

## International Center for Enterprise Preparedness (InterCEP)

# Food Security, Migration and Climate Change: Insights from the World Food Program

### Web Forum

On June 20, 2017, the International Center for Enterprise Preparedness (InterCEP) held a web forum focused on food security, migration and climate change. **Brian Bogart**, a program officer at the United Nations **World Food Program (WFP)**, provided an overview of major trends on food security in the context of climate change, displacement and migration, and shared his organization's efforts to address these challenges. A key take away from the discussion was that we face the potential for additional increased risks in these areas over time unless we take action today.

### I. Climate Change

Climate change often affects small farmers and other vulnerable populations, and exacerbates malnutrition and food insecurity. What are the expected consequences if countries do not curb emissions and invest in climate change adaptation? Current projections suggest a 20% increase in hunger and malnutrition by 2050 if climate change mitigation and adaptation remains at current levels. In 2080, with continued emissions at current rates and lack of investment in adaptation, the world begins to look pretty bleak. This is shown in Figure 1, which includes a food security vulnerability index for countries where WFP works.

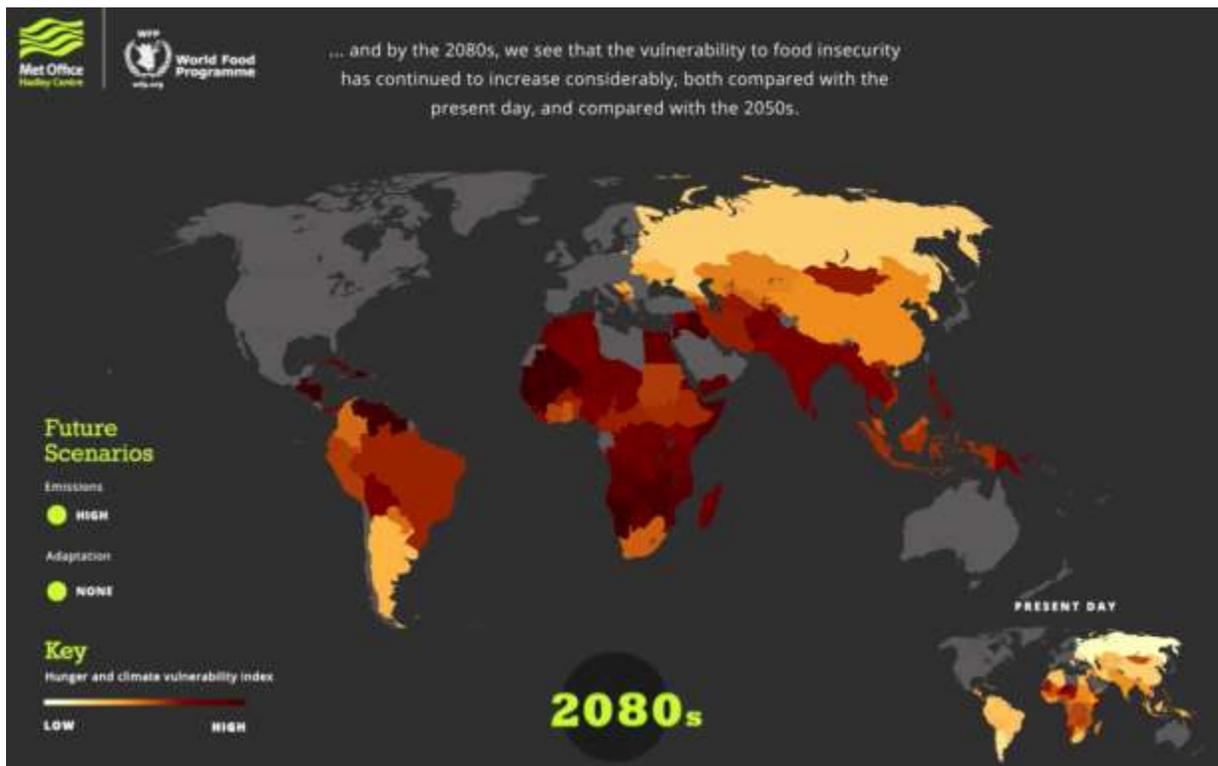
Water stress is another important factor when considering food security, and an increasingly precious resource. According to the World Bank, over 40% of the world's population lives in areas of water-scarce areas. Half of the world's population is expected to live in water stressed areas in the coming decades. Underground aquifers are used for agriculture in many parts but are not being replenished.

Climate change has been linked to human conflict. *The potential for conflict and climate to interact is clear.* When climate events such as drought occur, people become increasingly vulnerable and depend on natural resources. This context may precipitate conflict. This has happened in Sudan, for example, where WFP assisted pastoralists with water management. When water resources had to be shared or fought over, the result was ethnic conflict. Competition over scarce natural resources is exacerbated by climate change for vulnerable populations. Figure 2 illustrates the spatial correlation between areas affected by extreme weather and conflict in Africa.

There is also an interaction between food prices and human conflict. Boko Haram in northern Nigeria can be linked very directly to food insecurity and people being pushed into conflict when they are hungry and vulnerable and uncertain about their future. Figure 3 shows data on the temporal relationship between food prices and conflict in the context of Nigeria.

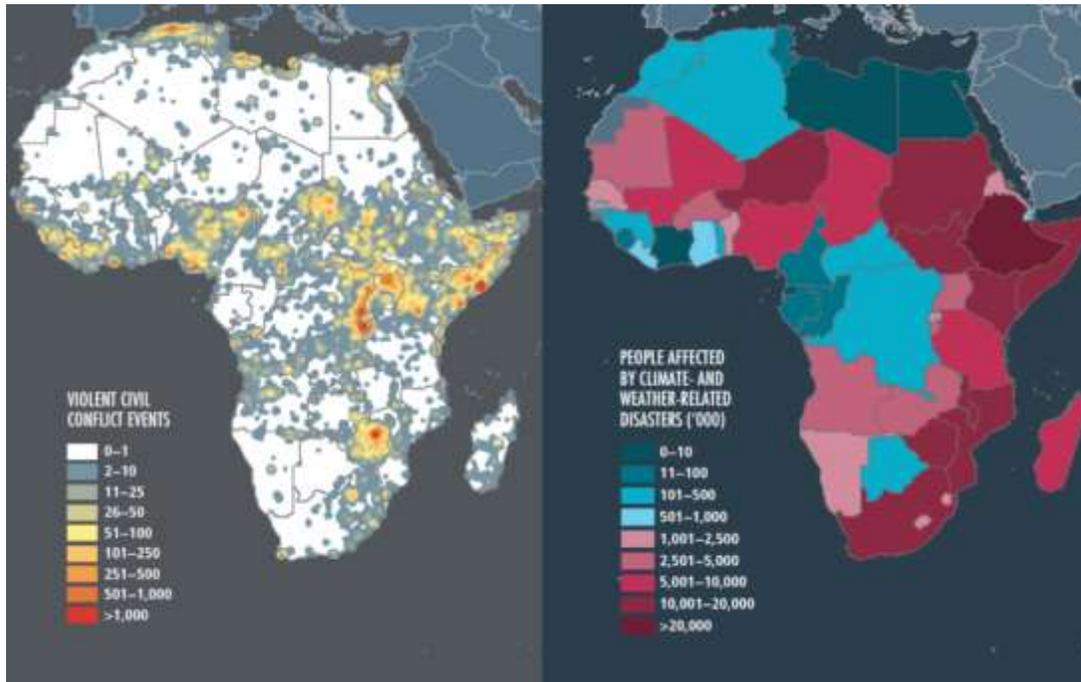
Population projections between now and 2100 suggest that Africa and Asia will be home to over 83% of the world’s population. This is a staggering statistic. In the rest of the world, population is expected to remain fairly constant. Reproductive health, and other factors like reduced mortality and improved health contribute to population growth. The rise of megacities in Africa is a relatively new phenomenon. But a large amount of urban population is taking place in secondary, smaller cities. Some of these cities may become megacities over time. Many poor countries are experiencing very rapid rates of urbanization. This is accompanied by rapid expansion of informal settlements, which are characterized by unplanned urban growth with little or no social and infrastructure services. This type of rapid, unplanned urban growth can result in political grievances, civil unrest and conflict.

Figure 1. Climate Change and Food Security: 2080s



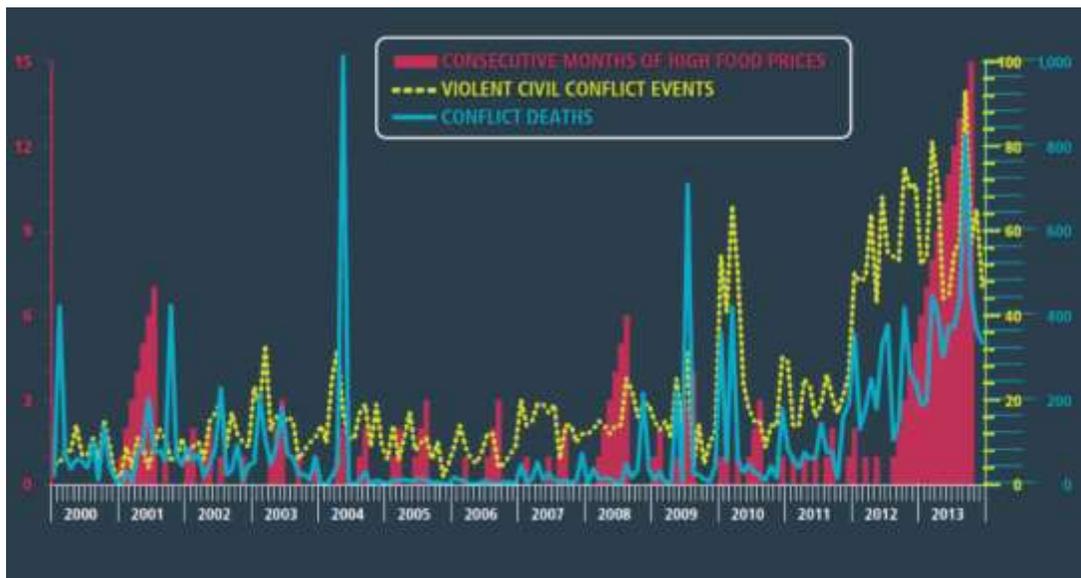
Source: World Food Programme and Met Office, Hadley Centre <http://www.metoffice.gov.uk/food-insecurity-index/>

Figure 2. Conflict and Extreme Weather Events (2000-2014)



Source: International Food Policy Research Institute. 2015. *2014–2015 Global Food Policy Report*. Washington, DC: International Food Policy Research Institute, pp.54

Figure 3. Food Price Spikes and Conflict in Nigeria (2000-2013)



Source: International Food Policy Research Institute. 2015. *2014–2015 Global Food Policy Report*. Washington, DC: International Food Policy Research Institute, pp.57.

## II. Migration

A WFP study titled *At the Root of Exodus: Food security, conflict and international migration*, outlines the interactions between food security, conflict and migration<sup>1</sup>. WFP has determined that there are many drivers of migration. A primary driver is the need for security and decent living conditions. High levels of food insecurity and conflict are perfect recipes for mass migration.

There is a definite relationship between these factors. An interesting point of data is that for every additional year of conflict we see increasing migration outflow. A one percent rise in hunger means an extra 200 people out of 10,000 will leave their country. And for each additional year of conflict, an extra 40 people out of 10,000 will flee their country. Increasing hunger and food insecurity represent push factors that, along with income inequality, can lead to mass migration. This is also explained on the WFP report mentioned above.

Most staggering and consequential is the fact that today approximately 20 million people are at risk for famine, which is unprecedented in recent history. Today four countries are at risk for famine: Yemen, South Sudan, Nigeria and Somalia. There is no access in the parts of these countries where vulnerable populations are located due to lack of respect for law and international rescuers. On top of the 20 million people at risk of being caught up in famine in the four countries, another 10 million people are in crisis and struggle to feed their families.

In addition, there are food security risks in Malawi and Zimbabwe. Both countries have experienced unusual climate events and drought as a result of El Niño.

## III. WFP Programs in Food Security and Climate Change

WFP works in 80 countries and does not act alone in the area of food security, there is a large network of partners. WFP follows the framework established in the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals. WFP focuses primarily on the eradication of hunger (Goal number 2), but the UN can't eradicate hunger without addressing other goals like peace, gender equality, education, health, and others.

A number of activities at WFP are explicitly or indirectly related to climate change, and over the past five years about 40% of the agency's operations are related to resilience and climate change adaptation.

Some of the programs WFP is carrying out in the area of climate change and food security include:

- The Climate Adaptation Management and Innovation Initiative (C-ADAPT): Food security and climate change analyses, adaptation planning, and good practices in food security adaptation programming.

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<sup>1</sup> See World Food Programme, 2017. *At the root of exodus: Food security, conflict and international migration*. Available at: <https://www.wfp.org/content/2017-root-exodus-food-security-conflict-and-international-migration>

- The Food Security Climate Resilience (FoodSECuRE) Facility: A facility to trigger action before climatic shocks occur and to provide predictable multi-year funding for post-climate disaster resilience. This is a financial program that provides micro-insurance.
- The R4 Rural Resilience Initiative (R4): Builds climate change adaptation and resilience into safety nets.
- Adaptation Fund Projects: WFP adaptation activities under the United Nations Framework Convention on Climate Change (UNFCCC) Adaptation Fund.

WFP also supports a program called African Risk Capacity (ARC) that is intended to help sovereign governments access insurance funds. The goal of the ARC is to develop mechanisms to respond to drought and manage drought mechanisms. It is still in the early stages but presents a very innovative approach to access international capital.

The UN has prioritized peace and the agency recognizes that it cannot get far in the area of food security if there is continued escalation of conflict. The Secretary General is implementing a strategy to address prevention of conflict and crisis, and assessing how the UN can be more efficient in this area.

WFP has also developed a much more systematic approach to *business continuity*. This approach includes how crises affect the agency's ability to operate. In the past WFP reacted in an ad hoc manner, as an emergency provider, and rarely thought about how crises affected its operations. Haiti was an eye opener, as it affected the WFP's ability to respond. The agency continues to learn from different crises in different countries, and to adapt its business continuity processes accordingly.

#### **IV. Rationale for Engagement with the Private Sector**

There is a rationale for an agency like WFP to engage with the private sector because businesses and the global economy depend on stability and depend on the credibility of the multilateral system to support it. If the global order is threatened by international and domestic inequality there is an increased risk for conflict which is disruptive for business.

Partnerships with the private sector are rare but can be very beneficial. For example, WFP has worked with Ericsson in the area of standing IT capacity after a disaster. The company has deployed staff in situations where IT capacity has been disrupted, as in the Philippines after a typhoon, for example, and provided necessary services. This partnership was inspiring for both WFP and Ericsson.

#### **V. WFP and Urban Areas**

Urban areas are extremely complex and are only now becoming a recognized priority. In the past, WFP has monitored food insecurity every year and its activities were focused on harvest conditions. When harvest was insufficient the agency would develop a response to support vulnerable populations. That's

how the agency worked because that's where the need was, food insecurity was primarily a rural phenomenon.

Currently, about 25% of the population considered to be at risk for food insecurity is in urban areas, and WFP is attempting to address this issue. The data on food insecurity is rarely disaggregated by rural and urban areas. Given population trends, the risk of food insecurity in urban areas is likely to grow. There are examples of urban contexts with large urban displaced populations where food insecurity is an issue. In Africa, for example, urbanization is not necessarily being fueled by industrialization or services, it's often fueled by a lack of opportunities in rural areas. Subsistence farmers are going to urban areas and this increases the risk of food insecurity. This is a new frontier for WFP.

### Additional Resources

- World Food Programme. Overview. Available at: <http://www1.wfp.org/overview>
- World Food Programme, 2017 - *At the root of exodus: Food security, conflict and international migration*, available at: <https://www.wfp.org/content/2017-root-exodus-food-security-conflict-and-international-migration>
- World Food Programme. Climate Adaptation Management and Innovation Initiative (C-ADAPT): <http://www.wfp.org/climate-change/initiatives/c-adapt>
- World Food Programme. Food Security Climate Resilience (FoodSECuRE) Facility: <http://www.wfp.org/climate-change/initiatives/foodsecure>
- World Food Programme. R4 Rural Resilience Initiative: <https://www.wfp.org/climate-change/initiatives/r4-rural-resilience-initiative>
- African Risk Capacity (ARC): <http://www.africanriskcapacity.org/>
- International Food Policy Research Institute. *2014–2015 Global Food Policy Report*.
- United Nations Population Division. World Population Prospects 2017: <https://esa.un.org/unpd/wpp/>