Climate change affects food-insecure people the most. Many of them live in countries that are prone to extreme weather events and face high levels of environmental degradation. It is estimated that by 2050 the risks of hunger and child malnutrition could increase by 20 percent. Climate disasters such as droughts, storms and floods will act as some of the driving forces behind these increases.

Each year, donors and governments spend billions to prepare for, respond to, and help people recover from climate disasters. Growing evidence suggests that investing in anticipatory action, early response and continued disaster risk reduction activities at community level greatly reduces the need for humanitarian assistance when a crisis hits. To achieve Zero Hunger, more systematic measures are needed to analyse, anticipate and prepare for climate shocks, build back better after climate disasters, and engage in continuous resilience-building activities at community level.

**WHAT IS FOODSECURE?**

FoodSECuRE is a comprehensive financial and programmatic approach that will trigger preventive action before, during and after climate disasters:

*Window I: Anticipatory action based on climate forecasts.* The FoodSECuRE approach uses seasonal climate forecasts, meteorological thresholds and early warning signals to trigger early action at community level. Forecast-based early actions and financing reduce losses and damages from impending climate hazards and lower the number of people requiring humanitarian assistance in their aftermath.

*Window II: Shock-responsive safety nets.* The FoodSECuRE approach complements existing, government-led emergency response mechanisms through climate-focused safety net, risk financing and transfer instruments. An example is the African Risk Capacity, which enables millions of Africans to benefit from climate risk insurance that enables early pay-outs based on climate indices.

*Window III: Community-based disaster risk reduction and resilience building.* A key feature of FoodSECuRE is to sustain community-based climate and disaster risk reduction activities, which require predictable multi-year funding after a climate disaster to increase the resilience of exposed and hazard-prone food systems.

**WHAT ARE THE BENEFITS OF EARLY ACTION?**

Forecast-based Financing saves lives and prevents catastrophic losses in vulnerable livelihoods. It allows for effective early interventions that mitigate the impacts of extreme climate events at community level and reduce humanitarian aid costs. A 2018 Return on Investment (ROI) study in Nepal where WFP has been implementing the approach, found that US$22 million can be saved when responding to an emergency of an average size (175,000 affected people). Over 20 years, US$34 can be saved per dollar invested, after deducting the investment cost.

When Forecast-based Financing is combined with early response to a climate shock and predictable multi-year financing for resilience/disaster risk reduction activities, the benefits are maximized. A 2018 USAID study on Ethiopia, Kenya and Somalia found that early response to drought, combined with safety net transfers and resilience-building activities, could over a 15-year period save US$4.3 billion, or an average of US$287 million per year.
PROGRESS TO DATE

WFP has operationalized the FoodSECuRE approach in five phase I countries (Guatemala, Niger, Sudan, Philippines, and Zimbabwe). Tailored climate forecast and trigger mechanisms are being developed with the International Research Institute for Climate and Society (IRI) as lead science partner in three countries.

FoodSECuRE has already benefitted communities affected by the 2015/16 El Niño event, at the onset of which forecast-based funding and activities were triggered for vulnerable populations in Zimbabwe and Guatemala. Early action helped farmers to implement resilience-building measures to reduce the impacts of anticipated drought and help preserve food security in its aftermath. Results from a vulnerability study of the Zimbabwe pilot in the Mwenezi district showed that compared to the areas where no anticipatory action was taken, forecast based financing activities have led to an 11 percent rise in agricultural production value. Drought-induced increases in food insecurity as a result of El Nino were kept at 32 percent in comparison to 86 percent increase in populations that did not benefit from the interventions.

To further upscale country capacity on Forecast-based Financing, WFP, with funding from Germany, is linking extreme weather forecasts with preparedness procedures and activities before an event occurs. This pilot initiative is taking place in five countries (Bangladesh, Haiti, Dominican Republic, Nepal, Philippines). In collaboration with national and local government partners, early warning indicators and thresholds are being determined and linked to pre-defined Standard Operating Procedures (SOPs) which enhance readiness to respond at government and community levels. Lessons learnt from these 9 countries will inform the development of a second phase of FoodSECuRE.

RESOURCE REQUIREMENTS

The FoodSECuRE approach provides donors with the opportunity to invest in comprehensive and innovative climate risk financing mechanisms that transform the current humanitarian model, which is focused on repetitive crisis response, to a model which is based on forward-looking risk management. FoodSECuRE integrates cutting-edge tools from climate science, such as hydro-meteorological forecasts and early warning systems, with WFP’s skills in emergency preparedness, social safety nets and community-based disaster risk reduction.

Initial financial support from Norway and Germany has allowed the start-up and design process in 9 countries, yet a more comprehensive operationalization and scaling up of the FoodSECuRE approach across WFP will require the mobilization of additional resources. Currently, US$12 million are being sought to further expand the approach in target countries, develop institutional capacity on forecast-based financing, and develop evidence-based guidance for WFP’s government partners.

FoodSECuRE significantly changes traditional response mechanisms through community-level action before a climatic shock. The approach complements existing emergency response mechanisms and resilience-building during post-disaster recovery.