



Climate and Disaster Risk Financing and Insurance



# The Impacts of WFP’s Integrated Climate Risk Management Approach On Farmers’ Resilience to Climate Change

*Evidence from a [Tetra Tech](#) assessment on the R4 Rural Resilience Initiative demonstrates that an Integrated Climate Risk Management (ICRM) approach for managing climate and disaster risks can help vulnerable families to reduce the impacts of extreme weather events and strengthen resilience in the face of constantly changing weather patterns.*

## THE CHALLENGE

Climate extremes, such as droughts, floods, and storms, can worsen poverty and inadequate nutrition as families struggle to cope with these shocks. They may have to reduce spending on food and other essential household goods, take their children out of school, and even sell important household assets, such as livestock. The resulting effects on acute hunger are detrimental and even more severe for women and children.

Beyond these immediate impacts, long-term effects on health, household finances, and future agricultural investments create significant barriers to ending poverty and hunger, especially for malnourished children. In addition, hungry and vulnerable households generally do not have access to efficient and effective climate risk management strategies to help them reduce and address the risks they face.

## ABOUT R4

Recognizing vulnerable people's need for financial protection to address hunger, the United Nations World Food Programme (WFP) is implementing the R4 Rural Resilience Initiative (R4), an approach that integrates risk management strategies with inclusive insurance. Since 2011, R4's integrated climate risk management approach allows the most vulnerable farmers to access insurance by participating in activities to reduce the risk of climate shocks and improve their productivity and access to markets.

First, WFP supports households to reduce their vulnerability to climate-related shocks by participating in risk reduction activities and enhancing agricultural practices. Second, WFP enables individuals to access insurance policies that transfer the risk of extreme events to insurance markets. Third, WFP encourages better risk retention among households and communities through savings reinforcement and integration with social protection systems. Lastly, WFP promotes prudent risk-taking by providing financial education, diversifying livelihoods, and simplifying access to credit, which can result in more worthwhile investments.

## IMPACTS

Through analysing results from four years of WFP's R4 programmes in Ethiopia, Kenya, Zimbabwe, Senegal, and Malawi, Tetra Tech's findings demonstrate significant positive impact on households' ability to feed themselves and to recover from climate shocks.



### Significant improvements to household diets

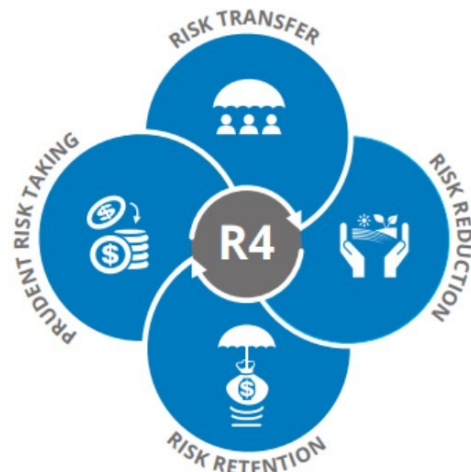
WFP measures improvements to household food security through the frequency of food consumption, diversity in household diets, and the relative nutritional value of the foods households are eating. Farmers participating in the R4 Initiative consistently demonstrated better food security than non-participants, including benefiting from more diverse

#### Important Food Security Indicators

**Food consumption:** Food consumption is a proxy indicator for current household food access based on food consumption frequency (Food Consumption Score (FCS)), dietary diversity (Dietary Diversity Score (DDS)), and Food Expenditure Share (FES).

**Reduced Coping Strategy Index (rCSI):** It focuses on the frequency and severity of the reduction of food consumption behaviors in the 7 days prior to the date of data collection.

**Livelihood-based Coping Strategies Indicator (LCSI):** it summarizes a household's medium and longer-term coping capacity in relation to the lack of food, lack of money to buy food, and ability to manage challenges in the future.



diets, meaning that families are consuming more dairy, protein and fruits that are essential to health and development.



### Better coping responses to shocks

During times of shock that limit food availability and household income, families often make difficult decisions to survive. Negative coping responses, such as reducing food purchases, eating less, selling livestock and other assets, and taking children out of school, have long-term negative impacts on families. Farming households participating in R4 were less likely to adopt these negative coping responses. This means that R4 participants are more likely to keep kids in school, retain household assets, and continue to buy and eat healthier foods on a regular basis.



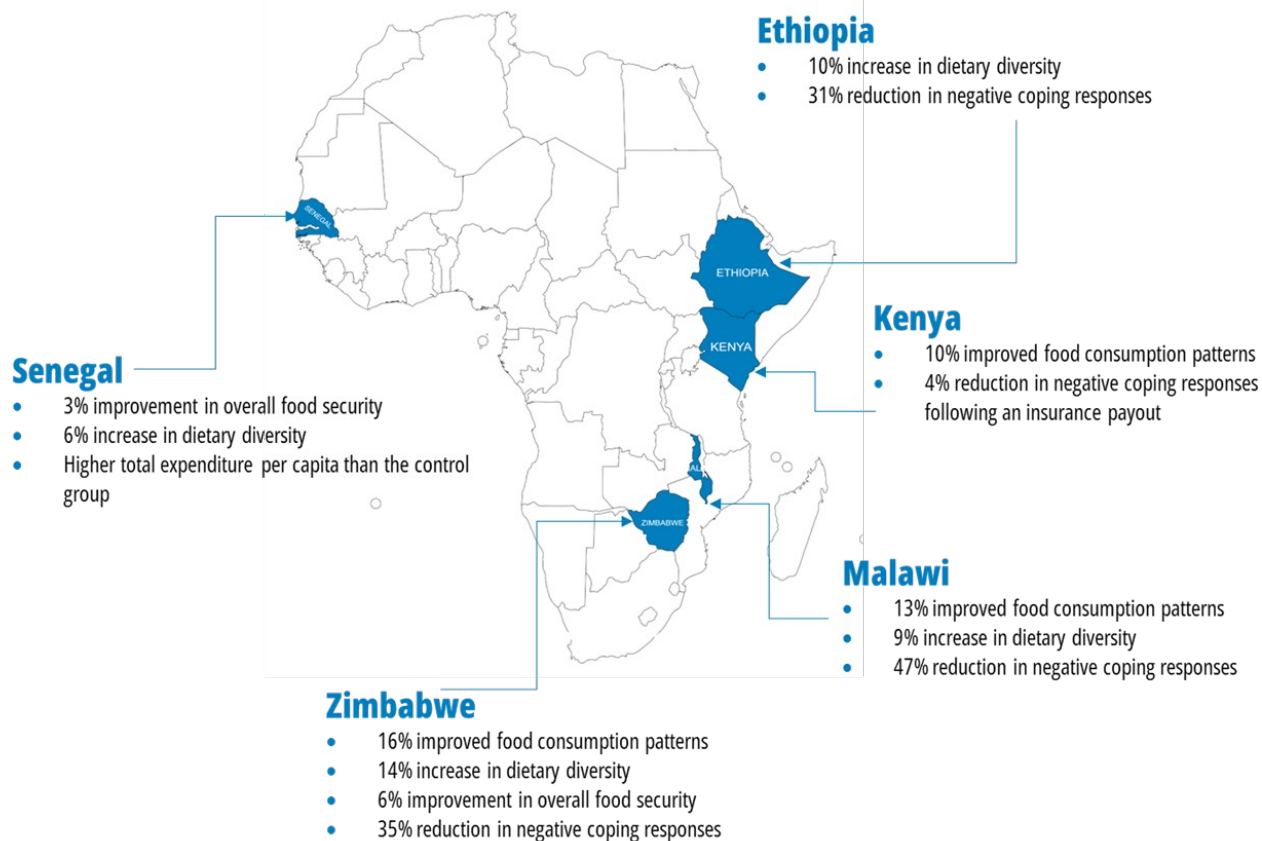
### Overall food security improved

WFP measures household food security by assessing information on food consumption and coping strategies. In the three countries with available data, Kenya, Zimbabwe, and Senegal, farming families participating in the R4 Initiative were experiencing hunger less than non-participant households. R4 female-headed households consistently had better food security and ability to recover than their counterparts among non-R4 participants.

#### The impacts of insurance payouts

*In Zimbabwe, receiving an insurance payout in the year following a shock led to a notable 28 percent increase in the Food Consumption Score and a substantial 46 percent reduction in the Coping Strategies Index.*

## Outcome Improvements for R4 participants compared to non-participating households



## CONCLUSION

The R4 Rural Resilience Initiative is making a significant impact on farming households' diets, overall food security, and their capacities to respond to and recover from shocks. There is compelling evidence across the various R4 countries that the initiative has increased participants' food consumption and dietary diversity, as well as reduced negative coping strategies. Results from the study demonstrate more substantial enhancements in farming households that are already comparatively well-off, specifically with regard to food consumption, wealth, and agricultural investments. These findings validate WFP's new strategic approach, which will target farmers from different socio-economic profiles and reinforce integration with WFP's activities, promoting productivity and access to markets. Furthermore, the study indicates that female-headed households exhibited notable improvements in food security and coping

strategies, albeit at a slower pace compared to male-headed households. WFP is committed to integrating gender considerations systematically across all its programmes and operations. Through the R4 initiative, WFP aims to identify and address the distinct needs and challenges faced by both women and men, striving to enhance outcomes for women and their families without leaving any segment of the community behind. Finally, WFP is currently updating the R4 Initiative, focusing on boosting access to climate-responsive financial services.

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### World Food Programme

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Photo page 1: Tetra Tech/Jen Peterson