GLOBAL EARLY WARNING – EARLY ACTION REPORT
ON FOOD SECURITY AND AGRICULTURE
JANUARY – MARCH 2017
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 2.
Global map of countries with humanitarian response plans or emergency plans

Source: Global Humanitarian Overview 2017, OCHA.
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 2.

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 20.

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 agriculture and food security, 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.
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.

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.

- **HIGH**
  - FAO and partners should start implementing early actions on a no-regret basis.
  - Inclusion in the report under the High Risk category.

- **MEDIUM**
  - FAO should strengthen corporate monitoring and preparedness, and plan for the implementation of certain low cost early actions.
  - Inclusion in the report under the On Watch category.

- **LOW**
  - Continue monitoring risk and country.
  - No inclusion in the report

In a context where a new emergency or the further deterioration of the situation might lead to an increased risk of famine, this aspect is particularly highlighted in the cover map and narrative of the report.

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.
**SOUTH SUDAN**

**Localized risk of famine due to conflict and macroeconomic collapse**

1. **Risk overview**
   - Intensified fighting has further disrupted agricultural activities and access to markets against the backdrop of a general economic downturn characterised by the sharp devaluation of the local currency, high inflation (approximately 800 percent year-on-year) and a corresponding rise in food prices.
   - According to the recent Food Security and Livelihoods (FSL) Cluster projections, 4.9 million people — 42 percent of the country’s estimated population — will be severely food insecure in the lean season (mid-2017). Food insecurity has increased in previously food secure and surplus producing areas.
   - The past harvest season has temporarily alleviated the situation, however crop production was severely affected by ongoing tensions and increasing displacements. Insecurity has prevented farmers from reaching their fields, notably in the major cereal-producing regions of Greater Equatoria, Unity, and Northern and Western Bahr el Ghazal. Consequently, harvests in these areas are considerably lower than normal which will affect the availability of cereals nationwide in 2017.
   - The worsening nutritional status across South Sudan is worrying. According to the World Health Organization classification, deterioration to ‘critical’ levels is expected from February to May 2017, as food stocks are depleted and most households will depend on disrupted markets. Furthermore, waterborne diseases (e.g. malaria) will increase with the rainy season.
   - Violence has caused a renewal of internal displacement (1.87 million people) and a new spate of migration into neighbouring countries (1.1 million people).

2. **Potential impact**
   - The situation is more severe in northern South Sudan (Greater Bahr el Ghazal), where an increased risk of famine for the upcoming dry and lean seasons (January — August 2017) is anticipated. Affected households are likely to continue using negative coping strategies, delaying or preventing recovery of already vulnerable livelihoods. Communities in central and southern Unity fled into swampy areas to escape violent fighting — a recurrent phenomenon since 2015.
   - Insecurity and other constraints hinder the capacity of aid organisations to respond to increasing needs, which will have cumulative effects on vulnerable groups, with a possible disastrous outcome into 2017 if obstacles to humanitarian access and operations are not mitigated.
   - Food prices are expected to peak between February and May 2017, when domestic stocks are exhausted.

3. **Recommended early actions**
   Considering the context of insecurity and the need to focus actions especially on farming communities in severe acute food insecurity, the following initiatives to reinforce food availability and nutrition led by FAO and FSL Cluster partners should be further supported:
   - Provide dry season livelihood support (e.g. fishing and vegetable cultivation kits) through rapid response initiatives, complemented by capacity building on post-harvest processing, particularly on food conservation and utilisation;
   - Safeguard pastoralist assets in accessible areas through livestock vaccinations and treatments during the dry season;
   - Support the most vulnerable population groups in urban and peri-urban areas (specifically Juba and Wau) by fostering urban and peri-urban agricultural production, income generating activities and voucher systems to provide access to food and inject cash into the local economy;
   - Timely procurement and pre-positioning of inputs for the main planting season starting in March – April 2017. Furthermore, in order to address the rapidly changing and severe situation, close monitoring of the food security and nutrition status, the production of regular and timely IPC information and increased coordination among actors within the FSL cluster are recommended.
YEMEN

1 Risk overview

- The ongoing conflict in Yemen is aggravating an already fragile socioeconomic context and weakened national infrastructures resulting in a protracted food insecurity situation in the country.
- Over 14.1 million people (51 percent of the population) are suffering from food insecurity and malnutrition, of which approximately 7.1 million are estimated to be in Crisis (IPC Phase 3) and over 7 million in Emergency (IPC Phase 4).
- Some 3.3 million children and pregnant or lactating women are acutely malnourished, including 462,000 children under five suffering from severe acute malnutrition. This represents a 63 percent increase since late 2015.
- Difficulties in accessing remittances and the recent freezing of Government salaries have exacerbated the economic situation. In particular, the relocation of the Central Bank of Yemen to the city of Aden has significantly affected the country’s economic performance. With household incomes already decreasing, limited purchasing power will further compound food insecurity.
- Escalated fighting has damaged national infrastructures, including the only gas export pipeline and main ports. Prior to the crisis, Yemen imported 90 percent of staple food crops (i.e. wheat), however recently imposed restrictions and delays on imports are undermining the commercial sector and impeding the delivery of goods and humanitarian aid.
- The crisis has severely disrupted the agriculture sector. Ongoing conflict, displacement and limited access to farmland and fishing sites continue to cause significant losses. Limited access to water supplies for irrigation as well as shortages of seeds and fertilizers have crippled crop production.
- Small-scale Desert Locust breeding continues in areas of the Red Sea coast. Due to limited control operations, breeding is expected to continue posing a threat of transboundary spread.

2 Potential impact

- The ongoing conflict, deteriorating economic situation and the challenges associated with trade will continue to hamper all sectors. In the absence of resources and a strong, well-coordinated support for the affected population, food insecurity and malnutrition of more than 7 million people in Emergency (IPC Phase 4) is likely to worsen and the localized risk of famine is increasing.
- Similarly, around 7 million people under Crisis (IPC Phase 3) might slide into Emergency (IPC Phase 4) unless essential food and non-food assistance are provided.

3 Recommended early actions

In order to address the worsening situation, and taking into account the key employment opportunities provided by the agricultural sector for rural and coastal communities, the following initiatives are recommended:
- Urgently provide food and cash-based life-saving assistance to the most vulnerable groups, prioritising malnourished children under five and pregnant and lactating women.
- Support recovery of livelihoods, especially for agriculture and fishing dependent communities. In particular, support backyard income-generating activities and food production to complement, enrich and diversify food intake of severely food insecure and internally displaced person (IDP) households.
- Manage the threat of locusts by continuing to support local authorities through the provision of equipment and capacity building efforts critical to containing the locust spread.
- Moreover, the international community needs to take swift action to prevent the food security situation from worsening in Yemen and consider lifting the restriction on food and non-food imports.

Risk ranking:
High
Local risk of famine linked to conflict
Deterioration of conflict-driven food insecurity

1 Risk overview

> In northeast Nigeria, food security is alarmingly deteriorating for many households in areas affected by the conflict despite the overall increase in food supply due to the recent harvest season. According to the latest Cadre Harmonisé (CH) analysis, 4.9 million people are acutely food insecure (CH Phases 3-5) in Adamawa, Yobe and Borno States, of which over 55,000 people are in Famine (CH Phase 5) in Borno State.

> Food insecurity in the northeast is driven by continued displacement as well as low market functioning, reduced land cultivation and destruction of infrastructure.

> Staple and cash crop production as well as food stocks are below average in the northeast, as most households in conflict-affected areas have not been able to cultivate crops in 2016. In addition, prices of staple food crops are significantly high due to the depreciation of the national currency and consequent inflation.

> An additional risk factor is the highly pathogenic avian influenza subtype H5N1 which is endemic in Nigeria.

2 Potential impact

> The most affected households in Adamawa, Borno and Yobe States will continue to experience food insecurity as the post-harvest season ended in December 2016. Limited crop production in the northeast suggests that the affected households and IDPs will remain dependent on purchasing food from markets while at the same time having reduced purchasing power due to high food prices. Food prices are expected to increase further towards the lean season in June.

> The food security situation is projected to deteriorate into 2017. The latest CH analysis estimates that the number of acutely food insecure people in Borno, Adamawa and Yobe States will be about 5.1 million in June-August 2017. The number of people in famine (CH Phase 5) is likely to rise to over 120,000. This represents an increase of over 200,000 people from the current levels of food insecurity.

> Areas where IDP populations are expected to increase, such as Borno and Yobe States, will be particularly affected as returnees and newly liberated populations move to urban centres. Households in these areas will likely have a fourth consecutive season with limited to no agricultural production and capacity to cope, and will remain at risk of famine into 2017.

> Food security is also likely to deteriorate in the Lake Chad Basin, particularly in Chad and the Niger.

3 Recommended early actions

Without agriculture and livestock support over the following months, many vulnerable IDPs, returnees and host communities will resort to negative coping mechanisms with long-lasting effects. This may result in increasing humanitarian needs into 2017 and beyond, including in terms of reliance on food assistance until October 2018.

The current priorities are as follows:

> Ensure adequate food access for the most vulnerable IDPs, host communities and returnees;

> Provide critical means for food production and livelihood restoration to host communities, returnees, and IDPs with access to land through:
  - the distribution of agricultural inputs to support the main cropping season, from May 2017;
  - training of farmers; and

> Strengthen coordination between the Government and the humanitarian community to increase synergies within the food security sector (e.g. through joint needs assessments)

Where security allows:

> Support the re-establishment of access to seasonal grazing areas and routes that have been disrupted since the start of the conflict.
Drought
Severe drought affecting significant parts of the Horn of Africa

1 Risk overview

- Two years of failed or below-average rainy seasons due to El Niño in the Horn of Africa region has led to drought conditions across Somalia, Kenya, Ethiopia as well as the Karamoja region of Uganda and significant parts of Tanzania. The ‘short rains’ have largely been poor or have failed completely in many areas, impeding the much-needed recovery of vegetation and water sources after the last dry spell. As a result, vegetation conditions are the worst on record in many areas.
- Approximately 12 million people across Somalia, Kenya and Ethiopia are in need of food assistance, as families struggle with increasingly limited access to food, dwindling incomes and rising staple food prices.
- In Somalia, two below-average rainy seasons in 2016 led to a 50 percent decrease in the ‘long rains’ or ‘Gu’ harvest in August 2016 and a poor short rains or “Deyr” harvest in January 2017 (50–60 percent below the long-term average). Pasture availability is the lowest it has been in the past five years. According to the October 2016 Food Security and Nutrition Analysis Unit’s assessment, some 5 million Somalis are acutely food insecure and require immediate humanitarian assistance. This is likely to increase by at least another 20 percent in the first half of 2017.
- In Kenya, 1.3 million people are food insecure. Following the failure of the short rains season, this number is likely to spike to over 2 million as we enter the dry season in early 2017, particularly across the northeastern and eastern pastoral counties where livelihoods are heavily dependent on livestock.
- Ethiopia is still recovering from the effects of the El Niño. Affected livelihoods still require support to recover fully from the drought crisis. In addition to these lingering effects, the south and southeastern areas of the country are now facing a long dry spell, impacting in particular livestock-based livelihoods in affected areas of Somali, Oromia and SNNP.

2 Potential impact

- From January onwards, the Horn of Africa region enters another dry season that will greatly affect harvest and livestock productivity, thus aggravating the current drought conditions and requiring urgent assistance.
- Based on preliminary estimations of current forecasts, the outlook for the 2017 April – June rainy season is pessimistic, indicating that below-average rainfall is likely.
- In Somalia, a worst case scenario is a second consecutive failed agricultural season coupled with declining purchasing power and access constraints which could lead to a dramatic increase in food insecurity and malnutrition with a possibility of Famine (IPC Phase 5).

Risk ranking:
High

3 Recommended early actions

To protect vulnerable livelihoods from the brunt of the drought impact in March/April, the following activities are recommended to be carried out in the January – March period:

- Emergency livestock support including provision of feed, water and veterinary care;
- Support quick growing fodder and feed production in reliably irrigated areas;
- Implement cash-for-work programmes to rehabilitate water sources and provide people the means to procure food;
- Provide unconditional cash, combined with in-kind productive assets and training (“Cash+”) to meet immediate needs and restore livelihoods;
- Support pastoral communities advising them on the potential application of commercial destocking practices;
- Support livestock marketing associations to safeguard trade and market functioning;
- Plan, procure and distribute ahead of the critical 2017 planting season to allow farmers and agro-pastoralists in the worst-affected areas to benefit from the March – May/June 2017 Gu season; and
- Supply diversified livelihood inputs (i.e. riverine fishing kits) to boost nutrition and bridge the hunger gap before the main 2017 harvest.
Drought and localized floods
Food security deterioration in areas with limited food access or availability

1 Risk overview

Southern Africa has reached the peak of the lean season following the worst El Niño-induced drought in decades. With food stocks depleted due to poor or failed harvests as a result of the drought, some 13.8 million people are estimated to be in need of humanitarian assistance, mainly due to increased needs in Madagascar, Malawi, Mozambique and Zimbabwe. The situation also remains severe in Lesotho, Swaziland and Angola.

Food prices mostly remain high owing to tight supplies and currency depreciations, therefore decreasing household’s purchasing power. The sub-region has also experienced high livestock mortality rates as a result of high disease prevalence, lack of water and poor-quality rangelands.

The acutely stressed situation is expected to continue throughout the lean season until March 2017. Countries of particular concern are:

- **Southern Madagascar**, where localized crop losses and reduced access to food are at critical levels. Overall, an estimated 849,000 people are currently in Crisis (IPC Phase 3) and Emergency (IPC Phase 4).
- **Malawi** has the highest caseload of people severely food insecure in the region. The Malawi Vulnerability Assessment Committee estimates 6.7 million people require food assistance during the lean season.
- In **Zimbabwe**, an estimated 4 million people are severely food insecure – nearly 28 percent of the population. Food security issues are further compounded by political and socio-economic turmoil.
- In **Mozambique**, an estimated 2.3 million people are currently severely food insecure (IPC Phase 3 and 4). Political tensions have further impacted food accessibility.

2 Potential impact

The cropping season is generally progressing well, with good rains reported in most areas and wetter conditions forecasted to continue for the remainder of the season. Crop conditions appear to be significantly better compared with the previous year. However, the planted area is expected to be constrained mainly due to the lack of quality seeds, which could negatively weigh on production outcomes. Heavy rains were also received in some central areas since late December, raising the possibility of flooding. In Zambia and Zimbabwe, localized armyworm outbreaks have been reported.

There is a high risk of further deterioration of food security in areas with limited food access and availability, until harvests begin in March 2017. Furthermore, if livelihood recovery does not occur during the current planting season, the crisis could protract into 2017/2018.

3 Recommended early actions

The following initiatives should be considered from January to March 2017:

**Support the current cropping season:**
- Disseminate information to communities on water availability and management techniques and support small-scale irrigation;
- Promote water harvesting activities and water conservation techniques, including mulching;
- Distribute fertilizers and other agricultural inputs (based on country-level assessments and need); and
- Promote post-harvest management and handling techniques to ensure preservation of harvested crops for enhanced food security.

**Support the livestock sector:**
- Provide subsidized supplementary feeds, fodder, hay and water (e.g. through bulk water trucking to critically affected areas, borehole drilling, etc.);
- Destock and/or relocate animals to areas where water and grazing are available to relieve grazing pressure and save core breeding herds;
- Establish pasture fields and/or fodder banks, using drought tolerant fodder species and improved feed management practices;
- Restock livestock, mainly with small stock, in areas that experienced high livestock mortality rates;
- Increase surveillance of transboundary animal diseases and zoonosis; and
- Increase veterinary service delivery (vaccinations, treatment, etc.) to weakened livestock.

**Support horticulture:**
- Provide small-scale water harvesting and drought-resilient gardening technologies (keyhole/trench gardens).
Projected acute food insecurity situation in the Grand Sud of Madagascar
Projected IPC acute analysis (January - March 2017)

Source: IPC (2016)

Acute food insecurity situation in Mozambique
Projected IPC acute analysis (October 2016 - March 2017)

Source: IPC (2016)
Acute food insecurity situation in Swaziland
Projected IPC acute analysis (October 2016 - February 2017)

Source: IPC (2016)

Acute food insecurity situation in Lesotho
Projected IPC acute analysis (October 2016 - March 2017)

Source: IPC (2016)

Acute Food Insecurity situation in Zimbabwe
Projected IPC Acute Analysis (July 2016 - March 2017)

Source: IPC (2016)
Conflict
Potential further deterioration of food security due to conflict

1 Risk overview

- The conflict is likely to continue to generate a very insecure and volatile situation in the forthcoming months, with severe repercussions on the humanitarian situation and food security.
- Some 7 million people in Syria are projected to be food insecure in 2017 and an additional 2 million are at risk of food insecurity.
- The agriculture sector still sustains a large share (estimated at around 50 percent) of the in-country food supply, representing a critical safety net for households and therefore is an operational priority. However, the six years of conflict have severely affected the sector.
- In 2016, sharp falls in the planted area and average harvest have been registered. An estimated 900,000 ha of wheat were planted, compared with the 1.5 million ha planted before the crisis.
- Agriculture-based livelihoods face severe constraints across the value-chain – from production to market – including reduced availability and increased costs of farming inputs (seeds, fertilizers, animal feed, veterinary supplies), damage to farming equipment and infrastructure (irrigation, storage and seed processing facilities), internal population displacement and restricted access to land due to conflict.
- The food security situation is also worrying among IDPs and Syrian refugees in neighbouring countries, who rely heavily on food assistance. Across four of the principal host countries of Syrian refugees (Egypt, Jordan, Lebanon and Turkey), majority of the refugee population are food insecure.

2 Potential impact

- The food security situation is likely to deteriorate, particularly where humanitarian assistance is restricted, such as in Aleppo, in the Islamic State of Iraq and the Levant (ISIL)-controlled areas and conflict zones. It is estimated that 4.9 million people in need of humanitarian assistance are residing in besieged and hard-to-reach areas. The situation will likely be further compounded by continuous displacement.
- The context will worsen if farmers engaged in the ongoing wheat and barley cropping seasons fail to receive adequate support and/or are affected by conflict and insecurity.

3 Recommended early actions

Early actions should be tailored to the situation existing in different parts of the country. In this regard there are broadly three main scenarios:

- Governorates not heavily affected by the conflict (e.g. Tartous and Latakia);
- Governorates directly affected but where the situation shows some signs of improvement (e.g. Homs and Hama); and
- Governorates where the situation continues to be directly and significantly affected by the conflict (e.g. Aleppo, Idlib, Deir ez-Zor and Al Raqq).

The following recommendations should be considered:

- Provide inputs to support agriculture-based livelihoods through backyard food production (vegetable and poultry);
- Rehabilitate damaged infrastructure, particularly irrigation, through cash-based interventions where the security situation allows;
- Support livestock producers by supplying feed, vaccines and other inputs; and
- Restock small ruminants in stable areas to initiate rehabilitation of depleted rural asset bases.
Conflict and civil society unrest

1 Risk overview

- In addition to a context of protracted conflict in the eastern provinces and a severe humanitarian situation, a combination of political unrest and protests linked to delayed elections has triggered violence in the country’s capital Kinshasa.
- According to the IPC Acute Food Insecurity Analysis, an estimated 6 million people – nearly 8 percent of the total rural population – are severely food insecure (IPC Phases 3 and 4).
- Conflict, particularly in the eastern parts of the country, has led to massive displacement of an estimated 1.9 million people. In addition, the country is hosting approximately 449,764 refugees from neighbouring crisis-affected Central African Republic, South Sudan and Burundi.
- Harvesting of the main 2016 maize crop was completed in November in northern areas and is well underway in central regions. In southern uni-modal rainfall areas, harvesting of maize crops will take place from March 2017. Vegetation conditions benefitted from favourable weather conditions in most cropping areas, except the southernmost Haut Katanga province where early season dryness delayed planting operations.
- Agricultural operations were negatively affected by civil insecurity. For instance, armed clashes have affected around 100,000 individuals, particularly in Kasaï-Central province, causing the destruction of standing crops and food stocks.
- Epizootic ulcerative syndrome, an aquatic disease, is very likely to further spread to other parts of the country and potentially to other parts of Africa in the upcoming months through rainfall, flooding, poor biosecurity, movement of infected fish and possibly birds.
- Humanitarian access remains constrained due to insecurity, especially in North Kivu, South Kivu and Katanga.
- Prolonged low prices of key export products for the national economy, such as copper and oil, have contributed to the reduction of the country's foreign reserves and governmental revenues.

2 Potential impact

- The deal reached at the end of 2016 on the political transition process could prevent further violence that has the potential to increase insecurity and displacement. This could hamper food access and availability, and exacerbate issues linked to the critical humanitarian situation.
- The influx of refugees and persistent population movements could further strain humanitarian resources and hinder the delivery of assistance from January 2017 onwards.

3 Recommended early actions

Taking into account contextual diversities, access constraints and conflict-sensitivity, coordinated and need-based actions should focus on reinforcing and restoring local livelihood systems and market access in an effort to contribute to sustainable peace and reconciliation. Among the various options, priority actions should be to:

- Focus livelihood interventions on key target groups, namely displaced people, returnees, refugees and host families, especially the most vulnerable (women, youth and former soldiers);
- Improve access to resources and training programmes, notably for women, focused particularly on the processing and marketing of agriculture produce; and
- Increase access to markets and food products through the establishment of storage facilities (i.e. community granaries and small warehouses) and improvement of infrastructures linking production areas to key markets.
IRAQ

Conflict
Conflict and insecurity impacting agriculture in key producing regions

1 Risk overview

- The escalation of conflict, particularly in the city of Mosul, has resulted in widespread displacement and the breakdown of key agriculture systems in surrounding areas.
- As many as 2.9 million people are currently food insecure, including 1.5 million facing increasing food insecurity conditions due to depleted coping strategies, conflict and disruption to livelihood activities.
- Intensified conflict since the Mosul assault of 17 October 2016 has resulted in the current new displacement of more than 160 000 IDPs along the Mosul corridor, where fighting has exacerbated in the past months with larger displacements expected to continue as the situation escalates.
- The ongoing battle for Mosul has hampered planting activities in the area, particularly leading up to the wheat and barley cropping season (November – March 2017). This region usually produces over 25 percent of Iraqi wheat and around 40 percent of barley. Production of both commodities has now shifted from Nineveh to Wasit, Salahadine and Anbar provinces due to insecurity.
- The resumption of agricultural activities is hampered by the damage that the conflict has had on the sector. An FAO assessment conducted in 2016 in areas previously under ISIL control found extensive damage – leading to reduced productivity – to agricultural land. Furthermore, loss of livestock, agricultural equipment, damage to irrigation systems and the presence of improvised explosive devices are hindering farmers.
- Many pastoralists were forced to flee conflict affected areas with their livestock, often relocating outside IDP camps or rural areas without the adequate resources to provide feed, water and veterinary care for their animals.
- A reduced public budget resulted in disruptions to the Government’s Public Distribution System, the main source of food for the poorest of Iraqis, and consequently increasing the vulnerability of the affected population.

2 Potential impact

- As conflict extends into 2017, its impacts on the ongoing agricultural season and pastoralists are likely to persevere and increase the need for humanitarian assistance.
- Assistance to displaced populations – currently 3.1 million IDPs – will remain an issue in the coming six months, as well as for the current 1.3 million returnees, mainly to Anbar and Salahadin Governorates.

3 Recommended early actions

To support agricultural activities and avoid further deterioration of the food security situation, the recommended initiatives in newly retaken territories are:

- Agriculture:
  - Supply agricultural inputs (mostly seeds, fertilizer and tools);
  - Distribute bee hives, equipment for greenhouses and fruit tree nursery, including drip irrigation systems;
  - Rehabilitate water wells and associated irrigation infrastructure and replace stolen and broken pumps;
  - Replace egg incubators for poultry production.
- Livestock:
  - Supply fodder and vaccines to pastoralists and set up mobile veterinary clinics to assist pastoralists in the rural areas where they relocated with their stock and in IDP camps;
  - Rehabilitate poultry houses and greenhouses; and
  - Replace egg incubators for poultry production.

Roadmap to Global Food Security

January to March 2017

Food and Agriculture Organization of the United Nations
Rome, 2017

Global Early Warning Early Action Report on Food Security and Agriculture
January to March 2017
Cyclone
Deteriorating food security due to the impact of Hurricane Matthew

### Risk overview
- Hurricane Matthew caused widespread devastation in southwestern Haiti during the country’s second main harvest time in October 2016. This caused a major setback to agricultural production with over USD 580 million in losses, driving an increase in food insecurity.
- Over 1.4 million people are in need of food assistance, of which more than 800 000 people are in urgent need of food aid and some 600 000 base their livelihood exclusively on agriculture.
- In the heaviest-hit areas – including Grand’Anse, parts of Nippes, and Sud departments – over 75 percent of the population is struggling with the impact of the hurricane, as livelihoods based on agriculture, livestock and fisheries were almost completely destroyed.
- The hurricane interrupted a period of much-needed recovery following El Niño-fuelled drought conditions throughout 2015 that caused the crop production to plummet by 50 percent (against a five year average).
- Haiti’s cereal production for 2016 was revised downward by 188 000 tonnes. According to a November 2016 market assessment, availability of local food produce in markets was low and trade was still hampered by infrastructure constraints. Food prices increased by 15-25 percent in the immediate aftermath of the hurricane in affected regions, especially in the Grand Anse Department. The flow of humanitarian aid, imports and recent harvested products from non-affected departments have subsequently eased price levels.

### Potential impact
- The hurricane has affected the ongoing harvest and, with the destruction of a large part of seed stocks, compromised the critical winter planting season (from November onwards) which include roots, tubers and maize – the main staples of the affected southern departments.
- While food assistance and emergency agriculture support are the priority in the coming months, supporting the main planting season in 2017 will be critical, especially to allow poor households in southwestern Haiti to cultivate crops and improve food access.

### Recommended early actions
In addition to providing life-saving assistance, the priority in the next 3–4 months is to support the restoration of agriculture-based livelihoods in the affected rural areas in time for the main planting season of maize, rice and beans from March onwards. Therefore, the recommendations are to:
- Distribute agricultural inputs (seeds, fertilizers and planting material) to contain food prices and improve the food security of the affected population;
- Restore livestock production through the provision of small livestock or cash transfer schemes;
- Rehabilitate rural assets and small irrigation infrastructures; and
- Support affected fishermen by replacing fishing equipment.
Risk ranking:
On watch

1 Risk overview

- Bolivia’s long-lasting drought, the worst in the last 25 years, is impacting the agriculture sector, rural livelihoods and water availability in most of the major cities. While it started in May 2015 as a meteorological drought, the situation now has worsened into a hydrological drought. As a consequence, the Government declared a national state of emergency on 21 December to support affected households affected and avoid further escalation of the issue.
- The drought has affected rural households particularly in the La Paz, Cochabamba, Oruro, Potosi, Chuquisaca and Santa Cruz Departments.
- The damage reported by the Government indicates that drought has affected 177,441 families in 173 municipalities (51 percent of the municipalities in Bolivia), and 624,288 ha of crop land cattle.
- FAO GIEWS estimates that due to the impact of drought and high pest infestations on crop land in 2016, the aggregate cereal production is at a sharply reduced level (less than 2 million tonnes) – its lowest level in over five years. While official figures are not yet available, producer organizations report losses up to USD 485 million.
- Maize prices consistently increased throughout most of 2016 and were more than 75 percent above their year earlier levels at the end of the year.
- The drought has also severely impacted the livestock sector. Nationally, an estimated 565,517 heads of cattle have been lost. The most critical losses were reported in the Oruro Department, where more than 200,000 heads of cattle have died, including camelids. Losses were also reported in the Beni Department.

2 Potential impact

- Dry conditions in the last quarter of 2016 also affected planting of several summer crops (maize, wheat, quinoa and potatoes), which represent the main sources of food and revenue for rural households in production areas of the Andean plateau and valleys region. Severe dryness was still reported in some of the major production areas of the country, such as Santa Cruz.
- Furthermore, the National Service of Hydrology and Meteorology forecasts a continuation of dry conditions for January and February 2017, especially in the west of the country.
- The ongoing hydrological drought could further impact the growing stages of crops, pasture availability and fodder production. This situation, following poor seasons in 2015 and 2016, could compromise agriculture prospects for 2017, and have serious consequences for the food security and livelihoods of rural dwellers.

3 Recommended early actions

While assessments on the ground are required to ascertain the outcome of the planting and the ongoing food security and nutritional status, several activities could be implemented to reduce the impact of drought in 2017:

- Provide assistance by way of conditional cash or voucher transfers to affected households to purchase productive assets (fodder, water dispensers for cattle and seeds of traditional crops like potatoes, bean, barley and vegetables) and/or increase water conservation and availability at household level;
- Implement cash-for-work initiatives targeting the rehabilitation of irrigation infrastructures (cleaning of debris, etc.) and wells;
- Strengthen water availability for livestock through the rehabilitation of water-holes and potentially water-trucking;
- Plan animal disease screening and treatment in the areas most affected by drought;
- Support households through the establishment of water harvesting systems; and
- Carry out field assessments to better ascertain the impact of drought on agriculture and devise appropriate livelihood rehabilitation strategies.
Conflict, displacement and dry conditions

1 Risk overview

- The recent increase of returnees from Pakistan is happening against the backdrop of conflict and dry conditions impacting the start of the winter agricultural season. The Food Security and Agriculture Cluster estimates that 3.1 million people will be in need of assistance through 2017.
- Ongoing violence has halted the recent harvest as farmers flee the fighting, causing food shortages. Areas of greatest concern for conflict-related food insecurity include Nangarhar, Hilmand, Farah, Faryab, Badghis, Sari Pul, Kunduz, Badakhshan and Zabul provinces, where control measures on the movement of people and goods are limiting the ability of households to maintain normal livelihood activities.
- Changes in refugee policies in Pakistan have led to steep increases in returnees. By the end of 2017, over 662,000 undocumented Afghans would have returned to Afghanistan. This will put a strain on local resources, particularly in the eastern province of Nangarhar.

2 Potential impact

- Food insecurity is likely to rise among newly displaced people and undocumented returnees from Pakistan, as well as among poor households in the Central highlands in north-astern agro-pastoral areas, particularly during the peak of the lean season. New displacements are predicted to reach 100,000 per month.
- Below-average rainfall, which has been reported in all but four provinces, partially impacted planting of winter crops in late 2016. Close monitoring of forecasts is needed, as the ongoing weak La Niña phenomenon might affect the remainder of the season with below-average rainfall.

3 Recommended early actions

To support smallholder farmers and rural communities impacted by conflict, as well as IDPs and returnees, through intensification of production and diversification of livelihoods, the following initiatives are recommended:

- Livestock:
  - Provide inputs for stock protection (animal feed, vaccines, de-wormers and emergency animal shelters) through the winter feeding season;
  - Increase provision of technical assistance and animal health support for pastoralists;
  - Support women-headed households and landless marginal groups in rearing small-livestock, such as poultry, through inputs and training;

- Agriculture – in particular, foresee increased support to returnees and farming communities affected by conflict, who have missed the autumn wheat plantation, through:
  - Provision of inputs (certified seeds of vegetables, pulses and cereal crops, fertilizers, hand tools) and technical assistance for spring 2017 planting season.
Conflict and high food prices

1 Risk overview

- The number of severely food insecure people is still very high as a consequence of displacement, reduced harvests and poor macroeconomic conditions. While the latest IPC report of August 2016 estimated 1.1 million people to be in Crisis (IPC Phase 3) and about 350 000 people in Emergency (IPC Phase 4), recent qualitative assessments have indicated a potential increase to over 2 million people severely food insecure. The deterioration of the situation has been primarily observed in the northern and eastern part of the country.
- Food security is deteriorating as households have already exhausted their food stocks, while opportunities of non-farming income are seriously reducing due to unfavourable socio-economic context. In addition, a decreasing trend of food availability and accessibility has also been observed.
- Cereal production in 2016 was slightly below the five year average, however production losses were higher in crisis-affected Rumonge, Bujumbura, Muyinga, Kirundo and Makamba provinces.
- In addition, irregular and limited rainfall and climatic hazards have either delayed planting activities or severely affected standing crops (particularly maize and beans) of season 2017A. This has led to the displacement of more than 11 000 households from Kirundo, Ruyigi, Cankuzo, Muyinga and Rutana, mainly along the Burundi-Tanzania border, in search of other livelihood and food opportunities.
- The continuing depreciation of the currency and the decreasing foreign reserves are severely reducing the country’s capacity to import food and agriculture inputs. Trade with neighbouring countries is partially disrupted due to trade restrictions, further impacting the income of small-scale farmers.
- Displacement has steadily grown with approximately 326 000 refugees in nearby countries and an estimated 139 000 IDPs in Burundi.

2 Potential impact

- The late start and potentially below-average production of season 2017A could have consequential effects on the next cropping season. Respectively, by delaying land preparation for season 2017B – normally starting in February – and reducing seed availability. These dynamics could aggravate food insecurity, since season 2017B is the most important of the year corresponding to more than 50 percent of total crop production.
- Disruption of markets, farming activities and livelihoods, coupled with limited humanitarian assistance, lack of off-farm income and declining food import capacity continue to seriously affect food security conditions of households, especially in Kirundo, Muyinga, Rutana and Makamba as well as near Bujumbura.

3 Recommended early actions

To support the next 2017B planting season, the recommended actions are to:

- Plan and implement targeted support to vulnerable farmers for the planting of season 2017B through the provision of quality seeds and planting materials resistant to drought and plant pest, as well as small livestock manure to improve productivity;
- Supply certified crop protection products and fertilizer;
- Promote biological control to limit the impact of plant pest and diseases, and support production. Such initiatives should be implemented with appropriate training;
- Promote high labour intensity cash-for-work initiatives in the areas of land restoration and natural resources protection targeting vulnerable people; and
- Support farmers’ groups in the multiplication and distribution of improved/certified seeds and planting materials.

To support households’ livelihood and income, the recommended actions are to:

- Advocate for a free cross-border trade among neighbouring countries;
- Facilitate linkages between producers and consumers through:
  - market information dissemination; and
  - rehabilitation of infrastructures (storage and transport facilities, feeding roads, etc.) through cash-for-work initiatives targeting vulnerable households.
- Provide small livestock to restore household assets; and
- Support short-term income generating activities that require limited access to land and water, such as kitchen gardens and mushroom production.
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)
  - Famine Early Warning Systems Network (http://www.fews.net)
  - International Research Institute for Climate and Society (http://iri.columbia.edu)

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List of acronyms

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<tr>
<td>CH</td>
<td>Cadre Harmonisé</td>
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<td>EWEA</td>
<td>Early Warning - Early Action</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FCC-EMPRES</td>
<td>Food Chain Crisis - Emergency Prevention System</td>
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<td>FSL</td>
<td>Food Security and Livelihoods</td>
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<td>GIEWS</td>
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<td>IDP</td>
<td>Internally Displaced Person</td>
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<td>IPC</td>
<td>Integrated Food Security Phase Classification</td>
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<td>ISIL</td>
<td>Islamic State of Iraq and the Levant</td>
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Contact:
Early Warning – Early Action Team
ewea@fao.org