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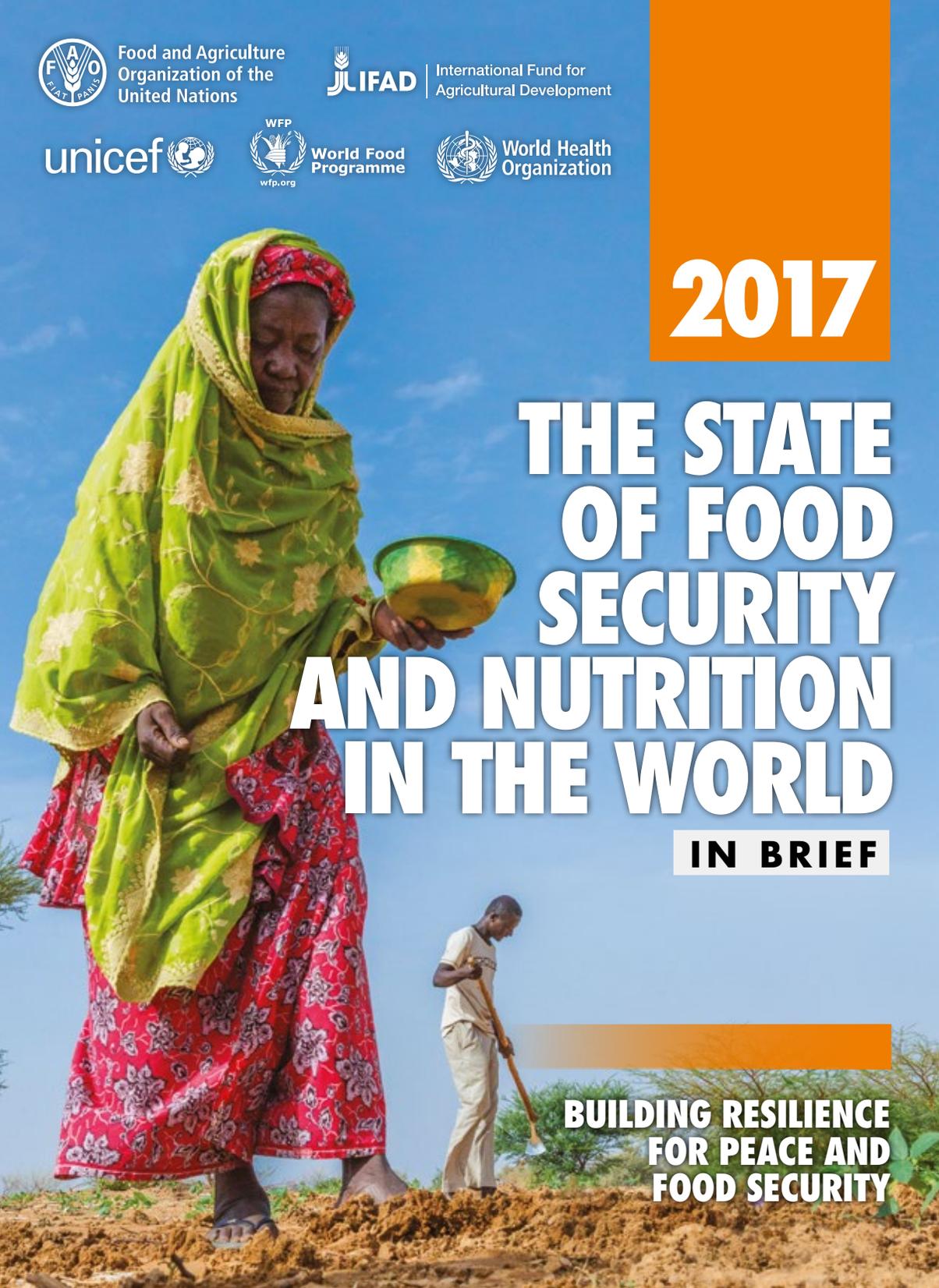


World Food  
Programme



World Health  
Organization

**2017**



**THE STATE  
OF FOOD  
SECURITY  
AND NUTRITION  
IN THE WORLD**

**IN BRIEF**

**BUILDING RESILIENCE  
FOR PEACE AND  
FOOD SECURITY**

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This booklet contains the key messages and content from the publication *The State of Food Security and Nutrition in the World 2017*. The numbering of the tables and figures corresponds to that publication.

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**GAFATI, NIGER.** A mother and her son cultivating the family farmland and planting groundnuts.

©FAO/Andrew Esiebo

# KEY MESSAGES

→ In 2016 the number of chronically undernourished people in the world is estimated to have increased to 815 million, up from 777 million in 2015 although still down from about 900 million in 2000.

→ After a prolonged decline, this recent increase could signal a reversal of trends. The food security situation has worsened in particular in parts of sub-Saharan Africa, South-Eastern Asia and Western Asia, and deteriorations have been observed most notably in situations of conflict and conflict combined with droughts or floods.

→ Multiple forms of malnutrition coexist, with countries experiencing simultaneously high rates of child undernutrition, anaemia among women, and adult obesity. Rising rates of overweight and obesity add to these concerns. Childhood overweight and obesity are increasing in most regions, and in all regions for adults.

→ The number of conflicts is also on the rise. Exacerbated by climate-related shocks, conflicts seriously affect food security and are a cause of much of the recent increase in food insecurity.

→ Conflict is a key driver of situations of severe food crisis and recently re-emerged famines, while hunger and undernutrition are significantly worse where conflicts are prolonged and institutional capacities weak.

→ Addressing food insecurity and malnutrition in conflict-affected situations cannot be “business as usual”. It requires a conflict-sensitive approach that aligns actions for immediate humanitarian assistance, long-term development and sustaining peace.

→ This report sends a clear warning signal that the ambition of a world without hunger and malnutrition by 2030 will be challenging — achieving it will require renewed efforts through new ways of working.

# FOREWORD

**T**he transformational vision of the 2030 Agenda for Sustainable Development calls on all countries and stakeholders to work together to end hunger and prevent all forms of malnutrition by 2030. This ambition can only be fulfilled if agriculture and food systems become sustainable, so that food supplies are stable and all people have access to adequate nutrition and health. The start of the 2030 Agenda coincided with the launch of the United Nations Decade of Action on Nutrition (2016–2025), adding impetus to these commitments by providing a time-bound, cohesive framework for action.

This year's edition of *The State of Food Security and Nutrition in the World* marks the beginning of a new era in monitoring the progress made towards achieving a world without hunger and malnutrition, within the framework of the Sustainable Development Goals (SDGs). Specifically, the report will henceforth monitor progress towards both the targets of ending hunger (SDG Target 2.1) and all forms of malnutrition (SDG Target 2.2). It will also include thematic analyses of how food security and nutrition are related to progress on other SDG targets. Given the broadened scope to include a focus on nutrition, UNICEF and the World Health Organization (WHO) have joined the traditional partnership of FAO, IFAD and WFP in preparing this annual report. We hope our expanded partnership will result in a more comprehensive and integral understanding of what it will take to end hunger and all forms of malnutrition, and in more-integrated actions to achieve this critical goal.

The challenges we face are significant. As shown in Part 1 of the report, a key worrisome finding is that after a prolonged decline, the most recent estimates indicate that global hunger increased in 2016 and now affects 815 million people. Moreover, although still well

below levels of a decade ago, the percentage of the global population estimated to be suffering from hunger also increased in 2016. In parts of the world, this recent surge in hunger reached an extreme level, with a famine declared in areas of South Sudan in early 2017 and alerts of high risk of famine issued for three other contexts (northeast Nigeria, Somalia and Yemen).

In 2016, the food security situation deteriorated sharply in parts of sub-Saharan Africa, South-Eastern Asia and Western Asia. This was most notable in situations of conflict, in particular where the food security impacts of conflict were compounded by droughts or floods, linked in part to the El Niño phenomenon. However, worsening food security conditions have also been observed in more peaceful settings, especially where economic slowdown has drained foreign exchange and fiscal revenues, affecting both food availability through reduced import capacity and food access through reduced fiscal space to protect poor households against rising domestic food prices.

The rising trend in undernourishment has not yet been reflected in rates of child stunting, which continue to fall. Nonetheless, the world is still home to 155 million stunted children. Levels of child stunting are still unacceptably high in some regions, and if current trends continue, the SDG target on reducing child stunting by 2030 will not be reached. Wasting also continues to threaten the lives of almost 52 million children (8 percent of children under five years of age), while childhood overweight and obesity rates are on the rise in most regions and in all regions for adults – all of which highlights the multiple burden of malnutrition as a cause for serious concern.

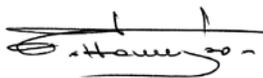
The failure to reduce world hunger is closely associated with the increase in conflict and violence in several parts of the world. Part 2 of this year's report attempts to provide a clearer understanding of the nexus between conflict and food security and nutrition, and to demonstrate why efforts at fighting hunger must go hand-in-hand with those to sustain peace. Over the past decade, conflicts have risen dramatically in number and become more complex and intractable in nature. Some of the highest proportions of food-insecure and malnourished children are found in countries affected by conflict, a situation that is even

more alarming in countries characterized by prolonged conflicts and fragile institutions. This has set off alarm bells we cannot afford to ignore: we will not end hunger and all forms of malnutrition by 2030 unless we address all the factors that undermine food security and nutrition. Securing peaceful and inclusive societies (SDG 16) is a necessary condition to that end.

We are more determined and committed than ever to step up concerted action to fulfil the ambitions of the 2030 Agenda and achieve a world free from hunger, malnutrition and poverty. Ending hunger and all forms of malnutrition is an ambitious goal, but it is one we strongly believe can be reached if we strengthen our common efforts and work to tackle the underlying causes that leave so many people food-insecure, jeopardizing their lives, futures, and the futures of their societies. It is clear that conflict is a significant challenge to meeting this goal and will require multisector humanitarian, development and peace strategies that address immediate needs while making the necessary investments to build resilience for lasting peace and food security and nutrition for all.



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**BUJUMBURA, BURUNDI**

A woman receiving seed rations at a rural seed fair.  
©FAO/Giulio Napolitano

# PART 1

## FOOD SECURITY AND NUTRITION AROUND THE WORLD IN 2017

### KEY MESSAGES

- Much of the recent increase in food insecurity can be traced to the greater number of conflicts, often exacerbated by climate-related shocks.
- The worrying trend in undernourishment is not yet reflected in levels of chronic child malnutrition (stunting), which continue to fall – but at a slower rate in several regions.
- Wasting continues to threaten the lives of almost 52 million children (8 percent).
- Child overweight and adult obesity are on the rise, including in low- and middle-income countries.
- Almost one-third (33 percent) of women of reproductive age worldwide suffer from anaemia, which also puts the nutrition and health of many children at risk.

### OVERVIEW

*The State of Food Security and Nutrition in the World 2017* marks the start of a new era in monitoring progress towards achieving a world without hunger and malnutrition – an aim set by the 2030 Agenda for Sustainable Development (2030 Agenda).

This report monitors progress towards ensuring access to food for all (SDG Target 2.1), and putting an end to all forms of malnutrition (SDG Target 2.2). For the first time, this year's report provides two measures of food insecurity. FAO's traditional indicator of the extent of hunger – the prevalence of undernourishment (PoU) – is complemented by the prevalence of severe food insecurity, which is estimated based on data collected from adult individuals worldwide using the Food Insecurity Experience Scale (FIES). The FIES is a new tool to measure people's ability to access food, based on direct interviews. In addition, the report assesses the trends for six nutrition indicators, including three SDG 2 indicators of child malnutrition (stunting, wasting and overweight).

Given its enhanced scope, the traditional partnership of FAO, IFAD and WFP in preparing this report has been expanded to bring in the knowledge and expertise of UNICEF and WHO as well.

## AFTER A PROLONGED DECLINE, WORLD HUNGER APPEARS TO BE ON THE RISE AGAIN

In 2016, the number of undernourished people in the world increased to an estimated 815 million, up from 777 million in 2015 but still down from about 900 million in the year 2000. The recent increase is cause for great concern and poses a significant challenge for international commitments to end hunger by 2030.

This sobering news comes in a year in which famine was declared in one country and crisis-level food insecurity situations at risk of turning into famines were identified in several others. The food security situation has visibly worsened in parts of sub-Saharan Africa and South-Eastern and Western Asia. Deteriorations have been observed most notably in situations of conflict, often compounded by droughts or floods (linked in part to the El Niño phenomenon).

### Prevalence of undernourishment (PoU)

The most recent PoU estimates show that, despite significant population growth, the share of undernourished people in the world decreased from 14.7 percent in 2000 to 10.8 percent in 2013 (Figure 1). However, this rate of reduction has slowed significantly recently, coming to a virtual halt between 2013 and 2015. Most worryingly, FAO estimates for 2016 indicate that the global prevalence of undernourishment in 2016 may have actually risen to 11 percent, implying a return to the level reached in 2012 and suggesting a possible reversal of the downward trend sustained over recent decades.

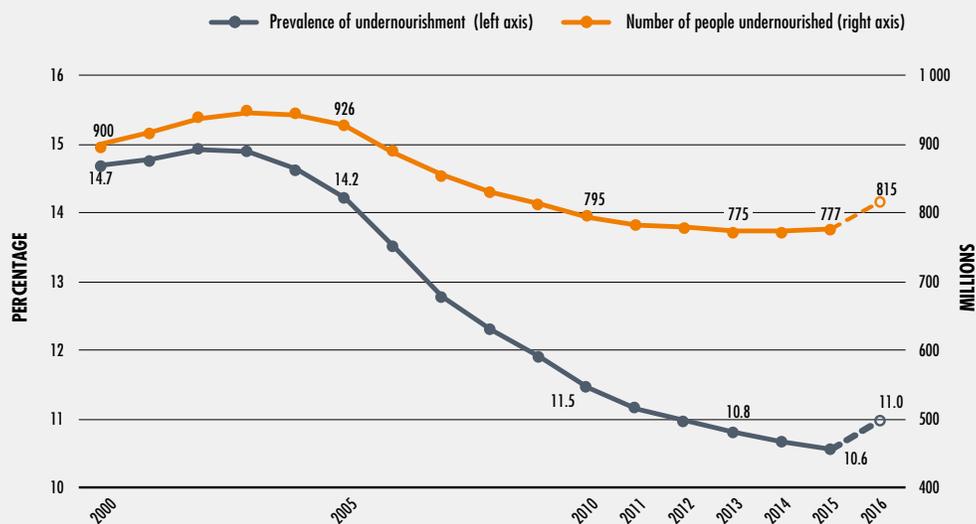
The absolute number of people in the world affected by chronic food deprivation began to rise in 2014 – going from 775 million people to 777 million in 2015 – and is now estimated to have increased further, to 815 million in 2016. Sub-Saharan Africa remains the region with the highest PoU, affecting an alarming 22.7 percent of the population in 2016. The situation is especially urgent in Eastern Africa, where one-third of the population is estimated to be undernourished.

Owing in part to the size of its population, the highest number of undernourished people is in Asia. FAO estimates that in 2016 almost 520 million people in Asia, more than 243 million in Africa, and more than 42 million in Latin America and the Caribbean did not have access to sufficient food energy (Figure 2).

**SUB-SAHARAN AFRICA REMAINS THE REGION WITH THE HIGHEST POU, affecting an alarming 22.7 percent of the population in 2016. The situation is especially urgent in Eastern Africa, where one-third of the population is estimated to be undernourished.**

### The Food Insecurity Experience Scale (FIES)

The FIES is a new source of additional evidence on the state of food security. Data collected by FAO in 2014, 2015 and 2016 in almost 150 countries reveal that nearly one in ten people in the world (9.3 percent) suffered from severe food insecurity, corresponding to about 689 million people. Africa has the highest levels of severe food insecurity, reaching 27.4 percent of the population – almost four times that of any other region in 2016. It is also one of the

**FIGURE 1** THE NUMBER OF UNDERNOURISHED PEOPLE HAS BEEN ON THE RISE SINCE 2014, REACHING AN ESTIMATED 815 MILLION IN 2016

NOTE: Prevalence and number of undernourished people in the world, 2000–2016. Figures for 2016 are projected estimates.  
SOURCE: FAO.

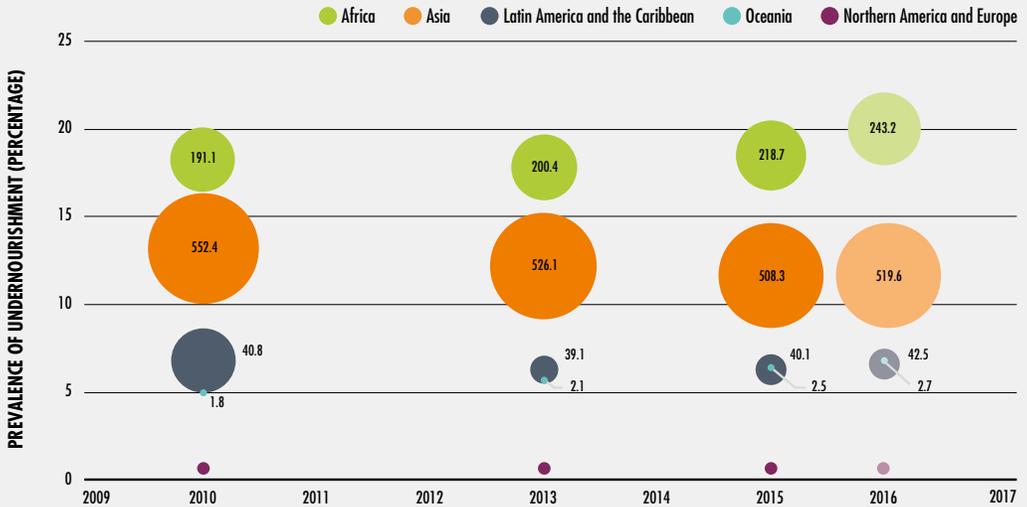
regions where food insecurity is on the rise, particularly in sub-Saharan Africa, with an increase of almost three percentage points from 2014 to 2016.

Higher food insecurity was also observed in Latin America over the three-year period, rising from 4.7 percent to 6.4 percent. In Asia, the prevalence of severe food insecurity decreased slightly between 2014 and 2016, from 7.7 percent to 7.0 percent overall, driven mainly by the reduction observed in Central Asia and Southern Asia.

## CHILD UNDERNUTRITION CONTINUES TO DECLINE, BUT LEVELS OF OVERWEIGHT AND OBESITY ARE INCREASING

However, the worrisome trend in undernourishment is not reflected in nutritional outcomes. Evidence on various forms of malnutrition points to continued decreases in the prevalence of child stunting, as reflected in global and regional averages. At the same time, overweight among children under five is becoming more of a problem

**FIGURE 2** THE PREVALENCE OF UNDERNOURISHMENT IS HIGHEST IN AFRICA; THE ABSOLUTE NUMBER OF UNDERNOURISHED PEOPLE IS LARGEST IN ASIA



NOTE: Comparison of prevalence and number of undernourished people by region. The size of the circles represents the number of undernourished people in millions, as labelled. Figures for 2016 are projected values.

SOURCE: FAO.

in most regions, and adult obesity continues to rise in all regions. Multiple forms of malnutrition therefore coexist, with countries experiencing simultaneously high rates of child undernutrition and adult obesity.

Sustainable Development Goal 2, Target 2.2, calls for an end to “all forms of malnutrition” by 2030, as does the UN Decade of Action on Nutrition. Malnutrition ranges from severe undernutrition to obesity. It affects populations throughout the lifecycle, from conception through childhood, into adolescence, adulthood and older age. Malnutrition may be a reflection of deficiencies in macronutrients (carbohydrates, fats or proteins) or

micronutrients (vitamins and minerals). It can be acute – resulting from an immediate crisis in food accessibility, inadequate nutrient intake and/or infection – or chronic, with cumulative deleterious effects over sustained periods. Undernutrition, overweight and their associated non-communicable diseases now coexist in many regions, countries and even households. Six nutrition indicators are described below to better understand the multiple burden of malnutrition, which affects all regions in the world.

### Stunting among children under five years of age

Stunting is evidence that children are too short for their age, which in turn is a reflec-

tion of a chronic state of undernutrition. When children are stunted before the age of two, they are at higher risk of illness and more likely than adequately nourished children to develop poor cognitive skills and learning abilities in later childhood and adolescence.

According to the latest estimates for 2016, 155 million children under five years of age across the world suffer from stunted growth. Globally, the prevalence of stunting fell from 29.5 percent to 22.9 percent between 2005 and 2016. However, at current trends, there would be 130 million stunted children by 2025.

Among the key determinants of stunting are: compromised maternal health and nutrition before and during pregnancy and lactation, inadequate breastfeeding, poor feeding practices for infants and young children, and unhealthy environments for children, including poor hygiene and sanitation.

### **Wasting among children under five years of age**

Childhood wasting, or being too thin for one's height, reflects a recent and acute process that leads to weight loss and/or poor weight gain. Wasting usually results from low birth weight, inadequate diet, poor care practices and infections. It is of critical importance due to the consequent heightened risk of disease and death. In 2016, wasting affected 7.7 percent (51.7 million) of children under five years of age worldwide. About 17 million children suffered from severe wasting.

### **Overweight among children under five years of age**

Overweight children are at a higher risk of developing serious health problems, includ-

ing type 2 diabetes, high blood pressure, asthma and other respiratory problems, sleep disorders and liver disease. Childhood overweight also increases the risk of obesity, diet-related non-communicable diseases, premature death, and disability in adulthood.

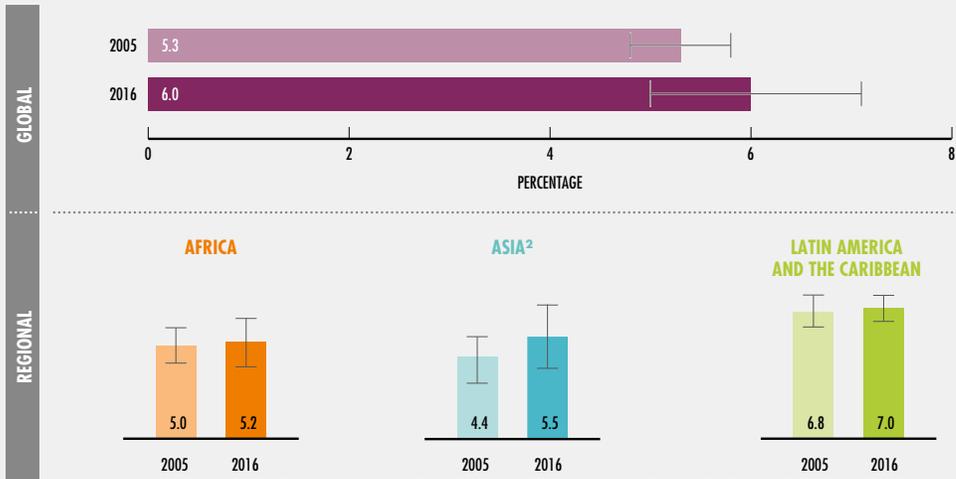
Reversing obesity and overweight is a serious challenge: the emphasis must be on prevention. Worldwide, an estimated 41 million children (about 6 percent) under five were considered overweight in 2016. (Figure 6).

### **Obesity among adults**

Obesity in adults is a major risk factor for non-communicable diseases, including cardiovascular disease, diabetes and some cancers. Non-communicable diseases represent the leading causes of death and illness worldwide and contribute to social inequities. The global prevalence of obesity more than doubled between 1980 and 2014. In 2014, more than 600 million adults were obese, equal to about 13 percent of the world's adult population. The prevalence is higher on average among women (15 percent) than men (11 percent). While it varies widely across regions of the world (Figure 7), the problem is most severe in Northern America, Europe and Oceania, where 28 percent of adults are classified as obese, compared with 7 percent in Asia and 11 percent in Africa. In Latin America and the Caribbean, roughly one-quarter of the adult population is currently considered obese.

### **Anaemia in women of reproductive age**

Anaemia can be the result of eating a diet that is low in micronutrient content (e.g. iron, folate, riboflavin, and vitamins A and B12), acute and/or chronic infections (e.g. malaria, tuberculosis and HIV), other chronic diseases and

FIGURE 6 CHILDHOOD OVERWEIGHT IS ON THE RISE IN VIRTUALLY ALL REGIONS<sup>1</sup>

<sup>1</sup> Prevalence of overweight in children aged under five years, 2005 and 2016.

<sup>2</sup> Asia and Eastern Asia excluding Japan.

SOURCE: UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates, 2017 edition.

cancer, or inherited genetic disorders. Anaemia is thus an indicator of both poor nutrition and poor health. Children and women are particularly vulnerable to anaemia.

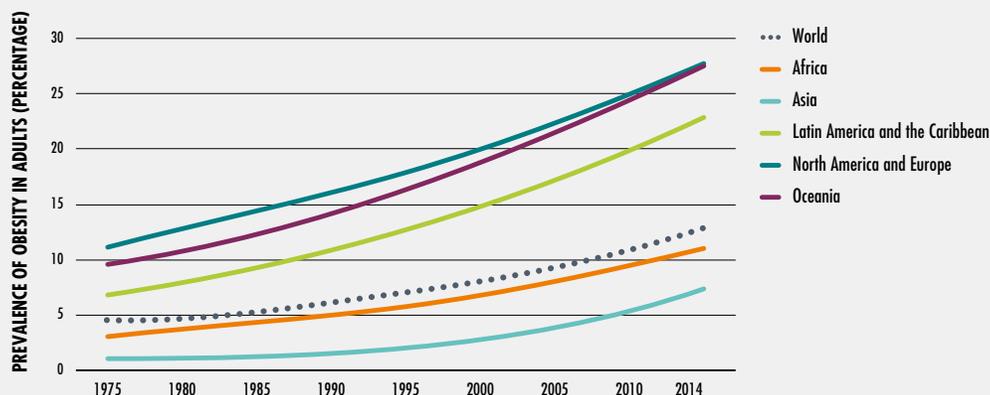
The most recent estimates for 2016 indicate that anaemia affects 33 percent of women of reproductive age globally. In Africa and Asia, the prevalence is highest at over 35 percent. It is lowest in Northern America and Europe, and Oceania (below 20 percent).

### Exclusive breastfeeding for infants under six months of age

Breastfeeding is a cornerstone of child survival and development as it provides essential

irreplaceable nutrition for a child's physical and cognitive growth. Breastfeeding helps to reduce child mortality, improve nutritional status, prevent common childhood illnesses and non-communicable diseases, and improve development and learning. It is considered to be the preventive intervention with the single largest impact on child survival.

Globally, 43 percent of infants younger than six months were exclusively breastfed in 2016, up from 36 percent in 2005. The prevalence of exclusive breastfeeding was highest in Southern Asia (59 percent) and Eastern Africa (57 percent). It is much lower in Latin America and the Caribbean (33 percent),

**FIGURE 7 ADULT OBESITY IS RISING EVERYWHERE AT AN ACCELERATING PACE**

NOTES: Prevalence of obesity in adults 18 years and over, 1975–2014.

SOURCE: WHO/NCD-RisC and WHO Global Health Observatory Data Repository, 2017.

Eastern Asia (28 percent), Western Africa (25 percent), and Western Asia (21 percent).

## PROGRESS HAS SLOWED, NEW CONCERNS HAVE EMERGED

The drivers behind these trends in food insecurity and malnutrition differ from country to country and even within countries. Food systems and diets are changing. As large companies increasingly dominate markets, highly processed foods become more readily available, and traditional foods and eating habits are displaced. Weather-related events – in part linked to climate change – have affected food availability in many countries and contributed to the rise in food insecurity. Economic slowdowns in countries highly dependent on oil and other primary

commodity export revenues have also had an impact on food availability and/or reduced people’s ability to access food.

Malnutrition is not only the result of a lack of access to sufficient, nutritious and safe food. It also derives from a series of interlinked factors related to inadequate access to resources and services, such as quality healthcare, education, drinking-water, sanitation and hygiene. Poor women often face additional hurdles to access resources and services.

Another increasingly important cause of food insecurity and malnutrition is conflict. People living in countries affected by conflict and violence are more likely to be food insecure and malnourished, particularly in those countries characterized by protracted conflict and fragile institutions.



**MOSUL, IRAQ**

Displaced civilians and their  
livestock fleeing fighting in  
early 2017.

©FAO/Cengiz Yar

## PART 2

# CONFLICT, FOOD SECURITY AND NUTRITION: THE IMPERATIVE OF SUSTAINABLE PEACE

### KEY MESSAGES

- The vast majority of the chronically food insecure and malnourished live in countries affected by conflict: an estimated 489 million of 815 million undernourished people and an estimated 122 million of 155 million stunted children.
- In the past decade, conflicts have increased in number and complexity, hampering efforts to end hunger by 2030.
- Hunger and undernutrition are significantly worse where conflicts are prolonged and compounded by weak institutional capacity and/or adverse climate-related events.
- Conflict-sensitive and timely interventions aimed at improving food security and nutrition can contribute to sustaining peace.
- Food insecurity itself can become a trigger for violence and instability, particularly in contexts marked by pervasive inequalities and fragile institutions.

### OVERVIEW

Part 2 of this year's *The State of Food Security and Nutrition in the World* provides a review of the evidence on how conflict affects food security and nutrition, and how deteriorations in food security conditions can exacerbate conflict, particularly when combined with other factors. In addition, it explores how conflict-sensitive approaches to food security and nutrition can make a vital contribution to sustaining peace and preventing conflict.

### WHY FOCUS ON THE NEXUS BETWEEN CONFLICT, FOOD SECURITY AND NUTRITION?

In early 2017, a famine was declared in South Sudan and alerts were issued for high risk of famine-like conditions in northeast Nigeria, in Somalia and in Yemen. Conflict and civil war are common denominators in all these cases, as they are in most other countries facing food crises. Moreover, FAO currently classifies 19 countries with a protracted crisis. All 19 countries are also currently affected by conflict and violence, which is typically compounded by adverse climatic events, such as prolonged droughts, that severely affect food production and livelihoods.

People living in countries affected by conflict are more likely to be food insecure and undernourished. The latest FAO

## BOX 7 SOUTH SUDAN – CRISIS IN AGRICULTURE, FOOD SYSTEMS AND PUBLIC HEALTH

In December 2013, two and half years after South Sudan gained its independence, large-scale violence erupted in the Greater Upper Nile Region and by 2016 had spread to Greater Equatoria and Western Bahr el Ghazal.

The ongoing conflict caused acute food insecurity to increase dramatically, with famine declared in parts of Greater Upper Nile State in February 2017. More than 4.9 million people (over 42 percent of the population) are currently severely food insecure, a number that is projected to increase to 5.5 million in 2017 if the situation is left unaddressed.

Armed conflict and communal violence are destroying rural livelihoods, decimating assets, deepening poverty and increasing the vulnerability of millions of people. Agricultural production and food systems have been disrupted, livestock production has declined significantly, and the spread of violence to cereal surplus-producing areas in Equatoria is severely affecting crop production. Violence is limiting market access and disrupting trade flows, affecting livestock producers, consumers and traders alike.

Food access has been hampered by sharp increases in prices, with inflation driven by shortages, currency devaluation and high transport costs owing to insecurity along major trading routes. The year-on-year inflation rate peaked at 836 percent in October 2016. In the worst-affected areas, food is being used as a weapon of war, with trade blockades and security threats leaving people marooned in swamps with no access to food or health care. Humanitarian access to the worst-hit areas is limited, as warring factions are intentionally blocking emergency food, hijacking aid trucks and killing relief workers. A lack of protection of civilians against violence has led to 1.9 million internally displaced persons and more than 1.26 million refugees, who have lost their livelihoods and are dependent on support for their survival.

estimates for 2016, as reported in Part 1, indicate that 815 million people in the world – or just over one in nine – are undernourished. The majority of these (489 million) live in countries struggling with conflict, violence and fragility, where the prevalence of undernourishment is higher than in countries not affected by conflict.

Conflict and violence have led to the displacement of millions of people, causing and protracting food insecurity in host communities. For example, the civil war

in the Syrian Arab Republic has caused more than 6 million people to flee their homes to other locations within the country and another 5 million to neighbouring countries. Displaced people today spend an average of more than 17 years in camps or with host communities.

### **The 2030 Agenda : advancing progress through conflict-sensitive approaches**

The 2030 Agenda for Sustainable Development makes an explicit link between sustainable development and peace and calls for a

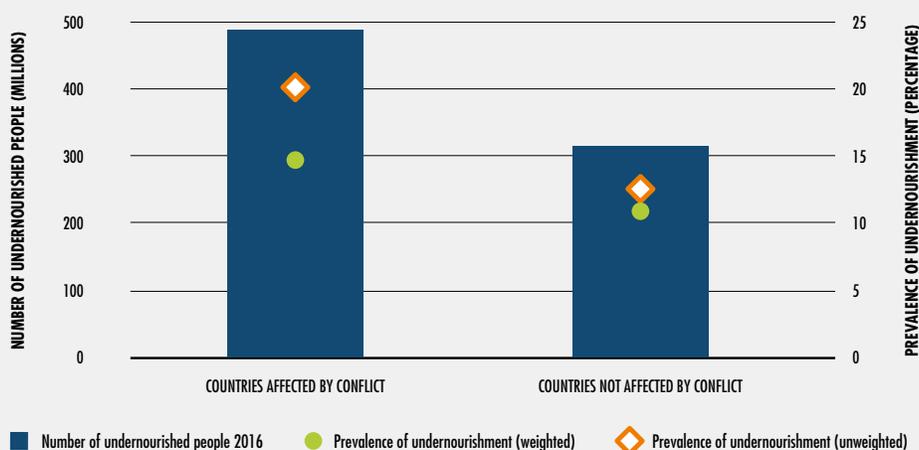
**BOX 8 YEMEN – CONFLICT, ECONOMIC COLLAPSE, AND THE DESTRUCTION OF RURAL AND URBAN LIVELIHOODS**

As of March 2017, an estimated 17 million people are experiencing severe food insecurity and require urgent humanitarian assistance. This represents 60 percent of the entire population – a 20 percent increase from June 2016 and a 47 percent increase from June 2015. Chronic child undernutrition (stunting) has been a serious problem for a long time, but acute undernutrition (wasting) has peaked in the last three years.

The conflict-driven public-sector crisis continues to escalate, creating a host of uncertainties and threatening a possible breakdown of the banking system. The Government’s inability to pay salaries is accelerating the economic collapse and tipping large parts of the country into a destructive downward spiral of extreme food insecurity and increasing poverty.

The nutrition situation has been aggravated by the dramatic breakdown of the health care system and its infrastructure; an outbreak of cholera and other epidemics that affected several governorates in 2016 and that is continuing into 2017; depletion of savings caused by loss of safety nets and government salaries; distressed livelihood coping strategies; and reduced ability to access food both physically and economically.

**FIGURE 14 THE MAJORITY OF CHRONICALLY FOOD-INSECURE PEOPLE LIVE IN COUNTRIES AFFECTED BY CONFLICT**



NOTES: Prevalence and number of undernourished people in low- and middle-income countries with and without conflict, 2016.  
 SOURCE: UCDP for classification of countries affected and not affected by conflict; FAO for data on prevalence of undernourishment.

## BOX 10 LEBANON – ECONOMIC STRAIN AND PUBLIC HEALTH CHALLENGES IN COUNTRIES HOSTING SYRIAN REFUGEES

The crisis in the Syrian Arab Republic has had an immense impact on Lebanon, which has experienced an economic slowdown and is having to deal with the arrival of more than 1.5 million refugees. The economic slowdown is a result of increased insecurity, disrupted trade routes, and declining confidence among investors and consumers. Exports and foreign direct investments fell by 25 percent between 2013 and 2014, and tourism has dropped by 60 percent since the start of the crisis.

The influx of refugees has been particularly felt in the housing and labour markets and in the quality and availability of public services. Labour supply has increased by up to 50 percent and the number of state-school students has risen by 30–35 percent. There has also been a surge in demand for public health-care services.

The crisis is having a disproportionate impact on already vulnerable households, not only because of increased competition for unskilled labour and overloaded public services, but also because half of the refugees live in the poorest one-third of districts. Those who were already poor will become poorer and adverse impacts on food security and nutrition are to be expected.

transformative approach, with improved collaboration on conflict prevention, mitigation, resolution and recovery. The universality, breadth and indivisibility of the SDGs have important implications for work on food security and nutrition in conflict-affected settings.

### The changing landscape of conflicts: implications for food security and nutrition

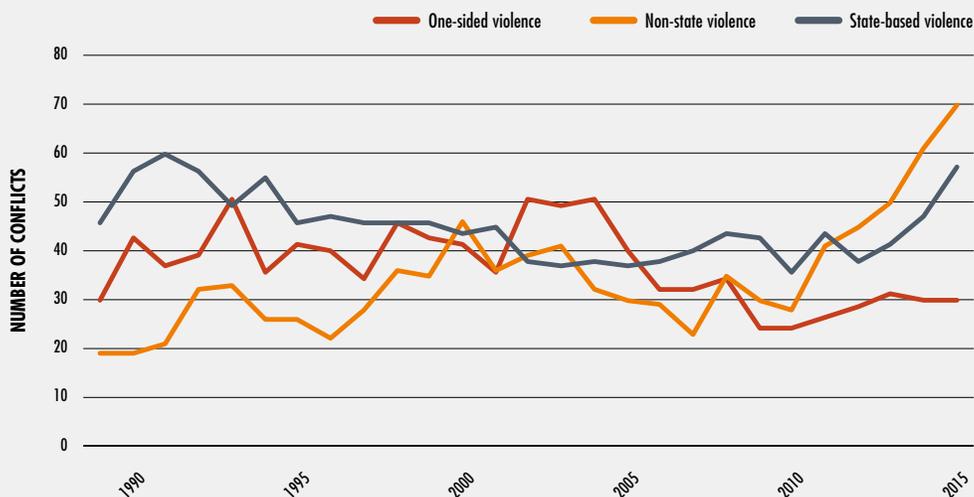
Although the frequency of wars had been decreasing in recent decades to reach an all-time low in 2005, there has recently been a surge in the number of violent conflicts and conflict-related deaths.

The number of conflicts and of displaced populations caused by internal or intrastate conflict are two worrying signs that current trends are likely to continue over the coming years. Violent conflicts have increased

dramatically since 2010 and are currently at an all-time high (Figure 12). Of these, nonstate conflicts – between two organized armed groups of which neither is the government or a state – have increased by 125 percent since 2010, surpassing all other types of conflict. State-based conflict also rose by over 60 percent in the same period.

**CIVIL WARS OR INTERNAL CONFLICTS** have now surpassed the number of interstate or external conflicts between states.

Civil wars or internal conflicts have now surpassed the number of interstate or external conflicts between states. In other words, there has been a shift away from conflict between nations to conflicts within nations. However, this trend is matched by a clear and significant rise in the number of internationalized internal conflicts.

**FIGURE 12** MARKED INCREASE IN THE NUMBER OF CONFLICTS SINCE 2010

SOURCE: Uppsala Conflict Data Program (UCDP).

Coupled with large outflows of displaced people, the entanglement of external international actors in state conflicts shows that even internal conflicts cannot be quarantined, with their repercussions being felt across borders and even continents. Similarly, the implications of conflict-induced food insecurity are no longer limited to specific countries or regions – they are now global.

## HOW DOES CONFLICT AFFECT FOOD INSECURITY AND NUTRITION?

Conflict is often a leading cause of famine and food crises. In 2016 alone, the far-reaching effects of violent conflict and

civil insecurity left more than 63 million people in 13 countries facing severe levels of acute food insecurity and in need of urgent humanitarian assistance.

Simple correlations show higher levels of chronic and acute food insecurity and undernutrition in countries affected by conflict. In 2016, the prevalence of undernourishment in countries affected by conflict was almost eight percentage points higher than in countries not affected by conflict (Figure 14). This difference is even more pronounced for child undernutrition. Almost 122 million, or 75 percent, of stunted children under age five live in countries affected by conflict, with

TABLE 4 CONFLICT AND CLIMATE-RELATED SHOCKS ASSOCIATED WITH FOOD CRISIS SITUATIONS IN 2016

| Country                          | Main climate/weather adverse effect on food security   | Number of food-insecure people (IPC/CH phase 3+) in millions |
|----------------------------------|--|--|
| Afghanistan                      | Floods, landslides in winter; drought in Ghor province | 8.5  |
| Burundi                          | El Niño phenomenon                                     | 2.3  |
| Central African Republic         | Localized floods                                       | 2.0  |
| Democratic Republic of the Congo | El Niño phenomenon                                     | 5.9  |
| Iraq*                            | Drought  | 1.5  |
| Somalia                          | El Niño-related drought                                | 2.9  |
| South Sudan                      | Drought and floods                                     | 4.9  |
| Sudan                            | El Niño phenomenon                                     | 4.4  |
| Syrian Arab Republic*            | Drought in Aleppo, Idlib and Homs                      | 7.0  |
| Yemen                            | Flooding, heavy rains and tropical cyclones            | 14.1   |
| <b>Total</b>                     |  | <b>53.5</b>  |

NOTE: Figures for food-insecure populations for countries indicated with an asterisk are reported by the government, Food Security Cluster (HNO or HRP) or WFP-CARI; figures for South Sudan and Somalia refer to IPC analyses conducted in January and February 2017, using data from 2016.

SOURCE: Food Security Information Network (FSIN). 2017. *Global Report on Food Crises 2017*. Rome.

the difference in average prevalence between conflict and non-conflict affected countries at nine percentage points.

Problems of acute food insecurity and malnutrition tend to be magnified where natural hazards such as droughts and floods compound the consequences of conflicts (Table 4). The concurrence of conflict and climate-related natural disasters is likely to increase with climate change, as climate

change not only magnifies problems of food insecurity and nutrition, but can also contribute to a further downward spiral into conflict, protracted crisis and continued fragility.

### Impacts on economic production, trade, and public finances

Conflicts can cause deep economic recessions, drive up inflation and erode fiscal finances, affecting livelihoods and under-

**BOX 11 PASTORALISM IN EAST AFRICA – BREAKDOWN OF TRADITIONAL SYSTEMS AND ENVIRONMENTAL DEGRADATION**

Long-lasting and recurrent conflicts have altered the grazing patterns of affected pastoralists in Ethiopia, Kenya and Uganda, reducing both their resilience and their coping strategies.

FAO has documented the impact of conflict on the breakdown of traditional systems and how this has affected environmental degradation, undermining the long-term viability of pastoral livelihoods. In Kenya, key informants in Kula Mawe (Borana) indicated that even in times of peace, livestock grazing is restricted to a radius of 15 kilometres for fear of raids orchestrated by either the Somali or Samburu. Concentrating livestock in limited areas results in overgrazing and general degradation of the environment. In Uganda, pastoralists have been forced to settle in concentrated areas, leading to overgrazing and ecological degradation, which is undermining their livelihoods and the community's ability to cope with droughts and other climate-related disasters. The congested settlements are causing loss of soil cover due to erosion. Communities also suffer from scarcity and overuse of water because of the larger numbers of people and livestock. Overcultivation and excessive pressure on soils have resulted in loss of soil fertility, deforestation, and depletion of biomass. This environmental degradation is exacerbated by cutting down trees and grass for construction, fuelwood, charcoal burning for domestic use and sale for income generation. In Ethiopia, on-and-off violent conflicts between the Borana, Garre, Guji and Konso have become commonplace. Although occurring at local levels, these conflicts have involved complex legal, political and economic dynamics that extend to national and even regional dimensions, encompassing the communities and their allies elsewhere in Ethiopia and across the border in Kenya.

mining response capacities. A recent study across 20 countries shows that armed conflict reduces the level of GDP per capita by 17.5 percent on average.

Economic contractions tend to erode public finances, which in turn may diminish, or in extreme cases fully disrupt, social protection mechanisms. They can also negatively affect basic social services that are critical to nutrition outcomes, including the availability of health care and clean and safe water. Conflict can also disrupt export channels and drain foreign exchange resources, limiting import capacity and causing

shortages of commodity supplies and inflationary pressure.

For net food-importing countries, import disruptions can lead to reduced food availability in markets as well as reduced availability or affordability of non-food items necessary for food preparation (such as cooking fuel). Inflation can also have significant negative impacts on households' ability to access food, as price hikes hamper the ability of households to purchase what they need.

**CURRENTLY, ONE IN EVERY 113 PEOPLE** is now either a refugee, internally displaced, or seeking asylum.

**FIGURE 18 CONFLICT AND THE CONSEQUENT FOOD CRISES LED TO WIDESPREAD DISPLACEMENT OF MORE THAN 15 MILLION PEOPLE IN 2016**



**NOTE:** The number of displaced people due to conflict in the six largest global food crises in 2016 (in millions).  
**SOURCE:** FSIN. 2017. *Global Report on Food Crises 2017*. Rome.

## Impacts on agriculture, food systems and rural livelihoods

On average, 56 percent of the population in countries affected by conflict live in rural areas, where livelihoods largely depend on agriculture. For protracted crisis contexts, the proportion of populations living in rural areas is 62 percent on average, but can exceed 80 percent in cases such as Burundi, Ethiopia and Niger. Most conflicts mainly affect rural areas and their populations,

heavily and negatively affecting agriculture, food systems and livelihoods. In many countries affected by conflict, subsistence agriculture is still central to food security for much of the population.

## Impact through displacement of people

According to the Office of the United Nations High Commissioner for Refugees (UNHCR), there were an estimated 64 million displaced people worldwide in 2016, of which 16 million were refugees and 36.4 million IDPs. The majority of the forcibly displaced are concentrated in developing countries in Africa, the Near East and South Asia. Over half of the world's refugees originate from countries affected by conflict (Figure 18).

There are now nine countries with more than 10 percent of their population classified as refugees or displaced persons, with Somalia and South Sudan having more than 20 percent of their population displaced, and the Syrian Arab Republic more than 60 percent displaced.

The number of displaced people worldwide is at an all-time high, as war and persecution continue to rise. Currently, one in every 113 people is now either a refugee, internally displaced, or seeking asylum.

In addition to direct conflict-related displacement, violent conflict can lead to the collapse of livelihoods, forcing populations to move for survival. There is often also an increased risk of disease, as people are forced to live in unhealthy surroundings and overcrowded shelters with potentially poor access to water and sanitation and health services.

**BOX 14** EVICTION AND DISPOSSESSION OF NATURAL RESOURCES AND LAND IN COLOMBIA

Colombia witnessed a five-decade-long conflict that left up to six million people internally displaced – equivalent to 14 percent of the total population. This was the result of systematic strategies of eviction and dispossession by armed groups in their quest to seize rural territories, control valuable natural resources and land, and appropriate the rents associated with these resources. Strategies of forced displacement have also been associated with the economy of drug trafficking, the growth of which requires control over routes and land to cultivate illegal crops. The scale and magnitude of forced displacement is not only the main effect of armed conflict, but also the main source of food insecurity. The impact has been most keenly felt by the poorest and most vulnerable populations, including ethnic communities.

The economic and social repercussions of Colombia's conflict were both short- and long-term in impact. Rebel strategies of eviction and dispossession led first to the displacement of farmers and rural households, while concentrating land ownership in fewer hands and inducing lasting changes in land-use and agricultural production (from staple food crops to crops for industrial use, including palm oil and coca leaves). This affected poverty and inequality as well as food production and access. For the period from 1980 to 2010, it is estimated that 6.6 million hectares of land were abandoned as a result of displacement. This figure would be even higher if the territories of ethnic communities were included. Dispossession revolved mostly around smallholdings and farms, which particularly affected the poorest and most vulnerable rural families. It became critical for Colombia to make up for the material losses experienced by displaced and rural populations as a result of conflict, including by instigating land and housing restitution and improving access to working capital and capital goods.

### **Coping strategies, resilience, and the role of gender and social networks**

Resilience is an important concept for coping with conflict and ensuring that shocks and stressors do not have long-lasting consequences for food security and nutrition.

People typically first engage in reversible coping strategies with short-term effects, such as making modest dietary adjustments and skipping meals. However, as coping options are exhausted or disappear and food insecurity worsens, households are more likely to employ more extreme and damaging strategies

that are less reversible and therefore represent a more severe form of coping, such as distress selling of livestock or productive assets such as farm tools. Severe and/or persistent conflict can ultimately lead to the collapse of coping mechanisms, prompting migration, destitution and, in extreme cases, death and starvation.

Conflicts tend to alter gender roles and social norms. Men and boys are more likely to be engaged in the fighting and are at greater risk of being forcibly recruited into military groups and socialized into adopting violent concepts of masculinity.

The engagement of men in conflict puts greater responsibility in the hands of women in sustaining the livelihood of the household, including for the access to food, nutrition and health care of household members. Conflict situations often are characterized by increased sexual violence, mostly targeted at women. Such violence and trauma not only cause direct harm to women, but also tend to affect their ability to support their families.

Rural women often have less access to resources and income, which makes them more vulnerable and hence more likely to resort to riskier coping strategies. These strategies may affect their health, which in turn is detrimental to the food security of the entire household as food production and the ability to prepare food decreases with illness. In crisis situations and among refugees, one in every five women of child-bearing age is likely to be pregnant. Conflicts put these women and their babies at increased risk if health-care systems falter and their food security situation deteriorates.

## CAN FOOD INSECURITY AND UNDERNUTRITION TRIGGER CONFLICT?

### Drivers and conditioning factors determining changes in food insecurity that trigger conflicts

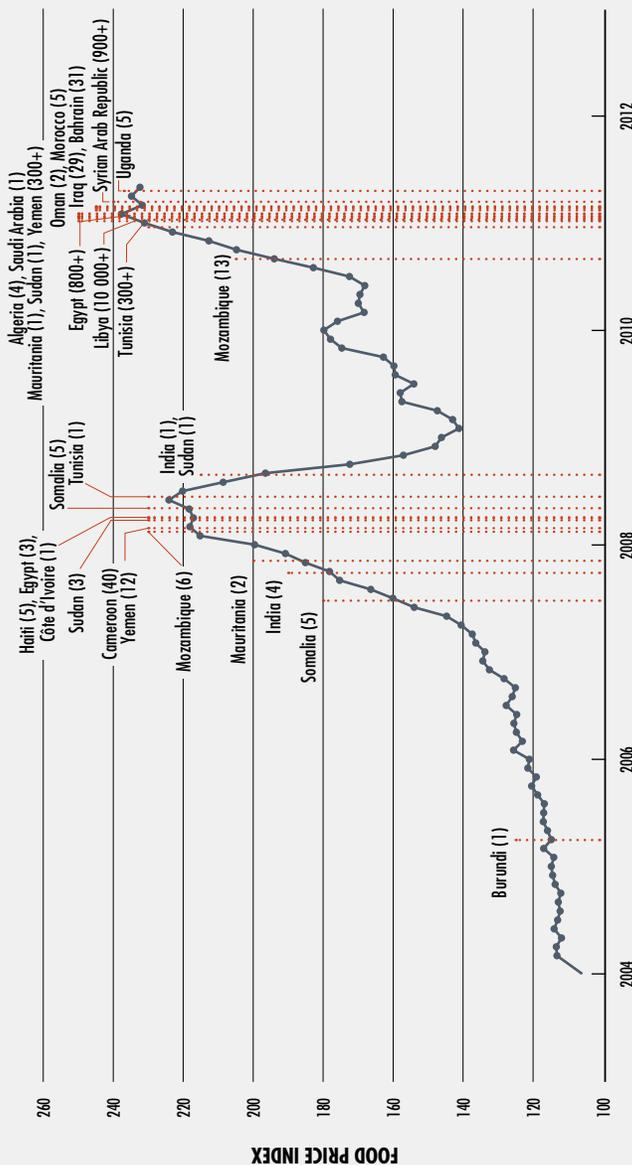
Poverty, hunger and food insecurity, together with a highly unequal distribution of income, land and other material goods, can create feelings of anger, hopelessness, unfairness and a lack of social justice among sectors of the population.

Such grievances can then be exploited by individuals and groups with a desire to foment violence. As noted earlier, conflict significantly affects food security and nutrition, especially when protracted and compounded by weak institutional response capacities (fragility). Fragile institutions and poor governance help explain why similar external shocks can produce violence in one country but not in another. Studies have shown that, during the 2007–08 food price crises, the likelihood of the outbreak

### BOX 12 THE ARAB SPRING AND SHARP INCREASES IN FOOD PRICES

Several studies have identified high food prices as a possible contributing factor that added to grievances that triggered the protests of late 2010 and early 2011, first in Tunisia and then in other Near East and North African countries. All of the Arab Spring countries are net importers of food, which meant their inhabitants were highly vulnerable to the global food price spikes of 2008 and 2011. Combined with high levels of unemployment, this resulted in a steady increase in the cost of living and an erosion of living standards, which has been perceived as exacerbating food insecurity in the region. Sharp rises in domestic food prices from 2007 onwards also contributed to an unravelling of a social system whereby governments had offered subsidized food, housing, utilities and fuel, often along with employment in a large public sector – all of which they could no longer afford.

**FIGURE 20 SUDDEN FOOD PRICE SURGES HAVE TRIGGERED FOOD RIOTS AND PROTESTS IN MORE THAN 40 COUNTRIES**



NOTES: Time dependence of FAO Food Price Index from January 2004 to May 2011. Red dotted vertical lines correspond to beginning dates of “food riots” and protests associated with the major recent unrest in North Africa and the Near East. Overall death toll in parentheses. Price data are FAO Food Price Index from 2004 to 2011.

SOURCE: Adapted from M. Legi, K.Z. Bertrand and Y. Bar-Yam. 2011. *The food crises and political instability in North Africa and the Middle East*. Cambridge, USA, New England Complex Systems Institute.

of protests was much higher in developing countries categorized as in fragile situations.

### Sharp increases in food prices

As most poor people spend more than 50 percent of their income on food, even a slight increase in prices can severely affect their well-being. There is a growing body of evidence that points to food price hikes as an important contributing trigger of social unrest such as protests, riots, violence and war.

The dominant explanation for the food-price–conflict link is consumer grievances: higher prices create or increase economic

**THE GLOBAL FOOD PRICE  
CRISES OF 2007–08  
AND 2011** triggered riots  
in more than 40 countries.

constraints and/or sentiments of (perceived) relative deprivation, which activates grievances that in turn lead to conflict. A second explanation emphasizes the breakdown of authority and legitimacy when the state fails to provide food security, leading people to act out grievances against the state.

More recently, the global food price crises of 2007–08 and 2011 triggered riots in more than 40 countries, where the cost of imported basic goods increased, thereby eroding real incomes (Figure 20).

### Climate change and extreme weather events

Climate-related events can increase food insecurity in terms of both availability and access, through a number of channels. Drought is a special case as it diminishes livestock and agricultural productivity, thus expanding the pool of potential combatants and giving rise to more broadly held grievances.

A severe drought tends to threaten local food security and aggravate humanitarian conditions generally speaking, which in turn can trigger large-scale human displacement and create a breeding ground for igniting or prolonging conflicts.

The risk of conflict related to weather shocks increases where people – in particular discriminated and marginalized groups – lack coping mechanisms to avoid the harmful effects of events such as drought on their food security and livelihoods.

Climate-induced crop failure or loss of pasture can mean a dramatic drop in income, and limited material and human capital can aggravate the situation by narrowing the range of outside options.

### Competition for natural resources

Competition over land and water has been identified as a potential trigger for conflict, as loss of land and livelihood resources, worsening labour conditions and environmental degradation negatively affect and threaten household and community livelihoods. Sources estimate that over the past 60 years, 40 percent of civil wars have been associated with natural resources. Since

**SOURCES ESTIMATE THAT  
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2000, some 48 percent of civil conflicts have taken place in Africa, in contexts where access to rural land is essential to the livelihoods of many and where land issues have played a significant role in 27 out of 30 conflicts.

## **THE ROLE OF FOOD SECURITY AND NUTRITION IN SUSTAINING PEACE**

### **Harvesting peace by improving food security and nutrition**

Interventions to improve food security could help weaken some of the causes of conflict, including motives that may lead individuals to support or join armed groups or engage in illegal activities. Greater food price stability and the recovery of local agricultural and food markets could also help vulnerable individuals and households mitigate the impacts of conflict, including by supporting people affected by conflict in regaining access to markets.

In 2006, the UN Secretary-General's progress report on the prevention of armed conflict stated that, "... tackling food insecurity and related problems of agricultural underproduction and resource scarcity can do much to stabilize a fragile situation. A hungry person is an angry person".

### **Pathways to building resilience to conflict and sustaining peace**

There are a number of food security and nutrition-related interventions and measures that can be put in place to prevent and mitigate the risk of conflicts recurring.

Preventive interventions that can break the link between food insecurity and conflict include shielding consumers and producers from food price shocks, for example, through price stabilization measures and social protection interventions. A different approach, rooted in social anthropology, is to drive recovery through agriculture, thereby bringing new life to shattered homes and communities, and motivating people to come together after a conflict has destroyed social networks.

Access to predictable, sizeable and regular cash transfers can protect poor households from the impacts of shocks in the short term, thereby minimizing negative coping practices that have lasting consequences. Over time, by helping vulnerable households manage risks better, social protection can induce investments in livelihoods that enhance people's resilience to future threats and crises.

Given the link between climatic shocks, crop and livestock price collapse and conflict outbreaks, adopting agricultural practices and livelihood strategies for climate change adaptation should be promoted as an integral part of conflict prevention – with pastoralist and semi-pastoralist livelihoods deserving special attention.

## OVERALL RECOMMENDATIONS

No blueprints can be provided on the best course of action to take in any given conflict-affected situation, but some general recommendations on better ways of working are as follows:

- ▶ Sustaining peace is a long-term engagement. Rather than one single impact, conflict tends to create multiple, compounding and simultaneous outcomes, the complexity of which must be fully understood and recognized when designing programme and policy responses. For example, conflict can lead to economic and price impacts that reduce household food access and may also constrain people's mobility, thereby limiting household access to food, health services and safe water, and leading to an increased incidence of disease and in some cases increased mortality. Short-term, sector-specific approaches that address only one problem are therefore unlikely to be effective. Mitigating these impacts and strengthening resilience would require more multisector programming, forming part of holistic development approaches beyond immediate humanitarian aid.
- ▶ Closer partnerships between humanitarian, development and peace actors and international financial institutions will be important to support conflict and protracted crisis-affected communities in addressing root causes, building resilience and finding durable solutions. Contributing to improved food security, nutrition and sustainable peace will require a change in mind-set to a more deliberate, preventive approach, and from short-term and output-based interventions to longer-term sustainable and collective outcomes linked to a strategic focus on resilience building.
- ▶ In conflict-affected and protracted crisis contexts, a boost in development action to help people become self-reliant as quickly as possible and build resilience to future shocks (including conflict) is vital. This will require more risk tolerance, earlier engagement, more flexible financing and context-adaptable, conflict-sensitive programming.



# 2017

# THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

## BUILDING RESILIENCE FOR PEACE AND FOOD SECURITY

The international community is committed to ending hunger and all forms of malnutrition worldwide by 2030. While much progress has been made, conflict and human-induced and natural disasters are causing setbacks. This year's *The State of Food Security and Nutrition in the World* warns that the long-term declining trend in undernourishment seems to have come to a halt and may have reversed, largely on account of the above-mentioned factors. Meanwhile, though progress continues to be made in reducing child malnutrition, rising overweight and obesity are a concern in most parts of the world.

These and other findings are detailed in the 2017 edition of *The State of Food Security and Nutrition in the World* (formerly, *The State of Food Insecurity in the World*). For the first time, this year's report is published by an expanded partnership, with UNICEF and WHO now joining FAO, IFAD and WFP.

The report also marks a new era in the monitoring of food security and nutrition in the context of the 2030 Agenda for Sustainable Development and the UN Decade of Action on Nutrition. To assess progress made towards the goal of ending hunger, the report uses both the traditional measure of the prevalence of undernourishment and a new indicator, the prevalence of severe food insecurity, based on the Food Insecurity Experience Scale. The report further looks at various forms of malnutrition, including trends and situations for child stunting, wasting and overweight and for adult obesity, breastfeeding and anaemia in women. The thematic part of the report sheds light on how the increasing incidence of conflict in the world is affecting food security and nutrition. It also explores how, by improving food security and nutrition and by making rural livelihoods more resilient, it is possible to help prevent conflicts and sustain peace.



2017 *The State of Food Security  
and Nutrition in the World* (full text)

