This forward-looking report highlights 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 the case of moderate to high likelihood and moderate or 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. For an overview of all ongoing humanitarian emergencies, please refer to the map on page 27.
The Global Seasonality Map provides overview of the agricultural and climate seasonality of the countries highlighted in this report. The agricultural seasons are country-specific and provide an insight into the status of the main (staple) crops during the reporting period. The climatic areas provide a general overview of regional weather patterns as well as tropical cyclone basins relevant to the reporting period.

The map is indicative and does not give exact geographical delineations. For more country specific details on the agricultural seasons of different crop types please visit the GIEWS Country Briefs page: http://www.fao.org/giews/countrybrief/index.jsp.
Background

The Global Early Warning – Early Action (EWEA) report on food security and agriculture is developed by the Food and Agriculture Organization of the United Nations (FAO). The report is part of FAO’s EWEA system, which aims to translate forecasts and early warnings into anticipatory action.

EWEA enables FAO to act early before disasters have happened and to mitigate or even prevent their impact. By lessening damages to livelihoods and protecting assets and investments, FAO can help local livelihoods become more resilient to threats and crises.

The Global EWEA report is a quarterly forward-looking analytical summary of major disaster risks to food security and agriculture. The report specifically highlights two types of contexts:

➢ potential new emergencies caused by imminent disaster threats; and
➢ the risk of a significant deterioration in countries currently in a situation of protracted crisis or already in the response stage of an emergency, with a severe impact on food security and/or agriculture. For this kind of risk, the analysis will focus on the additional risk factors which would, either alone or in combination with others, lead to a substantial deterioration of the situation.

Countries affected by protracted crises or already in the response stage of an emergency, where there are limited signs of a significant deterioration, are not included in the report. However, an overview of countries with humanitarian response plans or emergency plans is provided on page 27.

The report’s summary is rooted in the analysis provided by existing FAO corporate and joint multi-agency information and early warning systems, mainly:

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

Additional corporate information and external sources are also consulted for the development of this report. A detailed list is available on page 5.

Through a consensus-based process, countries have been indicated as “high risk” when there is a very likely new emergency or deterioration of the current situation with potentially severe effects on food security and agriculture, and in which FAO and partners should start implementing early actions on a no-regret basis. Countries listed as “on watch” instead have a moderate to high likelihood of a new emergency or deterioration of the current situation, with potentially moderate or significant impacts on agriculture and food security. An overview of the risk ranking methodology is provided on page 4.

“In today’s global context of unprecedented humanitarian needs and increasing frequency of large scale natural disasters, anticipating and mitigating crises has never been more critical. 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
Methodology

The most at-risk countries and regions are selected through a consultative process led by the early warning system focal points group (which includes the IPC). The group also serves as the report’s key source of information (as outlined in the List of sources section). The main steps of the methodology are the following:

1. shortlisting countries flagged by the corporate early warning systems and IPC through core publications and alerts;
2. triangulation of information on countries and regions at risk from other datasets and external early warning systems;
3. consolidation of information from corporate and external early warning systems; and
4. final vetting and ranking of countries and regions at risk.

The final vetting and ranking of countries is carried out by the focal point group, making use of the following 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 ranked into five levels (negligible, minor, moderate, severe and critical). The impact is analysed through two dimensions, in terms of magnitude (the number of potentially affected people and/or geographical extent of the impact on agriculture and people’s livelihoods and food security) and severity (the gravity of the impact on agriculture and people’s 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). Lack of coping capacity, one of the Index for Risk Management’s (INFORM) dimensions, is used as a reference.

The three criteria are inserted in a risk matrix which determines the final result of the risk evaluation.

**Recommendations for early actions**

Early action recommendations, indicated for each risk, aim to briefly outline some 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. Recommendations are therefore sector specific and non-binding in nature. Early actions can vary from interventions aiming to protect livelihood assets to planning and preparatory activities. Recommendations are developed by FAO through a consultative process involving technical experts and FAO country offices.

A Famine is declared when at least 20% of the population of an area are experiencing Catastrophic food security conditions (IPC Phase 5) including acute malnutrition, mortality, extreme poverty, no food consumption and total disruption of livelihoods. The risk of famine refers to a situation in which people are experiencing Emergency levels of food insecurity (IPC 4) and this situation is projected to worsen in the upcoming period. For more information visit: http://www.ipcinfo.org/ipcinfo-detail-forms/ipcinfo-resource-detail0/en/c/178965/
List of acronyms

CH      Cadre Harmonisé
EWEA    Early Warning - Early Action
FAO     Food and Agriculture Organization of the United Nations
FCC-EMPRES  Food Chain Crisis - Emergency Prevention System
GAM     Global Acute Malnutrition
GIEWS   Global Information and Early Warning System
HEA     Household Economic Approach
HPAI    Highly Pathogenic Avian Influenza
HCT     Humanitarian Country Team
IDP     Internally Displaced Person
INFORM  Index for Risk Management
IPC     Integrated Food Security Phase Classification
OCHA    Office for the Coordination of Humanitarian Affairs
UNHCR   Office of the United Nations High Commissioner for Refugees

Sources of information and references

The report consolidates information provided by GIEWS, FCC-EMPRES and IPC, and where necessary external sources of information, highlighting the most urgent global situations to alert decision-makers at all levels of the Organization. The analytical basis for the prioritisation 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 low-Income food-deficit countries’ food security situation (Source: Crop Prospects and Food Situation Bulletin, GIEWS, http://www.fao.org/giews/reports/crop-prospects/en);

➤ Food chain crisis threats forecasting at country and regional levels (Source: Food Chain Crisis early warning bulletin, FCC-EMPRES, http://www.fao.org/food-chain-crisis/home/en); and

➤ Results of the IPC Acute Food Insecurity analyses (http://www.ipcinfo.org).

Additional information and data presented in the report are consolidated from the following sources:

➤ FAO sources
  • Situation reports and publications by the Emergency and Rehabilitation Division (http://www.fao.org/emergencies/en)
  • Resilience index measurement and analysis reports (http://www.fao.org/resilience/background/tools/rima/it)

➤ External sources
  • Reports and bulletins by the United Nation agencies, in particular the Office for the Coordination of Humanitarian Affairs (http://www.unocha.org) and the World Food Programme’s Vulnerability Analysis and Mapping Unit (http://vam.wfp.org).
  • INFORM (http://www.inform-index.org)
  • FEWSNET (http://www.fews.net)
  • International Research Institute for Climate and Society (http://iri.columbia.edu)
Risk of famine due to conflict

Large-scale humanitarian crisis and accessibility restrictions compound food insecurity

1 Risk overview

- Tensions have increased along the Red Sea coast since January 2017 and are likely to continue to escalate north towards Al Hudaydah. The governorate is a crucial lifeline for Yemen – as it has the only port able to handle large cargo – and is a key avenue for humanitarian agencies. If access is compromised, it is likely to instigate food shortages, decline purchasing power and incite a large-scale humanitarian crisis.

- As of March 2017, over 17 million people or 60 percent of the population are in Crisis (IPC Phase 3) or Emergency (IPC Phase 4) – a 20 percent increase from the June 2016 IPC figures. Four governorates (Abyan, Taiz, Al Hudaydah, and Hadramout) have prevalence Global Acute Malnutrition (GAM) rates above the critical threshold, with Al Hudaydah being one of the most affected governorates hosting 28 percent of the total malnourished cases.

- The conflict is significantly affecting transport routes, compromising the delivery of key humanitarian and commercial inputs. Al Hudaydah port, which channels 80 percent of Yemen’s imports, remains severely insecure with intermittent access. Given rising costs, major shipping companies are now avoiding the port, thereby limiting access to food and fuel. The average dock time to the port prior to the conflict was one week. Now the average dock time has prolonged to five weeks.

- As of June 2017, a resurgence of cholera was confirmed, with over 200,000 suspected cases and over 1,300 confirmed deaths. The World Health Organization has reported that fewer than 42 percent of health facilities are fully functioning.

2 Potential impact

- In a worst-case scenario, the risk of famine is likely if insecurity continues to hamper humanitarian access, the port of Al Hudaydah becomes inoperable and the cholera crises deepens.

- If Al Hudaydah port were to become inoperable, major food shortages are likely in local markets, as well as economic limitations such as increases in food prices and reductions to household food access. The Humanitarian Country Team (HCT) stressed that this could result in an additional 200,000 to half a million people becoming displaced. Therefore, HCT has endorsed a contingency plan in the event that the port becomes inoperable. Alternative routes in Aden and Mukhallah are being considered, but their operational capacity and geographical reach are limited.

- The recent cholera outbreak presents a serious public health risk. The situation is likely to worsen significantly, as 7.6 million people live in areas at high risk of transmission.

3 Recommended early actions

In the worst-case scenario, to address the risk of famine access to communities is required to support both emergency humanitarian assistance alongside resilience initiatives. Using this approach, the following actions are recommended:

- preposition food stocks and agricultural materials in Al Hudaydah and other warehouse hubs;
- urgently provide food and cash-based lifesaving assistance to the most vulnerable groups, prioritising malnourished children under five and pregnant/lactating women;
- safeguard pastoralist assets through livestock vaccinations, health treatments and restocking;
- support rain-fed agriculture and livestock production by improving water access and availability through the adoption of water harvesting techniques;
- undertake training and capacity building activities on contingency planning and advanced emergency and preparedness actions under the Food Security and Agriculture Cluster; and
- undertake rapid food security assessments, needs analysis and monitoring, particularly in vulnerable prone governorates and pocket areas.

Moreover, the international community needs to take urgent action to prevent the food security situation from worsening and advocate for improved accessibility.

Currently, the food security and agriculture sector is 82 percent underfunded.
Yemen Projected Food Insecurity
Situation overview (March-July 2017)

Source: IPC (2017)
**SOUTH SUDAN**

### Risk of famine due to conflict

**Armed conflict, economic crisis and humanitarian accessibility constraints**

#### Risk overview

- South Sudan’s food security situation remains critical and continues to deteriorate due to conflict, economic stress and below-average harvests. Insecurity and the ongoing rainy season is also disrupting humanitarian assistance efforts.
- As of July 2017, 6 million people or 50 percent of the population are estimated to be in Crisis (IPC Phase 3), Emergency (IPC Phase 4) and Catastrophic (IPC Phase 5) conditions – a 15 percent increase from May 2017 IPC figures. Areas of concern include the greenbelt (agriculture producing area) counties in Unity State, Jonglei, Western Bahr el Ghazal, Western Bank of Upper Nile State and Greater Equatoria. Humanitarian access will be further constrained as the rainy season impacts transport conditions.
- As of July 2017, 45,000 people are facing Catastrophic (IPC Phase 5) conditions, including 25,000 in Unity State (Leer, Koch and Mayendit) and 20,000 in Ayod county of Jonglei state. While the overall number of people in Catastrophic (IPC Phase 5) conditions has decreased from 100,000 in April 2017 due to ongoing humanitarian assistance, the situation remains severe and could deteriorate further.
- GAM rates are above the emergency threshold of 15 percent in Duk county of Jonglei state. Further deterioration is expected during the peak of the lean season especially in Mayendit, Aweil North and Ayod counties.
- Food prices are two to five times higher compared to April 2016 due to limited supply, disruptions of markets linked to insecurity, inflation and currency depreciation.
- Insecurity and displacements have increased in key cereal producing areas. In particular, the planting of the second season crops in the greenbelt was well-below average, despite favourable rainfall conditions.

#### Potential impact

- The further deterioration of food security is expected towards the peak of the lean season (July–August 2017). If humanitarian assistance is not scaled-up, in the worst-case scenario the risk of famine is likely for the most vulnerable parts of the population already in Emergency (IPC Phase 4).
- While forecasts predict favourable rainfall conditions, ongoing conflict is likely to interfere with the upcoming agricultural seasons in the north (cultivation/harvesting) and south (planting/harvesting). Areas of concern include Unity State, Jonglei, Western Bahr el-Ghazal, Greater Equatoria, Western Bank of Upper Nile State and Greater Equatoria. From June, disruptions to agriculture cultivation could lead to Emergency (IPC Phase 4) conditions in these areas.

### Recommended early actions

Considering the urgency and complexity of the crisis, a continued scale up of humanitarian assistance is required to save lives and livelihoods. In this context, support to agriculture-based livelihoods is critical and complementary to emergency food assistance. The following initiatives are recommended:

- **urgently provide food and cash-based lifesaving assistance to the most vulnerable groups;**
- **provide urgently needed veterinary services to pastoralists and livestock health interventions including treatments against internal and external parasites, endemic and infectious diseases;**
- **support voucher schemes focused on nutrition;**
- **increase the distribution of fishing kits to people living in wetlands in famine-affected areas to provide an immediate source of food and income;**
- **support the most vulnerable population groups in urban and peri-urban areas (specifically Juba an Wau) by encouraging agriculture production, income generating activities and voucher systems to provide access to food and inject cash into the local economy; and**
- **preposition seeds and agricultural inputs to support farmers in the south for the second cereal planting season.**

The current funding gap for the food security and livelihood sector is 42 percent.
SOUTH SUDAN

IPC acute food insecurity classification
for South Sudan (June – July 2017)

Source: IPC (2017)
Risk overview

The Boko Haram insurgency continues to drive massive displacement in northeast Nigeria and in the Lake Chad Basin region, leading to a dire humanitarian situation and a risk of famine in Borno, Adamawa and Yobe states in Nigeria.

Despite humanitarian assistance in the three northern states, the food security situation remains dire. About 4.7 million people are food insecure (CH phase 3-5) in the three northeastern states, of which 3.2 million people are in Crisis (CH phase 3), 1.4 million people in Emergency (CH Phase 4) and 44 000 people in Famine (CH Phase 5). In addition, 450 000 children are at risk of Severe Acute Malnutrition, of which over 314 500 will receive treatment in 2017.

Although Nigeria has registered an above-average cereal harvest at national level in 2016, the continued conflict in the northeast part of the country has resulted in widespread disruption in agricultural and marketing activities.

Internally displaced people (IDPs) are among the most vulnerable groups in northeast Nigeria. According to the International Organization for Migration, over 1.9 million people are still internally displaced, of which 56 percent are children. Furthermore, the Household Economic Approach (HEA) assessment conducted by Save the Children shows that three out of four IDPs are still unable to meet their daily kilocalorie needs.

The Lake Chad Basin crisis is currently one of the largest humanitarian crisis in the world. Conflict in the Basin pushed 6.9 million people to become severely food insecure and caused the displacement of 2.5 million people in Nigeria, Cameroon, Chad and Niger.

Potential impact

The food security situation is expected to deteriorate in July–August 2017 due to the ongoing insecurity compounded by the lean season. The number of people facing Crisis, Emergency and Famine conditions in northeast Nigeria is expected to reach 5.2 million, including more than 50 000 people in Famine.

The effects of the ongoing violence have restricted livelihood activities and caused the disruption of the normal supply to markets in the Lake Chad Basin, thus significantly affecting the availability and access to food. Influx and movement of IDPs, rising food prices and localized conflict between pastoralist and farmers are likely to continue driving food insecurity.

The ongoing rainy season until the end of October is expected to exacerbate humanitarian access already greatly restricted in the conflict affected areas.

Recommended early actions

Over 80 percent of the population in the Lake Chad Basin rely on agriculture as a main source of income and livelihoods, therefore it is critical to address the immediate needs of the population especially during the lean season to avoid the loss of another harvest.

In order to mitigate the impact of the violence-induced displacement on agricultural activities in northeast Nigeria and prepare for the dry season, the following early actions should be implemented:

- rehabilitate food processing and agricultural infrastructure;
- support vegetable and fruit production through home gardening activities;
- provide livestock emergency support (restocking, vaccination, animal feed); and
- rehabilitate infrastructure (water tanks, post-harvest storage, livestock infrastructure, market facilities, etc.), when possible.

Currently the food security and agriculture cluster is 76 percent underfunded.

Risk of famine due to conflict

Deterioration of conflict-driven food insecurity

Over 80 percent of the population in the Lake Chad Basin rely on agriculture as a main source of income and livelihoods, therefore it is critical to address the immediate needs of the population especially during the lean season to avoid the loss of another harvest.

In order to mitigate the impact of the violence-induced displacement on agricultural activities in northeast Nigeria and prepare for the dry season, the following early actions should be implemented:

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- support vegetable and fruit production through home gardening activities;
- provide livestock emergency support (restocking, vaccination, animal feed); and
- rehabilitate infrastructure (water tanks, post-harvest storage, livestock infrastructure, market facilities, etc.), when possible.

Currently the food security and agriculture cluster is 76 percent underfunded.
Food and nutrition insecurity in Nigeria
Projected Cadre Harmonisé analysis
(June – August 2017)

Source: Cadre Harmonisé (2017)
SOMALIA

Risk of famine due to drought
Increasing food insecurity and risk of famine due to drought

1 Risk overview

The risk of famine remains elevated in 2017 for Somalia. Between February–April, the number of Somalis in Crisis (IPC Phase 3) and Emergency (IPC Phase 4) has increased from 300 000 to 3.2 million people— with most cases recorded as Emergency (IPC Phase 4). An additional 3.5 million are Stressed (IPC Phase 2), bringing the total number of food insecure people to 6.7 million.

The majority of people facing extreme hunger are Somali agropastoralists and pastoralists. These rural populations represent 68 percent of those in IPC Phases 3 and 4, and 92 percent of those in IPC Phase 4.

During the drought, hunger has spiked due to the loss of production, productive assets and income sources in rural areas. In 2016, farmers suffered from severe food and income loss, including a 50 percent reduced Gu harvest mid-year and a 70 percent reduced Deyr harvest at year-end.

The January–March 2017 Jilaal season was drier and hotter than usual with extremely limited pasture and water resources. April field reports indicated households in northern and central areas lost 40–60 percent of their livestock and 20–40 percent in southern regions since Deyr 2016/17 assessments. The harsh Jilaal was followed by poor April–June Gu rains (20–50 percent below average in most central and southern regions) and is likely to result in another below-average harvest in July.

The recent cholera outbreak further compounds the situation, with over 53 000 suspected cases and 795 deaths recorded since May 2017.

People are leaving rural areas in search of food and water supplies as livelihoods and coping strategies erode. Since November 2016, the Office of the United Nations High Commissioner for Refugees has recorded over 739 000 IDPs due to the drought.

2 Potential impact

The geographic area of people in IPC Phase 4 has greatly expanded. Through mid-2017, almost all Federal Member States have large areas in Emergency.

Humanitarian needs are expected to persist at current levels until at least October 2017, with the risk of Famine (IPC Phase 5) in areas with severe food consumption gaps and high acute malnutrition. Protracted insecurity in southern and central Somalia could hamper the delivery of critical assistance.

Existing high levels of displacement could significantly increase if Gu season renders little food and humanitarian assistance does not reach rural populations. If rural livelihoods collapse, people become displaced and the prospect of returning becomes increasingly difficult.

3 Recommended early actions

Continued, massive support is needed to keep Somalia free of famine. The following activities are recommended to be undertaken by food security partners between July and September:

- scale up life-saving assistance to increase food access (in-kind, voucher, unconditional and conditional cash grants);
- protect pastoral livelihoods by scaling up emergency livestock interventions such as fodder/feed supplements, veterinary care (deworming, supportive treatment, vaccination), and possible restocking for vulnerable agropastoral families that have lost the few animals they depend on for subsistence;
- provide agricultural inputs to farmers and agropastoralists for the Deyr 2017 cropping season beginning in October; and
- help rural communities prepare for and resist new shocks (potential flooding in the event of good Deyr rains, plant pests and transboundary livestock diseases) by repairing river breakages, reactivating community-based flood alert systems established during 2015/16 El Niño and mobilizing community surveillance networks for locusts, fall armyworm and livestock diseases.

The current funding gap for the food security sector is 66 percent.
Acute food insecurity situation in Somalia - Projected IPC acute analysis
(February – June 2017)
THE DEMOCRATIC REPUBLIC OF THE CONGO (DRC)

Localized conflict
Rapid deterioration of the food security situation due to localized conflicts

1 Risk overview

- Further displacement is ongoing due to the volatile political and security situation in the country, exacerbating food insecurity in already vulnerable areas.
- According to the latest IPC analysis in June 2016, 5.9 million people are facing acute food insecurity (IPC Phases 3 and 4). However, evidence points to a rapid deterioration of the food security situation due to escalation of conflict in the Kasai and Tanganyika provinces.
- More than one million people are estimated to have been displaced by the violence that started in August 2016 in Kasai Central and spilled over into neighbouring Kasai, Kasai Oriental, Lomami and Sankuru provinces. The crisis has generated needs that are above the humanitarian community’s response capacities.
- According to the Office for the Coordination of Humanitarian Affairs, the Kasai region is experiencing a complex and volatile situation that caused the displacement of over 1.3 million people (including returnees), representing an increase of 300 000 people compared with mid-April 2017 figures. The most affected provinces include Central Kasai, Kasai and Lomami. Since early 2016, prolonged and intensified conflicts and armed violence in the east have resulted in the displacement of 3.7 million people nationwide.
- The normal to below-normal rainfall activity across the country points to below-normal crop yields starting from June/July for growing season B, with the exception of the northwest.
- The persistent high pathogenic avian influenza (HPAI) H5N8 virus in neighbouring Uganda has caused all neighbouring countries to extend the poultry import ban, affecting households dependent on this source of revenue, namely on the sale of livestock products.
- As of 20 May 2017, 37 suspected Ebola virus disease cases and four deaths were reported.
- The alarming spread of fall armyworm infestations to 50 of the country’s 145 territories may affect crop production for growing season B in these areas, with 333 000 ha of maize crops already affected at the regional level.

2 Potential impact

- Considering the fragile political climate, conflict and the ongoing military operations, insecurity is expected to continue during the upcoming months, likely driving further displacements and disrupting trade and livelihoods.
- As military operations are ongoing and the political climate is stressful, people’s livelihoods and access to food will remain compromised.
- The next IPC analysis due mid-July will provide further evidence on the situation.

3 Recommended early actions

During the sowing season in central DRC, the following early actions should be implemented:
- focus livelihood interventions on key target groups such as refugees, IDPs/returnees and directly affected host communities. Particular focus should be on the displaced people who have no access to land;
- strengthen civil society through the coordination of people (both men and women) into economically viable farmer organizations; and
- ensure coordination of the Food Security Cluster while facilitating needs assessment, business planning (including prioritization and identification of gaps) and preparation of calls for funds.

Currently the food security sector in DRC is 60 percent underfunded.
1 Risk overview

- Substantial areas of Kenya and Ethiopia continue to experience severe drought, despite the conclusion of the wet season in many areas. This has resulted in reductions of food availability, increased market prices and instigated high rates of livestock mortality.
- As of April 2017, the number of acutely food insecure people in IPC Phases 3 and 4 was around 2.6 million in Kenya (with 2.2 million people in IPC Phase 3) and 7.8 million requiring humanitarian assistance in Ethiopia.
- Maize prices across the region have surged by 30–55 percent in the January–May 2017 period, reaching near record levels. Prices are expected to further increase with the lean seasons.
- Drought has resulted in massive population displacements in Ethiopia (840 000 people) and Kenya (38 000 people), increasing the risk of conflict over limited resources. Incoming Somali and South Sudanese refugees could further aggravate the situation by increasing pressure on host communities.
- Significant livestock deaths were reported in drought-affected areas of Ethiopia and Kenya, mostly affecting sheep and cattle. Livestock losses have had a serious impact on livelihoods; even if half of a herd survives, it will take a minimum of two to four years for pastoralist and agropastoralist households to recover.
- In Kenya, the 2016/17 maize production was 70 percent below the five-year average, with a near-total failure reported in coastal areas. In addition, localized floods in central and coastal counties resulted in the loss of standing crops and livestock. Kenya is on high alert following outbreaks of fall armyworm and the contagious Tilapia Lake Virus.

2 Potential impact

- In southern and southeastern Ethiopia, food security is likely to deteriorate in pastoral areas due to the late and below-average Genna rains, which have resulted in a mixed outlook for the secondary season “belg” harvest in June. Furthermore, the lean season in the southeastern Somali Region is likely to exacerbate conditions resulting in a deterioration of many households from IPC Phase 3 to IPC Phase 4 from July 2017.
- In Kenya, more households are expected to move into IPC Phase 3 between July to September 2017; particularly in northern and southeast areas, which received minimal benefits from the long rainfall season.

3 Recommended early actions

The following early actions are recommended for the July–September 2017 period:

- ensure vulnerable pastoralists have access to livestock survival and supplementary feed in order to safeguard their core breeding stock;
- scale up livestock offtake and destocking programmes, if animal conditions further deteriorate;
- boost local availability of fodder, seeds of growing forage and grasses in areas with access to irrigation;
- support cash for work initiatives to address immediate needs through activities focused on deepening traditional wells, desilting water sources and hygienically disposing of carcasses; and
- monitor herd movements and livestock body conditions in cross-border areas to assist country and local-level actors to respond with necessary actions.

The funding gap for the food security and livelihood sector is 76 percent in Kenya and 92 percent in Ethiopia.
Fall Armyworm outbreak

1 Risk overview

- The fall armyworm (Spodoptera frugiperda) is a moth native to the Americas, which can reproduce several times per year and has a fast spread potential. In its larval stage, it feeds mainly off maize and other cereals, causing significant yield losses and reduced grain quality and quantity.
- The pest was first detected in West Africa (Benin, Nigeria, São Tomé & Principe and Togo) in early 2016 and later in Central Africa (Democratic Republic of Congo) as well as Southern Africa. In East Africa, the pest has been reported in Kenya, Ethiopia, Burundi and Uganda, where its impact is affecting farmers and threatening their recovery from the ongoing drought and related humanitarian crisis.
- The ongoing planting season (March–September), threatened by the outbreak, represents one of the main opportunities to tackle hunger and protect lives and livelihoods in East Africa.
- The fall armyworm has so far affected over 143,000 ha of crops in major maize and wheat producing counties in Kenya. FAO and the Ministry of Agriculture have adopted a planning response figure of 800,000 ha, which requires USD 33.5 million for pesticides and awareness campaigns in the medium term.
- In Ethiopia, the July–September period coincides with the main Meher crop-growing season during which the maize crops might be at risk. The pest currently affected about 52,962 ha in 144 districts in three of the major maize-growing regional states – Gambella, Oromia and Southern Nations Nationalities and Peoples’ Region.

2 Potential impact

- The pest may continue to further spread in the already affected countries as well as to other neighbouring countries, considering its ability to fly long distances.
- Failure to control the pest would result in serious food, economic and social insecurity in Kenya, and more broadly in eastern and central Africa.

3 Recommended early actions

The following early actions are recommended:
- surveillance and early warning:
  - monitor the development of the pest through the use of pheromone traps;
  - use of mass trapping techniques to suppress the moth population build-up; and
- impact assessment:
  - establish or strengthen national surveillance systems by FAO and partners through the provision of technical assistance and advice.
- coordination:
  - strengthen coordination between all partners at global, regional and national levels through early warning systems.
AFRICA
Map of areas affected by Fall Armyworm, as of 15 June 2017

Source: FAO Briefing note on FAO actions on Fall Armyworm (FAW) in Africa. June 2017
**Recommended early actions**

The following initiatives should be considered for the period of July–September 2017:

- provide livelihood support (e.g. vegetable or home-gardening cultivation kits) to both refugees with access to land and host communities to improve food security and access to livelihoods;
- support vulnerable pastoral households with livestock vaccinations and health treatments; and
- implement cash-for-work initiatives targeting rehabilitation of agriculture infrastructures and assets (e.g. the distilling of water catchments and construction of new valley tanks).
**Risk overview**
- As of 21 April 2017, over 900,000 people are affected by prolonged drought across 17 of the 25 districts in Sri Lanka.
- Two below-average consecutive harvests due to poor rainfall have affected food security. Due to the poor Maha harvest (February–March 2017), seed availability for the Yala season (April–July) is severely compromised. Water shortages are further compounding the season’s performance – water levels in the main reservoirs are only at 36 percent, compared with 77 percent at the same time last year.
- In parallel, heavy rains in the second part of May in certain parts of the country caused a series of floods and landslides, mostly in the southwest, resulting in deaths and injuries, large displacement of people and damage to livelihoods and infrastructure. Over 630,000 people were affected.
- Domestic agriculture provides more than 80 percent of Sri Lanka’s food requirement, with rice being the staple crop. The combined production of staple crops foreseen for the two 2017 harvests is expected to be the lowest in the last 10 years.
- A joint assessment conducted by the Government and humanitarian partners highlights that in affected areas only 10 percent of farmers produced enough paddy seeds to replant in the upcoming Yala season, while generally 80 percent are able to do so in normal years.
- From a food security perspective, daily agricultural labourers and rainfed paddy farming households are among the most affected and vulnerable livelihood groups. The prolonged period of drought has caused a loss of income due to the reduced production of paddy for sale, poor agricultural labour opportunities and reduced purchasing power because of increased retail rice prices.

**Potential impact**
- The shortage of water and seeds for the ongoing Yala season (April – July 2017) is likely to further impact livelihoods and food security conditions in affected areas, as well as seed availability for the next main Maha season scheduled to start in late 2017.
- The heavy rainfall during May was localized and had very little impact on increasing the water levels of the dry zone reservoirs. The poor rainfall in dry zones as well as upper catchment areas of the major rivers is likely to result in reduced paddy harvest (rainfed and irrigated) to less than 50 percent of a normal Yala (minor) season.
- Prolonged drought would also further jeopardize the livestock and inland fisheries sector.

**Recommended early actions**
In order to avoid further deterioration of the situation in late 2017, the following recommended initiatives are to:
- promote home gardening cultivation of stress tolerant crops and tubers
- support crop diversification among farmers (maize, cowpea, peanuts, soybean, green gram, black gram, millet, etc.); and
- support inland fisheries activities through fingerlings production and stocking in seasonal tanks, where water availability allows.

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**SRI LANKA**

**Prolonged drought and localized floods compounding the existing situation**

**1 Risk overview**

**2 Potential impact**

**3 Recommended early actions**

**Risk:** On watch

**Seasonality:** [July – September]
ON WATCH

CENTRAL AFRICAN REPUBLIC (CAR)

Escalation of localized conflict driving displacements

1 Risk overview

- The recent escalation of violence in May 2017 is compromising access and the safety of humanitarian assistance, while instigating new displacements.
- In May 2017 alone, OCHA reported the displacement of over 100,000 people and the refuge of 19,000 in the Democratic Republic of the Congo, bringing the total displaced population to almost 1 million, including over 500,000 IDPs and close to 500,000 refugees in neighbouring countries.
- In a context of already widespread food insecurity, a further deterioration is driven by localized conflict especially in the northwestern, north central, south central and eastern zones. Vulnerable households food security is further compromised in the southern prefectures, where the lean season (April – July 2017) is currently ongoing.
- Since February 2017, IPC has reported the number of people facing acute food security reached 1.1 million (excluding Nana-Gribizi and Bangui) – with approximately 800,000 in Crisis (IPC Phase 3) and 316,000 in Emergency (IPC Phase 4). Out of the 15 assessed prefectures, eight were classified in IPC Phase 3 due to the impact of insecurity on livelihoods and the difficulties in accessing food.
- Crop production remains below-average and below 2012 pre-crisis levels.
- Increasing insecurity further compromises the safety of humanitarian workers. Between January 2016 and April 2017, 29 percent of worldwide incidents to humanitarian workers were registered in the Central African Republic. This will likely further hamper humanitarian assistance.

2 Potential impact

- The ongoing security situation in some localities of the central and southeastern parts of the country (Bria, Mobaye, Alindao, Bangassou, Bakouma, Nzako) may impact access to agricultural lands during the maize and groundnut harvests.
- Despite favourable rainfall forecasts for the upcoming cultivation and harvesting season, the localized abandonment of farmlands due to conflict is likely to result in below-average production. This will further limit food availability to households and markets.
- Despite ongoing humanitarian assistance, the food security situation will remain precarious in the northwest, southwest, southeast and central regions (Ouham, Ouham Pende, Nana Gribizi, Vakaga, Ouaka). Households in these areas are likely to face Crisis (IPC Phase 3) levels until September 2017, as conflict is likely to persist.

3 Recommended early actions

To support agricultural activities and avoid further deterioration of the food security situation, the recommended initiatives are to:

- support the August–December 2017 maize and groundnut harvest in the south by improving value chain approaches including post-harvest management, storage, food processing and marketing;
- provide livelihood support (e.g. vegetable or home-gardening cultivation kits) to both IDPs and host communities to improve food security and access to livelihoods;
- rehabilitate infrastructure (water tanks, post-harvest storage, livestock infrastructure, market facilities, etc.), where possible to support the ongoing harvesting season; and
- support and strengthen already existing dialogue platforms between pastoralists and farmers to reduce conflict through access to natural resources.

Risk: On watch

Seasonality: [July – September]
Displacement and deteriorating food security

Risk overview

1. Renewed conflict in the Lake Chad Basin has instigated displacements, decreased livestock prices and increased food insecurity in Chad. The situation is likely to deteriorate further due to the ongoing agricultural lean season.

2. As of July 2017, an estimated 3.5 million people are food insecure (IPC Phases 2–5). Of which, 897,500 people are in Crisis (IPC Phase 3) and Emergency (IPC Phase 4), representing a 58 percent increase from March 2017.

3. OCHA estimated that over 495,000 refugees and returnees are living in the eastern, southern and western parts of the country. In addition, around 104,000 IDPs are placing pressure on host communities and increasing tensions.

4. The early lean season has resulted in a significant drop in livestock prices, straining the resources of thousands of pastoralist already affected by the Nigerian livestock export market halt. Livestock conditions deteriorated atypically in Kanem, Bahr El Gazel, Batha, Ouaddai, Borkou, East-Ennedi, West-Ennedi and Wadi Fira regions. In this areas, water points have dried up and pasture is scarce, with increased livestock mortality. The situation was declared a pastoral crisis in June 2017.

5. The early lean season has increased seasonal cereal prices, ranging from 20–40 percent, depending on the markets and commodity.

6. Low oil prices have considerably affected the budgetary situation at national level.

Potential impact

1. While above-average harvests were recorded last year, acute food insecurity conditions are likely to continue until at least September 2017, with the peak agricultural lean season occurring in July–August. Such conditions could cause early depletion of household stocks, further increasing cereal prices while depressing livestock prices.

2. Districts with cereal production deficits (Tandjilé, Mayo Kébbi Est and Wadi Fira) are expected to worsen during the agricultural lean season. The food situation, which is already precarious in the department of Tandjilé East, is likely to require urgent humanitarian action.

3. Economic constraints leading to reductions of government social protection schemes combined with food price increases are likely to impact the purchasing power of vulnerable households.

Recommended early actions

The following initiatives should be considered for the period of July – September 2017:

- provide livelihood support (e.g. vegetable or home-gardening cultivation kits) to both refugees and host communities to improve food security and access to livelihoods.

- support vulnerable pastoral households through destocking, animal health guidance, supplementary feed and vaccinations.
EL NIÑO

Drought, floods and cyclones

What is El Niño?

El Niño is a recurrent atmospheric-oceanic phenomenon that is associated to an increase in sea surface temperatures in the central tropical Pacific and a sustained weakening of the trade winds. It develops roughly every two to seven years and lasts from six to 24 months. While reduced rainfall and drought is a key outcome of El Niño, the phenomenon can also cause heavy rains and flooding. Impacts of El Niño on agriculture and food security depend on a complex interplay of meteorological factors and range from minor to severe. The 2015/2016 El Niño episode severely affected over 60 million people worldwide, causing 23 countries to appeal for international humanitarian assistance.

What is the 2017 El Niño outlook?

The current official forecasts (consensus-based) points to a 43 percent probability of an El Niño to develop by the Northern Hemisphere summer. This probability is set to decrease progressively towards the end of the year, reaching 33 percent at the start of 2018.

As a global phenomenon, El Niño can potentially affect the climate system worldwide. However, with this level of probability even in the absence of a declared global El Niño, localized El Niño-like effects in some areas of the world are possible, most notably in the form of precipitation anomalies. These might affect both agricultural production, especially if they coincide with critical stages of crop and pasture.

The focus of this section is to indicate and inform which countries should be “On watch” for further close monitoring over the coming months to be able to discern a potential impact from El Niño-like conditions during the July-September 2017 period. Furthermore, a secondary objective is to recommend a set of context and seasonality specific early actions that can be taken in the case that continuous monitoring indicates a likely impact on the agriculture sector from El Niño conditions in the July to September period. Early actions aim at mitigation and resilience-building, preventing loss of lives and livelihoods and protecting development gains.
HISTORICAL EL NIÑO TRENDS

Source: NWS/NCEP Climate Prediction Center
EL NIÑO ANNEX - LATIN AMERICA and CARIBBEAN: El Salvador, Guatemala, Haiti, Honduras, Nicaragua and Venezuela

Drought

1 Risk overview

- During an El Niño event, Central America, the Caribbean and northern South America often experience drier than usual conditions starting from June/July and lasting until the end of the year and into the next year.
- For June–August, there is a 40 percent probability that there will be below-normal rainfall in parts of Latin America and the Caribbean, most notably in southern Nicaragua and northern Honduras and along the north coast of Haiti.
- In the July–September period, the probabilities for below normal rainfall along the Nicaraguan, Honduran and El Salvadorian Pacific Coast are set to increase as well as along the northern Atlantic Coast in both Honduras and Nicaragua. Localized dryness in Guatemala is indicated.
- In northern South America, including Venezuela, there is a 40–45 percent probability for below-normal precipitation in the June–August period, affecting the whole country by July–September.
- Chances for below-average conditions are predicted to increase significantly by the August–October period.

2 Potential impact

- The predicted negative precipitation anomalies in the June–September period are likely to affect crop growth of the main staple crops.
- In Guatemala, Honduras, Nicaragua and El Salvador, the 2017 cereal production is expected to increase or remain at last year’s level. Some of these countries are still recovering from the previous El Niño event, therefore another (even light) drought could have a potentially disastrous effect.
- In Haiti, outlooks indicate uncertain prospects due to farmers’ difficulties in accessing inputs. El Niño-induced dryness on secondary plantings could thus exacerbate potential production shortfalls.
- In Venezuela, an impact on the main staple crop-growing season would compound the low level of expected plantings due to a lack of inputs.
- In Haiti, Hurricane Matthew had a compounding effect on vulnerability and the lack of coping capacity, while the current socio-economic and humanitarian conditions are likely to aggravate the impact of even a light El Niño event in Venezuela.
- Lack of pasture will affect livestock conditions, making them susceptible to different diseases as well as reduce production of animal products, such as milk and wool.
- Low grass will force animals to graze close to soil and, in anthrax endemic areas, increase the risk of infection.

3 Recommended early actions

The following initiatives should be considered:
- immediate preparation for extension advice on planting of early maturing crop varieties in Central America and Haiti for postrera season;
- prepare for the provision of inputs (e.g. seeds) in Central America and Haiti for the next season, if current and secondary plantings (Haiti) is below-average; and
- support water supply for livestock and crops through immediate review of water point coverage and rehabilitation or establishment, as appropriate in July/August.
Drought and floods

1 Risk overview

- During El Niño periods, the Northern Pacific is usually affected by dry conditions, starting from July. The equatorial Pacific is affected by wet conditions from the start of June and the South Pacific experiences dry conditions in the beginning of September.
- In June–September, there is a probability for below-average conditions in Timor-Leste, the southeast of Papua New Guinea, the Marshall Islands and parts of Kiribati. Conditions in Vanuatu are expected to be normal.

2 Potential impact

- In Timor-Leste, off-season maize production could potentially be affected. This would likely exacerbate food insecurity, which is still at critical levels in parts of the country due to the impact of the last El Niño. In addition, the livestock sector would be impacted by reduced water availability.
- In Papua New Guinea, where there is no strong seasonality, crop growth can be impacted all year round, especially affecting subsistence farming and potentially exacerbating the already critical food security situation in parts of the country that is still recovering from the previous El Niño event.
- Vanuatu was severely impacted by the previous El Niño and, in light of the low coping capacity, mild dryness in the coming months could have a severe impact.
- The Marshall Islands are currently impacted by drought, while typically more intense cyclone activity (May to October) and above-average rainfall are observed during El Niño, both of which increases flood risk.
- Kiribati is characterized by high vulnerability and low coping capacity and due to year-round seasonality agriculture, it could be impacted all year round by above-average rainfall, as expected during an El Niño event.

3 Recommended early actions

Continuous monitoring of regional and local climate sources indicating climate anomalies over the coming period. If forecasts confirm anomalies, the below activities should be considered:

Early actions relevant for drier-than-average conditions in Timor-Leste, despite the current situation appearing close to normal should include:
- strengthen community-based water management techniques; and
- provide stress-tolerant varieties for early crops and early maturing crops (e.g. maize) in September for the planting season in October/November (depending on location and farming systems).

Early actions relevant for drier-than-average conditions in Papua New Guinea, Vanuatu and northern atolls in the Republic of the Marshall Islands include:
- support water saving irrigation materials. Where possible, repair existing water management systems;
- provision of drought-tolerant crop varieties; and
- support food preservation techniques.

Early actions relevant for wetter-than-average conditions in Kiribati and increased cyclone activity in southern atolls in the Republic of Marshall Islands include:
- preposition standardized agriculture/fisheries kits;
- support food preservation techniques;
- establishment of storage sites for agricultural tools, fishing gear and boats close to villages; and
- promote elevated household gardens and vertical farming that can be easily transported to safe havens.
Drought

1 Risk overview

- Historically, in the June-September period, El Niño has driven rainfall shortages and resulted in drier than normal conditions across the northern part of the Greater Horn of Africa. In northern Ethiopia, Eritrea, southern Sudan and northern South Sudan. El Niño has been historically associated with wetter than average conditions in the rest of the Greater Horn of Africa in the October–January period.
- The International Research Institute Multi-Model Probability Forecast for Precipitation for the July–September 2017 period indicates a probability of below-average rainfall in northwestern parts of Eritrea, northwestern Ethiopia, northern South Sudan and southern and southeastern Sudan. The probability for below-normal rainfall in the same areas are set to increase in the following August–November period according to the same source.

2 Potential impact

- In northern Ethiopia, below-average July–September "karan/karma" rains would negatively impact rangeland conditions in pastoral areas.
- In South Sudan, planting, germination and establishment of sorghum and millet crops in unimodal (central and northern) areas and ripening of maize and sorghum first season crops in southern bimodal rainfall areas could be potentially affected.
- In Eritrea and Sudan, planting, germination and establishment of wheat, barley, sorghum and millet crops could also be potentially affected.
- Dry conditions could worsen livestock conditions and trigger increased livestock migration.
- Ethiopia and Eritrea have been affected by the 2015/2016 El Niño and are still recovering. Other aggravating factors include the high levels of food insecurity, disease burden and famine conditions especially in South Sudan.

3 Recommended early actions

Continuous monitoring of regional and local climate sources indicating climate anomalies over the coming period. If forecasts confirm anomalies, the below activities should be considered:

Early actions relevant for drier-than-average conditions in the northern Greater Horn of Africa include:

- improvement of water-harvesting techniques and land preparation;
- distribution of improved seed varieties, tools and inputs;
- support water supply for livestock and crops through the rehabilitation and establishment of shallow wells and water-points; and
- supplementary feeding for livestock to preserve livelihoods of highly vulnerable pastoralists.
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