

SAVING  
LIVES  
CHANGING  
LIVES



# World Food Assistance 2018

## Preventing Food Crises Summary

May 2018

This shop vendor in Umerkot in Pakistan participates in WFP's blockchain-based cash-based transfer programme.

WFP/Alexandra Alden



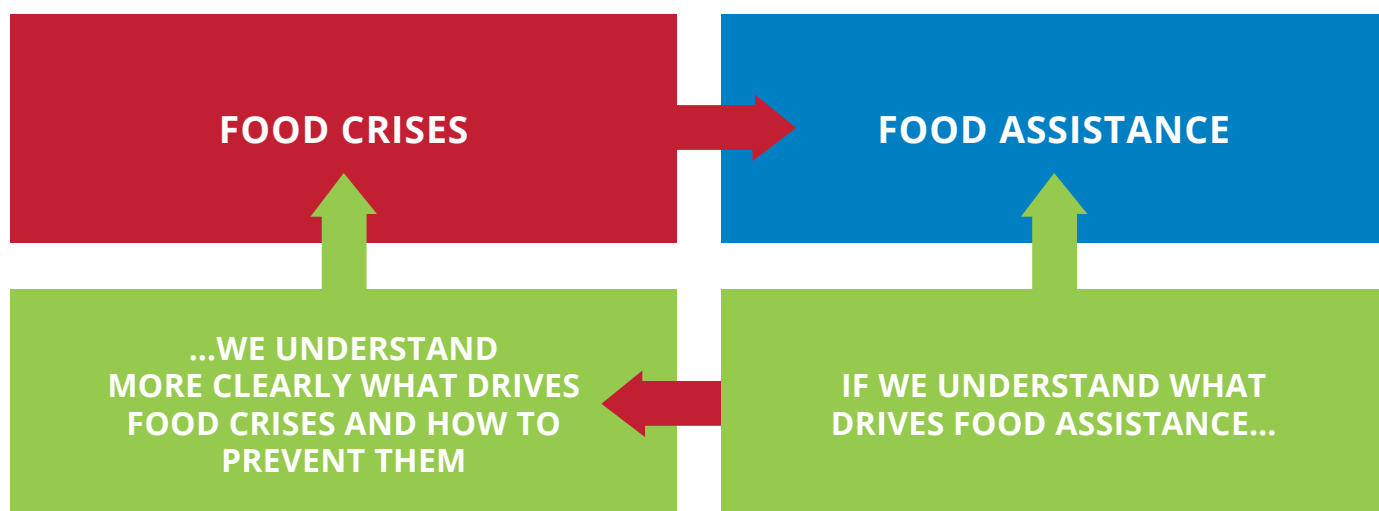
# Hunger, Food Crises and Food Assistance

Chronic hunger is increasing, and food crises are spreading and intensifying. *World Food Assistance 2018: Preventing Food Crises* (WoFA 2018) focuses on these crises, and asks what causes them to break out, what determines their scale and how they might be prevented.

Existing knowledge suggests that food crises are driven by combinations of short-term events such as conflicts and natural disasters and long-term influencers of poverty and food insecurity. Hence the prevention of food crises entails

short-term action and long-term investment. But precisely which actions and investments should be prioritized in different contexts, and why, are still not clear.

WoFA 2018 seeks to reduce this knowledge gap through ground-breaking analysis of linkages between food assistance expenditures by the United Nations World Food Programme (WFP) and a range of other factors. Food assistance is uniquely positioned at the intersection of short-term humanitarian action and long-term hunger reduction. Food assistance expenditures thus constitute a powerful lens through which the drivers and deterrents of outbreak and intensity of food crises can be examined. The vision of this report is that increased understanding of the drivers of food assistance will lead to greater comprehension of the causes of food crises. This should in turn expand scope to prevent them.



## Analysing Outbreaks and their Scale

A dataset covering 152 countries between 2009 and 2015 is analysed in two stages. In the first stage the probability of a food crisis in all 152 countries is examined; the

presence of WFP food assistance is taken as an indicator of a food crisis. The aim is to identify factors influencing the probability that a country will need WFP food assistance, which in turn sheds light on causes of food crisis outbreaks. The second stage focuses on the scale of food crises. Only the 77 countries receiving food assistance from WFP are included, and the aim is to identify the factors that influence the level of food assistance expenditures and hence show what determines the scale of the underlying food crisis.

# Modelling Causes and Determinants

The empirical modelling strategy proposes that both outbreaks and scale of food crises are rooted in three systemic problems in food systems: i) the “bad year” or “lean season” problem; ii) the “last mile” problem; and iii) the “good year” problem. They are also defined by cross-cutting challenges linked to conditions and outcomes that affect the overall performance of a national economy. The argument is that when these systemic problems and cross-cutting challenges are inadequately dealt with, food crises start and then worsen. On the other hand, when they are effectively addressed food crises can be prevented or reduced.

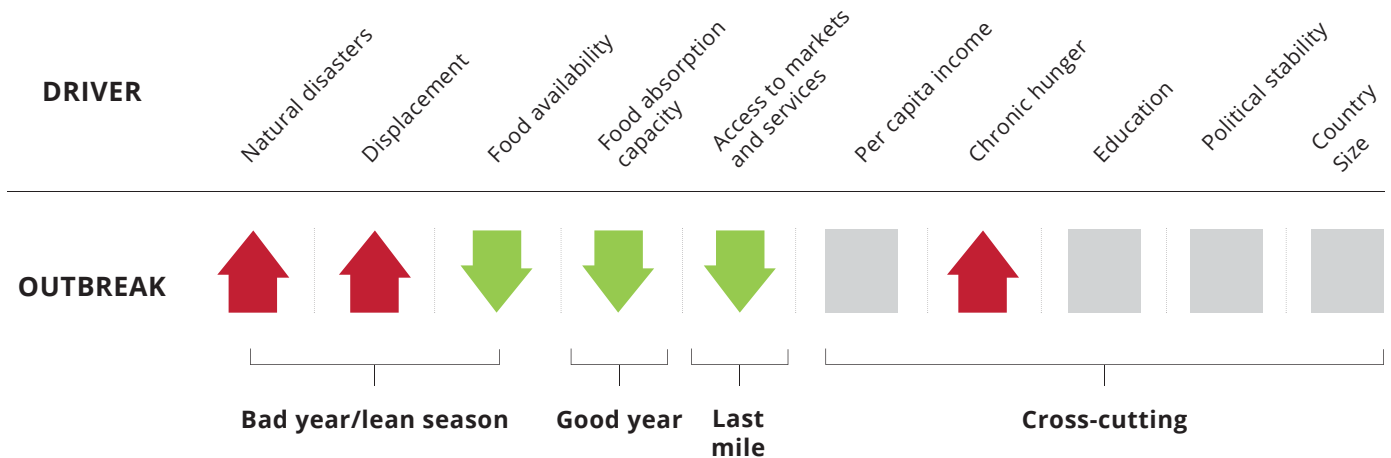
Data on variables that precisely capture systemic problems and cross-cutting challenges are patchy (e.g. food prices), unreliable (e.g. employment), erratic (e.g. income equality),

or simply non-existent for many countries (e.g. gender inequality). But a number of datasets yield ten highly relevant measures. Three – natural disasters, displaced populations and food availability – are linked to the bad year/lean season problem. One – access to markets and services – is linked to the last mile problem and one – food absorption capacity – is linked to the good year problem. Five measures are cross-cutting – per capita income, chronic hunger, education, political stability and country size.

## Findings

### Causes of Outbreaks

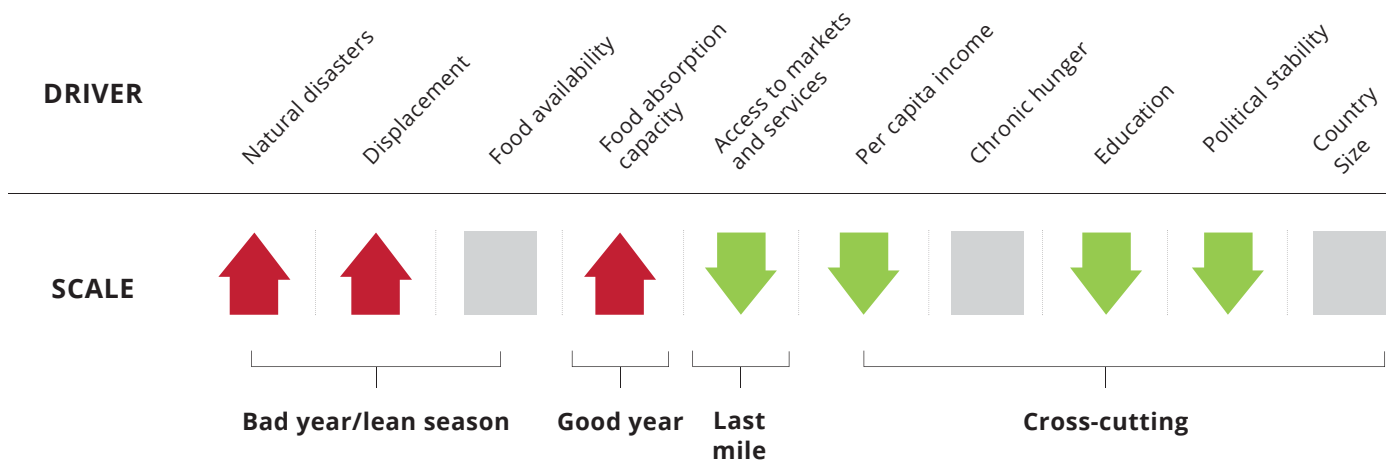
The likelihood of a food crisis outbreak increases in accordance with the share of a population affected by natural disasters, displacement and/or chronic hunger. The likelihood of outbreaks decreases with greater availability of food, better food absorption capacity and better access to markets and services.



## Determinants of Scale

The scale of a food crisis increases in line with the share of population affected by natural disasters and displacement and by lower food absorption capacity. The higher the

income, the greater the level of education and the greater the political stability the smaller the scale of food crises. The size of a country does not affect the outbreak or scale of a food crisis.



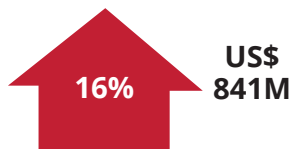
## Estimated Impacts and Potential Savings

Political instability, displacement, poor education and sparse infrastructure emerge as especially potent drivers of food assistance expenditures, and hence also of the food

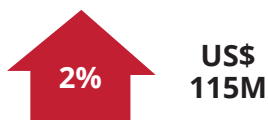
crises reflected in these expenditures. Exposure to natural disasters and food system congestion lead to greater than proportionate increases on food assistance expenditures. Lower income increases food assistance expenditures but less than proportionately.

### CRISIS INTENSIFIERS

A 1% increase in the share of population that is **uprooted**



A 1% increase in the share of population affected by **natural disasters**



A one point increase in the **food absorption capacity** growth rate



### CRISIS MITIGATORS

A one point increase in the **political stability index**



An additional year of **education**



An additional kilometre of **road** per 1000 people



1% increase in **per capita income**



The findings suggest that improved management of natural and man-made shocks in the short-term, and greater investments in social and economic underpinnings of economies in the longer term would have reduced WFP's global food assistance expenditures in 2016 by US\$ 5.1

billion. This would have been equivalent to almost 96 percent of the US\$ 5.3 billion WFP actually spent that year. The savings would have averaged US\$ 56.7 million per country, with a high of US\$ 562 million in South Sudan and a low of US\$ 63,400 in Togo.

The importance of political stability and peace cannot be over-stated. Even a one-point improvement in the World Bank's Index on Political Stability and Absence of Violent Conflict could reduce the scale of food crises by half. On the basis of 2016 expenditures, if Yemen registered a one-point improvement on the World Bank index, there would be an annual reduction in WFP's annual food assistance expenditure of US\$ 205 million. In the Syrian Arab Republic a one-point increase on the index would save WFP US\$ 300 million. Similarly, in Somalia, WFP would save US\$ 85 million.

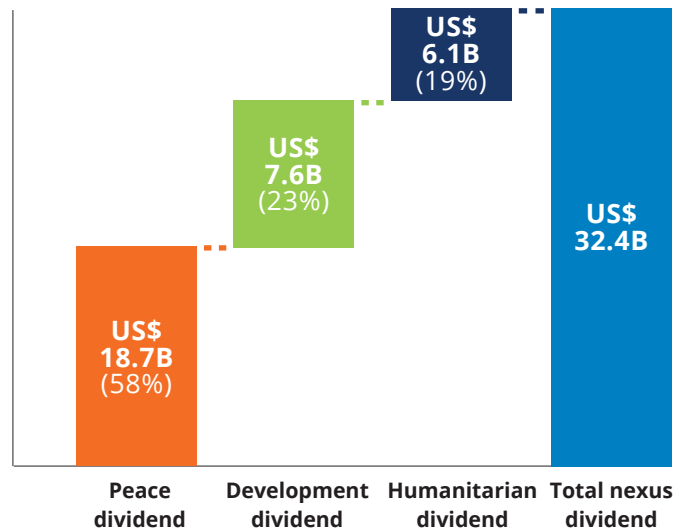
Although the analysis is undertaken at country level, exposure to the identified risk factors appears to vary by region and income group. Between 2013 and 2015, the Eastern and Central Africa region was the most exposed, followed by West Africa, Southern Africa, the Middle East and Northern Africa, Asia and the Pacific and Latin America and the Caribbean. Low-income countries were more exposed than lower-middle-income countries, which were more exposed than upper-middle-income countries and high-income countries. Potential savings exhibit a similar pattern across regions and income groups.

## Dividends at the Humanitarian-Development-Peace Nexus

The identified significant risk factors can be clustered under the three dimensions of the "humanitarian-development-peace nexus". The findings enable an estimation of humanitarian-development-peace "dividends" related to food assistance. If the identified risk factors had been adequately addressed between 2009 and 2016 the estimated total food assistance-related nexus dividend would have been US\$ 32.4 billion.

This translates into an average dividend of US\$ 4.04 billion each year, providing each country with a dividend of US\$ 49.7 million. The peace dividend accounts for the bulk of the total – US\$ 2.33 billion per year. This reflects the size of the underlying impact of political instability on food crises. The development and humanitarian dividends are smaller but also significant. The development dividend could yield US\$ 953 million each year, and the humanitarian dividend could be US\$ 759 million each year.

## FOOD ASSISTANCE-RELATED DIVIDENDS: 2009-2016



## Priorities for Action and Investment

There are similarities and differences in priorities for preventing outbreaks of food crises and for containing them. Each component of the prevention agenda requires short-term and long-term action and investment to address the effects of identified risk factors.

Priorities are inherently country-specific, but regional patterns are apparent. Measures to improve political stability, access to markets and services, incomes and education are important in a number of regions. Coping with risks posed by uprooted populations is paramount in the Middle East and North Africa and in East and Central Africa, where complex emergencies dominate food assistance. Measures to address chronic hunger are especially important in southern Africa; investments to increase food availability are particularly important in West Africa. Effective management and response to natural disasters is particularly significant in Asia and the Pacific and in Latin America and the Caribbean.

Priorities also vary across income groups. The higher a country's income level, the more important are initiatives to promote political stability and to manage natural and man-made shocks. The lower a country's income, the more decisive are measures to address underlying structural and institutional factors such as access to markets and services, chronic hunger and education, which exacerbate vulnerability at the community and household levels.

## Conclusions

The pioneering demonstration of "food assistance analysis" in WoFA 2018 confirms that food crises have short-term and long-term causes and drivers. A core argument is that

international food assistance signals the existence of food crises. The analysis shows that these crises are linked to myriad performance gaps in national food sectors, economies and political and social systems.

The analysis also shows that international food assistance reveals challenges and opportunities at the humanitarian-development-peace nexus. The greater the level of international food assistance, the greater the challenges and opportunities at the nexus. The identified priorities for action and investment to prevent food crises can therefore justifiably be interpreted as priorities to generate and seize major dividends at the nexus.



In Umerkot in Pakistan many families can feed their children thanks to WFP's blockchain technology, which makes cash-based transfers more secure and efficient.

*WFP/Farman Ali*

## **World Food Programme**

Via Cesare Giulio Viola 68/70,  
00148 Rome, Italy  
T +39 06 65131 wfp.org  
wfpinfo@wfp.org

A mother feeds her children  
at the distribution centre at  
Gode wereda in Dolo Baad in the  
Somali region of Ethiopia.

*WFP/Michael Tewelde*