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### Overview

The Early Warning Early Action initiative has been developed with the understanding that disaster losses and emergency response costs can be drastically reduced by using early warning analysis to act before a crisis escalates into an emergency. Early actions strengthen the resilience of at-risk populations, mitigate the impact of disasters and help communities, governments and national and international humanitarian agencies to respond more effectively and efficiently

José Graziano da Silva, FAO Director-General The Early Warning Early Action (EWEA) report on food security and agriculture is developed 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 (CH)

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.

## Methodology

### Risk value



### High risk

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



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 CH
- 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's (INFORM) is further applied to measure the coping capacity of a country.

#### Famine declared and risk of famine

As per IPC guidance, when a new emergency or further deterioration of the situation might lead to an increased risk of famine, this aspect is highlighted in the global risk map and narrative of the report as "risk of famine". When the occurrence of famine has been declared. this is labelled as "famine declared".

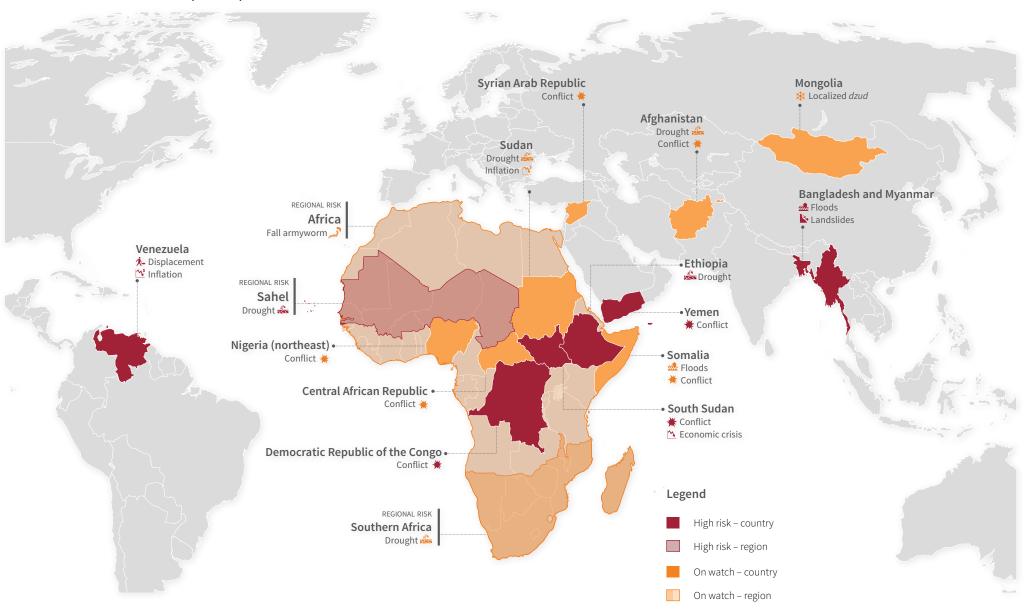
### Recommendations for early actions

Early action recommendations are indicated for each risk that features 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, sub-regional and regional offices.

### Global risk map

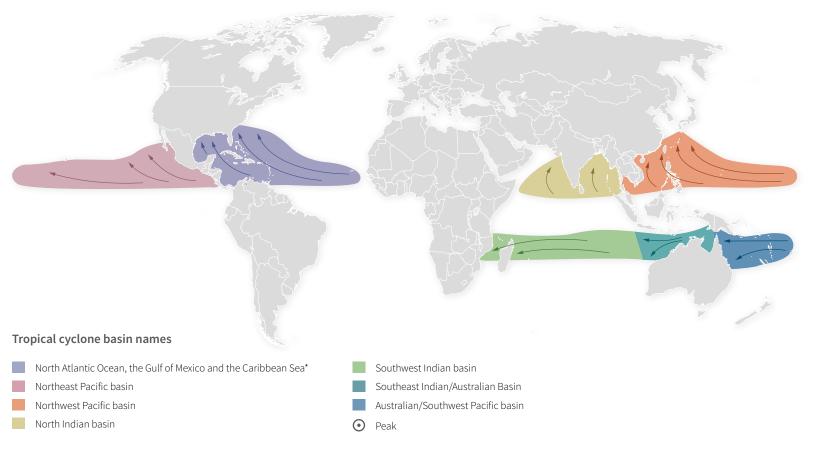
The map on the right provides a visualization of major disaster risks to food security and agriculture in the indicated reporting period. When a new emergency or deterioration of the current situation is very likely and might have severe impacts, it is indicated as "high risk". In case of moderate to 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: April–June 2018

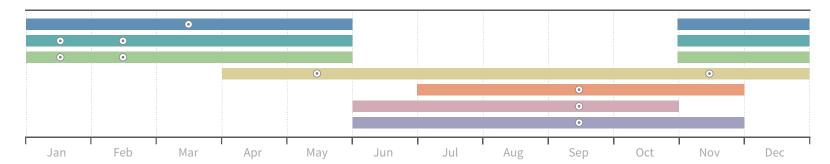


# Cyclone seasonality

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.



### Seasonality calendar

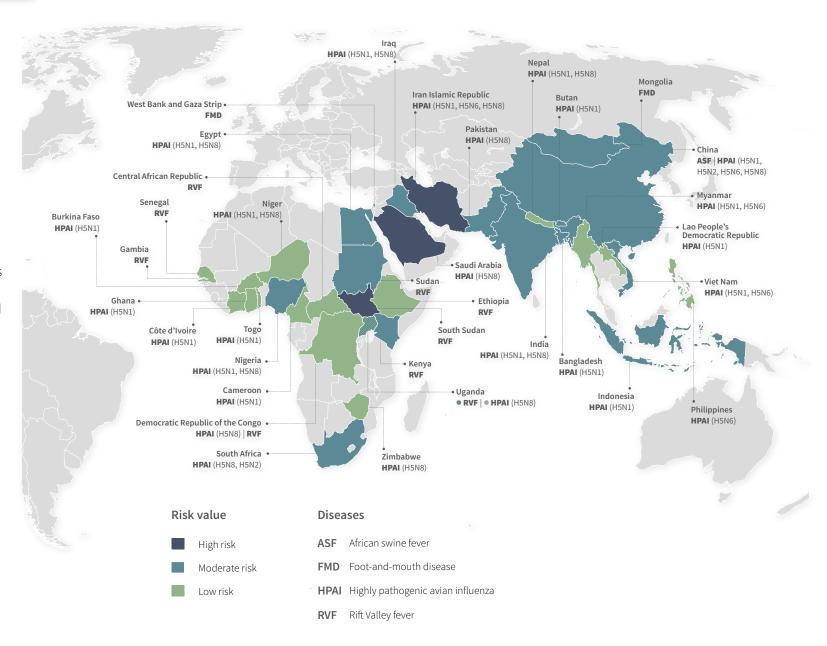


<sup>\*</sup> Cyclone activity in 2018 is forecast to be 15 percent below the long-term average

# Animal health risks

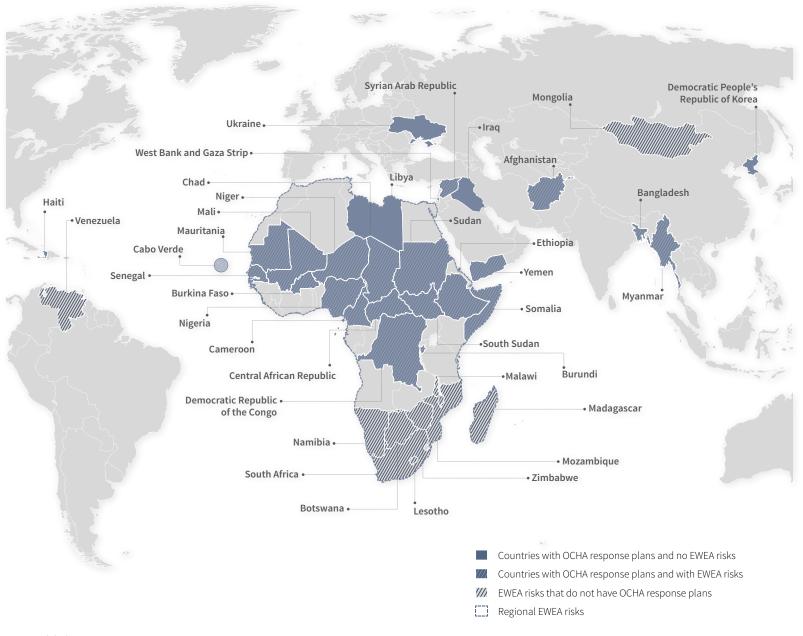
This map highlights selected countries facing animal health risks during the reporting period. Countries are only highlighted if the risk has the potential to impact food security. The information used to compile this map was extracted from the Food Chain Crisis Management Framework (FCC) Early Warning Bulletin for the period April-June 2018.

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



# **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 in relation to countries with ongoing emergency operations (Office for the Coordination of Humanitarian Affairs [OCHA] response plans) in which a major deterioration is not foreseen over the reporting period.



Source: Global Humanitarian Overview 2018, OCHA

## Sources of information

This report consolidates information provided by GIEWS, FCC-EMPRES and IPC, and 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 CH 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 OCHA, Office of the United Nations High Commissioner for Refugees (UNHCR), the United Nations Children's Fund (UNICEF), the World Food Programme's (WFP's) Vulnerability Analysis and Mapping Unit and the World Meteorological Organization
- updates from external sources including INFORM, Famine Early Warning Systems Network (FEWSNET) and the International Research Institute for Climate and Society - Columbia University (IRI), Reliefweb, local and international media

<sup>\*</sup>Crop Prospects and Food Situation Bulletin, and Crop and Food Security Assessment Missions (CFSAM), GIEWS

<sup>\*\*</sup>Food Chain Crisis early warning bulletin, FCC-EMPRES, Animal Production and Health Early Warning Systems Team



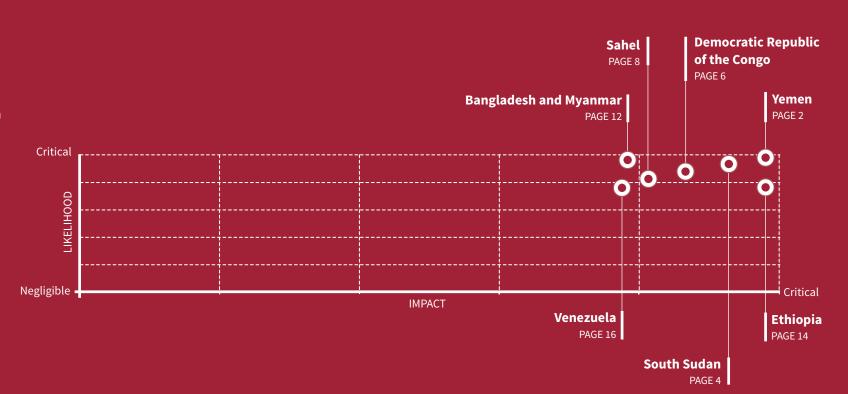
# High risk

The matrix provides an overview of the ranking of risks featured in this report. The ranking is based on an estimation of the likelihood and impact of a disaster, taking into consideration the capacity of a country to respond to the event.

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 April–June 2018, the **high risk** section includes:

- Yemen
- South Sudan
- Democratic Republic of the Congo
- Bangladesh and Myanmar
- Sahel
- Ethiopia
- Venezuela





### Yemen

Access constraints combined with spikes in conflict threaten to precipitate an already large-scale humanitarian crisis



17.8 million food insecure people, of which 8.4 million severely insecure



**61 percent** increase of the cost of food basket



More than 1 million suspected cholera cases



**85** 000 displaced people since December 2017



- Intensified conflict coupled with disrupted access has aggravated an already dire humanitarian situation in Yemen. According to the 2018 Humanitarian Response Plan, 22.2 million people (75 percent of the population) in the country are in need of some form of humanitarian assistance. The most recent Famine Risk Monitoring results revealed that 17.8 million people in Yemen are food insecure. Of that number, 8.4 million are severely food insecure – a 24 percent increase since April 2017. Vulnerable populations in 107 out of 333 districts are facing a heightened risk of famine as conflict and accessibility issues persist.
- Al Hudaydah port is a major lifeline for Yemenis, facilitating 60 percent of imports. Despite recent blockades, humanitarian assistance has been arriving through Al Hudaydah port as of December 2017, which is the closest port to 70 percent of people in need. However, commercial imports are an estimated 30-40 percent less than the previous months. Uncertainty remains if the port will remain open, as the 30-day access period granted in December 2017, has expired. Because of reduced imports as of January 2018, the cost of a food basket on average has increased by 61 percent (compared to pre-conflict figures in 2015).

- Hostilities continue in Yemen, with recent upsurges of violence recorded across the country. Following the December 2017 clashes in Sana'a, fighting has spread along the western coast reaching districts in Al Hudaydah (for the first time), Taiz and Al Jawf. UNHCR estimates that more than 85 000 people were displaced since December 2017, including more than 13 200 displaced households from Al Hudaydah.
- The cholera and diphtheria outbreaks are a consequence of a collapsed health system in Yemen. As of April, more than 1 086 000 suspected cholera cases and 2 771 associated deaths have been reported – an 8 percent increase since December 2017. Furthermore, there are more than 1 360 probable diphtheria cases, including 76 associated deaths.
- As of February, shortages and high prices of cooking gas (up to 10 000 Yemeni Rial or USD 40 per cylinder) in Sana'a has negatively affected household cooking, private businesses and transport systems that depend on the resource. In the search for alternatives, deforestation of the area is likely due to many families now cooking with firewood.





- While the opening of Al Hudaydah and Salif ports has increased access for urgent assistance, this is insufficient to meet the needs of people experiencing food insecurity. Without a sustained flow of imports of essential basic goods for both humanitarian and commercial supplies, it will become increasingly difficult to avert further catastrophe in Yemen. Urgent access is required to secure a thoroughfare and avoid further deterioration. Without this lifeline, it is most likely food security will worsen, alongside the loss of livelihoods and continued collapse of basic facilities.
- According to the World Health Organization, the rainy season from March to June could further exacerbate the spread of cholera.

Access constraints in Yemen are further worsening the existing levels of vulnerability in the country, leading Yemenis to exhaust their coping mechanisms. The upcoming rainy season in central highlands and southern uplands may further worsen the situation through increased risk of flooding and spread of cholera outbreaks.



### Recommended early actions

The April–June period coincides with land preparation and planting of staple crops, especially in central highlands and southern uplands. Side-by-side with food assistance, it is therefore critical to support the agricultural livelihoods of the most vulnerable populations over the next months, with particular attention to internally displaced people (IDPs) in areas where the conflict has recently expanded, such as Al Hudaydah and Taiz governorates. In close cooperation with local partners on the ground.

### Crops

• Distribute vegetables and cereals seeds to support vulnerable farmers who have limited access to agricultural inputs.

#### Fisheries

Provide fishing gear (fishing net kits, iceboxes, life jackets) and trainings on value chain development to vulnerable smallholder fishers in the Red sea and Arabian Sea coastal areas, with particular attention to recent conflict-affected areas.

#### Livestock

Expand vaccination and feed distribution activities, in particular for IDPs and female-headed households, due to uncontrolled movements of people and their livestock.

#### Water

• Provide solar water pumps to vulnerable farmers for agricultural and domestic use in areas with damaged water infrastructure. The rainy season threatens the spread of cholera to various water points. Therefore, establishing safe access to water will be essential to contain the outbreak.



## South Sudan

Early lean season induced by conflict-related disruptions



**5.3** million people facing IPC Crisis or Emergency food insecurity



More than **700 000** people fled the country in 2017



Cereal production 14 percent below average in 2017/18



- The ongoing conflict has instigated mass displacements that has undermined an already compromised agriculture sector in South Sudan, destroying livelihoods and instigating food shortages. In 2017, more than 700 000 people were uprooted from their homes and fled the country, which in turn, has severely affected the outcome of the main cereal harvest (August 2017–January 2018).
- According to the latest IPC, 5.3 million people (48 percent of the population) are experiencing Crisis and Emergency (IPC Phases 3 and 4) levels of food insecurity. Of this number, 1 million are facing Emergency (IPC Phase 4) acute food insecurity. Compared with the November–January post-harvest season in 2016–17, this represents a 40 percent increase in the population facing severe food insecurity.
- The intensified violence has led to destruction of value chains. cattle being stolen or left behind and farmers fearful to access their lands. As a result, the 2017/18 FAO/WFP CFSAM estimates cereal production will only reach 764 100 tonnes – 7.5 percent lower than last year and 14 percent below the five-year average. Data from the Food Security and Nutrition Monitoring System further indicates household cereal stocks are likely to be depleted by March 2018, prompting an early lean season. Areas of concern include Unity, Jonglei, Upper Nile and Central Equatoria.
- Cereal crops were also damaged by the fall armyworm (FAW), which contributed to below-average 2017/2018 output. In addition, between January-February 2018, human cases

of Rift Valley fever (RFV) were reported in Yirol county area, Eastern Lakes state. RFV is considered endemic to livestock in South Sudan. However, the risk of transmission in previously unaffected areas can be high during the seasonal transhumance, which coincides with the start of the rainy season in April.



### Potential impact

- In the lead-up to the peak of the lean season in May–July 2018, the food security and nutrition situation is expected to significantly deteriorate. Without sustained humanitarian assistance and access to conflict areas, an estimated 7.1 million people (63 percent of the population) would face Crisis or worse acute food insecurity (IPC Phase 3 and above), including 2.3 million people in Emergency (IPC Phase 4). Particularly at risk are 155 000 people facing Catastrophe (IPC Phase 5), who could suffer from the most extreme levels of hunger. Counties of greatest concern include Leer, Koch, Panyijar, Ayod, Nyirol and Uror.
- The lack of livestock quarantine and movement restrictions could contribute to the spread of diseases, particularly RFV, from the area of former Lakes state. The risk of RFV spreading within South Sudan and to neighbouring countries is moderate to high. FAW also presents a significant risk to the upcoming cereal sowing and cropping season, which began in March 2018.



The risk of famine remains elevated and food security is expected to worsen in 2018. The situation may significantly deteriorate especially in the coming months, with the lean period starting in May, and the continued sowing of staple crops in April–May. It is critical to support the most vulnerable households to become self-sufficient and build their resilience.

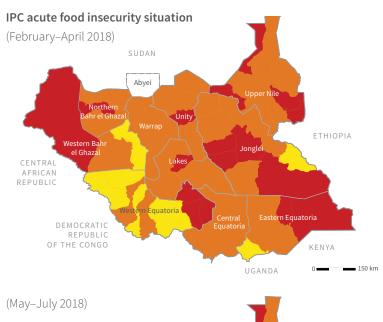


### Crops

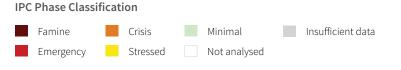
- Distribute crop seeds and tools for the main and second season between March and August, targeting the most vulnerable farmers facing IPC Phases 3 and 4.
- Train government extension workers, Non-governmental Organization staff and village facilitators on FAW management, where relevant in the country.
- Support farmer field schools through training of smallholder farmers on FAW pest management.

#### Livestock

- Continue RFV surveillance and awareness raising (i.e. radio, television, print media, posters, pamphlets and other International Electrotechnical Commission materials) in the Lakes, Unity and Jonglei states among livestock keepers.
- Control animal movements and the spread of infectious diseases, and inspect disease exposure in slaughterhouses.
- Provide veterinary services to pastoralists, focusing on endemic and infectious diseases like foot-and-mouth disease, bovine pleuropneumonia, haemorrhagic septicaemia and East Coast fever.
- Invest in networks of community-based animal health workers to sustainably support livestock health services.







Source: South Sudan IPC Technical Working Group, January 2018



# Democratic Republic of the Congo

Intensification and spread of conflict to other regions



More than 5 million displaced people



7.7 million severely food insecure people



2.2 million children to suffer from severe acute malnutrition in 2018

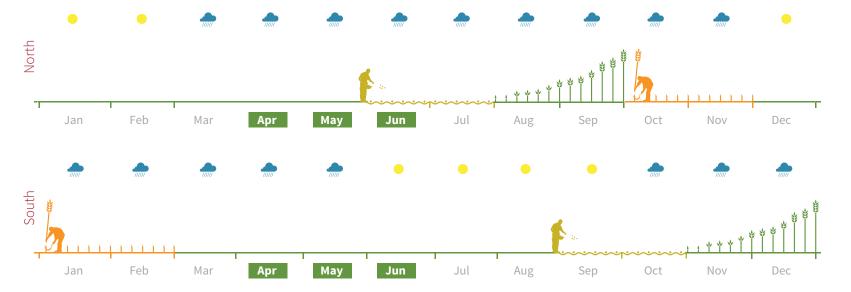


100 percent increase in staple prices in the Tanganyika region in six months



- The Democratic Republic of the Congo continues to experience widespread insecurity, population displacement, and food insecurity and poor nutrition – mainly in Ituri, North and South Kivu, Tanganyika and Haut-Katanga provinces and Kasaï regions. Over the recent weeks, tens of thousands of people have fled intercommunal violence between Lendu and Hema in the northeastern Ituri provinces, seeking refuge in neighbouring Uganda.
- Due to the escalating violence, more than 4.5 million people are currently internally displaced, alongside 600 000 Congolese refugees who have fled their homes for refuge in neighbouring countries. As of July 2017, the deteriorating situation has had a dramatic effect on food security, with 7.7 million people severely food insecure compared with 5.9 million during the same period last year.
- Agricultural activities are among the most affected. Farmers fleeing from violence have missed three consecutive planting seasons and

- have lost their productive assets, with little food or seed stocks and are relying mainly on food assistance. In addition, crop production continues to be affected by the fall armyworm (FAW) pest.
- In various parts of the country, the humanitarian situation has been exacerbated by frequent disease outbreaks, including measles, malaria and the worst cholera outbreak in years. As a result of the challenges and restricted access to clean water and limited diet, the nutrition situation of children under five in displaced communities is of concern. According to UNICEF, an estimated 2.2 million children are likely to suffer from severe acute malnutrition in 2018.
- The depreciation of the Congolese franc against the US Dollar, combined with an increased dependence on cross-border trade, has increased prices. In the Tanganyika region, a greater dependence on cross-border flows from Tanzania in the last six months has resulted in almost a doubling of local prices for maize and cassava.
- The political uncertainty in the country continues to be a serious concern, with the postponement of the elections to later in 2018.





- Crop production shortfalls are expected in conflict-affected areas of Kasaï and Tanganyika provinces as well as in North Kivu and Katanga provinces, where FAW outbreaks were reported.
- The ongoing conflict in the Kasaï, Tanganyika and the eastern parts of the country is likely to continue disrupting food trade and markets, and drive food prices upward in the coming months. In Ituri, the recent intensification of conflict is likely to drive further displacement in the region and across the border.
- With president Kabila potentially not partaking in the 2018 presidential campaign, further instability in the country is likely in a case the electoral transition fails.

In 2018, the humanitarian situation in the Democratic Republic of the Congo is projected to worsen. Therefore, it is essential to continue responding to the immediate needs of those most affected to avoid further deterioration of the food security situation. Some of the most atrisk areas will be in critical stages of the crop production cycle between April and June, especially in the Ituri province where sowing for the main maize season is expected to start in June 2018.

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### Recommended early actions

### Crops

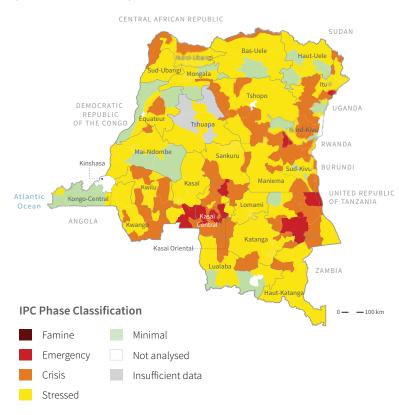
- Provide short-cycle vegetable seeds to those most vulnerable in the Kasaï region, including internally displaced people, between April and August 2018.
- Support the distribution of maize and pulse seeds between May and June in Bunia city, Ituri province, ahead of the maize-sowing season in June 2018.

#### Livestock

 Support the livestock production of vulnerable farmers in the Kasaï region through the provision of guinea pigs and goats starting from May 2018 to improve their access to income and protein food sources.

### IPC acute food insecurity situation

(June-December 2017)



Source: Democratic Republic of the Congo IPC Technical Working Group, June 2017



## Sahel

Difficult pastoral lean season due to drought impacting food security outcomes



### 3.2 million food insecure people



More than 1 million children could face severe acute malnutrition in 2018



2.5 million pastoralists require urgent livelihood assistance

# Risk overview

- The food security situation in the Sahel is alarming following the poor performance of the 2017 rainy season. This has led to substantial deficits in fodder production in major pastoral and agropastoral areas of Burkina Faso, Cabo Verde, Chad, Mali, Mauritania, Niger and Senegal. According to the latest CH food security analysis (March 2018), 3.2 million people are currently food insecure (CH Phases 3 to 5) in Burkina Faso, Cabo Verde, Chad, Mali, Mauritania, Niger and Senegal.
- The 2017–2018 pastoral campaign was marked by a deficit and a poor spatial-temporal distribution of rains in the Sahelian belt. In Mauritania, 39 percent of the monitored stations recorded deficits compared with the long-term average (1981-2010). In Senegal, 25 percent of livestock was affected by the significant shortfall in biomass production, while an early drying up of water points was noted at the end of the rainy season in Mali.
- The severe rainfall deficit in 2017 has affected pasture availability in many parts of the Sahelian belt and triggered an early onset of the lean season. This has had a substantial impact on livestock conditions and movements, causing a massive and early departure of pastoralists to livestock concentration areas in Senegal and Mali as well as in neighbouring coastal countries. As of March 2018, 2.5 million pastoralists and agropastoralists require urgent livelihood assistance.
- The ongoing pastoral crisis is also affecting the population's nutrition status, particularly women and children under the

- age of five. The CH analysis indicates a prevalence rate of global acute malnutrition exceeding the emergency threshold of 15 percent in parts of Chad, Mali and Mauritania as a result of insecurity in these areas and limited access to food, health services and sanitation. In the worst-case scenario, UNICEF estimated that 1.6 million children under the age of five are at risk of facing severe acute malnutrition in 2018.
- In Chad, prolonged dry periods observed throughout the rainy season did not favour vegetation development and impacted water levels in many parts of the Sahelian belt in the country. This has led to significant fodder deficits in the Wadi Fira, Ouaddai, Kanem, Batha, Hadjer Lamis, Bahr El Ghazal, Lake, Borkou, Ennedi East and Ennedi West regions. Food security analyses indicate that the entire Sahelian belt is anticipated to deteriorate to Crisis (CH Phase 3) between June and August 2018, while the nutrition rates for the last two lean seasons show increasingly alarming malnutrition rates. In the Niger, 800 000 people are expected to be in CH Phases 3 and 4, a deteriorating trend in comparison with the same period last year.
- In Mauritania and Cabo Verde, crop production was below average. In 2017, Cabo Verde in particular experienced one of the worst droughts ever recorded in the country. Given the currently unfavourable conditions, some municipalities in Cabo Verde are facing acute food insecurity and malnutrition and are expected to face Crisis (CH Phase 3) until the lean season (June-August 2018).



- In Burkina Faso, Mali and Mauritania, the prices of cattle and small ruminants in livestock markets are declining due to unfavourable pastoral conditions, while fodder prices rises. This has resulted in deteriorated terms of trade, further threatening the livelihoods of poor pastoral households.
- In response to the massive movements of animals in 2018, some coastal countries (Benin, Côte d'Ivoire, Ghana, Guinea and Togo) adopted new regulations to strengthen the control of the number of incoming animals and manage transhumance.
- The region has also seen an intensification of armed conflict and insecurity due to the presence of insurgent groups such as Boko Haram or Al Qaeda in the Islamic Maghreb, which hinders trade flows, triggers forced displacement and threatens livelihoods. The growing insecurity in the region and new regulations impeding the movement of transhumant livestock have constrained the movement of herds between borders. This is resulting in the concentration of animals in transboundary areas, increasing competition around natural resources and promoting risks of epidemics and conflicts.



- Increased migration to forage rich areas of Mauritania, Mali, Senegal and coastal countries is likely to contribute to the deterioration of local agropastoral conditions due to livestock overgrazing, and ignite tensions between pastoralists and host communities. Many pastoralist households are likely to sell their livestock at very low prices due to deteriorating livestock body conditions, and as a result, engage in negative coping strategies.
- Low availability of pastures and difficult access to fodder undermines the health status of animals, which is likely to deteriorate further at the start of the rainy season in June. Although, no major animal disease outbreaks have been reported, the risk of an emergence of new epidemics continues to be reported especially at the borders, requiring increased vigilance.
- As a result of the early and prolonged lean season, many vulnerable agropastoral and pastoral households are likely to deplete their food stocks earlier than usual and will increase their dependency on markets to access food in a context where staple food prices are above average and terms of trade are deteriorating.
- More than 4.9 million people may require food assistance (CH Phases 3 to 5) during the lean season (June-August 2018) in pastoral areas across the Sahel (Burkina Faso, Mali, Mauritania, Niger, Senegal and Chad). Countries such as Niger and Mali have noted a significant increase in the number of food insecure people. WFP estimates that this number might rise to affect up to 7 million people in the coming months.

Since the end of 2017, severe rainfall deficits. conflict, limited movements and market distortions have further aggravated the food security situation in the Sahel. To address the immediate needs in 2018. actions should protect pastoral and agropastoral livelihoods affected by the crisis and improve the food security and nutrition of affected populations.



#### Cash

• Implement unconditional cash transfer, cash-for-work and cash+ activities for pasture replenishment, water point rehabilitation, soil protection and technologies to reduce women's workload between April and September in Mali (Gao, Kayes, Koulikoro, Mopti, Ségou, Sikasso and Tombouctou).

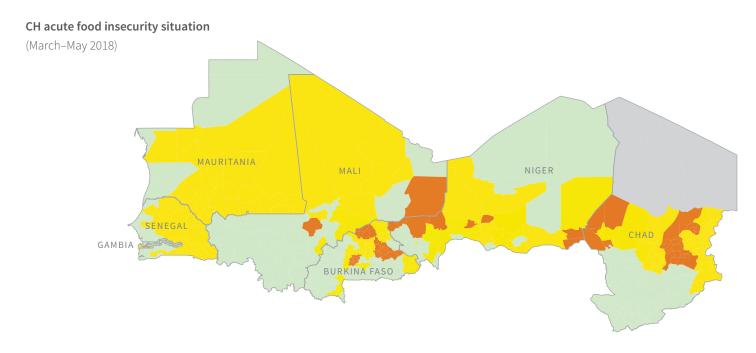
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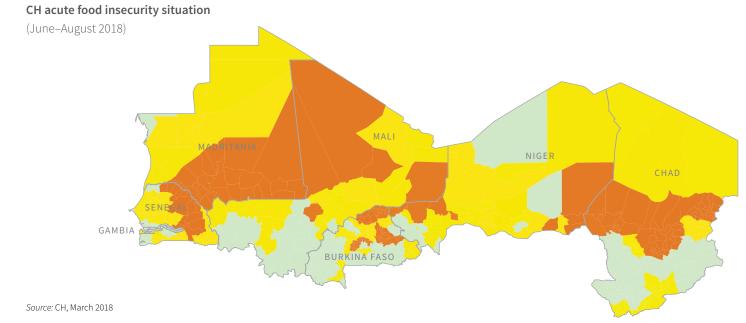
• Provide agricultural inputs through direct distribution or at reduced prices between May and October in Niger (Agadez, Diffa, Dosso, Maradi, Tahoua and Zinder) and Senegal (Kaffrine, Louga, Matam, Saint-Louis and Tambacounda), reaching the most affected households.

#### Livestock

- Provide animal feed through the in-kind distribution or through voucher or cash to vulnerable pastoralist and agropastoralist communities affected by the crisis.
- Provide animal health services (i.e. vaccination and deworming).
- Support commercial and emergency livestock destocking activities (conservation, processing and consumption by women and children).

These activities should be undertaken between April and July 2018, targeting the most vulnerable pastoralists and agropastoralists in Burkina Faso (Cascades, Centre Nord, Est and Sahel), Chad (Bahr El Gazal, Guéra, Kanem, Lac, Ouaddaï and Wadi Fira), Mali (Gao, Kayes, Koulikoro, Mpoti, Ségou, Sikasso and Tombouctou) and Mauritania (Assaba, Brakna, Gorgol, Guidimakha, Hodh El Charbi, Hodh El Garbi, Tagant and Trarza).





IPC Phase Classification

Famine

Stressed

Emergency Crisis

Minimal

Not analysed

Insufficient data



# Bangladesh and Myanmar

Refugee crisis compounded by the upcoming monsoon season



Nearly **1 million** refugees in Cox's Bazar



240 000 internally displaced people in Myanmar



**190 000** people at risk from natural hazards



More than 5 700 diphtheria cases



30-35 percent of people in Cox's Bazar are severely food insecure



- As of August 2017, more than 688 000 Rohingya refugees mainly women and children – escaping violence in Myanmar have sought protection in Cox's Bazar district, Bangladesh. This has increased the area's refugee population to 974 000, located in camps, settlements and within host communities.
- According to the Rohingya Refugee Crisis Joint Response Plan, as of March 2018, 30–35 percent of those living in Cox's Bazar are classified as severely food insecure, with 38 percent of children underweight.
- The ecology of Cox's Bazar remains fragile. Firewood collection or land clearing has exacerbated ongoing serious deforestation in areas surrounding refugee camps. The digging of shallow wells has also damaged the ecosystem, and up to 86 percent of the newly installed systems are suspected to be contaminated with E. coli.
- The high population density in camps has increased the risk of disease outbreaks. As of 17 February, more than 5 700 suspected cases of diphtheria were reported and 38 deaths.
- The mass population movement has increased tensions with host communities, who already had limited access to resources, infrastructure and services. Competition for key natural resources compounds already severe challenges in accessing sufficient food and water. Host communities have experienced

- dramatic inflation and a highly competitive labour market with drastically lower wages, challenging their access to sufficient food. The steady rise in tension between host communities and refugees, which will be exacerbated with dwindling resources and the onset of the rains.
- The repatriation of Rohingya refugees was scheduled to begin in January 2018 under an agreement signed by the governments of Myanmar and Bangladesh. However, these plans have stalled. The conditions in Myanmar are not yet conducive to the voluntary repatriation of refugees, according to UNHCR. Meanwhile refugees, albeit in small numbers, continue to cross into Bangladesh.
- In Myanmar, concerns remain for an estimated 241 000 people displaced in Kachin, Kayin, Shan and Rakhine states. In addition, an estimated 100 000 Rohingya remain in Northern Rakhine under unclear conditions due humanitarian access constraints.





# Potential impact

• The combination of the upcoming monsoon season (May-September) and the cyclone season (April-May) presents a new risk to an already highly volatile situation in Cox's Bazar. While a normal rainy season is forecasted, the high levels of exposure and vulnerability in the Cox's Bazar settlements raise grave concerns. In particular, Rohingya refugees living in congested shelters in areas with high levels of deforestation are the most vulnerable. Landslide and flood risk hazard mapping reveals that at least 190 000 refugees are in severe danger and would require relocation. It is also foreseen that many refugees will be trapped in isolated areas and cut off from services as transport becomes difficult due to flooding.

### Recommended early actions

The Joint Response Plan for Rohingya Humanitarian Crisis focuses on three priorities over the coming year:

- Meeting the basic needs of the forcibly displaced Rohingya population.
- Restoring the severely damaged environment.
- Building confidence between refugees and host communities.

### Crops

• Finalize the distribution of agricultural inputs before the monsoon season, to provide economic opportunities for host communities while enhancing the local availability of nutritious food crops for displaced communities.

### Energy and natural resources

- Reduce pressure on degraded natural resources by facilitating access to alternative sources of cooking fuel such as liquefied petroleum gas and biomass briquettes, promoting energy efficient technologies.
- Initiate land and soil stabilization efforts while planning for medium-term reforestation actions.

### Partnerships and accessibility

- Support national partners in decongestion and relocation initiatives to mitigate safety risks.
- Advocate for access to food insecure population in Rakhine State to assess needs and initiate recovery interventions.



# Ethiopia

Erratic long rains forecast potentially affecting meher season



### 8.5 million

people in need of humanitarian assistance



More than 1 million people are displaced due to conflict



### 2.3 million

food insecure people in the Somali region



- Farming households continue to be affected by consecutive poor rainy seasons, experiencing failed harvests, increased livestock mortality and food insecurity. Overall, an estimated 8.5 million people are in need of humanitarian assistance according to the 2018 Ethiopia Humanitarian and Disaster Resilience Plan. The Somali Region is the most affected, hosting around 2.3 million food insecure people (42 percent of the region's population) also facing high levels of acute malnutrition.
- In Ethiopia, the *meher* harvest outcomes (from October 2017 onwards) reports poor performance in East Oromia and the Somali Nations, Nationalities and Peoples Region (SNNPR). This is due to the delayed onset of rains early in the season and failure of maize crops in Somali due to prolonged severe dry conditions throughout the growing season. Consecutive poor rainy seasons have also severely affected rangeland conditions, leading to the destitution of 1.6 million pastoral households in Somali Region, Oromia, SNNPR and Afar region.
- The upsurge of violence along the Oromia and Somali regional borders adds to the complexity of the humanitarian situation in Ethiopia. As of January 2018, at least 1 million people were displaced due to violence or fear of violence, often in areas experiencing ongoing drought-related problems. In early 2018, the Government of Ethiopia has put in place a plan to respond to the needs of the displaced people in the country, both conflict and climate induced.



- According to the National Meteorological Agency, the 2018 spring rains in the current drought belt could potentially be erratic and underperform. If this materializes, it will be the fourth successive year of underperforming rains in many areas. Given the existing vulnerabilities, this will potentially lead to an increase in food insecurity, large-scale loss of livelihood assets, increased displacement and possible disease outbreaks.
- As the conflict in the border areas of Oromia and Somali regions de-escalates, return movements, resettlement and relocation of conflict-affected communities are expected during the reporting period. The Government and its partners are anticipating the need for support in the delivery of programmes aimed at facilitating this process.



Given the ongoing climatedriven humanitarian crisis and the recent escalation of conflict around the border areas of Oromia and Somali regions, food insecurity is expected to increase in Ethiopia in 2018. The April–June period is critical as it coincides with the sowing period of the meher season for staple crops.



### Crops

• Distribute vegetable seeds and related agricultural inputs in Amhara, Oromia, SNNPR and Tigray regions, targeting those most vulnerable.

### Livestock

- Provide supplementary feed and veterinary support to protect core-breeding animals and improve milk production during the expected harsh dry season (June–September), targeting the most affected pastoralists in Somali Region, southern Oromia Region and SNNPR.
- Support commercial and emergency livestock destocking activities to increase cash availability between June–September in Somali Region, southern Oromia Region and SNNPR.



# Venezuela (Bolivarian Republic of)

Hyperinflation and a declining economy to affect food security



Projected inflation at 13 000 percent at the end of 2018



# Risk overview

- The aggravation of Venezuela's economic woes in recent months, particularly hyperinflation, have resulted in a worsening food security situation. The potential of an uptick of violence, coinciding with the upcoming presidential elections, could further limit food access.
- The International Monetary Fund (IMF) predicted Venezuelan inflation to increase to 13 000 percent at the end of this year – more than five times the inflation estimated for the end of 2017. IMF also expects the economy to contract 15 percent this year. Venezuela's currency, the Bolivar, lost nearly all its value in 2017. Risks of a disorderly foreign debt default remain, which could choke already fledging oil revenues.
- Presidential elections are scheduled to be held on 20 May 2018. The main opposition coalition is boycotting the polls and called for public demonstrations, which could lead to increased political violence.
- Venezuela imports 75 percent of its food. In 2016–2017, food imports fell by 67 percent and looting has become frequent. In October 2017, Caritas warned that 280 000 children could die of malnutrition. At the beginning of this year, UNICEF reported that a growing number of children suffer from malnutrition. According to Caritas, the number of cases increases each month.
- The number of Venezuelans seeking asylum abroad has increased steadily in recent months. In March 2018, UNHCR stated that international protection measures should be

considered. The number of Venezuelans in **Colombia** has risen by 62 percent – more than 550 000 in the second half of 2017, and registered migrants in the country increased to approximately 700 000 at the end of February 2018.



### Potential impact

- The dire economic prospects of an increased political instability during the election period raises concern of an aggravated food security situation during the April–June period. Looting could become more widespread. Under a worse-case scenario, whereby a disorderly debt default takes place, risks to systemic stability would be substantial.
- A worsening humanitarian situation could have a grave impact on regional stability. The flow of refugees into neighboring countries could further destabilize local economies and communities. Colombia is of particular concern. While the peace process with the former Revolutionary Armed Forces of Colombia is underway, the country is witnessing a resurgence of violence from the National Liberation Army and upcoming presidential elections scheduled in May-June 2018.



Recommended interventions are focused on Colombia, as substantial presence of FAO and partners in the country will serve to sustain early action efforts. This presence is strongest in the northern department of La Guajira, where an increasing number of migrants from Venezuela and three years of extreme drought are generating pressure on food availability.



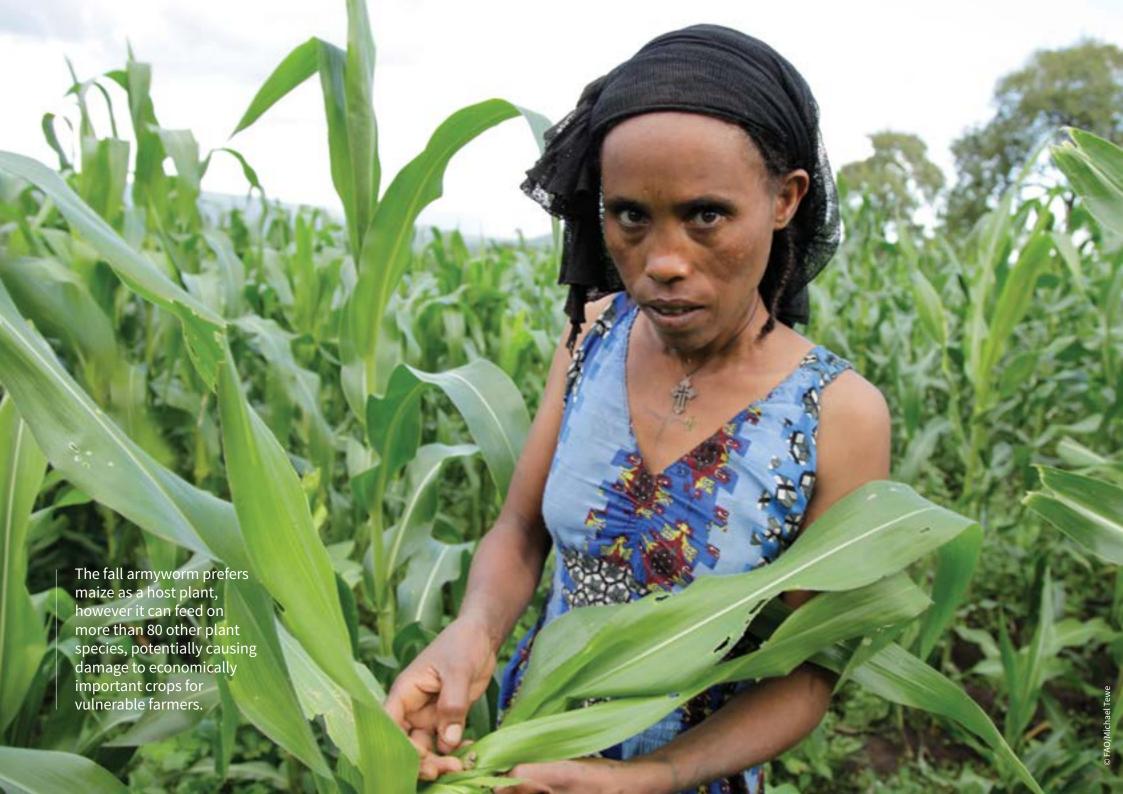
### Crops and livestock

 Establish multi-family or community production systems (through farmer field schools) to recover the production of feed and vegetables, in accordance with climatic conditions and cultural preferences – with a strong focus on agroclimatic risk management.

#### Water

 Adapt or install water supply infrastructure for human consumption, and adapt infrastructure for the supply of water required in the agriculture and livestock sectors.

The migrant crisis also affects other departments in Colombia, most notably Arauca and Norte de Santander. It is recommended to conduct food security needs assessment in the two departments to understand the impacts of migration on rural and agricultural livelihoods, and inform programme design.



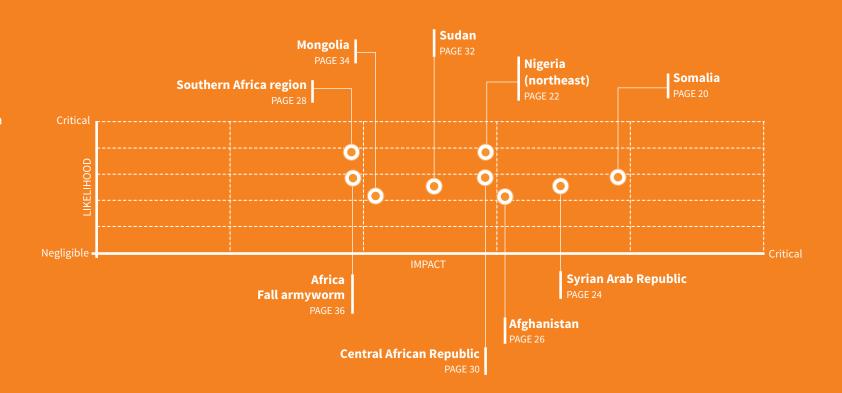
### On watch

The matrix provides an overview of the ranking of risks featured in this report. The ranking is based on an estimation of the likelihood and impact of a disaster, taking into consideration the capacity of a country to respond to the event.

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 April–June 2018, the **on watch** section includes:

- Somalia
- Nigeria (northeast)
- Syrian Arab Republic
- Afghanistan
- Southern Africa
- Central African Republic
- Sudan
- Mongolia
- Africa fall armyworm





### Somalia

Despite near-average Gu rains forecast, insecurity and flood risks could further exacerbate food insecurity



### 5.4 million

people in need of humanitarian assistance



More than 2.7 million people expected to face IPC Crisis or Emergency food insecurity



### 20-30 percent

below-average food production in 2017



25-75 percent

of herds lost in 2017

# Risk overview

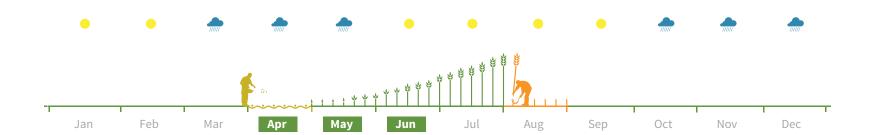
- The food security situation remains alarming following four consecutive seasons of poor rains and poor harvest in 2016–17. Despite an improved near-average *Gu* 2018 forecast. security disruption and flood risks could pose and compound serious threats to food security, particularly without sustained humanitarian assistance at the appropriate scale. An estimated 5.4 million Somalis are acutely food insecure and in need of humanitarian assistance through June 2018. This includes more than 2.7 million people in Crisis or Emergency (IPC Phases 3 and 4) – 13 percent lower than in August– December 2017, but still 170 percent above pre-crisis levels.
- The previous *Deyr* rains from October to December 2017 were below average and erratically distributed. The total national production was estimated to be 20–30 percent below average, leaving many crop-dependent households with diminished food stocks and accumulated debt following four consecutive below-average seasons. Farming communities also risk crop damage due to the presence of plant pests, including fall armyworm (FAW).
- Poor pasture and water conditions persist in some pastoral livelihood zones in northern and central Somalia. Of particular concern are the pastoral areas of Awdal, Berbera, Sool, Sanaag and Galmudug, where livestock body conditions are very poor and livestock deaths have been occurring. Households in

- these areas are currently also facing Emergency (IPC Phase 4) conditions through June.
- Due to high precipitation during recent weeks, river levels in both Juba and Shabelle have risen substantially and resulted in localized flooding. The situation is under continuous monitoring, and mitigation measures are being developed and deployed.
- There have been peaks in conflict-related insecurity, especially in the rural productive areas of southern Somalia and along the disputed border of Puntland and Somaliland. This could disrupt production during the ongoing Gu cropping season.



### Potential impact

- Since pastoralists in most livelihood zones lost between 25 and 75 percent of their herds in 2017, recovery will require several consecutive favourable seasons. Water and forage shortages in northern and central pastoral areas have weakened livestock and decreased their immunity against infectious diseases. Congregation of livestock at water points and grazing areas is foreseeable, with higher risk of animal diseases developing and spreading.
- Despite an improved Gu forecast, production could be negatively impacted by erratic distribution in rains during the cropping cycle, the presence of new plant pests – such as FAW and the emerging risk of localized flooding.



on watch

While the current Gu rains (April–June 2018) are slightly better than anticipated, sustained humanitarian assistance and support to livelihood recovery are necessary to prevent further deterioration of the food security and nutrition situation in 2018.

• The volatile security situation continues to pose the risk of disruption to, and abandonment of, productive livelihoods as well as people's ability to access food and other basic needs.



### Recommended early actions

- Provide sorghum/maize, pulses and vegetable seeds, on-farm support (paid tractor and irrigation hours) and training to vulnerable farmers in agropastoral areas in time for the Gu season.
- Prevent FAW spread and other pests through preparedness and effective response, targeting vulnerable farmers.

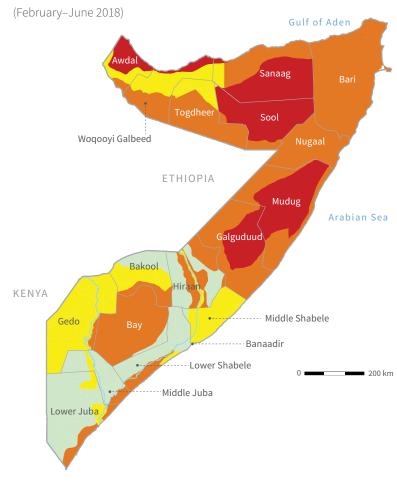
#### Livestock

- Distribute animal feed concentrates and improve water access for vulnerable pastoralists facing IPC Phases 3 and 4 in northern and central Somalia throughout the Gu season.
- Conduct livestock vaccination and treatment campaigns (taking into consideration the characteristics of specific disease agents) across Somalia

### Risk monitoring

• Continuously monitor river levels, alert local communities about flood risks/mitigation measures and activate contingency plans if the situation deteriorates.

### IPC acute food insecurity situation



### **IPC Phase Classification**



Source: Somalia IPC Technical Working Group, January 2018



# Nigeria (northeast)

Lean season to exacerbate impact of civil conflict on food security in northeast Nigeria



More than **1.6 million** internally displaced people



2.3 million people

facing severe food insecurity conditions (CH Phases 3 to 5), likely to increase to more than 3 million



- Prolonged conflict perpetuated by Boko Haram insurgency in northeast Nigeria has spurred massive displacement and undermined food security.
- Although the security situation has been relatively restored as a result of the military operations to regain control of the main roads and local government areas, access to affected areas is still limited in Borno State and in some areas of Adamawa and Yobe states. The lack of access constrains the delivery of food and livelihood assistance to local and displaced populations, especially in areas experiencing emergency conditions.
- As of February 2018, the insurgency had displaced more than 1.6 million people within the three most affected states in northeast Nigeria and forced more than 214 000 Nigerians to flee into neighbouring Cameroon, Chad and Niger according to UNHCR and the International Organization for Migration (IOM).
- The security situation remains extremely volatile as military operations are still ongoing and the insurgency is still active.
   Despite some recent improvements, insecurity continues to disrupt livelihood activities, and normal supply chains and routes to markets. This significantly affects the availability of food and the population's physical and economic access to food.
- According to latest CH food security analysis during the October–December 2017 period, 2.3 million people are still experiencing severe food insecurity conditions (CH Phases 3 to 5) in Adamawa, Borno and Yobe states.



- In the case where conflict continues at similar levels, food security will continue to deteriorate through the lean season (June–September 2018) when income and food stocks are most stressed and food prices peak before the harvest season.
- According to the March 2018 CH analysis, the number of food insecure people during the lean season in the three most affected states is projected to increase to more than 3 million people (CH Phases 3 to 5).
- IRI precipitation forecast for the June–August period, which represents the bulk of the rainy season in the northeast, points towards the probability of an above-average precipitation.



The insurgency in northeastern Nigeria has devastated agricultural livelihoods and eroded people's capacity to cope in crisis. It is therefore critical to scale up the ongoing efforts to support the most affected populations to safeguard their livelihoods and prevent a deterioration of their food security and nutrition conditions during the June-August 2018 lean season.

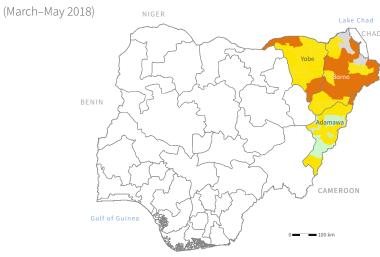


- Distribute agricultural inputs and crop varieties based on farmers' preferences and agroecological characteristics to the most affected households in Adamawa, Borno and Yobe states - mainly millet, sorghum, maize and intercropping cowpea to improve productivity in preparation for the upcoming rainy season (May-September 2018).
- Promote micro-gardening and rainfed vegetable production activities through the distribution of vegetable seeds during the forthcoming rainy season, targeting those most vulnerable including female-headed households.

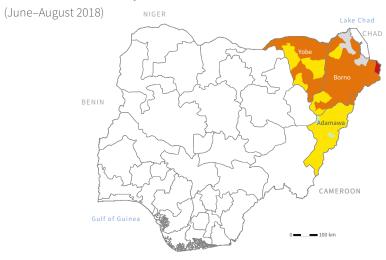
#### Livestock

- Distribute poultry production kits and small ruminants to vulnerable female-headed households in April 2018 in order to improve access to protein-based foods and promote diversified income sources.
- Distribute animal feed during the April–June lean season to minimize livestock deaths and protect vulnerable households' livelihoods assets, with priority given to female-headed households and internally displaced people that own small ruminants.

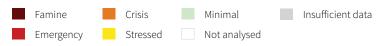
### IPC acute food insecurity situation



### IPC acute food insecurity situation



#### **IPC Phase Classification**



Source: CH. November 2017

# Syrian Arab Republic

Fighting to aggravate the food security situation in eastern Ghouta and northwestern Syrian Arab Republic



More than 13 million people in need of humanitarian assistance



**6.1 million** internally displaced people



More than **5.6 million** registered Syrian refugees



6.5 million food insecure people



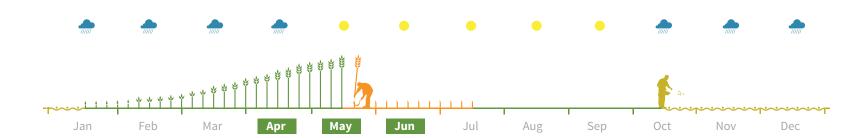
- The humanitarian situation in Syria is dire. As of February 2018, 13.1 million people – more than half of the Syrian population - are in need of humanitarian assistance, including almost 3 million people living in besieged or hard-to-reach areas. The number of internally displaced people has reached 6.1 million in the same month. The number of registered Syrian refugees outside the country amounted to more than 5.6 million in March within the Near East and North Africa region. A significant number of Syrians who have left the country do not hold refugee status.
- As of January 2018, 33 percent of the population equivalent to 6.5 million people – are facing Crisis or Emergency levels of food insecurity (IPC Phases 3 and 4).
- The ongoing siege of eastern Ghouta has intensified in recent months. In March, more than 393 000 people were living under extreme conditions in besieged areas. The number of people displaced and hosted in collective shelters in Rural Damascus was more than 50 000. Many more were displaced within the enclave and additional displacements are expected over the coming weeks.
- Turkish-led forces entered the city of Afrin in northwestern Syria in March 2018 in a move against the Kurdish People's Protection Units fighters, shelling an area home to more than 306 000 people. As of

- March, more than 166 000 people were displaced, with significant risks of further displacements. Recent emergency responses are only prioritizing short-term solutions, particularly food assistance without the integration of a livelihood protection mechanism.
- According to IRI, there is a 40 percent probability of belownormal precipitation in vast areas of eastern and western Syrian Arab Republic from April to August 2018.



### Potential impact

- The political situation is likely to remain extremely volatile due to military operations in northwestern Syrian Arab Republic and eastern Ghouta, which could result in a further deterioration of the food security situation and trigger a continued large-scale displacement. Humanitarian access will also likely remain unpredictable throughout 2018. As a result, emigration from Syrian Arab Republic will continue unabated, putting further pressure on host countries.
- The limited availability and high costs of farming inputs in addition to the decimation of the livestock population is likely to increase the dependency on external assistance. Projected below-average rains between April to August are likely to impact cereal (wheat and barley) and vegetable production. Damage to irrigation systems could impact the outcome of winter grains harvest.



The expected deterioration of the humanitarian situation over the next months in conflict-affected areas, particularly eastern Ghouta and Afrin, calls for the implementation of early actions to mitigate negative impacts on food security.



#### Crops

- Distribute vegetable seeds and seedlings by the end of April to support agriculture-based livelihoods of vulnerable farmers in eastern Ghouta and Afrin, especially female-headed households.
- Rehabilitate nurseries for the provision of good quality planting material (local varieties), where the security situation permits in eastern Ghouta and Afrin.
- Support the improvement of value chain approaches for the upcoming barley and wheat harvests, including through trainings and capacity building on post-harvest management to minimize loss, storage, food processing and marketing.

#### Livestock

- Provide feed and animal health treatments to vulnerable livestock keepers in eastern Ghouta and Afrin by May.
- Restock with small ruminants by June for vulnerable households in eastern Ghouta and Afrin to initiate the rehabilitation of depleted rural asset bases.
- Support dairy value chain development and rural incomegenerating opportunities through training and capacity building in eastern Ghouta throughout the April-June period.

#### Water

• Restore irrigation canals and water distribution points through cash-based interventions by September, where the security situation allows in eastern Ghouta and Afrin.



# Afghanistan

Prolonged dry spells, conflict and cross-border movements



### 7.6 million

food insecure people



16 percent below average wheat production in



More than 3.2 million livestock at risk of starvation



180-200 thousand returnees in 2018

# Risk overview

- As of October 2017, erratic and below average rains combined with higher-than-average temperatures has caused water stress and adversely affected crop development in some areas. As of February 2018, a 70 percent rainfall deficit was reported, compared with the same time last year and to the long-term average.
- From August to November 2017, an estimated 7.6 million people were experiencing Crisis and Emergency (IPC Phases 3 and 4) conditions. The situation in the northern region of Badghis is of particular concern, with the population facing IPC Phase 4 due to eroded coping capacities as a result of the effects from previous droughts.
- The exposure to natural hazards, continued conflict and the lack of labour opportunities have left most vulnerable farmers with limited food stocks and financial means to access agricultural inputs for the 2017/2018 rainy season. The poor harvest in 2017 resulted in a deficit of 1.4 million tonnes of the total crop harvest, with wheat registering 16 percent below-average production.
- Low fodder stocks and scarce vegetation in pastures due to poor rainfall are affecting the livelihoods of pastoralists throughout the country. Due to the low availability of animal feed, fodder prices are showing an upward trend. In turn, animals lose weight due to limited feed and pastoralists sell

- their animals in distress to avoid further economic losses and generate short-term income.
- Conflict is instigating large displacements inside and outside the country. Over the course of 2017, more than 438 000 people have been forced from their homes due to insecurity, many of whom are unable to return to their areas of origin.



### Potential impact

- Dry conditions have left 3.25 million livestock at risk of starvation, according to Food Security Cluster estimates. The reduced body conditions, as well as the collapse of the animal health services and the higher concentration of livestock in some areas, increase the probability of transboundary animal diseases.
- Continued dry conditions are likely to lead to damaged or lost crops during the ongoing winter grains and spring wheat seasons, potentially resulting in a reduced capacity of farmers to access inputs for summer crops and the next main wheatplanting season (autumn/winter).
- The Moroccan locust that hatched in March adds to the list of agricultural threats. Crops with low moisture are more liable to crop pests. The locust attacks a wide range of cultivated plants and can cause severe damage.
- In 2018, UNHCR estimates the return of 200 000 documented people, while the International Organization for Migration



(IOM) estimates 180 000 undocumented people. New massive returns are likely to add to the already large numbers of internally displaced people, putting further pressure on services, food access and humanitarian assistance.

Conflict, natural disasters and cross-border movements continue to exacerbate food security in Afghanistan. The April-June period is critical for agriculture. The month of April will coincide with the peak of the lean season. The sowing of maize and rice are expected to start in May with the planting of the second crops and winter wheat harvesting approaches are projected to start in June.



# Recommended early actions

## Crops

- Distribute seeds to support agricultural production of the most vulnerable households during the second and summer crop seasons from May to June.
- Distribute vegetable seeds targeting female-headed and displaced households to improve their income opportunities and nutrition.
- Initiate a locust surveillance campaign to avoid or control the potential impact of the Moroccan locust on wheat production.

### Livestock

- Provide concentrated feed, vaccinations, dewormers and health treatments to support affected pastoral household in the northern, northeastern, western and southwestern regions throughout the April-June period.
- Distribute fast-growing fodder crop seeds to vulnerable livestock keepers.
- Distribute chickens to promote poultry production and improve income opportunities for female-headed households, displaced people, smallholder farmers and landless people affected by the dry conditions.



# Southern Africa region

Dry conditions threatening cereal production prospects



Cereal production forecasted to be well below 2017 levels



4.3 million people in need of assistance

# Risk overview

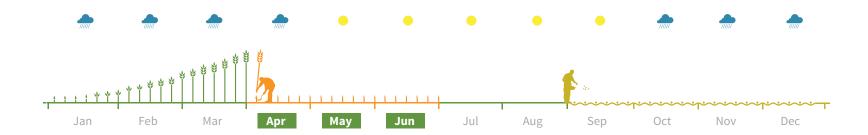
- The main season cereal crop production in 2018 is projected to be below-average in several countries in Southern Africa due to unfavourable weather conditions and the fall armyworm.
- Large areas of the Southern Africa region have experienced below-average rainfall since October/November 2017. In late December, the dry conditions intensified mainly in the southern half of the region, causing moderate to severe crop moisture stress in key growing zones.
- According to GIEWS, the most-affected areas are Lesotho, southern and central areas of Mozambique, western South Africa, northern and western Namibia, southern parts of Zambia and Malawi, eastern Zimbabwe and southwestern Madagascar. Additionally, heavy rains in February and March, including a cyclone in Madagascar, have caused localized flooding. In areas where floods did not occur, rains have improved crop and pasture conditions.
- Heavy rains might also result in the emergence of vectorborne livestock diseases. Based on the risk maps prepared by FAO in consultation with the National Aeronautics and Space Administration for the period October–December 2017, major potential hotspots of Rift Valley fever (RVF) vector amplification are located in northwestern, central and southwestern Namibia. southeastern Botswana, southwestern and northern Zimbabwe and wide areas in Mozambique.

Due to the subregional maize output registered in 2017, which were estimated at 32.2 million tonnes (43 percent above the previous five-year average), the impact of the forecast predicting below-average production should be contained. However, the poor rainfall performance could lead to belownormal income levels due to less demand for agricultural labour, further hindering people's access to food and threatening their food security.



## Potential impact

- Cereal production in 2018 is forecasted to fall from its high levels recorded in 2017, as a result of lower yields and a decrease in the harvested area. In South Africa, the early production forecast for the commercial sector points to a 27 percent decline, but supplies in 2018/19 are still expected to be above average, owing to the large carryover stocks.
- Although beneficial rains were witnessed in the main producing areas of Madagascar, the southwestern areas have experienced prolonged dry conditions. This will likely result in a sharp decline in outputs and severely stress food security.
- Compared with last year and the five-year average, maize prices are generally at lower levels. However, the reduction in harvests this year is likely to place an upward pressure on prices in 2018.
- Reduced harvests are predicted to exacerbate the food security



- and nutrition situation, thereby increasing the number of people in need of assistance in 2018 compared with last year. The Southern African Development Community's Vulnerability Assessment committee estimated that 4.3 million people are in need of assistance, excluding the Democratic Republic of the Congo, South Africa and the United Republic of Tanzania.
- In addition to the threat of highly pathogenic avian influenza, the ongoing rainy season and flooding has resulted in an increased prevalence of animal and zoonotic disease vectors and risk of outbreaks of vector-borne diseases such as RVF.
- Dry conditions will lead to scarcity of water and grazing for livestock. Consequently, farmers living in close proximity to national parks or wildlife conservancies are likely to encroach into these areas in search of grazing and water sources for their livestock, widening the interface between livestock/ wildlife. This can potentially increase the risk of transboundary animal disease transmission such as foot-and-mouth disease, zoonotic diseases such as bovine tuberculosis and Brucellosis, as buffaloes play an important role in the maintenance and transmission of these economically important livestock diseases at the wildlife and/or livestock interface.

In Southern Africa region, the effects of the dry conditions could potentially affect the livelihoods of many smallholder farmers, pastoralists and agropastoralists, especially in areas affected by consecutive poor rainy seasons.



## Recommended early actions

• Support the rehabilitation of community assets including storage facilities and water points through cash-for-work activities, when and where feasible.

### Crops

• Support the ongoing crop assessments to inform planning and programming of critical interventions.

### Livestock

- Provide fodder, vaccinations and health treatments for the livestock of the most vulnerable agropastoralists in Angola, Namibia, South Africa and Zimbabwe.
- Provide training and inputs, taking into consideration local varieties and farmers' preferences, for offseason crop production in Lesotho, southern and central Mozambique, western South Africa, northern and northwestern, central and south-western Namibia, southern parts of Zambia and Malawi, eastern Zimbabwe and southwestern Madagascar.



# Central African Republic

Further spread of conflict leading to continued displacement



humanitarian assistance



# Risk overview

- Intercommunal conflict and insecurity in the Central African Republic are spreading to previously unaffected areas in the southeast and northwest of the country, instigating further internal displacement. In addition, four consecutive years of reduced harvests, compounded by market disruptions and declining purchasing power, have created an alarming food security situation for most households in the affected areas.
- For 2018, the number of people in need of humanitarian assistance is estimated at 2.5 million people (54 percent of the total population).
- Increasing displacement and escalating conflict particularly in the northwest, southeast and central areas – are disrupting livelihoods, corroding households' income and purchasing power and disrupting markets while leading to low food stocks and increased food prices. According to UNHCR, the number of internally displaced people (IDPs) as of December 2017 is estimated to be more than 690 000 people – a 12 percent increase since end of October. In addition, more than 540 000 refugees are reported to be in neighbouring countries (Cameroon, Chad, Congo, Democratic Republic of the Congo, Sudan and South Sudan).
- The high insecurity in the country and the conflict over resources poses challenges as well to transhumant pastoralists both internally and across borders in search for better grazing lands and water points for their livestock.

Furthermore, and according to Doctors Without Borders, the political crisis and violence in the country aggravated the shortage of health services. Some 72 percent of health facilities were damaged or destroyed by violence and looting. Currently, the vast majority of public health structures depend on the support of humanitarian and faith-based organizations.



- According to FEWSNET, most populations affected by the conflict in the northwestern, southeastern and central parts of the country (Ouham Pende, Nana Mambéré, Basse Kotto, Mbomou, Haut Mbomou and Haute Kotto) are forecasted to remain in Crisis (IPC Phase 3) levels of acute food insecurity until May 2018.
- Intercommunal conflict between farmers and nomadic pastoralists during the transhumance season through May in the border areas with Cameroon, Chad, South Sudan and Sudan may further exacerbate the insecurity of these areas.



As violence is likely to continue in 2018, further increasing humanitarian needs, it is essential to continue providing households with agricultural and livestock support to strengthen their resilience to shocks.



• Provide emergency agricultural kits in April–June, including seeds (maize, paddy and sorghum) and tools, to increase the agricultural production of IDPs and host communities in Basse-Kotto, Haute-Kotto, Haut-Mbomou, Mbomou, Nana-Gribizi, Ouaka, Ouham and Ouham-Pendé.

### Livestock

Support livestock production through animal health interventions (vaccination and supplementary feed) between April-August to respond to potential spread of animal diseases including peste des petits ruminants or bovine pleuropneumonia. This activity will target vulnerable transhumant and sedentary herders facing IPC Phases 3 and 4 in Basse-Kotto, Haute-Kotto, Haut-Mbomou, Mbomou, Nana-Gribizi, Nana-Mambéré, Ouham-Pendé and Ouaka.



# Sudan

Localized dry spells and increased economic fragility



40 percent decrease in cereal production in 2017



Food expenditure is up by **64 percent** in rural areas

# Risk overview

- The performance of the June–October 2017 rainy season was mixed in Sudan, resulting in severe dry spells in localized areas. In Kassala, Gedaref and North Darfur, this dry period has negatively impacted crop development and hindered the ability for pastoralists to store pasture and water reserves. As a result, the lean season began four months earlier in Kassala, starting in January 2018.
- According to GIEWS, in these affected areas, cereal production was reportedly 65–90 percent lower than in the previous year. Overall, the 2017 aggregate cereal production in Sudan is estimated at 5.2 million tonnes, which is reportedly a 40 percent decrease from the 2016 record output.
- Further compounding the situation is the devaluation of the Sudanese Pound followed by an announcement in early January of the removal of subsides for wheat and wheat flour. These two elements combined have contributed to the surge in staple food prices nationally. The general cost of living in Sudan has increased dramatically. Within the first three weeks of January 2018, the price of sorghum increased by 47 percent and by more than 180 percent in a year, with similar price increases for bread. Sporadic shortages of fuel, cooking gas and bread were also reported. The situation is of even greater concern in rural areas, where food expenditure is up to 64 percent and prices have risen by 36 percent.

As of 25 February 2018, the North Darfur State acknowledged that four localities are already experiencing food shortages due to lack of rainfall and access to staple foods.



- As the lean season progresses, and peaks from May to September 2018, food prices will likely continue increasing. While some relief in regards to water availability will begin from June onwards with the onset of the rainy season, concerns over access to pasture will likely remain until August.
- In parts of North Darfur and Kassala, livestock will remain in dry season grazing areas and consequently, with limited pasture and poor animal body conditions, household milk availability (which is essential for children and lactating mothers) will become limited.
- As the economic situation deteriorates, an increase in the cost of production in addition to the scarcity of the fuel could threaten 2018/2019 agricultural season. This will further impact the availability and price of food, and increase rural-to-urban movement in search of employment.
- Fall armyworm was detected in the country and reports have confirmed the presence of the worm in the Blue Nile, Gedaref, Sinnar, Khartoum and River Nile states. Its spread could disrupt the upcoming planting season in June, if not properly managed.



Based on Rift Valley fever (RVF) human cases reported in South Sudan in early 2018, there is a moderate risk of the disease spreading as pastoralists move with their livestock from South Sudan to Sudan.

As of December 2017, FAO has been implementing early actions in Kassala state before the peak of the lean season (December 2017-April 2018) to help pastoralists mitigate the impact of dry spells. In particular, 5 000 vulnerable households and an estimated 30 000 livestock were supported through supplementary animal feed and animal health treatments.

## Recommended early actions

## Crops

• For the upcoming rainy season, support the cultivation of main crops (sorghum and millet), which are expected to start in June 2018, through improved water-harvesting techniques, support with land preparation and distribution of improved varieties of sorghum. These interventions should target agropastoralist households who rely on rainfed cultivation.

### Livestock

- For the current dry period, which will continue until June 2018, distribute animal supplementary feed including concentrated fodder and mineral licks to vulnerable pastoralists experiencing localized dry conditions. In addition, due to weakening of animals and a higher susceptibility to diseases, accordingly provide animal health treatments (deworming and vaccinations for haemorrhagic septicaemia, peste des petits ruminants and sheep pox).
- Strengthen the surveillance of RVF in livestock in southern Sudan to ensure transboundary movements are monitored and evaluated and for local veterinary authorities to make informed decisions.

## IPC acute food insecurity situation



### **IPC Phase Classification**



SOUTH SUDAN

Source: Sudan IPC Technical Working Group, October 2017



# Mongolia

Continued impact of localized dzud





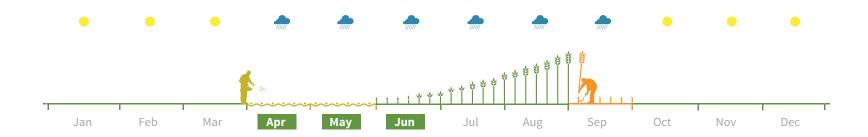
# Risk overview

- Mongolia is currently emerging from a harsh winter season, which has resulted in a localized dzud in various areas across the country. In total, 141 out of 330 soums declared dzud conditions, as a result of heavy snowfall and temperatures that approached minus 50°C. As of April 2018, more than 1.1 million heads of livestock have perished.
- In 2017, 80 percent of rangelands were affected by a severe summer drought. The September harvest is critical for the country's economy and building up fodder reserves. Having limited grazing capacity, livestock were not able to accumulate sufficient fat reserves to survive the winter and spring seasons, leaving them weak and vulnerable.
- While the livestock mortality rate is currently at its highest since 2011, according to Mongolia's National Statistics Office, it is important to note that the overall number of animals that have perished is considered normal mortality. Mongolia currently hosts 66.2 million heads of livestock, which is the highest number historically recorded. This has further influenced the high mortality rates. However, during these periods, it is the most vulnerable herders with access to few resources who are at risk of losing their livelihoods and falling into the poverty trap.

Since the beginning of 2018, foot-and-mouth disease (FMD)
 cases were confirmed in 21 out of the total 330 soums of
 Mongolia. National authorities have established quarantine
 controls in all of the soums that have declared an FMD outbreak.
 Clinical signs were observed in 5 496 animals in 465 herds, of
 which 3 676 animals were culled.



- As the country enters its spring season, the livestock mortality rate is expected to increase as animals continue to suffer inadequate nutrition in the aftermath of the harsh winter. The impact of the winter season on livestock is likely to continue until May 2018, as this will coincide with available fresh pasture for grazing animals. Rural-to-urban movements are also common following winter periods, as vulnerable herders who have lost their entire stock begin to search alternative livelihoods.
- The potential spread of FMD raises concerns for the already weak livestock emerging from the winter season. If not controlled, this could further exacerbate the loss of livestock. The combined effects of drought and dzud conditions has increased herds' susceptibility to infections, particularly as they share open pasture.



As of October 2017, FAO has supported 504 herder households, owning more than 106 400 livestock, vulnerable to the localized *dzud* in central and western parts of the country (Zavkhan, Arkangai, Bulgan, Tuv and Uvurkhangai aimags). Herders received support through destocking-forcash activities, provision of feed and nutrient supplements, and control of FMD spread.



### Livestock

• In areas susceptible to the spread of FMD, strengthen livestock disease surveillance and control. In areas where FMD has been detected, work alongside government officials to support efforts to improve the effectiveness and efficiency of the vaccination process. Vaccines must be scientifically matched to the current circulating virus strains using the International Organization for Migration FMD reference laboratory. Vaccination campaigns should be strategically designed and implemented using a riskbased approach.

• For the upcoming cropping season in May–June, support local farmers through the provision of agricultural inputs to mitigate adverse weather shocks.



# **Africa** fall armyworm

Further spread to Egypt and Libya



## 21-53 percent

likely yield loss in 12 maize producing countries



8.3-20.6 million tonnes potential maize yield loss per annum



Fall armyworm can affect more than 80 plant species



- Fall armyworm (FAW), an insect native to tropical and subtropical regions of the Americas, was detected in Africa (Benin, Nigeria, Sao Tome and Principe, and Togo) in early 2016. On 30 January 2018, almost all the countries in sub-Saharan Africa (except Djibouti, Eritrea, and Lesotho) detected and reported FAW.
- FAW's larvae prefers maize as a host plant, however it can feed on more than 80 other plant species, including rice, sorghum, vegetable crops and cotton, hence potentially causing damage to economically important crops for vulnerable farmers across the continent.
- In response to its rapid spread, and due to the lack of natural predators, a number of countries in the region have programmes that support farmers through the provision of pesticides as the main response to FAW infestation.



## Potential impact

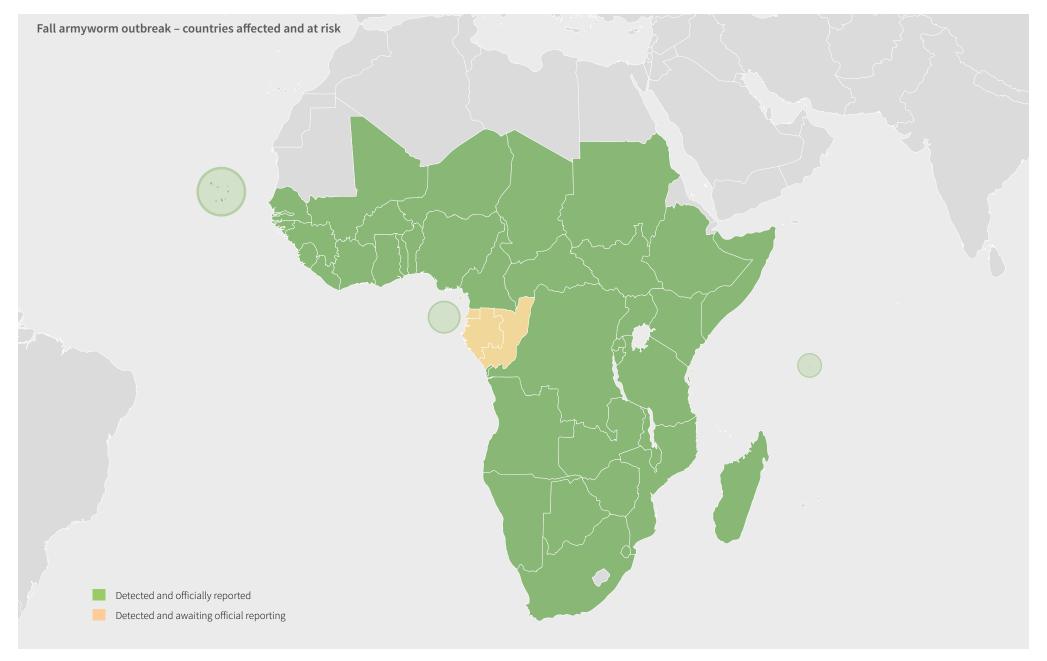
- The detection of FAW in Sudan increases the concern of a further spread to Egypt and Libya. Despite the spread of FAW currently halted due to dry season, awareness must be raised and preparedness measures undertaken in these potentially affected countries.
- Most smallholders in Africa do not use pesticides in their maize production. The introduction of sustained use of pesticides is likely to increase the production costs and human health risks, as well as potentially making the local agricultural systems economically unviable.
- Left unmanaged or in the absence of natural biological control, FAW can cause significant yield loss in maize and other crops. Estimates from the Centre for Agriculture and Bioscience

- International indicate a possible 21 to 53 percent yield loss in 12 maize producing countries. This would mean an estimated 8.3 to 20.6 million tonnes per annum loss of maize worth between USD 2.48 and 6.18 billion.
- Since the pest feeds on several crop and plant species, yield losses are likely to be even higher if its impact is quantified for the other species.



## Recommended early actions

- Country assessment of FAW impact (distribution, mapping, infestation levels, damage, yield loss, pest population and conduct case studies).
- Implementation of farmer field schools for the training of smallholder farmers on pest management.
- Since the pest cannot be eradicated in the long term, develop economically effective pest management techniques for smallholder farmers.
- Biological control efforts (development of natural pesticides e.g. predators and parasitoids).
- Strengthen regional coordination through the monitoring of early warning systems.
- South-south cooperation to share knowledge by facilitating events.



Source: FAO Food Chain Crisis Management Framework, February 2018

Early Warning Early Action
Food and Agriculture Organization of the United Nations (FAO)

For more information ewea@fao.org www.fao.org/emergencies/fao-in-action/ewea

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









