food insecurity will remain high.
- The intensification of farmer-herder conflicts in certain areas has prevented farmers from accessing their fields, which could affect production and thereby limit food availability. If not properly addressed, intercommunal tension could have repercussions in the long term and affect agropastoral activities in 2020.



A recent increase in insecurity due to intercommunal tensions and violence has been registered in the eastern regions of Ouaddai and Sila. The conflicts between nomadic camel herders and sedentary farmers along herder migration routes close to the border with the Sudan led to numerous deaths in August.



Recommended early actions

For the October–December period, the following early actions are recommended to provide immediate livelihood support to affected populations and help to prevent and mitigate the risk of further food security deterioration during the 2020 dry season.

Crops

- Support flood recession crops by distributing improved short-cycle cereal seeds (bérébéré sorghum, maize).
- Support home gardening by distributing vegetable seeds and agricultural inputs, as well as drilling with pumps to make irrigation water available.

Livestock

- For displaced pastoralists and agropastoralists and host communities, promote actions that safeguard core breeding stock and reduce the risk of conflict over access to resources by:
 - promoting production of fodder along water bodies and streams
 - providing vaccines and veterinary care



Fall armyworm

Further spread across Asia



Fall armyworm can feed on more than **80** species of plants, including maize, rice, sorghum, millet, sugarcane, vegetable crops and cotton



Risk overview

- Fall armyworm, or *Spodoptera frugiperda*, is an insect native to tropical and subtropical regions of the Americas. In its larval stage, it can cause significant damage to crops if not well managed. The pest prefers maize but can feed on more than 80 additional crop species, including staples such as rice, sorghum, millet, sugarcane, vegetables and cotton.
- In Africa, fall armyworm was first detected in Nigeria in January 2016 and has quickly spread across virtually all of sub-Saharan Africa, with tens of millions of hectares of crops affected.
- In July 2018, outbreaks were confirmed in India and Yemen. By December 2018, fall armyworm had been reported in Bangladesh, Sri Lanka and Thailand. As of June 2019, it had been reported in China, Egypt, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, the Republic of Korea and Viet Nam. In July 2019, Japan also reported the presence of the pest.



Potential impact

- Fall armyworm is likely to reproduce in areas of Asia with favourable climatic conditions and an availability of important host crops, such as maize. There is an increasing risk of further spread to east and northeast China, the Democratic People's Republic of Korea, the Republic of Korea and potentially Australia, Papua New Guinea and the Philippines.
- Left unmanaged or in the absence of natural biological control, fall armyworm could cause significant yield loss in maize and other crops.



Recommended early actions

Fall armyworm has the potential to spread to other areas and countries. Farmers will need significant support to sustainably manage the pest in their cropping systems through integrated pest management.

- Scale up efforts to collect evidence on the spread and impact of fall armyworm in African and Asian countries, with a particular focus on those known to be at high risk of food insecurity.
- Increase the use of the fall armyworm monitoring and early warning system (FAMEWS), a mobile application for reporting the level of infestation and mapping its spread. The app also contains a training component that works offline and advises farmers on sustainable pest management.
- Support natural biological control efforts rather than pesticides, such as the use of predators, parasitoids and entomopathogens (for example viruses or bacteria). Pesticides provide ineffective control of fall armyworm and in many instances pose significant risks to human and environmental health.
- Support the establishment of farmer field schools to train smallholder farmers on integrated pest management.
- Support South-South Cooperation, facilitating meetings and workshops to share knowledge and lessons learned.

The information in the risk narrative is accurate as of 13 September 2019.

Fall armyworm outbreak – countries affected

■ Detected and officially reported

Source: FAO, August 2019
<http://www.fao.org/emergencies/resources/maps/detail/en/c/902959/>

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FAO's Early Warning Early Action is supported by
the FAO Special Fund for Emergency and Rehabilitation Activities
and the following partners:



ISBN 978-92-5-131843-0



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CA6372EN/1/10.19