

R4 Rural Resilience Initiative

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Cover: Farmers from the Moatize district in Tete Province, Mozambique participate in a focus group activity conducted in preparation for the Green Climate Fund (GCF) project proposal, approved in November 2019.

WFP/Mathieu Dubreuil

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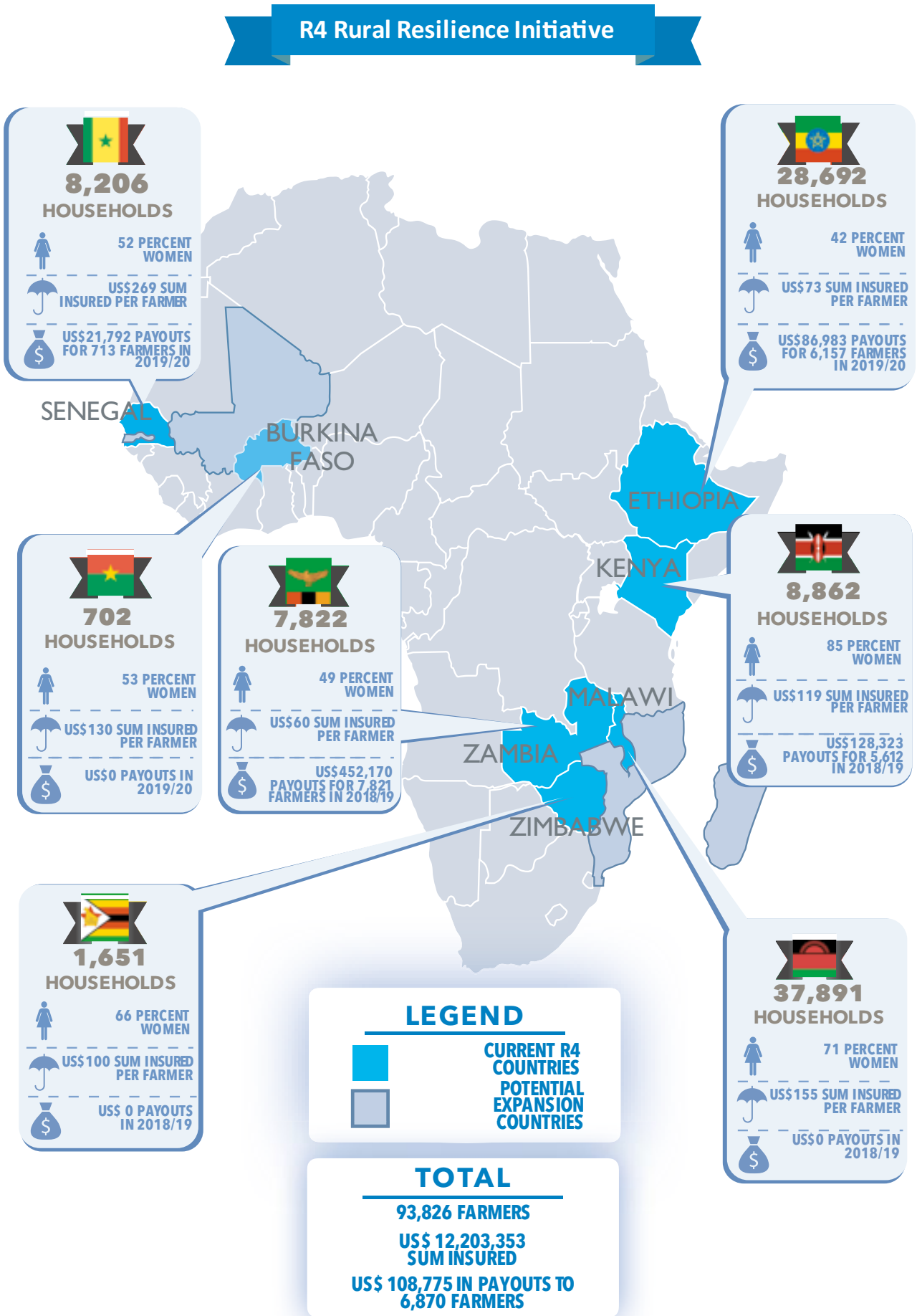
Acronyms

ADRA	Adventist Development and Relief Agency
AIC	Africa Insurance Company
ANACIM	Agence Nationale pour l'Aviation Civile et de la Météorologie
ANCAR	Agence Nationale de Conseil Agricole et Rural
ARC	African Risk Capacity
AQZ	Aquaculture Zimbabwe
AYII	Area Yield Index Insurance
ASALs	Arid and Semi-arid Lands
ASAP2	Adaptation for Smallholder Agriculture Programme
BCM	Beneficiary Contact Monitoring
BMZ	The Federal Ministry of Economic Cooperation and Development
CA	Conservation Agriculture
CASU	Conservation Agriculture Scale Up Project
CBPP	Community-based Participatory Planning
CIMMYT	International Centre for Maize and Wheat Improvement
CNAAS	Compagnie Nationale d'Assurance Agricole du Sénégal
CO	Country Office
CSA	Climate Smart Agriculture
CSP	Country Strategic Plans
DAPP	Development Aid from People to People
DCCMS	Department of Climate Change and Meteorological Services
DECSI	Dedebit Credit and Savings Institution
DFID	UK Department for International Development
DMMU	Disaster Management and Mitigation Unit
DoDMA	Department of Disaster Management Affairs
EbA	Ecosystem-based Adaptation
EIG	Economic Interest Group
FAO	Food and Agriculture Organisation
FbF	Forecast-based Finance
FEWS NET	Famine Early Warning Systems Network
FFA	Food Assistance for Assets
FGD	Focus Group Discussion
FHH	female-headed household
FICA	Government of Flanders International Cooperation Agency
FISD	Foundation for Irrigation and Sustainable Development

GALS	Gender Active Learning System
GCF	Green Climate Fund
GFCS	Global Framework for Climate Services
HARITA	Horn of Africa Risk Transfer for Adaptation
HGSF	Home-Grown School Feeding
IDPs	Internationally Displaced Persons
IFAD	International Fund for Agricultural Development
IGA	Income Generating Activity
INAM	Mozambique National Meteorology Institute
INGC	National Institute of Disaster Management
IRI	International Research Institute for Climate and Society
ISD	Institute for Sustainable Development
LSA	Lean Season Assistance
KCEP-CRAL	Kenya Cereal Enhancement Programme- Climate Resilient Agricultural Livelihoods Window
KfW	German state-owned development bank
KOICA	Korea International Cooperation Agency
KPI	Key Performance Indicators
MAL	Ministry of Agriculture and Livestock
MAER	Ministry of Agriculture and Rural Equipment
MASA	Ministry of Agriculture and Food Security
MEL	monitoring, evaluation and learning
MITADER	Ministry of Land, Environment, and Rural Development
MLAWCRR	Ministry of Lands, Agriculture, Water, Climate and Rural Resettlement
MoA	Ministry of Agriculture
MoALF&I	Ministry of Agriculture, Livestock, Fisheries, and Irrigation
MoFEP&D	Ministry of Finance, Economic Planning and Development
NbS	Nature-based Solutions
NDMA	National Drought Management Authority
NDP	National Development Plan
NMA	Ethiopian National Meteorological Agency
NORAD	Norwegian Ministry of Foreign Affairs
OA	Oxfam America
OIC	Oromia Insurance Company
ORDA	Organization for Rehabilitation and Development in Amhara
PADAER	Programme d'Accélération de la Cadence de l'Agriculture Sénégalaise Développement Agricole et à l'Entreprenariat Rural
P2RS	Multinational programme to build resilience to food and nutrition insecurity in The Sahel
PICS	Purdue Improved Crop Storage (PICS)

PICSA	Participatory Integrated Climate Services for Agriculture
PRSP	Department of Poverty Reduction and Social Protection
PSNP	Productive Safety Net Program
PSP	Participatory Scenario Planning
REST	Relief Society of Tigray
RUSACCO	Rural Savings and Credit Cooperative
RWH	Rain Water Harvesting Systems
SAMS	Smallholder Agricultural Market Support
SDC	Swiss Agency for Development and Cooperation
SfC	Saving for Change
SIDA	Swedish International Development Cooperation Agency
SIPE	Satellite Index for Pastoralists in Ethiopia
SNV	The Netherlands Development Organisation
SNNRP	Southern Nations, Nationalities, and People's Region
ToT	Trainings of Trainers
USAID	United States Agency for International Development
WAM	Water Access and Water Management
WII	Weather Index Insurance
WFP	World Food Programme
VESA	Village Economic and Social Associations
VFM	Virtual Farmer's Market
VFZ	Vision Fund Zambia
VSLG	Village Savings and Lending Group
ZMD	Zambia Meteorological Department

FIGURE 1. R4 Countries Map



Zimbabwe: Marching towards starvation

World Food Programme, September 2019

This section reports an article published in September 2019 on the integrated climate risk management approach in Zimbabwe.

“People are marching towards starvation if we are not here to help them,” said the World Food Programme’s (WFP) Executive Director, David Beasley, after concluding a recent trip to Zimbabwe. “We are facing a drought unlike any that we have seen in a long time,” he added.

Extreme drought is exacerbating the effects of the unprecedentedly strong cyclone that hit the country in March and an ongoing economic crisis that has pushed inflation over 175 percent in June, making prices of staple foods out of reach for 2.5 million Zimbabweans. As a result, more than 5.5 million people, or a third of the population, will be in need of humanitarian assistance by next year. To respond to this emergency situation, WFP needs US\$173 million to provide assistance during the lean season.

Zimbabwe’s high climatic variability results in frequent drought years as well as flood events, both of which have hit the country in 2019. Higher temperatures in the future are projected to threaten crop harvests and water availability, making it essential for farmers and communities to adapt to and manage increasing risks to their food production and income.

One of the ways in which WFP is trying to avert the worst and make sure people have enough to eat is to build their ability to withstand climate-related shocks. Starting in 2018, WFP began implementing an integrated resilience approach in Masvingo District, which combines activities that reduce farmers’ vulnerability to climate shocks, such as building soil and water conservation infrastructure at the watershed level, establishing nutrition gardens, and training in conservation agriculture practices that increase yields, reduce land degradation and promote the use of drought-tolerant seeds.

WFP is expanding the scope of this initiative this year to assist over 2,000 families in the district in managing their climate risks. Each community will be supported over a period of three years, and this integrated approach has become a blueprint for further expansion in other areas of Zimbabwe.

Like many of his fellow community members, 49-year-old Andrias, a farmer from Chevute, has been hit hard by the drought. He is enthusiastic about the nutrition garden: “We are selling these vegetables to schools and we are looking forward to expanding this garden so that we can have bigger profits”.

Through their work on asset creation, farmers also receive weather index insurance policies that protect them from their biggest threat — drought. These policies provide financial payouts when rainfall drops to levels that correspond with extreme drought conditions and resulting crop losses, ensuring that the investments farmers made on their plots do not go to waste.

The integrated approach also incentivizes farmers to build up savings through community savings and loans schemes. This ensures that they can cope with other shocks unrelated to drought and crop failure, and will eventually be able to afford the insurance premiums on their own, without assistance from WFP. This is a key component to creating a thriving insurance market and lasting impact for smallholder farmers.

The savings groups have had a multiplier effect on the other activities, especially for women. “Through the WFP intervention, I learned life skills. (...) We are not the same people we were in the past. We feel empowered,” says Praise Chipare, a member of a saving group in Masvingo.

People receive trainings on how to turn their farms into a business, together with support on getting their crops to markets. Thanks to all these efforts, just after one year of implementation, WFP has been able to purchase more than 6.5 metric tons of white sorghum from the farmers.

“Because of this project, these communities will no longer need our help,” said David Beasley when he visited Masvingo. “We are now even buying food from them to feed other communities in Zimbabwe.”

Through increasing the number of smallholder farmers protected from the threat of drought, Zimbabwe will be more prepared for future climate shocks, hopefully avoiding them leading to new food crises.

WFP is expanding the integrated approach in Zimbabwe through funding from the Swiss Development and Cooperation Agency (SDC), USAID, and thanks to a grant awarded by the Green Climate Fund, a multilateral fund established by the UN Framework Convention on Climate to assist developing countries in adaptation and mitigation practices that counter climate change.



A group of farmers from the Kilde Awulaelo woreda in Tigray, Ethiopia meet under a tree to discuss and identify the worst years for crop failure due to drought since 1983. This information will validate the data that WFP and its partner has collected to design an index insurance product that will protect farmers from drought risk.

WFP/Michael Goode

Executive Summary

In 2019, the R4 Rural Resilience Initiative (R4) reached over 93,000 farmers (60 percent women) benefiting approximately 600,000 people in Ethiopia, Senegal, Malawi, Kenya, Zambia, Zimbabwe, and Burkina Faso. Of these farmers, over 5,000 accessed insurance developed through the R4 initiative: either through subsidies from other donor-funded programmes or by paying the premium cost fully with their own cash.





















































R4 saw a one percent growth in the number of farmers insured in 2019, with this year's focus being on consolidating the gains achieved so far in existing countries and preparing for next year's geographical expansion. In Ethiopia, the initiative reached over 28,000 farmers (42 percent women) with microinsurance. This year, activities focused on building the index design capacity of local stakeholders in the country and defining the steps for handing over design and distribution of microinsurance products to the local insurance companies from 2020 onwards. Under the Satellite Index Insurance for Pastoralist in Ethiopia (SIIPE), 7,816 pastoralists accessed index-based livestock insurance in the Somali region of

Ethiopia. In Senegal, a total of 8,206 farmers (52 percent women) were insured this season. In Malawi, R4 insured 37,891 farmers (71 percent women) for the 2019/20 season and is piloting a hybrid index insurance product in three districts, that brings together Weather Index Insurance (WII) with Area Yield Index Insurance (AYII), providing farmers with a more comprehensive insurance coverage. In Zambia, no new insurance enrolments were undertaken, following recommendations made by the Mid-Term Review (MTR) of the R4 Programme in Southern Africa commissioned by the Swiss Agency for Development and Cooperation (SDC), with WFP Zambia now focusing on consolidating the gains obtained so far and supporting sustainability plans. In Kenya, a total of 8,862 farmers (85 percent women) were insured for the 2019 Short Rains season. In Zimbabwe, R4 insured 1,651 farmers (66 percent women) and expanded to three additional wards. In addition to microinsurance, Zimbabwe became the first-ever country in Southern Africa to test the ARC Replica instrument in collaboration with the Government of Zimbabwe and the African Risk Capacity (ARC) Ltd.

In 2019, R4 expanded to Burkina Faso, where the initiative insured 702 farmers (53 percent women). 2019 also marked the expansion of R4 to Mozambique, where the initiative will be piloted this year. Dry spells in Ethiopia and Senegal during the 2019 agricultural season triggered payouts totalling US\$108,775. A total of 713 farmers received an insurance payout of US\$21,792 in Senegal, and 6,157 farmers received a payout of US\$86,983 in Ethiopia. Moreover, dry spells during the 2018/19 agricultural season triggered payouts in Zambia totalling US\$452,170 to 7,821 farmers.

R4 also made significant investments in 2019 for building the technical and programmatic capacity of local stakeholders and governments to ensure national ownership of insurance products and systems. In addition, the initiative began taking concrete steps to offer new insurance products, such as hybrid indices. R4 has also made strides in integrating the approach with WFP's other climate risk financing programmes; strengthening and standardizing monitoring, evaluation and learning across the entire portfolio; and preparing for expansion of the programme into new regions of existing countries as well as new countries where R4 will begin implementing for the first time.

FIGURE 2. R4 achievements

Planting year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Payouts			 US\$17,000	 US\$320,000	 US\$24,000	 US\$38,000	 US\$450,000	 US\$74,000	 US\$1.5m	 US\$590,000	 US\$109,000
Value of premiums	 US\$2,500	 US\$27,000	 US\$215,000	 US\$275,000	 US\$283,000	 US\$306,000	 US\$362,000	 US\$770,000	 US\$1.1m	 US\$1.7m	 US\$1.6m
Total sum insured	 US\$10,200	 US\$73,000	 US\$940,000	 US\$1.3m	 US\$1.2m	 US\$1.5m	 US\$2.2m	 US\$4.9m	 US\$6.6m	 US\$10.3m	 US\$12.2m
Cash contribution							 US\$43,000	 US\$86,000	 US\$78,000	 US\$128,000	 US\$56,000
R4 Farmers insured through WFP (percent of women)	 200 (38)	 1,308 (39)	 13,195 (33)	 19,407 (21)	 20,015 (31)	 24,970 (33)	 29,279 (32)	 37,419 (40)	 51,955 (50)	 87,557 (55)	 88,790 (60)
Non-R4 Farmers insured*							 3,918	 4,448	 6,603	 5,763	 5,036
Countries	Ethiopia	Ethiopia	Ethiopia	Ethiopia Senegal	Ethiopia Senegal	Ethiopia Senegal	Ethiopia Malawi Senegal Zambia	Ethiopia Malawi Senegal Zambia	Ethiopia Kenya Malawi Senegal Zambia	Ethiopia Kenya Malawi Senegal Zambia Zimbabwe	Ethiopia Kenya Malawi Senegal Zambia Zimbabwe Burkina Faso

* Farmers accessing insurance products developed through the R4 Initiative, but not directly participating in the R4 programme or farmers that have graduated from the programme and are paying their insurance premium fully in cash.

Our vision: 500,000 insured farmers in 2022.

Foreword

The effects of the climate crisis are impacting households, communities and nations all over the world. With global average temperatures surpassing 1.1°C degrees above pre-industrial levels, we see increasing climate impacts on patterns of displacement, conflict and food security.¹ Climate variability and extreme weather events are among the key drivers behind the global increase in hunger and one of the leading causes of severe food crises. Countries that are highly dependent on rainfed agriculture are especially vulnerable, with 2019 seeing food security deteriorate in many of the countries in the Greater Horn of Africa due to climate shocks, leaving an estimated 22.2 million people severely food insecure by the end of the year.²

To address the impacts of climate change on food security, the World Food Programme focuses on the principle of integrated climate risk management. This term refers to a combination of strategies that address both the climatic as well as non-climatic factors contributing to people's vulnerability. We recognize that a comprehensive set of risk financing strategies and tools are essential for an effective early response to climate shocks, and for a faster recovery of affected households. In this context, WFP has led the way in developing innovative microinsurance solutions, which, when integrated with complementary measures to strengthen access to natural and financial capital, provide vulnerable populations with an effective safety net against climate shocks and stresses.

The R4 Rural Resilience Initiative is WFP's flagship approach for integrated climate risk management. The programme helps smallholder farmers become more resilient to climate risks through a combination of four integrated objectives: Reducing the risks of climate-related shocks through nature-based solutions and assets; transferring the risk of catastrophic events to the private insurance market; building risk reserves through the promotion of capital savings; and promoting prudent-risk taking through access to credit for livelihoods diversification and small-scale investments. This has the added benefit of addressing pre-existing structural challenges that are often aggravated by climate change, such as poor access to agricultural inputs, financial services and assets. Together, the different components do not only protect smallholder farmers from climate hazards and extreme events, but also promote savings and access to credit. This strengthens the food and income security of farmers in an increasingly uncertain environment.

Over the past 9 years, WFP has worked with Oxfam America to translate the R4 concept into a context based, participatory and result-oriented model for climate risk management that could be systematically incorporated into WFP country strategies. This effort has promoted integration with other aspects of WFP's programmes, such as asset creation and livelihoods, social protection, smallholder access to markets and nutrition. Over the years, R4 has evolved from a community-based programme into a layered model of risk

management that brought WFP's own programmes closer together, but also found opportunities for scale through government systems, strategies and policies. As the programme is moving into its next phase of scaling up via WFP country strategies and programmes, Oxfam America is transitioning from its role as an institutional to a technical partner. I want to take this opportunity to thank Oxfam America for their pioneering role in creating, developing, and transferring the HARITA model outside Ethiopia and for their leadership in helping WFP expand and scale up the R4 approach to the point of maturity where it finds itself in 2019. A documentation of Oxfam's collaboration in the R4 global partnership will reflect good practices and lessons learned over the past 9 years, and we will continue to collaborate on knowledge sharing.

In 2019, the R4 Initiative has provided 93,000 participants (60 percent women) in Ethiopia, Senegal, Malawi, Zambia, Kenya, Zimbabwe, and Burkina Faso with access to index insurance and a range of complementary risk management options. Burkina Faso was a new entry, with over 700 households able to access an insurance policy in 2019. At present, a number of additional countries have expressed interest in introducing risk transfer instruments into WFP country programmes to strengthen the resilience of communities and food systems. Notably, this involves a transfer of the R4 approach from African contexts to Asia and Latin America. Feasibility studies or project design efforts are currently under way or being planned in Bangladesh, Cuba, El Salvador, Guatemala, Mali, Mozambique and Uganda.

Traditional and new donors are committed to supporting R4 and to scaling-up this tried and tested approach to climate risk management in new and existing countries. In 2019, the Green Climate Fund (GCF) has committed US\$ 8.86 million for the expansion of R4 in Zimbabwe, allowing it to reach a target of 10,000 vulnerable households. The GCF also approved WFP's proposal for the scale-up of R4 in Mozambique: The US\$ 10 million project includes US\$ 9.25 million in financing from the GCF, US\$ 600,000 co-financing from Flanders, and US\$ 150,000 from the Cartier Foundation. In its initial phase the project is expected to reach 80,000 beneficiaries. Moreover, the Adaptation Fund (AF) has committed US\$ 9.9 million for the scale-up of R4 in Malawi, expanding the number of beneficiaries from 37,000 to 85,000. 2020 will continue to see an important expansion of the R4 Initiative within its current programme settings, as well as in several new countries in the Sahel, South Asia and the Latin America and Caribbean region. We thank all our donors and partners for the good collaboration in 2019 and look forward to continuing this important work in 2020.

Gernot Laganda

*Chief, Climate and Disaster Risk Reduction Programmes
World Food Programme*

1. WMO (2020). Statement on the State of the Global Climate 2019.

2. Ibid.



A facilitator stands among a group of farmers participating in a focus group activity in Moatize district of Tete Province, Mozambique.
WFP/Mathieu Dubreuil

The R4 Rural Resilience Initiative

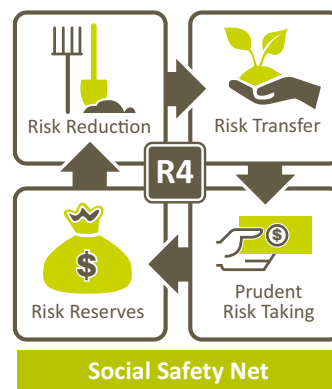
Background

Vulnerability to climate-related shocks is a constant threat to food security and wellbeing. As climate change increases the frequency and intensity of shocks, the challenges faced by food insecure farmers will also increase. In this context, building resilience to climate change for long-term food security and livelihoods improvement becomes essential.

The R4 model

The R4 Rural Resilience Initiative (R4) began as a strategic partnership between the World Food Program (WFP) and Oxfam America in 2011 to build on the success of Oxfam America’s pilot project HARITA (Horn of Africa Risk Transfer for Adaptation) that broke new ground in the field of rural risk management. After the successful expansion of the R4 integrated approach under the global partnership, in October 2018, Oxfam America transitioned into an advisory role with WFP taking the lead on the management and scale-up of R4 operations, globally. WFP gratefully acknowledges the pioneering role Oxfam America played together with the communities, the Relief Society of Tigray (REST) and other local and international actors in creating, developing, and transferring the HARITA model outside Ethiopia.

R4 currently reaches 93,826 vulnerable farmers (60 percent women) and their families in Ethiopia, Senegal, Malawi, Zambia, Kenya, Zimbabwe, and Burkina Faso with an integrated risk management strategy that combines four components: **improved natural resource management through asset creation or improved agricultural practices** (risk reduction), **microinsurance** (risk transfer), **increased investment, livelihoods diversification, and microcredit** (prudent risk taking) and **savings** (risk reserves). Of these farmers, 5,036 accessed insurance developed under R4, either subsidized through other programmes or paying fully in cash.





R1. Risk Transfer

R4 enables the poorest farmers to purchase agricultural insurance. R4 has been one of the most successful efforts to scale up weather index insurance (WII), a financial product based on an estimated rainfall index highly correlated

to the worst rainfall deficit events (droughts and dry spells) experienced by communities. Payouts are triggered by pre-specified patterns of the index rather than actual yields, thus eliminating the need for in-field assessment. Rapid compensation for weather-related losses means farmers can avoid selling productive assets and recover faster from droughts. Predictable income can reduce negative coping strategies and encourage rural households to invest in activities and technologies with higher rates of return. Insurance can also serve as collateral to obtain credit at better rates and give enough confidence to farmers to invest more. R4 is also implementing an Area Yield Index Insurance (AYII) product as part of its risk transfer component in Kenya. AYII can offer coverage against a host of risks affecting an entire area including pests and uses crop sampling at the end of season to determine value loss. Due to the inherent design of AYII, expected payout timeframe is longer compared to weather index-based insurance, but shorter than traditional agriculture insurance. R4 is also piloting hybrid WII and AYII products in select countries this year.



R2. Risk Reduction

Those households that are cash constrained have the option to pay insurance premiums by engaging in asset creation activities or by adopting improved agricultural practices. Assets built or rehabilitated through these activities

(such as water and soil conservation infrastructure), promote resilience by steadily decreasing vulnerability to climate risks. They also promote higher productivity by building the natural asset base available to farmers. The risk reduction component is usually built into government safety net and other programmes, as well as WFP Food Assistance for Assets (FFA) initiatives.

Farmers contribute their labour to risk reduction activities identified through participatory assessment and planning. In Ethiopia, Malawi, Zimbabwe, and Senegal, asset creation activities have contributed to natural resource rehabilitation and agricultural development. In Zambia, farmers apply conservation agriculture (CA) techniques to improve their agricultural productivity and sustainability. In Kenya, farmers receive technical assistance from extension services and field partners on good agricultural practises, including soil and water conservation techniques.



R3. Prudent Risk Taking

Smallholder farmers are often reluctant to invest in productive inputs or hired labour as their farms are vulnerable to external shocks. They may, thus, prefer low input – low output production systems that guarantee a

predictable, although low, income. Microfinance institutions may limit investments because of the perceived high risk of default in bad seasons. With increased food security and a stronger asset base, R4 farmers can increase their savings and stocks, using them along with insurance as collateral to obtain credit for investing in productive assets such as seeds, fertilizers and new technologies that increase productivity. Moreover, insured farmers are more confident to take out loans and invest in productive inputs, including hired labour, knowing that the financial risk of drought is minimized.



R4. Risk Reserves

Through individual or group savings, farmers can build a financial base that serves multiple purposes. For instance, they provide a buffer for short-term needs, increasing a household's ability to cope with

shocks. Group savings can be loaned to individual members with particular needs, providing a self-insurance mechanism for the community. Savings can also be accumulated in-kind, for example through cereal banks which allow farmers to stock surplus yields or livestock.



Smallholder farmers, Kidane Gliwwoz and Abeha Halsiase, recall the worst seasons for crop failure in the last 30 years in an interactive exercise that will inform the design for a microinsurance product to protect their livelihoods from drought risk in Tigray, Ethiopia.

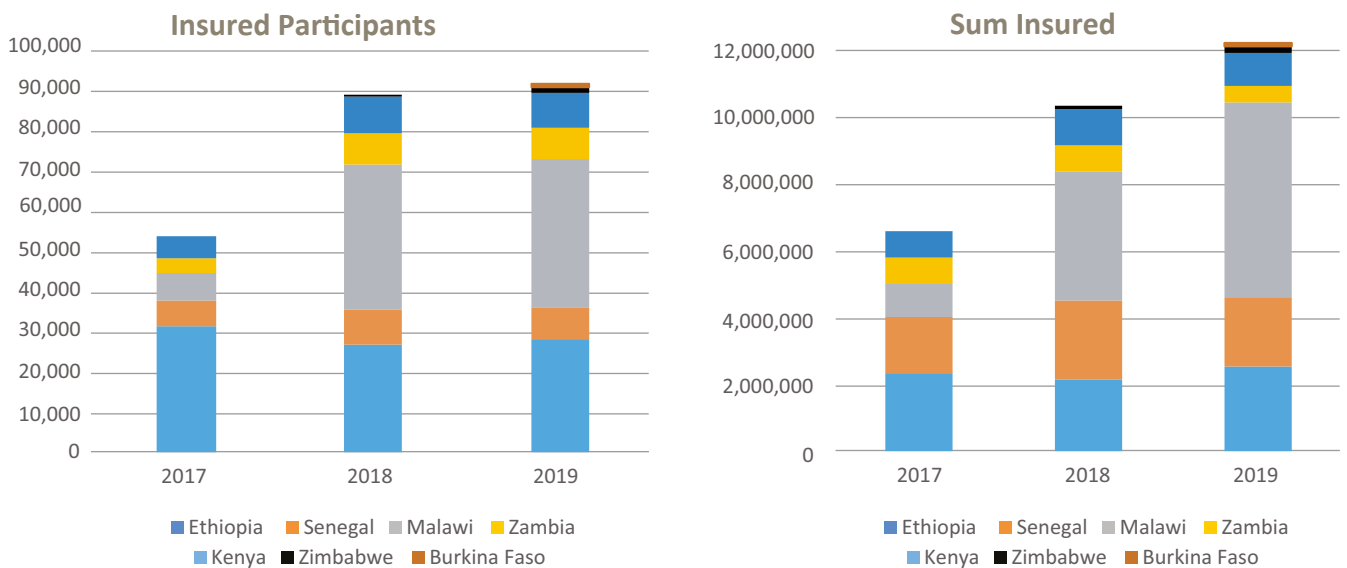
WFP/Michael Goode

Project Status

R4 reached 93,826 farmers in Ethiopia, Senegal, Malawi, Zambia, Kenya, Zimbabwe, and Burkina Faso in 2019. Of these farmers, 5,036 accessed insurance developed through the R4 initiative,

either subsidized through other donor-funded programmes or paying fully with their own cash. This year, the total sum insured amounted to approximately US\$12.2 million.

FIGURE 3. R4 achievements by indicator³




3. For the exact figures, please see Annex III.



The focus group facilitator, Fairuz Temam, enters answers into a tablet that will aggregate the data from all the expansion villages on smallholder farmers' crop production and seasonal calendar in Amhara, Ethiopia
 WFP/Michael Goode

R4 Ethiopia 2019



 Since 2009



28,692 households (144,033 persons)



42 percent women



Tigray and Amhara regions



AIC, DECSI, Ethiopian farmers' cooperative, IRI, ISD, Mekelle University, NMA, OIC, ORDA, REST, RIB Union



KfW, IFAD

Key Achievements

- **Sustainability:** 24,189 farmers paid 25 percent of their insurance premium in cash and 2,312 farmers paid their premium fully in cash. .
- **Cumulative value of savings:** US\$35,021 from VESAs and US\$757,353 from RUSACCOs.

R4 Programme in Ethiopia

In Ethiopia, R4 builds on the initial success of the Horn of Africa risk transfer for adaptation (HARITA) initiative, started in 2009 by Oxfam, the Relief Society of Tigray (REST), and several other national and global partners. The initiative builds its risk reduction component on the government's Productive Safety Net Programme (PSNP).



Risk Reduction component: The risk reduction component builds on the national Productive Safety Net Programme (PSNP)'s public works. The model is focused on a community-based watershed development approach, developed by WFP in collaboration with the Government of Ethiopia during the MERET programme. In order to build long-term resilience, farmers work on soil and water conservation, water harvesting, small scale irrigation, agroforestry and reforestation programmes for a number of selected days on top of the PSNP public works to receive crop insurance coverage. The activity is implemented by the implementing partners.



Risk Transfer component: By building assets, farmers can access weather index insurance. In order to be insured farmers should work on asset between two and seven days, depending on the sum insured participants require, as their contribution to the premium. The cash contribution is collected by the Rural Saving and Credit Cooperatives (RUSACCOs) and REST or the Organization for Rehabilitation and Development in Amhara (ORDA) and then paid to the insurance company branch. In 2019, participants contributed 25 percent of the total premium cost.



Risk Reserves and Prudent Risk Taking components: Farmers practice regular savings in Village Economic and Social Associations (VESAs) and RUSACCOs. Under the prudent risk taking component, R4 manages a revolving fund providing loans to farmers who want to invest in their agricultural activities through RUSACCOs. First, participants become members of RUSACCOs to access loans. Subsequently, the local partners, REST and ORDA, provide trainings to the participants before the RUSACCOs distribute the loan. Then participants repay the loan, which continues revolving in the village through further lending by RUSACCOs.



2019 Agricultural season: Below average rainfall during Belg rainy season and average to above average rains during Kiremt rainy season

The 2019 agricultural season was characterized by erratic rainfall distributions and dry spells during the *Belg* rainy season (February- May) and normal to above normal rainfall during the *Kiremt* rainy season (June-September).

Due to the late start, long dry spells, and below-average *Belg* rainfall, late planting occurred in many *Belg*-producing areas especially in central and eastern Oromia, and some areas of eastern Amhara and southern Tigray. The overall 2019 *Belg* harvest are estimated to be below average in most *Belg*-producing areas of the country.⁴

Kiremt rainfall from June to August 2019 has been average to above average across most *Kiremt* rain receiving areas; however, below average rainfall has been noted in localized areas. Generally, planting of 2019 *Meher* crops was timely and the area planted of short and long maturing crops was near normal in major *Meher* producing parts of Ethiopia. Despite localized crop losses due to poor rainfall, national *Meher* production was near average.⁵

Project Status

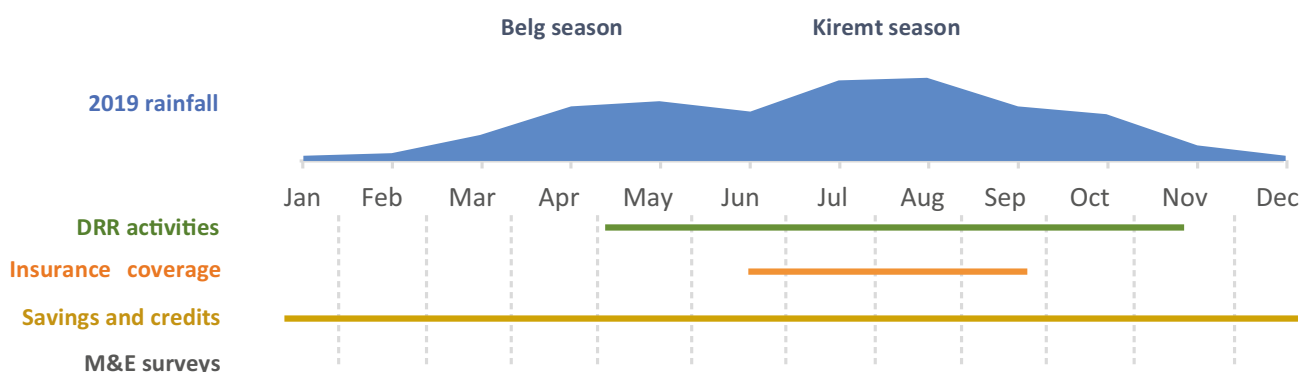
R4 has been working in 87 villages located across 12 districts in the Tigray and Amhara regions of Ethiopia. In 2019, the Country Office recruited four consultants to conduct assessments and develop the Targeting, Graduation, Savings and Credit strategies to determine a transparent process and criteria for these key areas of the project. Precisely, these strategies aim to establish new methods for targeting the project beneficiaries, as well as pathways and benchmarks to facilitate the graduation of beneficiaries.

These strategies developed guidance for key implementation activities such as criteria for expanding targeting of R4 participants beyond households enrolled in the PSNP, increasing the access to savings and credit for participants through strengthening RUSACCOs with trainings and expansion of credit guarantees, and conducting value chain assessments in target areas to be able to support livelihood and income generating activities for main commodities. The R4 project convened three workshops in the end of 2019 with relevant government and community partners at the national and regional level to validate the recommendations from the strategies and develop an implementation guidance document that will serve as a guiding framework for designing the field level activities for the project during the 2020-2022 period and beyond.

4. FEWSNET. 2019. Ethiopia Food Security Outlook. <http://fews.net/east-africa/ethiopia/food-security-outlook/june-2019>.

5. FEWSNET. 2019. Ethiopia Food Security Outlook. <http://fews.net/east-africa/ethiopia/food-security-outlook-update/august-2019>.

FIGURE 4. Ethiopia 2019 seasonal calendar



Risk Reduction Component

A total of 24,189 farmers (43 percent women) participated in long-term risk reduction activities, with women investing 50 percent less of their time in these activities than men. During the year, farmers engaged in building trench bunds on degraded communal land, runoff flood diversion canals, hillside terraces, and seedlings cultivation. These activities aim to protect farmers from runoff hazards, reduce erosion of fertile farmlands, improve soil moisture and recharge ground water.

Micro-gardening for Female Headed Households (FHHs) is also promoted as part of the risk reduction component to support vegetables production for household consumption, which improves their nutritional status and income generation. In total, 222 kg of vegetables seeds were distributed to 2,000 households involved in micro-gardening. Moreover, 2,000 watering cans and 4,176 different hand tools were distributed to these households. Among the households involved in micro-gardening, 820 prepared a total of 1,640 compost pits used both for growing their vegetables in their backyard plots and for the upcoming rain-fed agriculture season. Composting is essential for rebuilding soil nutrients and improving soil moisture retention, resulting in increased productivity.

Moreover, 110 rainwater harvesting systems (RWHs) were installed for 95 FHHs and for 15 male headed households with disabilities. RWHs help households easily access water for micro-gardening, reducing the workload for women and girls in fetching water and improve households’ nutritional status. In 2019, technical trainings on micro-gardens development and improved soil fertility practices were delivered to 2,062 farmers (94 percent women). Moreover, Trainings of Trainers (ToT) on Disaster Risk Management (DRM), Participatory Scenario Planning (PSP), and Climate Smart Agriculture (CSA) were also conducted.

Risk Transfer Component

A total of 28,692 farmers (42 percent women) were insured for the 2019 agricultural season for both long and short cycle crops. Of these farmers, 24,189 (43 percent women) paid 25 percent of their premiums in cash and 2,312 farmers (31 percent women) paid for their premiums fully in cash. Moreover, a total of 2,191 have accessed insurance through other donor funded programmes.⁶

Across the two regions, the total sum insured amounted to US\$2,514,317 and the total premium amounted to US\$392,012. Dry spells during the 2019 agricultural season triggered a total payout of US\$86,983 for 6,157 farmers.

In 2019, WFP started activities to build the capacity of national and regional stakeholders in index design, thanks to funding from IFAD. In this regard, WFP worked with its technical partner, the International Research Institute for Climate and Society (IRI), to develop Terms of Reference (ToR) for establishing the national and regional index design team. With the support of IRI, WFP conducted index design trainings and collected all field data for expanding the index design in Amhara and Tigray to around 300 additional villages. Moreover, WFP began consultation with the two Ethiopian local insurance companies, Africa Insurance Company (AIC) and Oromia Insurance Company (OIC), to define the steps and timeline for handing over management of the microinsurance component in the country from 2020 onwards.

Thanks to funding from IFAD’s Adaptation for Smallholder Agriculture Programme II (ASAP2), WFP piloted the Picture-Based Index (PBI) for seasonal monitoring in partnership with the International Food Policy Research Institute (IFPRI) and IRI to address basis risk challenges. The pilot studied the use of digital repeat photography through smartphone cameras as a tool to strengthen seasonal monitoring of crop health and damage in Ethiopia. This approach combines key advantages of both index-based insurance—timely compensation without expensive loss assessments—and indemnity insurance—minimum basis risk

6. 2,016 farmers accessed insurance through the Development Food Security Activity (DFSA) programme, supported by USAID; 175 farmers accessed insurance through the Participatory Small-Scale Irrigation Development Programme (PASIDP), supported by IFAD.

and an easy to understand product. The picture-based monitoring system was tested to complement the existing index-based insurance product, helping the project better understand whether the index has underperformed, if the location is uninsurable or if farmers have too high expectations. Main conclusions and lessons learned from the pilot are summarized below:

- The level of damage reported on average by farmers remained limited, with many farmers not reporting any damage, and if reporting it, damage remained often at moderate levels. The overall output of the season suggests that it was not a catastrophic year in any of the locations, but some did experience a bad season.
- Farmers who reported damage, however, attributed this damage to drought in only half of the cases; the remainder of cases was due to pests and other perils.

- Farmer-reported damage is not always reflected by lower yields measured objectively using Crop Cutting Experiments (CCEs).⁷ Additional data analyses will explore the potential reasons for these gaps.
- In this context, images can provide an important objective source of data to track phenology and crop health in a transparent, tangible way.
- There is a clear need to monitor crops and have a system in place to address basis risk, and pictures can play an important role in this regard. Additional analyses are however required to obtain better insights in the discrepancies between different data, and how to make optimal use of the images as an objective source of data that can help resolving the gaps between farmer reports, insurance indices and yield data.

INSURANCE PERFORMANCE INDICATORS

- * **Growth Ratio:** 2.1 percent decrease in the number of farmers insured from 2018 to 2019.
- ** **Consumer Protection Investment Ratio:** 15.3 percent. This ratio is acceptable and has slightly increased from the value registered in 2018 (13.6 percent).
- *** **Utility Ratio:** 96 percent. A well-designed insurance contract will usually have a utility ratio between 80 percent and 120 percent; therefore, the ratio is quite healthy.

Satellite Index Insurance for Pastoralists in Ethiopia (SIPE)

WFP began offering insurance to pastoralist in 2018 through the Satellite Index Insurance for Pastoralists in Ethiopia (SIPE). In 2019, a total of 7,816 pastoralists have registered for the index-based livestock insurance in the Somali region of Ethiopia. Following dry spells during the 2019 season, 1,721 pastoralists received a total payout of US\$97,508.

Risk Reserves and Prudent Risk Taking Components

In 2019, 9,150 farmers (40 percent women) participated in 404 VESAs, with a total capital held amounting to US\$35,021 (ETB1,128,131). This year, farmers in 33 villages continued to benefit from the Revolving Loan Funds (RLFs) managed by RUSACCOs. The lessons learned from these RLFs have also informed how the project should move forward with the credit component. This year, 19,851 farmers (38 percent women) saved a total of US\$757,353 (ETB 24,394,345) in RUSACCOs. Moreover, a total of 946 farmers (7 percent women) accessed loans from RLFs totalling US\$53,033 (ETB1,708,173) for different Income Generating Activities (IGAs).

Capacity building activities were conducted throughout the year with trainings and technical support provided to committee members and staff to improve the operational and managerial capacity for better service delivery. Trainings

on gender mainstreaming and gender and nutrition were also carried out with project implementing staff and stakeholders to improve knowledge and integration of gender considerations.

Outlook for 2020 and beyond

In 2020, R4 in Ethiopia is expected to scale up to 66,000 households in Amhara and Tigray regions. The initiative is planning to reach over 180,000 households and expand its intervention to the Oromia region and to the Southern Nations, Nationalities and People's Region (SNNRP) by 2021 as a result of the support received from KfW. Activities for 2020 will continue to focus on building the capacity of local stakeholders, with WFP aiming to ensure continuity on the insurance company handover and supporting capacity strengthening activities. Moreover, the initiative is planning to hire two Disaster Risk Reduction officers and a livelihood officer.

7. Crop Cutting Experiments (CCE) refer to an assessment method to accurately estimate the yield of a crop or region during a given cultivation cycle.

* **Growth Ratio:** This indicator determines the increase in number of insured participants on an annual basis.

** **Consumer Protection Investment Ratio:** This indicator measures the amount of resources dedicated for consumer protection including-financial literacy, awareness, and communication.

*** **Utility Ratio:** This ratio measures in which proportion the sum insured meets the utility requirement of the insured participant.




In preparation for the Green Climate Fund project implementation, WFP conducted a baseline monitoring activity with the Senegalese farmers that will be receiving support for managing their climate risks..

WFP/Senegal Communications Team

R4 Senegal 2019



 Since 2012



8,206 households (71,392 persons)



52 percent women



Kolda and Tambacounda Regions



ANCAR, ANACIM, CNAAS, Inclusive Guarantee, IRI, La Lumière, MAER, Orange, Oxfam America, P2RS, Université Gaston Berger



BMZ, French Cooperation

Key Achievements

- 8,206 farmers (52 percent women) insured and 9,001 farmers (34 percent women) enrolled in FFA.
- **Sustainability:** 533 farmers paid their premium fully in cash with total cash contributions amounting to US\$6,688.
- **Cumulative value of savings:** US\$93,658.

R4 Programme in Senegal

In Senegal, R4 builds on WFP's FFA and Oxfam America's Saving for Change (SfC) programmes. The initiative was previously linked to the IFAD-funded programme, *Projet d'Appui au Développement Agricole et à l'Entrepreneuriat Rural (PADAER)*, an agricultural development initiative providing farmers with agricultural inputs as well as insurance through WFP.



Risk Reduction component: By participating in WFP's FFA programme, farmers build assets that decrease their vulnerability to climate shocks over time. These activities include reforestation, prevention of soil erosion, composting and vegetable gardens.



Risk Transfer component: Farmers access weather index insurance by investing their time in building assets. As their contribution to the insurance premium, farmers have to work eight days in building productive assets. When a drought hits, compensation for weather-related losses prevents farmers from selling assets and stimulates faster recovery.



Risk Reserves and Prudent Risk Taking components: Insurance policies are delivered through SfC Associations, which support participants in establishing small-scale savings, used to build 'risk reserves'. Savings help build a stronger financial base for investing – but also act as a buffer against short-term needs and idiosyncratic shocks, such as illness and death and could be used to pay insurance premiums in cash. Saving and microcredit also enable investment in livelihoods, increasing household production and income, gradually allowing them to access insurance commercially and contributing to the general sustainability of the initiative.



2019 Agricultural season: Dry beginning and heavy rainfall in September

The 2019 rains in Senegal were moderate, characterized by a dry beginning and more intense rains in June, July, and August.⁸ During the month of July, rainfall of variable intensity was recorded across the country, with greater accumulations in Tambacounda. August recorded rainfall of variable intensity across the country, with higher intensity for the last two decades in the center and south of the country.

The rainy season started on time in early June in the South-Eastern region and cumulative rainfall resulted in favourable moisture conditions to support planting operations and crop growth.⁹ Planting of the 2019 grain crops (maize, millet, and sorghum) started timely in June in a few regions (South-East) of the country. However, Senegal experienced significant flooding in September 2019, causing extensive damage in Rufisque and Guédiawaye department in Dakar Region and Kaolack region, negatively impacting livelihoods.¹⁰

Project Status

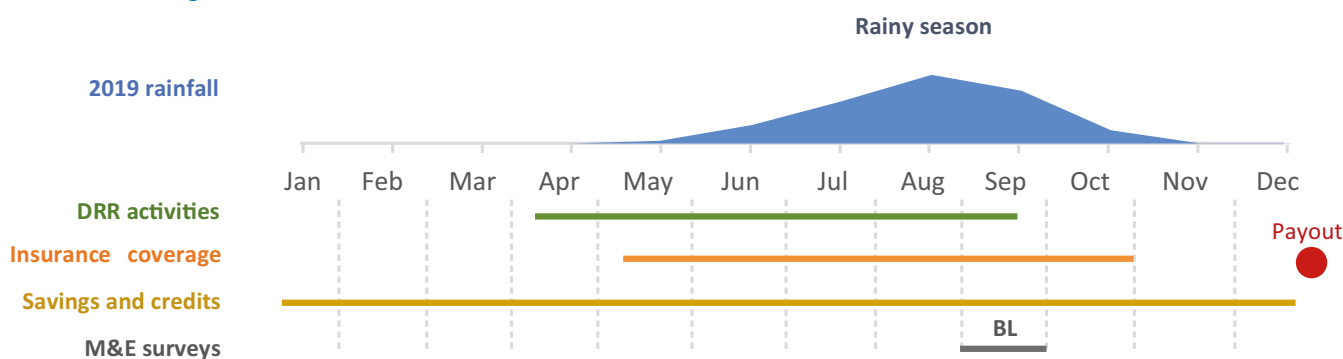
This year marked the seventh year of implementation of R4 in Senegal. In 2019, a total of 8,206 farmers (52 percent women) were covered by insurance in Tambacounda and Kolda.

8. ANACIM (2019) http://www.anacim.sn/climat/index.php/bulletins_climatiques/.

9. GIEWS- Global Information and Early Warning System. (FAO, 2019). <http://www.fao.org/giews/countrybrief/country.jsp?code=SEN&lang=es>.

10. FEWSNET (2019) Global Weather Hazards Summary. <http://fewsn.net/global/global-weather-hazards/october-18-2019>.

FIGURE 5. Senegal 2019 seasonal calendar



Risk Reduction Component

In 2019, Food Assistance for Assets (FFA) activities under the risk reduction component were undertaken and completed by 9,001 farmers (34 percent women) in both regions, representing a decrease of only 10 percent compared to last year, but a significant increase of 48 percent compared to 2017.

Risk reduction activities were mainly focused on creating community and household productive assets, in addition to providing livelihood support, including improvement of vegetation cover through reforestation, building semi-permeable stone bunds to prevent soil erosion, watershed management measures to avert runoff, composting pits and nutrition-sensitive vegetable gardening. WFP continued to focus on enhancing rain-fed rice production, providing seeds and bio-fertilizers to improve rice yields.

During the year, farmers engaged in risk reduction activities for both the dry and rainy season. Activities for the dry season included: creation of stone bunds used to protect water ponds and lowlands from sand invasion and dispel runoff, increase infiltration of rainwater, reduce water erosion, and improve soil fertility; sand removal, including cleaning and digging of ponds to increase water resources for livestock; and building of small dams to ensure water requirements for crops and to increase access to groundwater.

Rainy season assets creation activities included: small dykes levelling for water control; distribution of rice seeds and fertilizers to increase rice yields; planting of *Acacia mellifera* trees around garden perimeters. These trees are used as fences or windbreaks to protect crops against the wind, contributing to improved crop yields.

Rice farming was conducted on 382 ha, leading to a 69 percent increase compared to last year. Overall, the FFA activities have reduced exposure to climate-related shocks as well as soil degradation from agriculture, strengthening resilience to drought and flooding, and contributing to long-term livelihood and environmental benefits.

In Tambacounda and Kolda, the total amount of cash that was distributed to participants as an incentive to participate in community asset creation activities amounted to US\$475,000. For the first time, the response was digitalized, through electronic cash-based transfer directly reaching farmers.

This year, the Country Office strengthened its efforts to increase women’s participation in decision-making to ensure that women are recognized as agents of change and can actively contribute to change management processes. Women actively participated in food assistance decision-making entities such as committees and boards. WFP also communicated on gender issues during community activities such as training and committee meetings and ensured that local authorities allow women to acquire land use rights.

Risk Transfer Component

As part of the risk transfer component, a total of 8,206 farmers (52 percent women) were insured for the 2019 agricultural season. Of these farmers, 533 paid their insurance premium fully in cash with total cash contributions amounting to US\$6,688. The remaining 7,673 farmers (52 percent women) paid 24 percent of their premium in cash. In total, cash contributions from farmers amounted to US\$32,672.

The number of insured farmers dropped by 11 percent compared to 2018, with the decrease being the result of limited time to work on asset creation and distribute the product to all participants (due to late budget confirmation), the end of the IFAD-funded programme PADAER,¹¹ and a reduction in the number of villages covered by WFP due to funding constraints.

The 2019 agricultural campaign was generally satisfactory but was marked by a late start which led to insurance compensation in the first phase of US\$21,792 for 713 farmers in Kolda.

Across both regions, the total sum insured for the 2019 agricultural season amounted to US\$2,056,176, with a total premium amount of US\$271,625.

11. Projet d’Appui au Développement Agricole et à l’Entrepreneuriat Rural (PADAER) is an agricultural development initiative providing farmers with agricultural inputs as well as insurance through WFP.

INSURANCE PERFORMANCE INDICATORS

- **Growth Ratio:** 11.2 percent decrease in the number of farmers insured from 2018 to 2019.
- **Consumer Protection Investment Ratio:** 30 percent. The ratio is quite healthy, demonstrating that more than a quarter of insurance budget is dedicated to improving financial capacity and understanding of farmers.
- * **Promptness of Claims Settlement:** 65 days for the 2019 agricultural season. This timeframe is slightly over the ideal limit of two months from policy closure.
- **Utility Ratio:** 179 percent. The ratio is above the ideal range (from 80 percent to 120 percent).

Risk Reserves and Prudent Risk Taking Components

In 2019, WFP has continued to support women in strengthening their asset base and investing in their economic activities. Out of the 11,646 farmers participating in 748 Saving for Change (SfC) and Economic Interest Groups (EIG), 81 percent were women. The total amount of capital held by savings groups at the end of 2019 amounted to US\$143,340 and the total savings amounted to US\$93,658. Moreover, a total of 8,788 farmers (88 percent women) were able to access loans worth US\$195,247. This approach is highly successful as evidenced by the 100 percent repayment rate.

Beyond the SfC groups, the EIG groups —consisting of women members derived from the SfC groups— allow women, through community decision-making bodies, to reflect on project ideas, develop income-generating activities and carry out advocacy in favor of the communities on questions of financing, land, and other topics. The funds generated are redistributed among the members to increase activities and strengthen their income. Both groups are also effective social mobilization channels, which have enabled them to negotiate better access to land with the territorial authorities. Particularly under this component, WFP has continuously made efforts to ensure that women smallholder farmers have equal access to technical support and information on productive agricultural techniques, nutrition and rural entrepreneurship.

Key programme findings

In September 2019, a baseline was conducted in Kolda, Tambacounda, and Koumpetoum districts. The survey provided a complete profile of R4 participants (in Kolda and Tambacounda) and a control group (in Koumpetoum) that presented similar characteristics of livelihood and resilience capacities to serve as reference to analyse the effects of the programme.

The baseline allowed the analysis of the food security status, the socio-economic situation (livelihood, wealth, access to land, productive assets and financial services, income sources, etc.), the shocks experienced recently (frequency and seasonality) and the resilience capacity of households. The baseline shows a starting point where the food security situation of non-participants is better than the future R4 participants showing that programme targeting was done effectively. Concerning R4 households, it was observed that male headed households present a better food consumption score than women headed households. Differences were also observed between regions, with Kolda presenting the lower proportion of food secure households compared with Tambacounda and Koumpetoum that present a similar situation.

To adapt to the different shocks, households have put in place different coping strategies. Almost 40 percent of respondents mentioned adopting coping strategies to meet food needs, 20 percent link the strategies to cover education needs and more than 26 percent used coping strategies to ensure health needs.

The most frequent shocks reported by households participating in the survey indicate that over the last 12 months were illness or serious injury of a household member, followed by invasion of insects or pests, job loss, loss of crops or death of the main breadwinner. The regular monitoring system of the programme will conduct a similar survey in 2020 to understand the changes experienced by R4 participants to better orient the programme. Main findings will be presented in the next annual report.

Outlook for 2020 and beyond

In 2020, the R4 programme will be marked by the start of the scaling up phase thanks to funding from the Green Climate Fund (GCF), for a total of US\$10 million for four years (2020-2023). Activities under the GCF project will include the creation of sustainable agricultural assets, electronic cash transfers, access to weather index insurance, access to climate services and education, savings, gender mainstreaming, guarantees and credit. The number of participants is expected to scale-up to 12,000 in 2020 and eventually reach 25,000 in 2023. All activities will be guided by a strong coordination and capacity building approach with government stakeholders at national, regional and municipal levels, including social protection actors, in order to facilitate government hand-over and prepare an exit strategy for R4 in Senegal.

The design of project activities is based on the achievements of the R4 pilot phase (2012-2017), confirmed by the impact evaluation conducted in 2016, but they are also adapted to the continuation phase (2018-2019) and the results of the R4 review workshop that took place in Tambacounda in December 2019. The approach is based on systematic involvement of Vulnerability Analysis and Mapping (VAM), Community-based Participatory Planning (CBPP) and Monitoring, Evaluation and Learning (MEL) activities. New in 2020 will be the integration of environmental and social assessments integrating the new risk management standards. In addition to the expansion of R4, the complementarity with other Country Strategic Plan (CSP) programmes, notably school canteens and nutrition activities, will be reinforced. The focus on village cereal banks and financial inclusion will depend on a good framing of the Smallholder Agriculture Market Support (SAMS)¹² approach together with Supply Chain and other WFP programmes.


12. Smallholder Agricultural Market Support (SAMS) is WFP's flagship program connecting smallholder farmers to markets.

* **Promptness of Claims Settlement:** This indicator measures the efficiency of the claims' settlement process, with the ideal limit being two months from policy closure.



Female farmers participating in a sensitization activity in Mangochi, Malawi.
WFP/Jyothi Bylappa

R4 Malawi 2019

 Since 2015



37,891 households (170,510 persons)



71 percent women



Southern Region



CUMO, DoDMA, DCCMS, Emmanuel International, Find your Feet FIRD, Hannover Re, Insurance Association of Malawi, IRI, MoA, MoFEP&D, NICO Insurance, Plan International Malawi, Pula Advisors, UoR, UP, World Vision Malawi



SDC, USAID, BMZ, DFID, Flanders, Norway

Key Achievements

- **Scale up:** The number of insured farmers increased from 36,969 in 2018 to 37,891 in 2019.
- **Expansion:** The integrated risk management approach is currently active in six districts, with operations being rolled out this year to the new district of Phalombe, but being withdrawn from Nsanje district, owing to donor preference.
- **Sustainability:** 4,171 farmers in Blantyre paid 14.33 percent of their premium in cash.
- **Cumulative value of savings:** US\$560,000.

The Integrated Risk Management approach in Malawi

As part of the Malawi Country Office's integrated resilience building portfolio, WFP is offering a comprehensive set of integrated interventions that reduce and mitigate increasing climate-related risks vulnerable households face and to help them achieve food security while enhancing resilience at the community level. Interventions include asset creation under WFP's Food Assistance for Assets (FFA), the provision of Climate Services (under the Global for Framework Climate Services), agricultural insurance, savings and diversification of livelihoods, as well as market access support under WFP's Smallholder Agricultural Market Support (SAMS). These interventions are linked with shock responsive social protection, early recovery, school feeding and nutrition programmes and are implemented in an overall integrated life-cycle approach. This is in line with WFP's life-cycle approach to building resilience under its 2019-2023 Country Strategic Plan (CSP), focussing on 3 areas:

- 1) building human capital as a pre-requisite to resilience building;
- 2) building physical capital to activities and effectively ensure resilience at household levels;
- 3) grounding these interventions in strengthening national systems, processes, and policies.

The different components of the integrated risk management approach work as following:



Risk Reduction

Risk Reduction component: By participating in WFP's FFA programme, farmers build assets such as soil and water conservation structures in addition to applying conservation agriculture techniques. This helps them improve their natural resource base for improved resilience against climate-related risks.



Risk Transfer

Risk Transfer component: By participating in WFP's FFA programme and investing their time in building homestead assets to improve productivity, farmers access Weather Index Insurance products in all the six districts and Area Yield Index Insurance in three districts (Balaka, Zomba, Phalombe). A cash contribution to purchase an insurance policy was introduced in Balaka in 2018 and to Blantyre and Zomba in the past year. Smallholder farmers work for an average of 14 days on this component.



Risk Reserves

Risk Reserves and Prudent Risk Taking component: Savings are promoted through Village Saving and Loans (VSL) groups. These act as a buffer for smaller, more frequent shocks and to fund investments in diversified and more resilient livelihoods. The uptake of credit is promoted through microfinance institutions to support farmers in making larger investments in their livelihoods, for prudent risk taking.



Prudent Risk Taking

2018/19 Agricultural season: Heavy rainfall led to flooding in Southern Malawi

The 2018/19 season was characterized by heavy rainfall during the beginning of March, leading to flooding in southern and parts of central Malawi, which resulted in infrastructure and crop damage, loss of livestock, collapse of houses, and cutting off of roads as well as damage to clean water sources. In affected areas, some poor households experienced significant production losses.

Preliminary assessments estimated that in southern areas a total of 25,000 to 35,000 hectares of matured crop were destroyed, significantly decreasing production estimates across the south.¹³

In Nsanje, Phalombe, Chikwawa, Mangochi and Zomba, outcomes are most likely to be stressed with many households facing crisis based on the extent of crop destruction and loss of assets due to flooding. According to the Ministry of Agriculture's (MoA) estimates, national maize production is expected to be 10 percent above the five-year average, with rice, sorghum, and millet also expected to be above average. However, despite above-average national production, below-average maize grain supply is reported in most southern districts where flooding led to production deficits.¹⁴

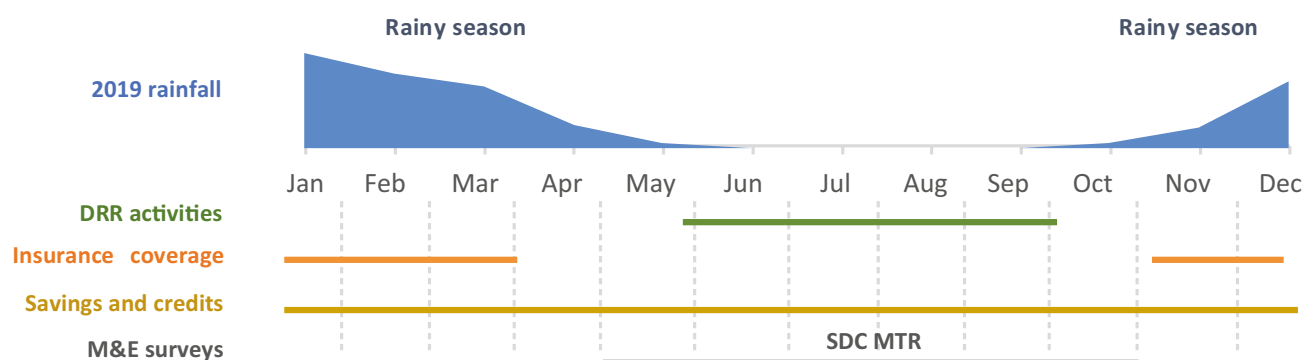
Project Status

Malawi's climate is highly variable, with frequent floods, droughts, and climate-related disasters affecting farmers particularly in the southern part of the country where WFP is implementing its livelihood interventions. During 2019, Malawi experienced floods and droughts affecting a significant number of farming households. Weather-related events such as cyclone Idai exacerbated the vulnerability of farmers, putting prospects for food security and resilient livelihoods at risk. The 2019 climate-related events in Malawi rendered over 1.9 million people food insecure, requiring urgent need of support for the lean season (Nov 2019 – March 2020). Moreover, higher than average temperatures, the impact of Fall Army Worms and rainfall variability were among the prominent risks facing farmers and significantly reduced yield for both rainfed and winter cultivation. This led to early reliance to markets, driving food prices rocket high.

13. FEWSNET. 2019. *Heavy rains and flooding cause extensive crop and infrastructure damage in southern Malawi.* <https://fews.net/southern-africa/malawi/key-message-update/march-2019>.

14. FEWSNET. 2019. *Crisis (IPC Phase 3) outcomes expected to emerge around October in southern areas.* <http://fews.net/southern-africa/malawi/food-security-outlook-update/august-2019>.

FIGURE 6. Malawi 2019 seasonal calendar



In March 2019, Malawi experienced heavy rains that were associated with Cyclone Idai, with the Southern Part of Malawi being heavily affected. As a result, Level Two (L2) Emergency Response was activated, providing emergency food assistance to 427,000 beneficiaries in the nine of the 15 flood affected districts. Afterwards, an Early Recovery plan was developed to provide support towards recovery for an estimated 48,000 households in six worst flood affected districts (Nsanje, Chikwawa, Phalombe, Zomba, Mangochi and Machinga) all of which being part of WFP Malawi’s resilience targeted districts.

In 2019, the Malawi CO continued promoting the comprehensive integrated livelihood support package that includes FFA, integrated risk management strategies like microinsurance, savings and prudent risk taking activities, as well as market access support, climate services and other behavioural change activities that enhance good health and nutritional practices. In 2019, a total of 37,891 farmers were insured for the 2019/20 season, with an overall increase of 3 percent compared to the 2018/19 season. (For details on participants by activity please refer to Table 1).

TABLE 1. Resilience beneficiaries by activity

Malawi	District	FFA	Insurance, VSL & Credit	SAMS/P4P	Climate Services
No. of participants (HHs)	Balaka	16,370	10,309	500	15,390
	Blantyre	13,721	4,171		12,790
	Chikwawa	19,222	4,501	396	15,920
	Machinga	18,138		500	-
	Mangochi	25,541	7,454	5,500	18,460
	Nsanje	18,128		396	-
	Phalombe	14,259	8,256	344	-
	Zomba	29,056	3,200	541	22,830
TOTAL		154,435	37,891	8,177	85,39

Risk Reduction Component

By participating in WFP’s FFA programme, farmers build or maintain assets to improve their livelihoods, work on community gardens, fishponds, and reforestation, creating healthier natural environments and improving their natural resource base. These activities reduce risks and the impacts of climate-related shocks, increasing food productivity, and strengthening resilience to climate-related disasters. WFP is also implementing watershed management activities (including deep trenches, irrigation canals, soil bunds) under the joint resilience project ‘Promoting Sustainable Partnerships for Empowered

Resilience’ (PROSPER)¹⁵ in four districts, targeting 28,000 farmers. Communities were put at the centre of the activities through the implementation of Community Based Participatory Planning (CBPP) sessions to identify the appropriate FFA and complementary activities, which will continue in 2020. CBPP brings together communities, partners and local government to identify issues and tailor programme responses to local requirement. In 2019, WFP was able to confirm 51 percent of its assets created and maintained through its Asset Impact Monitoring System (AIMS), which uses satellite imagery to monitor assets.

15. PROSPER is a multi-stakeholder resilience programme supporting the Government of Malawi to reduce extreme poverty and end the recurrent cycle of crises and humanitarian assistance. Using an integrated, multi-layered and sequenced approach, PROSPER aims to reduce the impact of climate shocks, help households meet their immediate needs, while supporting longer term efforts to enhance natural resource management, strengthen disaster preparedness and response mechanisms, support linkages to safety nets, increase access to appropriate financial services and products, and create functional markets systems. With funding from the UKAID under the BRACC (Building Resilience and Adapting to Climate Change), the programme targets 1.1 million vulnerable people in the districts of Balaka, Chikwawa, Phalombe and Mangochi and implements the same activities as under R4, enabling the initiative to scale up its interventions.

Climate services activities were also carried out and in 2019, WFP's partners Farm Radio Trust and the Ministry of Agriculture, supported the co-production and dissemination of messages via 534 community radio listening hubs, enabling over 18,000 households to directly access weather and agro-climatic advisories for enhanced farmer decision making on their livelihoods and climate smart agriculture options. Selected government officials have been trained in Participatory Integrated Climate Services for Agriculture (PICSA) methodology which aims to strengthen government's agriculture extension services by interacting with farmers in a participatory manner.

Risk Transfer Component

In 2019, a total of 37,891 farmers (71 percent women) were insured for the 2018/19 season in the six districts of Balaka, Zomba, Blantyre, Chikwawa, Mangochi and Phalombe. Following recommendations from the Mid-Term Review of the R4 Southern Africa phase 2 programme commissioned by its donor, the Swiss Agency for Development and Cooperation (SDC),¹⁶ and a review of the performance of the insurance product,¹⁷ the CO decided to test a composite insurance product for the 2019/20 season.

Specifically, the CO partnered with Pula Advisors, a risk modelling institution to provide an Area Yield Index Insurance product for the 2019/20 season on a 50:50 premium basis with the Weather Index Insurance (WII) product in three districts for 21,765 farmers, which will provide coverage against dry spells but also other risks contributing to yield loss (i.e. drought, pest and diseases, hail, flood and storms). The introduction of a hybrid product responds to the needs of the farmers, who have been requesting a more comprehensive insurance cover that would consider multiple risks.

It is hoped that the introduction of a multiple peril product will stimulate more appetite for microinsurance products and therefore make participant households more willing to contribute in cash towards premiums cost. In 2019, a total of US\$10,047 (MK 7,400,220) was collected from farmers in Blantyre as their premium contributions for this season. Farmers in Balaka and Zomba were unable to contribute due to significant yield losses during the 2018/2019 season as a result of water logging, pests and diseases, which were not covered by the drought policy.

Across all districts, the total sum insured amounted to US\$5,871,590 (MK4,324,779,504) for both Area Yield and Weather Index insurance products, with a total premium of US\$679,869 (MK500,764,446).

During the year, WFP Malawi worked with the International Research Institute for Climate and Society (IRI) to facilitate index design trainings for the national pool of experts from both the public and private sector, to help sustain the expertise for index insurance in the country. The trainings brought together participants from NICO, the Insurance Association, Malawi's government departments including the Department of Climate Change and Meteorological Services (DCCMS), the Department of Poverty Reduction and Social Protection (PRSP), under the Ministry of Finance, Economic Planning and Development, the Department of Disaster Management Affairs (DODMA), and the Ministry of Agriculture.

INSURANCE PERFORMANCE INDICATORS

- **Growth Ratio:** 2.5 percent increase in the number of farmers insured from 2018 to 2019.
- **Consumer Protection Investment Ratio:** 18 percent. This ratio is healthy, demonstrating that almost 20 percent of insurance budget is dedicated to improving financial capacity and understanding of farmers.
- **Utility Ratio:** 103 percent. The ratio is quite healthy and within the acceptable range (from 80 percent to 120 percent).

Risk Reserves and Prudent Risk Taking Components

In 2019, under the risk reserves component, a total of 37,857 farmers (78 percent women) saved approximately US\$560,000. In alignment with Malawi CO's livelihood implementation strategy, there is a plan to revisit partnership arrangements and commit to a comprehensive multi-year

approach for Village Savings and Lending groups (VSLs). Multiple options for strengthening the linkages and improving the effectiveness of the VSLs are being explored and among other things, WFP Malawi will consider establishing a start-up revolving fund option, if appropriate, to stimulate meaningful savings and support graduation of the saving groups.

16. R4 Southern Africa phase 2 is funding the scale-up of the integrated risk management approach in Zambia, Malawi, and Zimbabwe. In Malawi, SDC funds interventions in the districts of Balaka and Zomba.

17. Low uptake of insurance was associated with the weather index insurance product not entirely meeting the population's needs, as farmers suffered from weather induced shocks as well as non-weather induced shocks, including Fall Army Worms.

Key programme findings

In the aftermath of Cyclone Idai it was established that farmers benefitting from a package of WFP Malawi's livelihood interventions experienced lesser damage than those not part of the programme. This was mainly the case due to assets, including water harvesting structures/catchment conservation structures done through WFP's FFA programme. The after-action review and ongoing monitoring by WFP also reported that the neighboring non-targeted communities and villages have seen the benefit of the implementation of the risk reduction measures in flood protection and have started replicating without external support the risk reduction measures.

Midterm Reviews of the integrated risk management approach

In 2019, two independent Mid Term Reviews were commissioned: one by the Swiss Agency for Development and Cooperation (R4 Southern Africa phase 2 2017-2021) and one by the Government of Flanders (IRMP 2017-2020 and Climate services) to assess the performance and sustainability of their respective funded programmes in Malawi, while highlighting key lessons learned for the remainder of the programme and/or subsequent phases. Main findings and lessons learned from both reviews are outlined below:

- The integration of interventions like FFA, climate services, insurance, and VSL at the household level provides a powerful combination of knowledge and money that is available at the right time to allow smallholder farmers to plan ahead for the forthcoming agricultural season and has led to increased resilience to drought spells;
- Insurance has potential to contribute to reducing a household's food gap in the event of a moderate to severe drought;
- Improved communication of the benefits of insurance to farming households is needed to enhance buy in for sustainability;
- The insurance product was designed to cover only drought and is ineffective in covering crop losses caused by floods or pest. This point has already been addressed with the introduction of a composite insurance product in three districts for the 2019/20 season;
- VSLs are effective in strengthening the capacities of smallholder farmers to invest and diversify their livelihoods;
- Climate services information provided through extension officers and radio is effective, with farmers reportedly making changes to their farming practices as a result;
- Increased partner coordination and engagement is needed for improved implementation of the integrated approach;
- Continued capacity strengthening and support of the various stakeholders is needed to ensure sustainable outcomes;
- In Malawi, the Government has demonstrated strong commitment to supporting the resilience building approach, but capacity still needs to be strengthened.

Outlook for 2020 and beyond

In 2020, the Malawi Country Office will continue to explore further resource opportunities through both traditional and non-traditional donors to sustain and upscale the integrated resilience

management approach through the various interventions, including FFA, insurance, Smallholder Agricultural Market Support, Climate Services, and VSL amongst others. WFP will continue working with partners, including Government Ministries and Departments, Non-Governmental Organizations, the Academia and the private sector in order to effectively enhance food security and partnerships.

WFP Malawi will assess the performance of the Area Yield Index Insurance (AYII) product tested in three of the targeted districts (Balaka, Zomba, and Phalombe) for the 2019/2020 season. The pilot will help the CO draw its recommendations on the sustainability and benefits of both insurance models, informing a possible upscaling of the composite crop insurance product to all the six districts. The CO will continue monitoring ongoing discussions between Pula and the Government of Malawi on agriculture insurance and will pursue potential areas of collaboration and policy advocacy. WFP Malawi will continue to promote investment in non-traditional crops and food fortification as part of a nutrition sensitive and risk management approach. The promotion of value chains together with the introduction of demand driven financial services products would build long term sustainability of the insurance and other risk management interventions, including the savings and credit components.

WFP will focus on strengthening the capacity for VSL groups and propose a standard model that considers different vulnerabilities of participants, with the CO exploring the revolving fund option to stimulate savings activities. There will be increased focus on the VSL and Prudent Risk Taking components for the upcoming season to ensure farmers have access to a complete integrated package. Recommendations from the VSL and Credit assessment that WFP Malawi conducted with support from the Regional Bureau Johannesburg (RBJ) will guide the CO to inform the development of relevant capacity building and operational plans for 2020.

In 2020, WFP Malawi plans to continue strengthening the integration of the resilience package into other WFP activities including livelihoods for refugees, emergency through recovery operations, school meals and nutrition. Other priorities include the increased equitable engagement and enhanced access to food and resilience interventions for women and youth by enhancing the ability of households to produce enough food for longer periods, consume and preserve perishable commodities at household level, including the diversification of household incomes and local value addition. As a technical advisor, WFP Malawi will also be supporting the government of Malawi with the implementation of the Adaptation Fund approved project "Adapting to Climate Change Through Integrated Risk Management Strategies and Enhanced Market Opportunities for Resilient Food Security and Livelihoods". This will be a step towards national ownership of the integrated risk management approach and long-term sustainability of reducing hunger through enhanced partnership in Malawi.

Furthermore, a final evaluation workshop of SDC second phase funding to R4 in Southern Africa will take place at the end of 2020. It will be the opportunity for Country Offices to present and agree on strategic and programmatic directions in view of a potential third phase funding, starting in July 2021.



Three of the 7,821 R4 farmers that received payouts this year pose for a photo during the insurance payout distribution in Zambia, dry spells during the 2018/19 agricultural season triggered a total of US\$452,170 in payouts.

WFP/Zambia Communications Team

R4 Zambia 2019



 Since 2015



7,822 households (53,965 persons)



49 percent women



Southern Region



DAPP, DMMU, FAO, Hannover Re, Heifer Intl, IFAD, IRI, Mayfair insurance, MFinance, MoA, MTN, Pula Advisors, Vision Fund Zambia, Zanaco, ZMD



SDC, KOICA, Green Climate Fund, IFAD, SIDA

Key Achievements

- WFP facilitated trainings and adoption of Conservation Agriculture (CA) among 18,035 farmers.
- **Total cumulative land size under Conservation Agriculture:** 9,895 hectares.
- **Climate services:** WFP and partners installed 165 rain gauges to help smallholders make informed farming decisions.
- **Sustainability:** 7,822 farmers insured for the 2019/20 season.
- **Technology:** Introduction of digital payment platform in partnership with MTN Zambia to process payouts amounting to US\$452,170.
- **Capacity Building:** Thanks to a partnership and funding received from IFAD, WFP was able to set-up a Technical Working Group to support national capacity building on index insurance product development and monitoring, as well as conduct a dry run on Area-Yield insurance (AYII) in one district, together with Pula Advisors.
- **Cumulative value of savings:** US\$96,215.

R4 Programme in Zambia

In Zambia, R4 was built on FAO's Conservation Agriculture Scaling-Up (CASU) project, whereby farmers access insurance by applying conservation agriculture (CA) techniques. The integrated risk management approach is based on four components:



Risk Reduction component: In Zambia, farmers apply CA techniques such as minimal soil disturbance, permanent soil cover and crop rotations. Farmers also receive tailored weather and climate information services to help them better prepare and cope with increasing climate variability and adapt their decision-making and farming practices.



Risk Transfer component: Farmers are insured by applying CA techniques on at least 1 hectare of land.



Risk Reserves and Prudent Risk Taking component: R4 in Zambia facilitates and encourages savings schemes for households and communities through a Village Savings and Loans (VSL) model, which builds reserves to buffer against shocks and promotes investment in income generating activities and the wellbeing of household members. Groups' activities run in cycles of one year, after which the accumulated savings and the loan profits are distributed back to its members. Part of the risk-taking activities include improved access to credit facilities, in particular loans related to support for CA activities. Improving access to credit allows households to borrow for much needed agricultural inputs and to develop other on or off farm income generating activities. Financial education and trainings on credit are also provided and will support households to make prudent choices.



Access to markets

R4 Zambia supports farmers' access to markets by linking them to the WFP [Virtual Farmers Market \(Maano\)](#), [Farm to Market Alliance \(FtMA\)](#) and the [Home-Grown School Feeding \(HGSF\)](#) programmes. Virtual Farmers' Market (VFM) is an app-based e-commerce platform where farmers' surplus and buyers' demand for crops are advertised and traded. VFM provides a transparent, open and trustworthy space for smallholder farmers and buyers to negotiate fair prices and deals. The Farm to Market Alliance helps smallholder farmers receive the appropriate information, investment and support from seed to market in order for them to have the capacity to produce and sell marketable surplus for increased incomes. The HGSM programme provides safe, diverse, and nutritious food, sourced locally from smallholders, to children in schools.

2018/19 Agricultural season: Rainfall shortages significantly affected crop yields

The 2018/19 agricultural season in Zambia was characterized by a late onset of the rains that resulted in reduced planted area in some of the key maize growing areas, followed by long dry spells that negatively affected crop development. Several districts in southern Zambia experienced their driest season since 1981.¹⁸

Following impacts from drought, national maize production is expected to be below average for the second consecutive year. The decrease is mainly driven by significant rainfall deficits in southern, western and central provinces. Outputs of millet, sorghum and rice are also estimated to have decreased to below-average levels for similar weather-related factors.¹⁹ In addition to direct impacts on farming, there are reports of dams running dry and significantly decreased ground water levels with implications not only for crops, but also for livestock and water security.

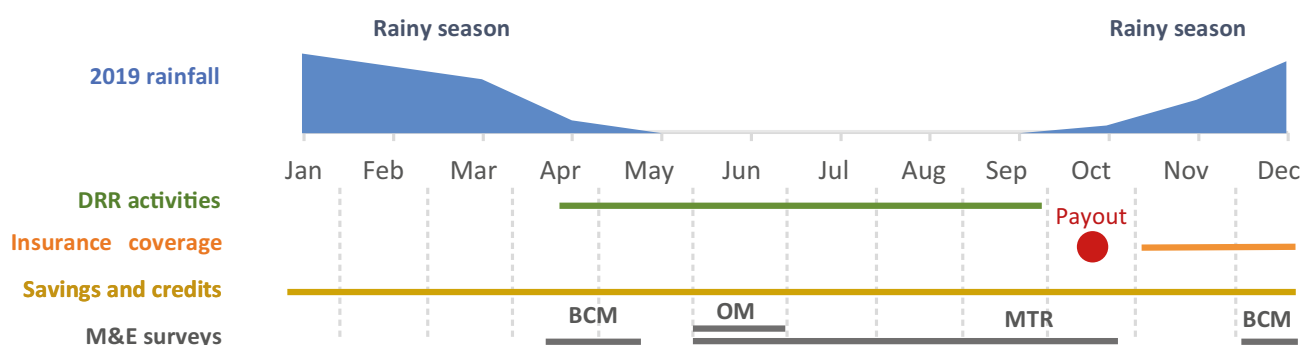
Project Status

In Zambia, R4 is implemented in Pemba, Monze, Namwala, Mazabuka, and Gwembe districts. No new insurance enrolments were undertaken for the 2019/20 season, with the number of insured farmers remaining at 7,822 (49 percent women). This decision was in line with the SDC Mid-Term Review (MTR) recommendation to maintain the number of participants and focus on consolidating the achievements reached so far and supporting sustainability plans. Special attention will be given to participants that are moving towards graduation from the programme and are establishing business enterprises in order to support them with entrepreneurship and business skills development to improve viability of the local enterprises and sustainability of the programme achievements.

18. GEOGLAM Crop Monitor (2019). Southern Africa 2018/19 summer crops. https://cropmonitor.org/index.php/2019/04/18/special_update_southern_africa/.

19. GIEWS- Global Information and Early Warning System (2019) Country Brief: Zambia. <http://www.fao.org/giews/countrybrief/country.jsp?code=ZMB>.

FIGURE 7. Zambia 2018 seasonal calendar



Risk Reduction Component

In 2019, activities under the risk reduction component mainly focused on monitoring and promotion of Conservation Agriculture (CA), training on improved agricultural practices, access to different seed varieties, early warning systems, and horticulture trainings. In 2019, a total of 18,035 farmers (51 percent women) participated in risk reduction activities. Approximately 78 percent of these farmers applied CA on their land, with an average of 1.17 ha per farmer.

Climate information services are also provided as part of the risk reduction component. In 2019, WFP and partners installed 165 rain gauges to help smallholders make informed decisions on what and when to plant. During the year, training on early warning systems, the meteorology calendar and crop maturity calculation were provided to rain gauge minders. Sensitization meetings on climate services were conducted with farmers participating in Farmers’ Clubs to enhance utilization of climate information services. In addition, capacity building trainings were provided to farmers to enhance their knowledge of agro-meteorological data and interpretation on how to use the information.

Risk Transfer Component

In 2019, activities under the risk transfer component focused on sensitizing farmers on index insurance, capacity building, and insurance premium contributions. In total, 7,822 farmers (49 percent women) were insured for the 2019/20 season. No new insurance enrolments were undertaken this year, in line with the recommendation made by the SDC commissioned Mid-Term Review to maintain the same number of participants, with the strategy being to focus on consolidating the gains obtained so far and supporting sustainability plans. This year, the total sum insured amounted to US\$466,962, with a total premium amount of US\$90,282.

In 2019, in partnership with Pula Advisors, WFP piloted an Area Yield Index Insurance product (AYII) in some of the camps in the target area. The work conducted under the risk transfer component has also been noticed by the Government of Zambia as good practice, with WFP signing a Memorandum of Understanding (MoU) with the Ministry of Agriculture (MoA) to provide technical support on market and financial services, including on the Farmer Input Support Programme (FISP),²⁰ that has introduced micro-insurance to around one million smallholder farmers. This technical assistance consists mainly in improving the MoA’s understanding of the insurance product features, strengthening local skills in product design, and improving processes and the overall system.

During the 2018/19 season, in partnership with the International Research Institute for Climate and Society (IRI), WFP refined the index through introducing a zonal approach. This approach significantly improves the process of explaining the insurance product and its price to farmers, as the premium and payout rates are the same within a whole district, provided there is enough homogeneity in terms of where and when shocks occur. Also, in order to avoid missing payouts during important drought years because of a few dekads,²¹ IRI proposed an overlapping window covering different dekadal combinations, allowing coverage of the whole growing season and no longer missing any key dry spell during an uncovered window.

20. FISP is a government agriculture input subsidy programme for smallholder farmers.

21. A Dekad is a period of 10 consecutive days, commonly used in the study of meteorological elements.

INSURANCE PERFORMANCE INDICATORS

- **Growth Ratio:** 0 percent increase in the number of farmers insured from 2018 to 2019. No new insurance enrolments were undertaken this year, in line with the recommendation made by the Mid-Term Review commissioned by SDC.
- **Consumer Protection Investment Ratio:** 48 percent demonstrates that nearly half of insurance budget is dedicated to improving financial capacity and understanding of farmers.
- **Promptness of Claims Settlement:** 167 days after the insurance coverage closure for the 2018/19 season. This timeframe is well over the ideal limit of two months from policy closure and needs to be improved in upcoming seasons.
- **Utility Ratio:** 69 percent. The ratio is slightly below the acceptable range (from 80 percent to 120 percent).

Dry spells during the 2018/19 season triggered payouts totalling US\$452,170 to 7,821 farmers. Insurance payouts were distributed using a mobile money payment platform in partnership with the mobile network operator MTN Zambia. To assess farmers' access, use, and satisfaction with the insurance payout, a survey was undertaken in all the five districts. The insurance product triggered a payout ranging from US\$42 to US\$53. Households mainly used the payout to purchase agricultural and livestock inputs, pay for education and invest in Income Generating Activities (IGAs). The decision on how to use the payout was primarily made jointly by both male and female adults in the household and the majority indicated it was the right decision for the family. The level of satisfaction with the insurance payout was very high, with 88 percent of households declaring being satisfied or very satisfied with the amount received, with the withdrawal method, and timeliness of the payout received. Going forward, most of the households (98 percent) indicated willingness to enroll for insurance again and most indicated willingness to pay a cash contribution for insurance premium in the future. The two major challenges reported by the households were difficulties in using the technology and the long waiting time. The programme will address this issue by enhancing farmers' knowledge on the use of mobile money technology.

Risk Reserves and Prudent Risk Taking Components

In 2019, activities under the savings and credit components focused trainings on financial literacy and credit for Farmers Club members, in addition to refresher trainings on the savings for change (SfC) model. This year, a total of 6,369 farmers (69 percent women) participated in 298 supervised²² saving groups, with a total savings amount of US\$96,215 and an average saving amount per farmer of US\$17.50. A total of 321 farmers accessed loans from the saving groups amounting to US\$6,364 (ZMW 89,103). Trainings on financial education and record keeping were also conducted throughout the year.

New partnerships were formed this year with new financial service providers, including MTN, ZANACO, and MFinance, to offer innovative savings and credit-linked products, tailored to provide credit to savings groups. Additionally, in an effort to digitize the transactions within savings groups and avoid farmers handing large sums of money, savings wallets (mobile based banking), were introduced by the partners MFinance and Vision Fund Zambia.

Access to markets

Building on the achievements from 2018, two additional rural aggregation centers were established in Pemba and Mazabuka districts in the first half of 2019, potentially creating increased access to markets to an additional 4,000 smallholder farmers. The establishment of the aggregation centers brought markets closer to the last mile smallholder farmers. WFP also engaged 106 farmers to play the role of micro-aggregators, in order to provide market linkages to smallholder farmers. Furthermore, 50 intermediary aggregators were linked to eight food processors (off-takers).

Key programme findings

Main findings from the regular monitoring system and the qualitative surveys conducted by the Mid-Term Review commissioned by SDC show that:

- The programme has engaged government at national and district level, leading to progress in the adoption of specific R4 components. The most representative result of this engagement is reflected by the government's inclusion of R4's insurance model into the Zambia's Farmer Input Support Programme (FISP);
- Case studies conducted by the MTR show that R4 has contributed to increase farmers resilience to drought. This is confirmed by the monitoring system as the initial R4 participants have gradually increased their wealth, reduced the use of negative coping strategies and improved their food security status over time.
- The initiative's insurance component performs better than other insurance models especially in Zambia. Most of the households in the project camps are willing to pay for future weather index insurance premiums. This indicates high levels of acceptance and ownership by the target beneficiaries and most importantly, it demonstrates that the project is on track to ensure smooth transition and exit as the beneficiaries will continue to enjoy the insurance services.
- Farmers consider that VSLs are contributing to the strengthening of social capital and enhancing their financial inclusion.

22. Supervised saving groups are groups that are still being guided and supported by WFP project staff or NGO partners with management of the groups' activities.

Recommendations based on the findings:

- WFP Zambia should establish and implement a learning framework, aimed at capturing and communicating outcomes that will be used to develop a business case for R4's integrated approach;
- The Zambia CO should revise the targets downwards to ensure no new enrolments are undertaken while the focus is shifted towards consolidating the gains and supporting sustainability plans. (This recommendation has already been partially addressed, with no new enrolments undertaken this season. Activities supporting sustainability are currently ongoing).
- R4 participants still experience post-harvest losses even though the numbers have significantly reduced compared to the baseline. WFP has been supporting farmers to adopt modern methods of post-harvest storage and handling which are more effective in addressing post-harvest losses. These methods include the use of PICS²³ grain bags and plastic silos. WFP should therefore continue sensitizing target beneficiaries on the use of modern storage facilities.

Outlook for 2020 and beyond

Plans for 2020 and beyond include the continued roll out of activities related to the different components, with a focus on evidence generation, advocacy and support for policy reform, enhancement of national systems in order to facilitate scale up of sustainable assistance, and capacity strengthening at the institutional and individual levels. Moreover, WFP Zambia will also take part in the final evaluation workshop of SDC second phase funding to R4 in Southern Africa, to be held at the end of 2020.

As part of the sustainability and transition strategy of R4 operations, WFP Zambia aligned its R4 operations with the Government's 7th National Development Plan (NDP-7) to increase government ownership and improve their technical oversight through its Smallholder Support Programme. Through this programme, WFP Zambia supports government systems and structures to improve smallholder farmer's access to markets, enhancing their resilience to climate-related shocks and diversifying their livelihoods. In 2019, WFP Zambia signed a MoU with the MoA to provide technical support to strengthen local skills in product design and improving the insurance system. Activities for 2020 will include capacity building in weather index design, performance assessment of the different microinsurance indexes (WII and AYII), improvement of the insurance system and coordination between the different existing schemes. Moreover, in order to streamline existing insurance products, a Technical Working Group was formed to support national capacity building on index insurance product development and monitoring.

For 2020, WFP will continue to provide technical assistance to the Technical Working Group on index insurance design, costing, implementation and monitoring. Furthermore, WFP will continue working with the Zambia Meteorological Department to support the Government in developing early warning system technologies to improve agricultural production and productivity among smallholder farmers.

23. Purdue Improved Crop Storage (PICS) bags provide a simple, low-cost method of reducing post-harvest losses.



Farmers participate in a sensitization activity to increase their knowledge and interest in insurance before the insurance sign ups in Kenya.
WFP/Alfred Karisa

R4 Kenya 2019



 Since 2017



8,862 households (59,375 persons)



85 percent women



Kitui County



MoALF&I, NDMA, County Government of Kitui, Kenya Agriculture and Livestock Insurance Pool, Catholic Diocese of Kitui, Pula Advisors



Global Affairs Canada, USAID, IFAD

Key Achievements

- 8,862 farmers (85 percent women) insured for the 2019 Short Rains season.
- **Cash contribution:** Introduced farmers' cash contributions representing five percent of premiums through mobile money platforms.
- **Insurance payout:** 5,612 farmers compensated for drought-related crop losses during the 2018 Short Rains season.
- The R4 learning event contributed to sharing lessons learned and future perspectives on crop insurance in Kenya amongst government, private sector and civil society stakeholders.

R4 Programme in Kenya

In Kenya, the initiative is implemented through the collaboration of WFP with the Ministry of Agriculture, Livestock, Fisheries, and Irrigation (MoALF&I), the National Drought Management Authority (NDMA), County Government of Kitui, Catholic Diocese of Kitui, and private sector partners. The integrated climate risk management approach is based on two components:



Risk Reduction component: Farmers receive technical assistance from extension services and field partners on improved agricultural practices, including soil and water conservation techniques. These activities contribute to promote resilience by steadily reducing farmers' vulnerability to shocks over time.



Risk Transfer component: By growing drought resistant crops and adopting recommended agricultural practices, farmers can access Area Yield Index Insurance (AYII). AYII can offer coverage against several risks including pests and uses crop sampling at the end of the season to determine the amount of value lost. The conditionality for farmers to receive an insurance policy requires farmers to grow at least one drought resistant crop, including green grams, sorghum, millet and cow peas in one acre of land. When a major shock affecting the community hits, compensation for losses prevents farmers from selling productive assets and stimulates faster recovery.

2018/19 Agricultural season: Rainfall deficits during the 2019 Long Rains season and heavy rainfall during the 2019 Short Rains season

In Kenya, seasonal rains in March and April were generally very poor, with most rainfall deficits recorded in south-eastern and coastal agriculture livelihood zones. Severe early season dryness caused substantial planting delays, affecting crop germination and vegetation conditions.

Despite improved rains between mid-April and late May, severe drought was still affecting between 20 and 45 percent of the cropland in late May.²⁴

From October to December, Kenya experienced one of the wettest Short Rains seasons on record, with rainfall totals ranging up to 400 percent of average. Disruptions to critical transport infrastructure and ongoing delays in the unimodal harvest have reduced the availability of food in markets, resulting in high food prices. Crop and livestock losses have been reported in localized areas.²⁵ In comparison to the five-year average, maize prices ranged from 14 to 41 percent above average and bean prices ranged from 9 to 25 percent above average.

In marginal agricultural areas, above-average rainfall has led to mixed effects on Short Rains crop production. In many areas, area planted is above normal and cropping conditions remain favourable. However, excess soil moisture and flooding in some coastal and South Eastern areas is expected to result in below-average, short-cycle legumes production and localized maize losses.

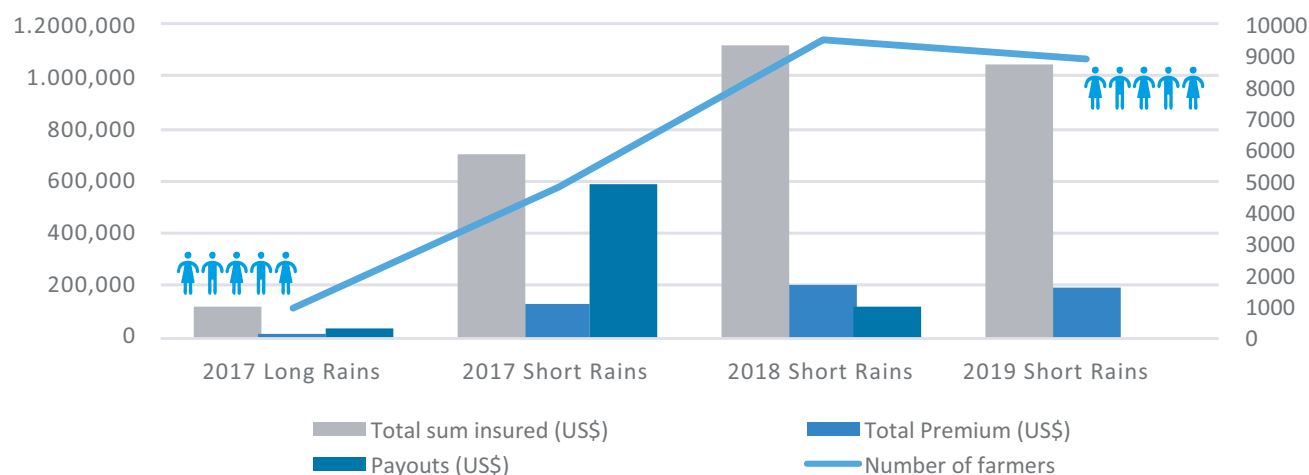
Project Status

The R4 programme in Kenya entered its fourth season in October 2019. Over the past three years, the programme scaled-up its operations from 1,000 to about 10,000 insured farmers, with a total sum insured from the four seasons of approximately US\$3 million and crop loss compensation amounting to US\$766,000 (Figure 10). Its geographical coverage has also expanded from one to four sub-counties, ensuring crop protection and income security for vulnerable smallholder farmers in the Eastern region of Kenya. In the 2019 Short Rains season, the programme has successfully registered 8,862 farmers (85 percent women) with an Area Yield Index Insurance coverage between November 2019 and February 2020.

24. FAO. (2019) GIEWS- Global Information and Early Warning System. Country Brief: Kenya. <http://www.fao.org/giews/countrybrief/country.jsp?code=KEN>.

25. FEWSNET (2019) Crisis (IPC Phase 3) to persist in the short-term due to prior drought and current heavy rainfall <https://fews.net/east-africa/kenya>.

FIGURE 8. R4 Progress in Kenya, Kitui county (2017-2019)



Complementary to field operations in Kitui county, WFP Kenya has actively pursued opportunities to share knowledge acquired with partners at the national level. An R4 learning event took place in June 2019, providing for reflections on the R4 journey and recommendations for future interventions. With support from IFAD’s Adaptation for Smallholder Agriculture Programme II (ASAP 2), a hybrid index insurance product has been designed for expansion into two additional counties in the semi-arid region and a feasibility assessment was carried out to inform the coordination between national drought contingency funds and microinsurance.

R4 is one of the few index insurance models tested in the semi-arid counties of Kenya. The approach enables the poorest farmers to manage climate risk through crop insurance that smallholders can access by participating in risk reduction activities.

The R4 programme in Kenya is implemented in the semi-arid county of Kitui, which integrates the South-eastern Marginal Agricultural Livelihood Cluster. The cluster is mainly dependent on the Short Rains season (from October to December) for crop production. The short rains account for about 70 percent of annual production of the main crops i.e. maize, green grams, cowpeas, sorghum and millet in this area.

Risk Reduction Component

This year, a total of 8,862 farmers engaged in community mobilization and sensitization activities on improved agricultural practices, as well as timely planting and replanting of green grams, cow peas, millet and sorghum, in preparation for the 2019 Short Rains season and tracking of crop development.

Risk Transfer Component

Compensation of 2018 Short Rains season

In the first and second quarter of 2019, partners completed yield measurement for the four targeted project areas, which qualified 5,612 smallholders for an insurance payout due to reduced yields from drought. A total of US\$128,323 (KSh 12,832,348) were disbursed in two sub-counties: in Kitui South, the payout

represented 44 percent of the sum insured, totalling US\$122,719 (KSh 12,271,886) for the 2,310 farmers insured; in Mwingi North, a total of US\$5,605 (KSh 560,462) was disbursed to 3,302 farmers. In the two sub-counties of Kitui Rural and Kitui East, payouts were not triggered as yield levels were over 0.61 bags. Payout sensitization meetings were carried out from 27th May to 14th June 2019, where farmers discussed the results of the season and provided feedback on programme design. Challenges faced in the 2018 season included high basis risk embedded in the product, which influenced farmers’ perception in certain areas due to low insurance compensation vis-à-vis experienced crop losses. Lessons from this season informed important programmatic changes in the design of the 2019 Short Rains insurance coverage.

Support to national crop insurance debate

A national ‘Dialogue on Climate Risk Management in Kenya: Supporting Vulnerable and Food Insecure Households through an Area Yield Index Insurance in Kitui’ was held in June, gathering approximately 60 representatives from government, civil society, private sector and development partners. The event provided an opportunity to discuss the role of risk transfer tools in protecting smallholder farmers against climatic shocks. The area yield index insurance for smallholder farmers in Kitui is a relevant and effective tool providing this protection against climatic shocks as well as promoting investment and increasing productivity. Particularly strong results are seen in reducing debt, improving school attendance and supporting livelihoods diversification. There is also significant scope for expansion, ensuring that more smallholders have access to appropriate and affordable microinsurance products. While subsidized models are required in order to ensure that all stakeholders (smallholders, authorities and private sector) can participate and learn in new areas and markets, there are potential pathways to increase consumer contributions and commercial models as the experience and resilience of smallholders increase. Meanwhile, WFP will continue to document lessons from subsidized models for vulnerable farmers and how it influences behaviour i.e. towards more drought tolerant crops and uptake of new technologies.

In Kenya, microinsurance is also one component within a larger national climate and disaster risk financing strategy and framework, that also includes sovereign insurance and loans, contingency funds and programmatic risk financing. Increased coordination and layering between these instruments can enhance their cumulative efficiency in protecting against the economic losses and humanitarian response expenditures arising from repeated climatic shocks. An integration of financial instruments generally increases the effectiveness of disaster risk management at national, sub-national and community levels. With support from IFAD's ASAP 2 programme, WFP and Pula Advisors carried out a feasibility assessment to inform the design of a risk layering mechanism between the National Drought Emergency Fund and microinsurance. The NDEF allows disbursement of funds to support implementation of preparedness and response activities aimed at mitigating the worst impacts of droughts in Kenya's Arid and Semi-Arid Lands (ASALs). Through a layering approach with one common method of measuring a trigger - an index insurance product - a win-win situation can be created. While insurance can cover the catastrophic risks and become more affordable and attractive, the contingency can absorb the more frequent smaller shocks to farmers and will now be able to provide a solution for the infrequent catastrophic events. Discussions will continue in 2020 on operationalization of this concept in partnership with the Government.

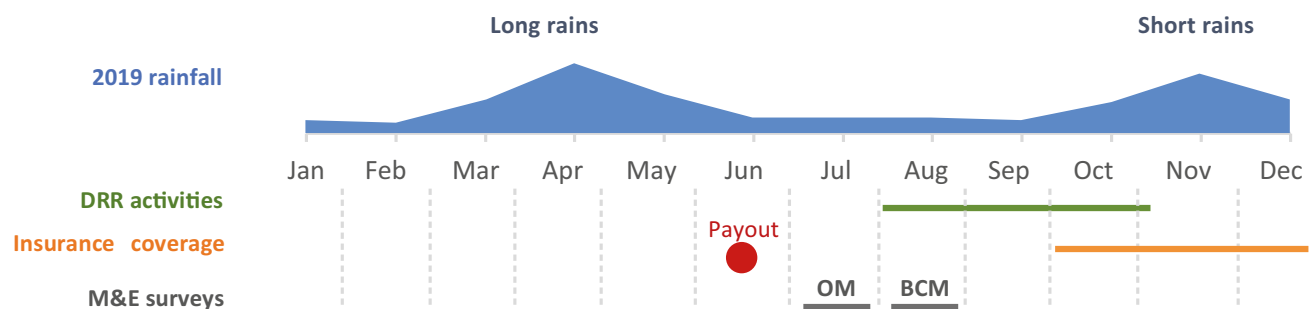
By leveraging partnerships in the semi-arid areas, WFP is maximizing the impact of its programmes and ensuring coherence with priorities set at the national level on climate risk finance. Under the Rome-Based Agencies (RBAs) partnership, WFP has been supporting the inclusion of graduated asset creation farmers to the Kenya Cereal Enhance Programme – Climate Resilient Agricultural Livelihoods Window (KCEP-CRALW), which offers an integrated risk reduction package to farmers with higher

production and marketing capacities. As KCEP-CRAWL introduces its insurance coverage in 2020 Short Rains in these counties, WFP has been collaborating with KCEP-CRALW stakeholders on the design of an area yield insurance product based on its experience with R4. The two programmes also have an opportunity to invest in smallholder's education on insurance and financial services given common geographical targeting, thus ensuring that farmers have access to information and services appropriate for protecting their livelihoods and adapting to climate-related impacts.

Registration for 2019 Short Rains

Between September and October, WFP and Caritas Kitui carried out farmers' sensitization and electronic registration for the 2019 Short Rains. This season has introduced SCOPE registration of R4 farmers, which aligns with WFP's beneficiary monitoring system and facilitated collection of household data to support the social protection system (i.e. single registry) in Kenya. For the 2019/2020 season, WFP has insured 8,862 farmers (85 percent women women) for a total sum insured of US\$1,037,604 (KSh 110,556,706). WFP paid 50 percent of premiums while the Ministry of Agriculture is expected to provide a 50 percent subsidy. Farmers' cash contributions were introduced in the current season totalling US\$8,862 (KSh 886,200). As of December 2019, rainfall in the county was above average and crops generally performed well despite isolated dry spells and pest and disease episodes. Of particular concern is the threat posed by the desert locusts invasion, with the situation on the ground worsening as widespread swarm breeding continues in Northern and Central counties leading to an increase in the number of hopper bands. This upsurge could cause below-average 2020 harvests and major pasture losses in arid and semi-arid regions. In January and February 2020, WFP and partners will continue to monitor crop health up to the harvesting time, when crop cuts will inform the payout analysis for the 2019 Short Rains.

FIGURE 9. Kenya 2019 seasonal calendar



INSURANCE PERFORMANCE INDICATORS

- **Growth Ratio:** 6.6 percent decrease in the number of insured farmers from the 2018 Short Rains season to the 2019 Short Rains season.
- **Consumer Protection Investment Ratio:** 29 percent indicates that more than a quarter of insurance budget is dedicated to improving financial capacity and understanding of farmers.
- **Promptness of Claims Settlement:** 85 days for the 2018 Short Rains season. This timeframe is above the optimal limit of two months from policy closure and needs to be improved in upcoming seasons.
- **Utility Ratio:** 80 percent. The ratio is acceptable and within the ideal range (from 80 percent to 120 percent).

Key programme findings

- In 2019, the second year of the programme, after computation of the average yield per sub-county, the insurance triggered a payout in Mwingi North and Kitui South and no payout was triggered in Kitui rural and Kitui East as the average yield was higher than the historical benchmark. Payout in Kitui South represented 44 percent of the sum insured providing US\$52.5 (KSh 5,312) per farmer while in Mwingi North it only represented 1 percent of the sum insured totalling US\$1.65 (KSh 168) per farmer disbursed during the month of June. The observed variability of payout levels was directly related to the Unit Area of Insurance, adopted by the programme, where yield data was aggregated at sub-county level and used to define payout thresholds for all farmers within a given sub-county. This model showed a high level of basis risk, particularly in Mwingi North, where there are significant agroecological variations across the three targeted wards in the sub-county.

To assess farmers' access, use, and satisfaction with the insurance payout, a survey was undertaken in the different sub-counties covering both farmers receiving a payout and the ones not receiving it. Overall, the results revealed a continuous high interest in joining R4 in future seasons, with 98 percent of respondents declaring they would enrol in the insurance programme again, with 94 percent willing to pay a portion in cash in the future. However, the survey revealed a need to significantly invest in farmers' understanding of insurance and the meaning of payouts, with particular focus on increasing the effectiveness of information sharing on payout entitlement.

For farmers who were entitled to a payout, the insurance compensation was mostly used to purchase food and pay school fees. Participants suggested increasing the payout amount in future seasons as the main element to improve the programme. Overall, both respondents receiving or not receiving a payout identified the need to improve communication on the programme and on the payout disbursement process, improve accountability by providing regular feedback, and requested to include additional training modules on crop production and provide seed support to restart production.

- The outcome monitoring survey, conducted annually, showed that in contrast with the positive results achieved by the programme in 2018 - following the withdrawal of two important insurance payouts- in 2019, despite a better harvest, WFP observed a deterioration of the food security and socio-economic indicators monitored for the R4 participants, that are currently in a similar situation to the households in the control group, not having received any support in the period. This condition is the result of several shocks not covered by the programme, mainly aggravated by the cumulative effect of two failed seasons on yield levels and household food stocks, market price spikes as well as a reduction of external assistance and the meagre effect of a reduced insurance payout. This finding needs to be taken into consideration in the future, for any intervention that includes a risk transfer element. While the insurance component can make the difference in response to a crisis (supporting food access or temporarily increasing savings as seen with the positive results of 2018), the changes promoted are not long-lasting if the intervention is not embedded into a wider integrated risk management approach that promotes an improvement of the adaptive capacity of households and livelihoods.

Lessons learned and way forward

Lessons from Kitui programme resulted in important design changes, which were introduced this season to improve efficiency and to respond to farmers' suggestions collected during WFP's monitoring activities. The product has shifted its unit area of insurance to agroecological zones as compared to previous administrative boundaries, which is expected to reduce the basis risk and provide for fairer compensation. In partnership with Pula, satellite technology should also support in monitoring performance and complement Crop Cutting Experiments. Moreover, for the first time, farmers have contributed the equivalent to 5 percent of the premiums. The programme aims at gradually increasing farmer's co-share while strengthening their savings capacity through Village Savings and Loans Associations (VSLAs) in 2020. Besides ensuring long-term sustainability, supporting farmers' financial capacities has an educational effect on how insurance works as well as on introducing savings and investment principles, which can inform diversification of their income sources.

Farmers have also requested a review of distribution mechanisms from bank accounts to mobile money channels, especially when the payout amount is very small. As a result, R4 has aligned its distribution through Safaricom Mpesa. During the registration phase, farmers received instructions on how to transfer their shares, which in turn were verified by the insurance company through a special account. Moving forward, WFP and partners will continue to review and test distribution mechanisms to ensure timely and reliable disbursement of payouts.

In the R4 programme in Kenya, around 85 percent of insured smallholders are women. Yet, gender inequalities affect their asset endowment and control over resources in the household, which in turn can undermine their food security and negatively impact their adaptive capacities. To inform the scale-up of the R4 programme in the next year, a gender and financial inclusion rapid assessment was carried out in December 2019. The analysis aimed at understanding how the R4 implementation strategy can promote women's empowerment through economic inclusion and protection against risks, but also minimize unintended negative effects on gender dynamics at household and community levels. Unequal gender relations at the household level were observed, with women contributing to 90 percent of household work, farming and income generation activities, exacerbated by men's migration in search for casual labour. Although women seem to have some agency at community level, their decision-making power is limited at the household level. Weak organizational capacity of women groups is also undermining their capacities to maximize savings and invest in

productive enterprises. The main findings of this stocktaking exercise will inform the introduction of a VSLA component in the R4 project in Kitui, as well as the design of a Gender Active Learning System (GALS) methodology, a community-led inclusive approach to empower men and women, which will strengthen the R4 implementation strategy and introduce more transformative gender approaches in the programme.

Outlook for 2020 and beyond

The positive changes brought by R4 in Kenya are also informing its scale-up to an additional county in the semi-arid region, where a hybrid product will be tested in 2020. Furthermore, WFP is investing in increasing the number of insured farmers to attract the interest of private insurance companies to offer more affordable products to vulnerable and food insecure smallholders. With support from IFAD's ASAP II programme, a dry run²⁶ has started in two additional districts for testing a hybrid insurance product. The purpose of the hybrid is to allow an early payout with the Weather Index Insurance (WII) and make sure no key shock is missed with the AYII. Results of the dry run will inform operations in 2020.

R4 Kenya is part of a multi-stakeholder partnership with MoALF&I, County Government of Kitui, Pula Advisors, Caritas Kitui and Kenya National Agriculture and Livestock Insurance Pool for the monitoring and implementation of the R4 programme. The generous contributions from Global Affairs Canada and USAID ensure the continuation and scale-up of the R4 Initiative in Kenya.

26. An insurance dry run refers to testing a prototype insurance product and monitoring its performance for one season before the product is introduced into the market.



Weather index insurance product testing at Makasi primary school in Ward 19, Zimbabwe ensures that the product meets the protective needs of the households who enroll in R4.

WEP/Sikhumbuzo Moyo

R4 Zimbabwe 2019



 Since **2018**



1,651 households (9,245 persons)



66 percent women



Masvingo and Mwenezi



Aquaculture, Blue Marble, CIMMYT, Foundations for Farming, Ministry of Lands, Agriculture, Water, Climate and Rural Resettlement, Old Mutual, SNV



SDC, USAID

Key Achievements

- **Scale-up:** From 500 farmers insured in 2018/19 to 1,651 protected by weather index insurance for the 2019/20 season.
- **Expansion:** The R4 programme expanded from one ward to four wards.
- **Sustainability:** 158 farmers paid 15 percent of their premium in cash, with total cash contribution amounting to US\$355.
- **Cumulative value of savings:** US\$12,024.
- Zimbabwe became the first-ever country in the Southern African region to test the ARC Replica instrument in collaboration with the Government of Republic of Zimbabwe and the African Risk Capacity (ARC).

R4 Programme in Zimbabwe

The R4 initiative in Zimbabwe, currently supported by SDC and USAID, builds upon and combines the knowledge and capacity accumulated by WFP and partners on productive asset creation (FFA), appropriate seeds and agricultural practices, weather index insurance, promotion of savings and access to credit. In addition to the four risk management activities, R4 in Zimbabwe also supports farmers' access to markets, linking with WFP's Smallholder Agricultural Market Support (SAMS) programme, as well as the improvement of farmers' decision making in the context of climate change and erratic rainfall patterns, through climate services.



Risk Reduction component: In Zimbabwe, farmers participate in WFP's FFA programme, building assets that decrease their vulnerability to climate shocks over time. Farmers also take part in appropriate seeds and agricultural practices activities, such as establishing demonstration plots of new cultivars or agricultural technologies.



Risk Transfer component: Farmers gain access to weather index insurance policies through investing additional labour in building risk reduction assets. When a drought occurs, compensation for weather-related losses prevents farmers from selling assets and stimulates faster recovery.



Risk Reserves and Prudent Risk Taking component: Farmers participate in Village Savings and Lending groups (VSLs), which support participants in establishing small-scale savings used to build 'risk reserves'. Farmers also access credit from the VSLs.



2018/19 context marked by adverse weather and macroeconomic conditions

The 2018/19 agricultural season was affected by a delayed start of rainfall and erratic rains. While rainfall levels across most parts of the country were below the normal long-term average, areas in the southern and western regions covering parts of Masvingo were worst affected as no significant rains were received during the first quarter of 2019. In addition, Cyclone Idai contributed to further deteriorate the agricultural conditions in the country. The combined effect of these events caused a steep decline in the area harvested and lowered yields, resulting in a maize output of about 780,000 tonnes, more than 40 percent below the previous five-year average.²⁷

In 2019, the country faced extreme levels of food insecurity mainly driven by a steep reduction in domestic cereal harvest and significantly high food prices that have resulted in severe food access constraints, in addition to very poor macroeconomic conditions. The area of intervention experienced inflation and currency depreciation that affected Zimbabwe from 2018 to 2019, increasing the consumer price index by 64 percent.

Forecasts for the 2019/20 agricultural season expect rainfall to be below average and characterized by a late start and erratic rainfall. This, combined with the anticipated poor access to agricultural inputs, will likely lead to below average cropped area.²⁸

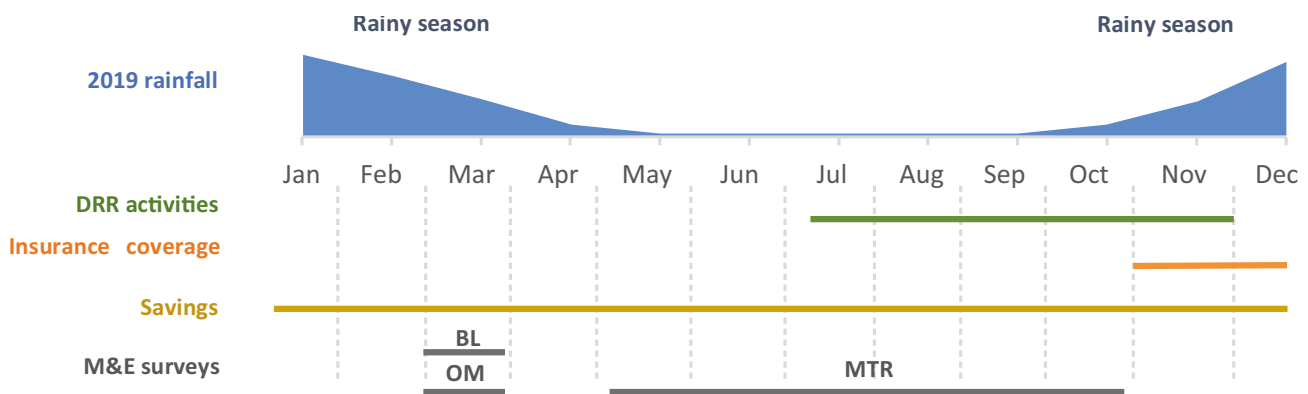
Project Status

In 2019, the R4 initiative scaled up its coverage from 500 farmers to 1,651 (66 percent women). The initiative also expanded from one to four wards.

27. FAO. (2019) GIEWS- Global Information and Early Warning System Update: Zimbabwe.

28. FEWSNET (2019). Zimbabwe Food Security Outlook. <http://fewsn.net/southern-africa/zimbabwe/food-security-outlook/october-2019>.

FIGURE 10. Zimbabwe 2019 seasonal calendar



Risk Reduction Component

2,000 farmers (64 percent women) engaged in asset creation activities in 2019. New assets were established in four Wards in Masvingo District. Activities included excavation works, road maintenance work, nutrition gardens, soil and water conservation work, borehole drilling, watershed management activities and stone and sand haulage.

Risk Transfer Component

In 2019, a total of 1,651 (66 percent women) were insured against drought across four wards in Masvingo. Based on feedback received from communities, the product was extensively revised to trigger smaller but more frequent payouts, while offering cover for only small grains and not maize. A digital platform was developed in collaboration with the private sector to transition away from the paper-based method and improve efficiency of the enrolment process. In line with the exit strategy of the integrated approach, mandatory cash contributions (15 percent of premium)

were introduced for participants who had been in the programme for over a year. In 2019, the total sum insured amounted to US\$165,100 and the total premium amounted to US\$27,597.

In addition to microinsurance, WFP Zimbabwe became the first-ever country in Southern African region to test the ARC Replica instrument in collaboration with the Government of Republic of Zimbabwe and the African Risk Capacity. For the 2019/20 pilot, the Replica cover for WFP was about US\$1 million. This innovative instrument will support a coordinated early response to drought and has the potential to significantly reduce humanitarian funding needs.

As part of the climate risk financing portfolio, WFP Zimbabwe also kickstarted the Forecast-based Financing (FbF) intervention thanks to additional funding received from the International Fund for Agricultural Development (IFAD) and the Norwegian Ministry of Foreign Affairs (NORAD).

INSURANCE PERFORMANCE INDICATORS

- **Growth Ratio:** 230.2 percent increase in the number of farmers insured from 2018 to 2019.
- **Consumer Protection Investment Ratio:** 36 percent. The ratio is very healthy given the expansionary stage of the project, demonstrating a strong focus on consumer protection.
- **Utility Ratio:** 100 percent. The ratio is healthy and within the acceptable range (from 80 percent to 120 percent).

Risk Reserves and Prudent Risk Taking Components

Financial education activities focused on strengthening and forming Village Savings and Loans (VSL) groups and financial literacy trainings. Moreover, to cushion members against Zimbabwe's currency depreciation, financial education trainings have been prioritizing lessons on inflation hedging methods that include saving in foreign currency, asset-based savings and income generating activities.

This year, a total of 1,281 farmers (93 percent women) participated in 129 VSL groups. As of December 2019, groups have saved approximately US\$12,024 (ZWL 108, 312) and the average member savings was at approximately US\$9.44 (ZWL 85).²⁹

With regards to linking farmers to credit, R4 farmers are now engaging with the Zimbabwe Women's Microfinance Bank (ZWMB) where the bank has developed a product where loans will be provided in the form of inputs (i.e. seeds) and farmers would repay the loan in the form of produce (i.e. sorghum grains).

Access to markets

In terms of market access, WFP's Smallholder Agricultural Market Support (SAMS) programme has procured 6.502MT of white sorghum from R4 farmers just after one year of integrated resilience interventions. R4 is also ensuring that farmers have access to inputs and appropriate extension support. Engagements with seed houses are underway to facilitate farmers' access to affordable small grain seeds. Information on seed types and prices was also gathered and shared with farmers. Following the engagement with Associated Foods Zimbabwe (AFZ) on a possible contract farming opportunity for R4 farmers, SNV has begun mobilizing and grouping groundnut farmers who will enter into contract and produce for AFZ.

Appropriate Seeds and Agricultural Practices

CIMMYT has been working to improve the productivity, income and resilience of farmers by encouraging the adoption of improved and adapted agricultural practices and cultivars on dryland areas, tailored to the agro-ecological target zone. Some of the activities include the promotion of Conservation Agriculture (CA) practices, as well as facilitating the exposure of farmers to drought tolerant maize and legume varieties, millet, and sorghum. A total of 210 demonstration plots have been set up to display different agriculture technologies for smallholder farmers in Masvingo and Mwenezi.

R4/Lean Season Assistance Nexus

Thanks to funding secured from the Swiss Agency for Development and Cooperation (SDC), it has been possible to link Lean Season Assistance (LSA) activities to resilience building activities under the R4 programme, with the objective of supporting the humanitarian-development nexus. Under this initiative, as part of R4, Foundations for Farming has provided a hands-on training on Conservation Agriculture to 3,925 farmers (49 percent women) in Masvingo to help farmers increase crop yields and become more resilient.

Under the nexus initiative, SNV has also provided trainings to 3,156 LSA participants (67 percent women) that provided a basic introduction to financial education, savings and loans, value chain and market linkages and risk and insurance. In collaboration with AGRITEX, SNV has also supported the establishment of 11 demonstration plots in targeted wards with the aim of promoting small grains among LSA participants. A total of 298 (58 percent women) farmers participated in the trainings at the demo plots on best practices in sorghum production.

In 2020, resilience oriented complimentary trainings will continue to be provided in LSA wards, supported by additional funding secured from SDC. Moreover, to ensure linkages are fostered and the benefits of the continuum between the two initiatives understood by communities, an internal nexus evaluation exercise will be carried out to reflect on and share lessons learnt, best practices, and challenges. This exercise will focus on the LSA/R4 nexus and the current LSA resilience focused complimentary activities.

Key programme findings

The R4 Outcome Monitoring survey conducted in 2019 shows the evolution of farmers targeted in Ward 17 of Masvingo District that have been participating in the programme since 2018. The survey revealed that R4 participants have managed to maintain their food security and increase their resilience capacity in a context of drought and economic instability. When compared to households not participating in the programme, participants of the integrated risk management approach were better able to cope with the different shocks during the period under review. The savings component of the programme has been effective in tripling the number of households saving through VSLs. In 2019, savings were used by most R4 participants to afford basic expenditures such as school, health, house or food, presenting a change from the previous year where savings were also invested

29. US\$/ZWL conversion was calculated using the average exchange rate for 2019, at interbank rate. The exchange rates for the last trading day of each month was used to calculate the average.

in agricultural production. The analysis also observed that, while the value of monetary savings has decreased, households managed to increase their average number of animals. This change in saving habits is oriented to secure household's economic capital by investing in storing values like animals and assets to avoid their depreciation.

The unstable economic environment in Zimbabwe requires adaptive programme management to ensure that the different risk management interventions are responsive to a changing environment. The saving component of the programme would need to be revised to avoid household's loss of purchasing power/decapitalization of savings in local currency. Adaptation of the VSL to reduce the risk of savings' loss due to devaluation, by promoting savings in stable currency/asset or other options, should be considered. There is a need to further strengthen integration of the various R4 components in light of the changing operating context for more sustained resilience outcomes. This entails increased focus in promoting the adoption of appropriate cultivars and agricultural practices for better productivity and increased production to reach critical volumes for market linkages, increasing incomes and allow farmers to create buffers against risks through savings and investments.

SDC Mid-Term Review

Main recommendations from the SDC Mid-Term Review (MTR) for the R4 programme in Zimbabwe (under R4 Southern Africa phase 2: 2017-2021) are summarized below:

- The MTR recommended that the current pilot phase of the programme in Zimbabwe needs to be the object of an in-depth lesson learning exercise, taking into consideration the experience from other R4 countries in the region like Malawi and Zambia, to inform the roll out of the programme.
- During the rolling out phase of the R4 programme, there is a need to define a learning framework that provides key questions to demonstrate the effectiveness of R4 components and the integrated approach. These questions should be jointly developed with donors, partners, government counterparts and beneficiaries, to ensure they inform needs of different stakeholders in R4. The framework will drive the data collection approaches and analysis of outcome monitoring data.

Outlook for 2020 and beyond

In 2020, R4 aims to reach an additional 4,000 households in Masvingo and Rushinga districts. The Zambuko Livelihoods Initiative³⁰ will also be fully launched in Masvingo and Mwenezi with a focus on strengthening social cohesion of communities, improving smallholder crop and livestock production, improving access to finance and markets and strengthening post-harvest handling, supported by USAID.

The initiative is implemented in all R4 current and expansion wards³¹ in Masvingo district, as well as in Mwenezi wards 6 and 10, with R4 partners CIMMYT and SNV also being involved in the implementation of the Zambuko initiative. WFP will ensure coordination and cross-learning between the two initiatives through: regular update meetings with partners; Quarterly R4/Zambuko meetings; lessons learned workshops; and information sharing.

In 2020, three operational exercises will be conducted to foster linkages between the various initiatives, including a Lessons-Learned Workshop, the Learning Framework, and the Nexus Evaluation Exercise. Moreover, WFP Zimbabwe will participate in the final evaluation workshop of SDC second phase funding to R4 in Southern Africa, scheduled for the end of 2020.

Moreover, the Green Climate Fund (GCF) proposal "Integrated Climate Risk Management for Food Security and Livelihoods in Zimbabwe focusing on Masvingo and Rushinga Districts" for the expansion of R4 activities in the country was approved in July 2019 during the 23rd Meeting of the GCF Board in Songdo. The US\$8.86 million funding, over a period of four years, will support the continuous growth of R4 in the country, allowing it to reach its 10,000 households target.

30. Differently from R4, the Zambuko Livelihood Initiative does not include insurance or asset creation activities but includes activities under the added component of social cohesion.

31. In Masvingo district, the Zambuko initiative is implemented in wards 12,13,15,16,17,18,19 and 25.



Farmers participate in a focus group in Kaya, Burkina Faso, before the rollout of the R4 programme in Central North and East Regions in 2019.
WFP/Mathieu Dubreuil

R4 Burkina Faso 2019



 Since **2019**



702 households (3,650 persons)



53 percent women



Central North and East Regions



Inclusive Guarantee, Allianz Burkina



BMZ

Key Achievements

- 2019 marked the first year of R4 implementation in Burkina Faso, with the initiative insuring 702 households for the 2019 agricultural season.

R4 Programme in Burkina Faso

In 2019, R4 was implemented for the first time in Burkina Faso. The Country Office used its own funds to initiate this pilot, with a clear plan to support the Government's strategy to introduce agricultural index insurance into the market. WFP focuses its interventions on resilience building and market access activities in Central North and East Regions.



Risk Reduction component: In Burkina Faso, R4 supports farmers to reduce their post-harvest losses, promoting their access to credits and markets, through WFP's Purchase for Progress (P4P) programme.



Risk Transfer component: Farmers gain access to Weather Index Insurance (WII) by participating in trainings on Post-Harvest Losses (PHL) management and by adopting post-harvest technologies.



Risk Reserves and Prudent Risk Taking component: Farmers also receive a capacity-building package aimed at increasing agribusiness investment through credit and marketing.



2019 Agricultural season: Security incidents and delays in agricultural activities affecting agricultural production

The rainy season started off poorly with irregular rainfall in June that continued until the beginning of July. This led to cereal planting delays of 10 to 20 days. In the northern half of the country, ongoing displacement and insecurity have prevented agricultural activities from being carried out or limited households to the cultivation of legume and other vegetable crops that could be grown closer to homes.³²

Increasing flows of Internally Displaced Persons (IDPs) and limited population movements have negatively affected agricultural activities, which have dropped by 20 to 70 percent in most communes in the north of the country. In addition, delayed crop development and poor spatial and temporal distribution of rainfall have reduced yields locally.³³ Particularly, the longer dry spells in September have severely impacted crop yields and pastureland in the north and northeast of the country. Elsewhere, the prolonged rains in October have damaged grains, resulting in crop losses. The combined effects of these factors resulted in below-average agricultural production in the north of the country.³⁴

Project Status

2019 marked the first year of R4 implementation in Burkina Faso, with WFP providing 702 farmers (56 percent women) with access to Weather Index Insurance (WII, based on relative evapotranspiration)³⁵ in Central North and East regions.

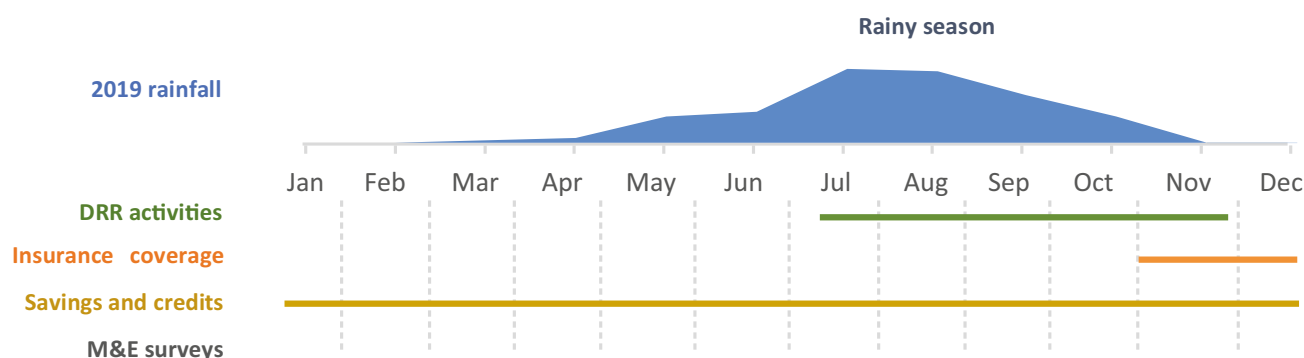
32. FEWSNET (2019). Delays in agricultural activities and in the development of crops. <https://fewsn.net/west-africa/burkina-faso/key-message-update/july-2019>.

33. FEWSNET (2019). The food crisis could continue in and around Soum province. <https://fewsn.net/west-africa/burkina-faso/remote-monitoring-report/august-2019>.

34. FEWSNET (2019). Increased areas facing Crisis (IPC Phase 3) acute food insecurity. <https://fewsn.net/west-africa/burkina-faso/remote-monitoring-report/october-2019>.

35. Relative evapotranspiration (rET) is defined as the ratio of the actual evapotranspiration (AET) to maximum evapotranspiration (MET), i.e. the evapotranspiration of the same crop at the same phenological stage under non limiting water conditions. Evapotranspiration (ET) is the sum of evaporation and plant transpiration from the Earth's land and ocean surface to the atmosphere.

FIGURE 11. Burkina Faso 2019 seasonal calendar



Risk Reduction Component

In 2019, WFP conducted Training of Trainers (ToT) on Post-Harvest Losses (PHL) management and on the principles of microinsurance in both regions of Burkina Faso. In total, eight trainers benefitted from capacity strengthening activities, including one woman. Participants were then expected to further disseminate learnings among their own communities. In July, 500 smallholder farmers received a five-day training from their communities' trainers on PHL in the East region. Farmers' participation in these trainings was used as a conditionality for their subscription to the insurance policy.

In August, another ToT event was organized for eight members of the Catholic Organization for Development and Solidarity (OCADES) on PHL management and microinsurance in the Central North region. 202 smallholder farmers also received a training as a conditionality for their insurance policy.

Risk Transfer Component

In 2019, 702 farmers (53 percent women) accessed insurance in both regions of Burkina Faso, with a total sum insured of US\$91,627 and the value of premiums amounting to US\$10,537.

During the year, farmers received training on Weather Index Insurance (WII). Particularly, 500 smallholder farmers in July and 200 farmers (43 percent women) in September were trained on WII in the East and Central North region.

The Burkina Faso CO is also participating in the ARC Replica instrument, another mechanism in the climate risk financing portfolio. ARC Replica is an insurance product offered by ARC Ltd to humanitarian organizations as an innovative approach to expand climate risk insurance coverage to more people while also improving the effectiveness of emergency humanitarian responses in vulnerable African countries prone to climate risks. The initiative allows governments and humanitarian agencies to quickly access and channel financing to vulnerable people in the event of an extreme drought.

Outlook for 2020 and beyond


WFP is planning an expansion to 2,500 households in the same regions, but will improve upon the integration of the risk transfer component with asset creation and market access activities. WFP has presented the first pilot results to the Ministry of Agriculture, who is also working on agricultural insurance, which raised a lot of interest in the integrated approach promoted by WFP. WFP will document this work in the coming months.



Farmers participate in a training on basic principles of Conservation Agriculture (CA) in Gaza, Mozambique, which will be the conditionality for households to receive an insurance premium when the product is rolled out next year.

ADRA/Mozambique Communications Team

R4 Mozambique 2019

 Since **2019**



2,600 households (15,700 persons)



70 percent women



Gaza, Tete, Nampula, Zambezia



MASA, MITADER, INGC, INAM, ADRA, Aceagrarios, Blue Marble, University of Reading, IRI, InovAgro



FICA, SDC

Key Achievements

- The R4 initiative was introduced in Mozambique in 2019, with successful registration of 2,600 farming households.
- The Green Climate Fund (GCF) Board approved Mozambique's first GCF proposal "*Climate resilient food security for women and men smallholders in Mozambique through integrated risk management*" in November 2019.

R4 Programme in Mozambique

In 2019, R4 was rolled out for implementation in Mozambique, targeting its first 2,600 participants in Tete and Gaza provinces, thanks to funding from the Government of Flanders. Farmers will be able to access insurance by applying conservation agriculture (CA) techniques. The integrated risk management approach is based on four components:



Risk Reduction component: In Mozambique, farmers will apply CA techniques such as minimal soil disturbance, permanent soil cover and crop rotations. Farmers will also receive tailored weather and climate information services to help them better cope with increasing climate variability and adapt their decision-making and farming practices.



Risk Transfer component: Farmers will be insured by applying CA techniques. The insurance product, tools and mechanisms will be piloted during the 2019/2020 campaign, with the product being designed and customized for the local context, focused on drought. As this year is only a dry run, no farmer will be insured this season.



Risk Reserves and Prudent Risk Taking component: Farmers will participate in Village Savings and Lending groups (VSLs), which will support participants in establishing small-scale savings used to build 'risk buffers'. Gross margins analysis and market assessments will be conducted to plan the roll out of prudent risk taking in future years.



2018/19 Agricultural season: Multiple climate-related shocks affecting agricultural production

Mozambique is experiencing its worst food insecurity emergency since the 2015/16 drought due to multiple climate-related shocks including tropical cyclones Desmond, Idai, and Kenneth with associated torrential rainfall and severe flooding in addition to drought in southern semiarid areas. These shocks have significantly impacted crop production and livelihoods across the country.

Current estimates from the Ministry of Agriculture and Food Security (MASA) indicate over a million MT of crops (including corn, rice, groundnuts, beans, and vegetables) were destroyed nationwide as a result of the poor rainfall in the southern semiarid areas and the three cyclones. MASA estimates a nearly 800,000 MT loss in national maize grain production, representing a reduction of more than 30 percent as compared to the last two years' average.

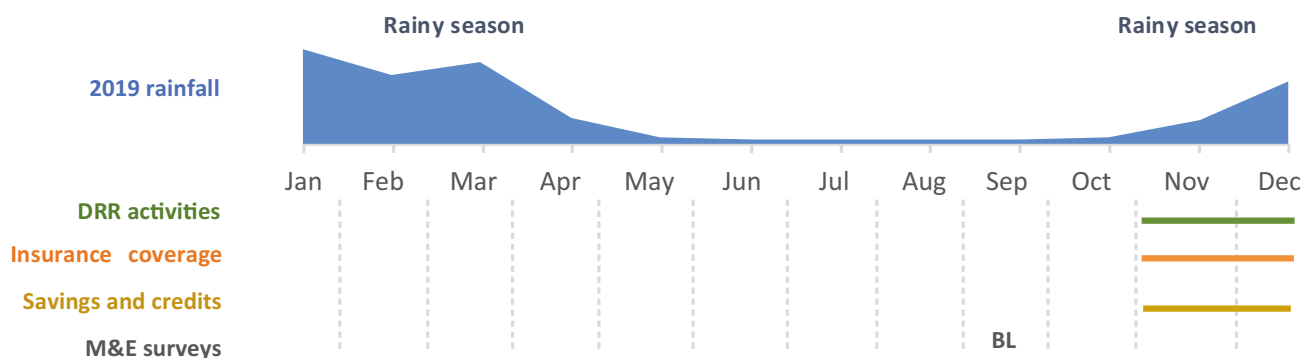
Current household food stocks are much lower than average in southern semiarid areas as well as in the areas affected by tropical cyclones.³⁴

Project Status

In 2019, WFP targeted and registered 2,600 farming households (70 percent women), into its R4 programme in Gaza and Tete province, thanks to financing from the Government of Flanders. This year, the Mozambique CO also started its work in Nampula and Zambezia provinces, with activities focused on piloting the insurance component and rolling out the climate services component, complementing the activities of SDC-supported projects in these provinces.

36. FEWSNET (2019). Mozambique Food Security Outlook. Atypically high humanitarian assistance needs will persist the start of the lean season. <https://fewsn.net/southern-africa/mozambique/food-security-outlook/june-2019>.

FIGURE 12. Mozambique 2019 seasonal calendar



Risk Reduction Component

In 2019, WFP Mozambique started local partnerships to support farmer clubs and transfer sustainable agricultural practices through Conservation Agriculture (CA) principles such as (i) minimal soil disturbance, (ii) permanent soil cover and (iii) crop rotations. This approach will go through 11 activities conducted by the farmer with each activity being related to one, or more, of the three different principles outlined above. This year, 104 demonstration plots and farmer clubs were established for the promotion of CA techniques, including the use of natural fertilizers, mulching, crop rotation, and inter-cropping.

In addition to the above-mentioned CA key principles, WFP’s intervention will also promote potential water access and water management (WAM). This will be done by combination of on- and off- plot water harvesting and irrigation solutions (trenches, swales and zai-pits) and small-scale irrigation schemes, such as surface water, or additional rainwater through supplementary water harvesting structures.

During the year, farming implements were provided to farmers, including seeds for maize, cowpea and beans, katanas, hoes, and wheelbarrows.

The dissemination of climate information services began during the third quarter of 2019, with a long-range forecast being shared at the start of the agricultural campaign, followed by the dissemination of in-season monitoring bulletins, including short-range forecasts. These are generated by INAM and are disseminated through a local NGO and government extension officers. During the last quarter of 2019, a Planning and Review workshop was held with users and producers in each province, with technical support from the University of Reading (UoR), to

review the products and dissemination actions, with the objective of improving climate services co-production and delivery.

Risk Transfer Component

Farmers will be insured for the 2020/21 season by applying Conservation Agriculture (CA) techniques. The insurance product, tools and mechanisms will be piloted during 2020, with the product being designed and customized for the local context, focused on drought. No farmer is being insured during the 2019/20 season.

The prototype insurance product was developed by the International Institute for Climate and Society (IRI) during the last quarter of 2019 and will be used for a 2019/2020 dry run in preparation for the 2020/2021 campaign. The product focuses on the lack of rainfall and seeks to take a zonal approach, which is essential considering the size of the country, and makes use of multiple rolling windows to enhance the protection of farmers. Seasonal monitoring arrangements have been set up in collaboration with INAM and MASA to track the rainy season and agricultural campaign, respectively.

Risk Reserves and Prudent Risk-Taking Components

Preparations are underway for farmers to participate in Village Savings and Lending groups (VSLs) in early 2020, which will start supporting participants in establishing small-scale savings used to build ‘risk buffers’. Mapping of existing VSL groups will be carried out and new groups will be formed as needed. Groups will benefit from trainings on financial literacy, groups dynamics, savings, and loans. They will also be supported to save for a period of six months. The groups will share out their funds leading up to the next agricultural campaign, allowing them to make productive investments.

With financing from the SDC, the Mozambique CO started activities in Nampula and Zambezia provinces this year. The work is focused on conducting assessments and a dry run that will inform a strategy for introducing, integrating, and scaling up insurance, as part of an integrated risk management package into SDC-supported programmes. The work is conducted in support of an agricultural development project called InovAgro, funded by SDC, connecting farmers with stakeholders, including agro-dealers, input providers, financial services and saving groups. Community consultations and focus group discussions were done in the month of November to better inform the insurance design and triangulate desk research. Gross margins analysis and market assessments will be conducted in the first quarter of 2020 to plan the roll out of prudent risk taking in future years.

Key programme findings

A baseline survey to collect key indicators was carried out in September. The baseline surveyed a total of 1,200 households in the target and control areas of the project in order to measure, using panel data, the impact of the project on the target area compared to the control group for the duration of the project.

Outlook for 2020 and beyond

In 2020, the R4 Initiative will introduce the insurance component to smallholder farmers, with the prototype insurance product being piloted during the 2019/20 agricultural season. The CO will continue promoting good agricultural practices through CA and supporting VSL groups created in Gaza and Tete provinces, in addition to supporting the expansion of R4 activities, including climate services and smallholder market access support to Changara and Marara districts in Tete province, and in other vulnerable areas of the country, especially in Gaza province. Moreover, the US\$9.25 million funding from the Green Climate Fund (GCF) from 2020 to 2025, will support the growth of R4 in the country, allowing it to reach 80,000 beneficiaries (51 percent women) as well as supporting the expansion of the project to two additional districts.

Activities under the climate services component will continue in targeted locations, with seasonal climate forecasts prepared by the National meteorological institute (INAM) made available and disseminated by partners. With support of the University of Reading, trainings on the PICSA methodology will be held for InovAgro partners and government extension services to help with the dissemination and use of climate services among farmers. WFP will support INAM in installing 50 rain gauges close to R4 targeted communities to increase the availability of climate information to support farmers in making better informed farming-related decisions and improve their ability to manage climate-related shocks.



A focus group facilitator marks the seasons that smallholder farmers identified as the worst crop failures since 1983, in Amhara, Ethiopia.

WFP/Michael Goode

The Risk Transfer Component

Under the risk transfer component, index-based insurance - an innovative type of insurance based on a proxy for losses- is offered to participants. Index based insurance compensates farmers based on changes in a pre-determined index correlated with agricultural yield, rather than on-site assessments of actual damage incurred due to insured risks. Insurance payouts are distributed to insured farmers if the index falls beyond a pre-determined threshold i.e. rainfall recorded over a certain period is below the value set in the index for drought coverage. The indexes are designed by specialized research institutions such as the International Research Institute for Climate and Society (IRI) or technical service providers from the private sector, such as Pula Advisors or Blue Marble, in close consultation with farmers, local and national government ministries, local partners and experts in agro-meteorology and remote sensing. Discussions during the index design phase determine the parameters for the index such as triggers, exits, frequency of payouts, fixed start of season, coverage windows and amount of the payout allocated to each window. Index based insurance can be categorized into two types:

Weather Index Insurance

Payouts are triggered by the actualization of a specific weather parameter such as rainfall measured surpassing a threshold over a pre-specified period of time, using either a particular weather station or via satellite. The parameters of the insurance contract are set so as to correlate, as accurately as possible, with the value of loss for a specific crop type. WII utilized by R4 is designed to cover two main drought perils: (i) severely late onset of rainfall or significant dry spells after sowing or in the middle of the season; and (ii) severely early cessation of rainfall or significant dry spells late in the season. As payouts are based on the same contract and rainfall measurement for a unit area, the need for an in-field assessment is eliminated and all insured farmers within this defined area receive the same payout levels. This product is currently offered to R4 farmers in Ethiopia, Senegal, Malawi, Zambia, Zimbabwe, and Burkina Faso with some adjustments depending on the needs. Additionally, a hybrid index using vegetation indices has been adopted for the second window in Ethiopia.

Area Yield Index Insurance

Payouts are based on the realised average yield of an area such as a county, a district or even a village, not the actual yield of the insured farmer. The insured yield is established as a percentage of the historical average yield for the area. A payout is triggered if the realised yield for the area is less than the insured yield regardless of the actual yield on the insured’s farm. A credible and consistent yield time series at the selected level of aggregation is required to design such an index insurance product. This product is currently offered to R4 farmers in Kenya.

Hybrid Weather Index and Area Yield Insurance

In 2019, WFP has also started experimenting with hybrid index insurance products. In Malawi, WFP is testing the introduction of an Area Yield product for the 2019/20 season on a 50:50 premium basis with the Weather Index Insurance (WII) product. The idea is to allow quick payouts with the weather index and also ensure farmers are properly covered against any type of risk that may occur at large scale. In Kenya, WFP and Pula have conducted an assessment of the performance between only WII, only AYII or a hybrid combination, with the hybrid index performing better than the standalone products. The introduction in Malawi will be another opportunity to verify hybrid indexes’ performance before a possible expansion to other countries.

Index-based Livestock Insurance

Starting in 2018, index insurance is also offered to pastoralists in the Somali region through the Satellite Index Insurance for Pastoralists in Ethiopia (SIPE). SIPE uses a pre-emptive approach, providing livestock asset protection insurance with the aim of keeping core breeding animals alive during major droughts. Under this type of insurance product, instead of providing payouts at the end of the season when the animals might have already died, early and regular payouts are provided in case of droughts to keep the core breeding animals alive and build the resilience of households in coping with droughts. These regular payouts during droughts can be used to provide supplementary feeding as well as timely veterinary care, which can be critical in keeping livestock alive.

The insurance coverage uses innovative satellite technology to measure the availability of pasture in grazing lands for pastoralists. The product index is based on the Normalized Vegetative Difference Index (NDVI) with triggers calibrated to ensure that payouts start to trigger when pasture and grazing resources are scarce and likely to lead to animals’ malnourishment.

FIGURE 13. Calendar of rainy seasons in R4 countries

Countries	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ethiopia												
Senegal												
Malawi												
Zambia												
Kenya												
Zimbabwe												
Mozambique												
Burkina Faso												

Microinsurance at WFP

Microinsurance is about developing and distributing insurance products that provide protection for low-income people against specific perils. Insured people are expected to pay premiums, which are market-based and proportional to the likelihood and cost of the relevant risk. One of the key aspects that differentiates microinsurance from traditional insurance is that it targets people who have limited or no access to traditional financial services as well as other means to effectively cope with the financial consequences of risk.

As part of WFP’s effort to achieve Zero Hunger, the organization strives to increase access to the protective cover of microinsurance to smallholder farmers. The insurance products WFP works with provide coverage primarily for drought risk, which results in 80 percent of the total damage and losses in agriculture.³⁷ Since 2006, WFP has worked with its partners to test and scale up innovative ways of providing insurance protection that help people become more resilient and food secure. WFP is now one of the leading UN agencies implementing microinsurance schemes at scale, integrated into a broader strategy to manage climate risks.

37. The State of Food Security and Nutrition in the World (SOFI). 2018. Building climate resilience for food security and nutrition.

Up to now, WFP has focused on increasing access to parametric insurance, a type of insurance based on a proxy for losses, such as measured rainfall or the measured health of vegetation. Index-based insurance compensates farmers based on changes in a pre-determined index correlated with agricultural yield (or harvest), rather than on-site assessments of actual damage incurred to crops due to insured risks. Insurance payouts are distributed to all insured farmers within a specific geographic area if the index falls beyond a pre-determined threshold i.e. rainfall recorded over a certain period is below the value set in the index for drought coverage.

For WFP microinsurance has two main roles:



Protection: Microinsurance programmes can help households cope with the consequences of shocks by providing timely support after the disaster has occurred. The monetary payout received from an insurance scheme in the event of a shock is protective in nature, as it allows insured households to meet food and other consumption needs. If well timed, payouts can prevent families from resorting to negative coping mechanisms and stabilise household incomes in the aftermath of extreme weather events.



Promotion: By protecting farmers against selected risks, insurance has the potential to unlock investment in agriculture production that results in higher productivity and incomes. Additionally, insurance can contribute to improving farmers' access to inputs and markets, increasing their productivity and incomes and helping promote sustainable pathways for transitioning vulnerable and food insecure households from safety nets to more productive and sustainable livelihoods. Improved access to inputs can also occur as insurance supports smallholder farmers in accessing credit as policies can be used as collateral with financial institutions when lending to lower-income households. Ultimately, insurance can be integrated with Ecosystem-based Adaptation (EbA) or Nature-based Solutions (NbS), which allow farmers to reduce the exposure of their livelihoods to climate risks while also restoring habitats that improve both ecosystem services and biodiversity that increase a community's resilience.

Hence, when anchored in a comprehensive risk management approach, microinsurance has the potential to help households strengthen their livelihoods and increase their resilience over the long term. For the market to be sustainable, however, the benefits of protecting farmers' investments must outweigh the cost of premiums. As many vulnerable smallholder farmers that live in

isolated communities prone to recurrent climate shocks do not have the resources to afford insurance premiums nor understand index insurance, WFP adopts a social protection approach, whereby it sets up mechanisms to facilitate access to insurance that initially offset capital costs of policies for participants until insurance becomes a well understood and cost-effective tool.

One of these mechanisms is about offering insurance 'free of charge' for participants, i.e. WFP pays the full premium to insurance companies on behalf of farmers. However, microinsurance becomes a **conditional transfer modality** whereby the participant fulfils predefined conditions (typically an investment in time and labour to reduce risk) in exchange for an insurance policy that WFP purchases on his/her behalf and the insurance company delivers to the participant. If the policy is triggered the participant receives an insurance payout which enables him/her to minimise the financial impact of the shock and recover faster.

Insurance as a Food Assistance Transfer Modality

Insurance programmes have long been considered part of the social protection landscape, with health, life, and unemployment insurance as common examples. However, insurance has only recently been used as a food assistance tool. In a food assistance context, insurance provides a **contingent transfer of cash (or potentially food or food vouchers) designed to meet a food need following a predefined future shock**.

Unlike other food assistance transfers, the transfer has two parts:

- 1. Insurance policy transfer.** The first step is the transfer of the insurance policy itself. This transfer is most often a conditional transfer based on participation in a labour-based safety net programme or other relevant activity.³⁸ While WFP would initially pay the full premium, in subsequent years the participant will be expected to pay an increasing percentage of the premium in cash. Although the premium that is paid to insurance companies in exchange for creating assets is considered the 'transfer value', the real value of this transfer is equivalent to the sum insured, which is hypothetical until the payout is triggered.
- 2. Payout transfer.** The second phase of the transfer takes place when the policy is triggered and a payout is made. The size of the payout depends on the magnitude of the shock (as captured by the index) and is calculated as a percentage of the sum insured. The sum insured varies depending on its specific function and can range from meeting basic food needs to covering the replacement cost of lost assets (i.e. seeds) or providing the resources needed to prevent the loss of certain assets (i.e. livestock).

38. In most cases, insurance has been provided based on additional work on asset creation (through FFA activities or possibly public works, like in Ethiopia). In other cases, like in Zambia through a collaboration with FAO, insurance has been provided on the condition that participants apply Conservation Agriculture (CA) measures in their production practices.

WFP distributes insurance as a conditional transfer modality for two main reasons:

1. The conditionality should provide an incentive for farmers to invest in assets that lower their risks over time and thus potentially reduce the price of premiums by decreasing the frequency of expected payouts. This incentive can also be designed to improve ecosystem functioning as well as other environmental outcomes. To be eligible for insurance, farmers work on community or individual risk reduction assets or apply innovative techniques/practices that reduce risks such as Conservation Agriculture (CA).³⁹ Insurance thus offers a further incentive for farmers to engage in risk reduction activities.
2. The conditionality should signify that insurance has a cost that the farmer will progressively be expected to pay in cash. From enrolment into the insurance programme, farmers are aware that a cash contribution will gradually be introduced, requiring them to pay a percentage of their insurance premium in cash.

Approaches to Conditionality for Insurance Transfers

WFP has developed various approaches for incorporating conditionality into its insurance initiatives as well as other transfers. This section outlines some of the possible options.

Integration with food or cash transfers: Integrating insurance in programmes that already provide cash and/or food transfers to meet immediate needs is the context in which WFP has the most experience. Food assistance programmes first seek to fill immediate food gaps while promoting activities that improve longer term food security and nutrition. Insurance transfers are normally added onto these programmes for populations whose food insecurity is exacerbated by recurrent shocks. Insurance transfers in this case are designed to fill predictable food gaps in the year after a shock, protecting gains made during a good year – gains that are achieved thanks to investments protected by insurance, and reducing future food assistance needs.

Standalone transfers: While not yet tested by WFP, insurance transfers could also be designed as standalone transfers, for populations who have a high risk of becoming food insecure should a shock occur. For example, beneficiaries of a safety net programme who have recently graduated from the programme, but whose livelihoods remain at risk, may continue to access full or partial insurance transfers to consolidate the gains they have made and build up enough capital to be able to absorb future shocks.

Conditionality Options

Whether integrated with other transfers or standalone, a number of conditionality options can be considered depending on the specific context and objectives of the programme. These include:

Labour-based conditionality: Labour-based conditionality has been the most commonly tested approach to conditionality in the context of R4. In this model, beneficiaries are required to work a pre-defined number of days in order to be eligible to receive an insurance policy. The number of days of labour is normally calculated based on the price of the insurance policy (the premium) and the prevailing rural wage rate. Conditionality can either be set based on actual days worked or work norms defined as the average number of days required to complete a specific task (i.e. build 100 meters of terrace). Careful consideration of the labour burden on households is needed when designing and implementing this kind of conditionality with programmes that have existing labour components, including consideration of gender specific norms. WFP's [Seasonal Livelihoods Programming](#) approach provides an excellent tool for defining the timing and integration of labour-based food, cash and insurance transfers. This approach is currently being implemented in Ethiopia, Senegal, Malawi, and Zimbabwe, where farmers access insurance by investing additional labour in building assets to improve their productivity and build their long-term resilience.

Blended labour and cash conditionality: Similar to labour-based conditionality, blended labour and cash conditionality requires that participants provide a partial cash payment in order to receive an insurance policy. The remainder of the cost of the policy is earned through participation in a labour-based programme. In the framework of R4, all countries have introduced a requirement for participant households to contribute in cash between 10 and 20% of the total premium amount starting from the second year of participation, with cash payments expected to gradually replace labour over a realistic time period, which varies based on context and participants' ability to pay.

Add-on to an existing conditionality: Another approach to integrating insurance transfers into a food assistance programme, is simply to add an insurance transfer onto an existing conditional food assistance transfer programme. For example, without adding additional labour requirements, an insurance policy could be added on as an additional value to a food or cash transfer to meet food needs from a potential future shock and reduce resulting food assistance requirements. This kind of approach is most appropriate for highly food insecure populations facing high levels of recurrent shocks, and who are typically labour constrained.⁴⁰ However, this

39. Conservation Agriculture (CA) is a farming system that can prevent losses of arable land while regenerating degraded lands. It promotes maintenance of a permanent soil cover, minimum soil disturbance, and diversification of plant species.

conditionality approach could represent an obstacle when trying to monetize access to insurance and progressively transition towards cash payments. Another option could be to provide a maternal and child health insurance policy to participants of a supplementary feeding programme that is contingent on maternal and child check-ups at a local health centre. In exchange for participating in these checks and associated training, beneficiaries would receive supplementary foods and a health micro-insurance policy that would cover basic medical care for the mother and child. This approach, which has not yet been tried, illustrates a non-labour-based approach to insurance transfers.

Practice-based conditionality: In Zambia, farmers receive an insurance policy by adopting Conservation Agriculture (CA) practices. The policy provides protection for the farmers as they change their agricultural practices and is expected to meet their food needs in case a drought event occurs. This approach was also introduced in Kenya this year, where farmers receive insurance policies for growing drought resistant crops and adopting recommended agricultural practices. Mozambique will also adopt a similar approach for the next agricultural season. Practice-based conditionality can essentially be seen as an incentive mechanism for improving livelihoods and food security. Another option for practice-based conditionality, could be participation in a community emergency preparedness programme, like the development of a household evacuation and emergency plan or the setting up of a (contributory) community-level fund to deal with more frequent shocks below the threshold at which insurance

would trigger. Although not an individual household-level insurance mechanism, [the African Risk Capacity](#) sovereign insurance has taken a practice-based conditionality approach, requiring participating governments to prepare a contingency plan in order to be eligible for coverage.

Market-based or full cost: The final option is to require participants to pay the full market cost of the insurance policy. In this case, WFP and its partners could provide the initial investment to support product development and delivery in areas where the local insurance market is unable to do so. Farmers not eligible to participate in a safety net, or who have graduated from one, could pay for the full cost of insurance. It may be applicable for those farmers who participate in a [Smallholder Agricultural Market Support](#) (SAMS)⁴¹ programme or for farmers who have 'graduated' from FFA development programmes and built adequate household capital to be able to afford insurance.

Unconditional. Lastly, the provision of insurance could be unconditional – or based purely on food needs and a high risk of future food deficits due to recurrent shocks and stressors. This approach has not been tested by WFP and it is unclear if microinsurance would have a comparative advantage against other contingency funding mechanisms. It is important, however, to differentiate unconditional transfers from programmes that bundle different transfer modalities (food, cash, voucher, insurance) with a range of conditionality structures.

40. This, specifically for weather insurance, would probably require a more detailed cost benefit analysis, compared to providing a direct transfer.

41. Smallholder Agricultural Market Support (SAMS) is WFP's flagship programme connecting smallholder farmers to markets.



WFP and partners introducing the integrated resilience approach to communities in Ward 18 of Masvingo District, Zimbabwe.

WFP/Jyothi Bylappa

Monitoring, Evaluation, and Learning (MEL)

In the evaluation and learning agenda of R4, different tools have been applied to assess progress in the implementation of the programme and its effects on participant households by country and across the different development stages of the initiative.

A rigorous monitoring, evaluation and learning (MEL) system is being rolled out across countries in order to assess the

impact of the program in its totality. This system is based on a sequential set of assessments to track participants' access to different services over time, assessing the quality of those services—with a particular focus on the performance of microinsurance—including the opinion of users, and measuring the effects of the integrated approach in a rigorous, transparent and cost-effective manner. The different components and objectives of the MEL system are outlined below.



Track the level of implementation

- Household Registration and Output Monitoring
- Monitoring Insurance Key Performance Indicators (KPIs)

- o Conduct specific gender analysis;
- o Understand effect of shocks and resilience capacities.

- Beneficiary Contact Monitoring Survey (BCM)



Consider the perception of participants

- Qualitative Focus Group Discussion (FGD):
Qualitative surveys aim to:
 - o Answer a specific research question;
 - o Better understand the quantitative results;
 - o Understand the perceived effect of the components of the program;



Measure the changes promoted by the programme

- Regular Outcome Monitoring
- Evaluation and Reviews



Facilitating Learning between R4 Countries

- Global R4 Learning Events

FIGURE 14. Timeline of M&E surveys or analysis conducted in 2019

Countries	2019												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Ethiopia					BL Tigray						BL Amhara		
Senegal									BL				
Malawi					Mid- Term Review								
Zambia					BCM	OM 2 Phase II OM 8 Phase I						BCM	
Kenya								OM 2	BCM 3				
Zimbabwe			OM 1										
Mozambique			BL 2		Mid- Term Review								
										BL			

Legend Baseline Outcome BCM Mid -Term Review

Key Findings and Recommendations

Level of implementation

Household registration and output monitoring is done periodically with the support of implementing partners to inform WFP on the magnitude of the intervention, access to the different components, entry and exit over time and to assist in defining a clear graduation path. In line with WFP's beneficiary guidance, the organization continues developing a standardized corporate tool and methodology for registering beneficiaries.

Quality of the insurance product: Key performance indicators of the insurance products

To ensure the quality of the insurance component of R4, the programme has set up an Insurance Performance Indicators monitoring system. These Key Performance Indicators (KPIs) are standard indicators recommended by the Microinsurance Network—a global multi-stakeholder platform for professionals and organisations working on microinsurance. KPIs are used to track the quality of the insurance component and how products are providing value for money. Key Insurance Performance Indicators that are being measured by R4 include: Growth Rate; Promptness of claims settlement; Consumer Protection Investment Ratio; and Utility ratio.

Comparative Analysis of Insurance Performance Indicators

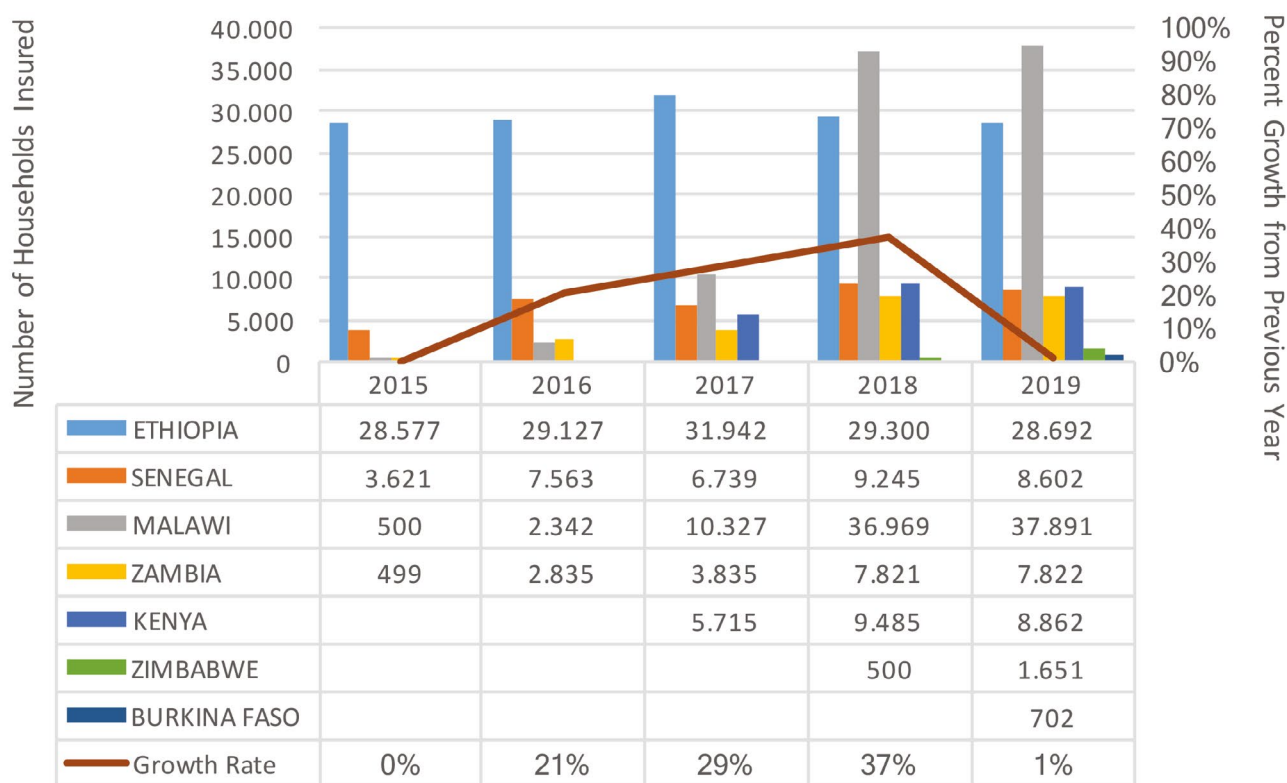
This section highlights key takeaways from comparison of the four Insurance Performance Indicators among the R4 countries where the risk transfer component is operational. Overall, these indicators showed a positive trend on portfolio growth, quality of the product, and a general improvement in the speed at which payouts are released after the index triggers, compared to previous years. However, in most countries payouts are still released way beyond the target time of 60 days after the insurance product has triggered, an issue that can be

addressed through increasing the training insurance companies receive to implement and measure the KPIs. This can support improvements in the overall performance of the portfolio when companies are able to effectively track these indicators and enact measures to achieve these targets.

Growth Rate

This indicator determines the increase in number of insured participants on an annual basis. The acceptable value varies according to the project design target.

FIGURE 15. Growth Rate indicator in R4 countries



From 2018 to 2019 the R4 initiative grew at an overall rate of one percent due to the different developments within countries in the number of insured farmers. Particularly, there was no geographical expansion in a number of R4 countries in 2019, such as in Malawi, Ethiopia and Zambia, which resulted in a reduced growth rate. The focus this year was on consolidating the portfolio and preparing expansionary activities for next year.

The number of participants remained stable with no new enrolments undertaken this year in Zambia while increasing in Malawi (+2.5 percent) and Zimbabwe (+230 percent) due to the ongoing expansions of the programmes in these countries. Zimbabwe displayed the highest growth, as the number of participants almost tripled. Conversely, Senegal and Kenya saw a reduction in the number of enrolled farmers by 11 and 7 percent respectively. As Zimbabwe is currently in an expansionary stage after the first year of introducing insurance at small scale, it is not surprising to achieve such a growth rate.

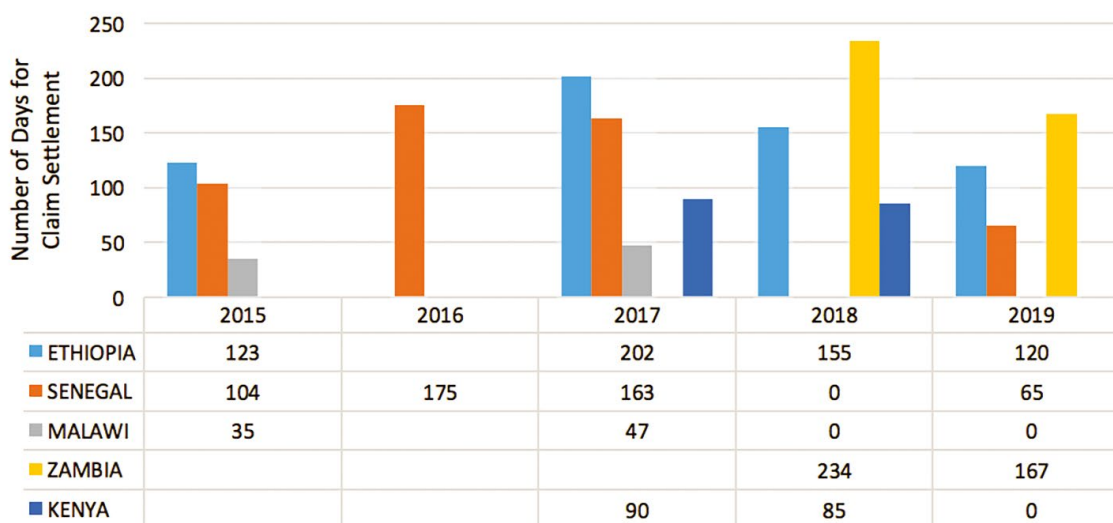
Promptness of Claims Settlement

This indicator measures the efficiency of the claims' settlement process. The acceptable value is less than two months from closure of second window for Weather Index Insurance (WII) and crop cuts for Area Yield Index Insurance (AYII). As timely insurance payout plays a vital role in facilitating recovery from droughts and ensuring food security, tracking this indicator provides a key measure of effectiveness of the risk transfer component of R4.

Since 2015, the average time to deliver a payout in the different countries is 133 days, double the acceptable value. While the indicator presents an overall improvement in number of days required to settle claims over the years, this may also be a result of countries not having a payout year, and therefore this indicator will need to be closely monitored in subsequent years. In Senegal, the number of days drastically reduced from 163 in 2017 to 65 this year, being the only country where the figures are just above the acceptable limits. In Kenya, the number of

days reduced from 90 during the 2017 Short Rains season to 85 for the 2018 Short Rains season. However, this is still above the ideal limits and should be improved in upcoming seasons. Zambia also saw a small improvement from 234 days during the 2017/18 season to 167 during the 2018/19 season, but these figures are still very high outside the acceptable range. Delays during the 2018/19 season were a result of the process for farmers to enrol in the digital payment platform MTN Zambia, which was used for the first time to process payouts, but for next year farmers will already be registered to the platform, thus expediting the payout process. Overall, stronger efforts are needed to reduce the time for participants to receive a payout to under 60 days over the next seasons. As the R4 portfolio expands to cover an increasing number of households, the time required for claims settlement may increase, therefore the programme will need to increase training for local insurance company partners as well as explore innovative technologies that can remove the bottlenecks that are resulting in delays, including digital payments and mobile money.

FIGURE 16. Promptness of Claims Settlement indicator in R4 countries



Consumer Protection Investment Ratio

This indicator measures the amount of resources dedicated for consumer protection—financial literacy, awareness, and communication. The indicator is the proportion between the consumer protection investment and the implementation cost of the risk transfer component of R4. The acceptable value is greater than 0.1. Trends in this indicator can provide insights into the levels of investment needed to sustain a planned scale up.

The indicator presents positive values in all R4 countries for 2019 and a general improvement over the years. In Senegal, the amount of resources dedicated to consumer protection increased from 22 percent in 2018 to 30 percent in 2019. Ratios in Zimbabwe are quite high, given the expansionary stage of the project, there has been a strong emphasis on consumer protection when enrolling new households. Kenya also saw an increase from 23 percent in 2018 to 29 percent in 2019. In Ethiopia, ratios are above the required threshold but are lower compared to other countries, ranging from 13 percent in 2018 to 15 percent in 2019. Zambia presents the highest value, with 48 percent of resources allocated to consumer protection.

Utility Ratio

This ratio measures in which proportion the sum insured meets the utility requirement of the insured participant. For example, depending on context, the sum insured should be sufficient to meet the required number of months of household food expenditure, the value of key agricultural inputs or enable payback of a loan. This indicator plays a key role in understanding whether the sum insured is accurately set to capture the changing needs of participants. A well-designed insurance contract will usually have a utility ratio between 80 percent and 120 percent, indicating that it meets demand of the policy holder.

This indicator shows healthy values in all R4 countries, with high ratios present in every country. This reflects the viability of insurance across the R4 countries and the sustainability of the products. Overall, values across countries have been increasing over the years. In Ethiopia, values have increased from 47 percent in 2015 to 96 percent in 2019. In Malawi, the ratio increased from 60 percent to 103 percent. Kenya saw a peak in 2018, with a 100 percent ratio, decreasing to 80 percent in 2019. Senegal also saw a peak in 2017, reaching as high as 325 percent, and decreasing to 179 percent this year, closer to the ideal target of 100 percent. Except for Senegal, there is relatively good convergence to the appropriate level of sum insured compared to the needs, which can be validated by an updated gross margin analysis.

FIGURE 17. Consumer Protection Investment Ratio indicator in R4 countries

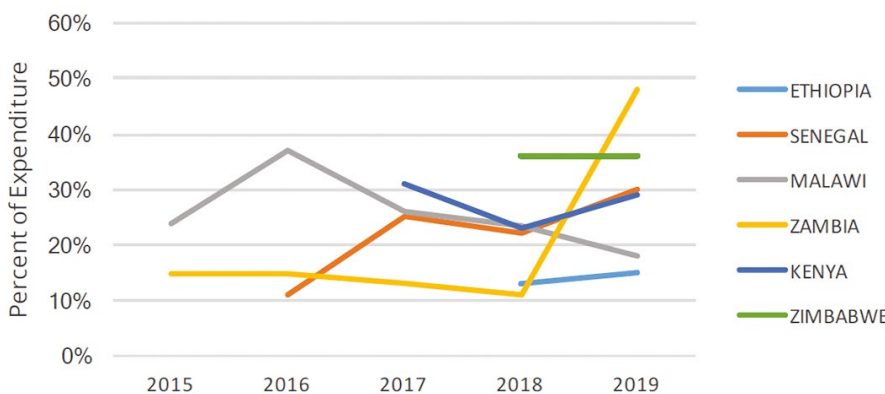
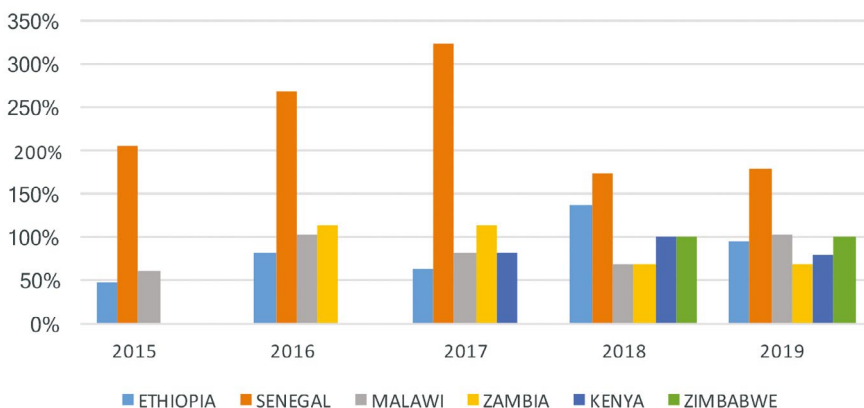


FIGURE 18. Utility Ratio indicator in R4 countries



Perception of participants

Through Beneficiary Contact Monitoring (BCM) surveys, WFP analyses the insurance payout distribution processes and level of satisfaction among farmers. BCMs provide a deeper understanding of participants' perspective on the access to, use of, satisfaction, and accountability of the insurance payout process. These surveys are usually conducted one month after an insurance payout is disbursed and are aimed at informing and orienting the initiative to the real needs and perceptions of the population served.

Surveys conducted after the disbursement of payouts in Zambia and Kenya showed that insurance payouts were mainly used to purchase food, agriculture and livestock inputs, cover basic needs and livelihood investments. Utilizing the payouts for these purposes has the potential to limit the degradation of household food security after a failed growing season. In Kenya, the importance of education in household livelihood strategies resulted in participants dedicating a large portion of the payout on school fees, reducing school dropouts even during a period of crisis.

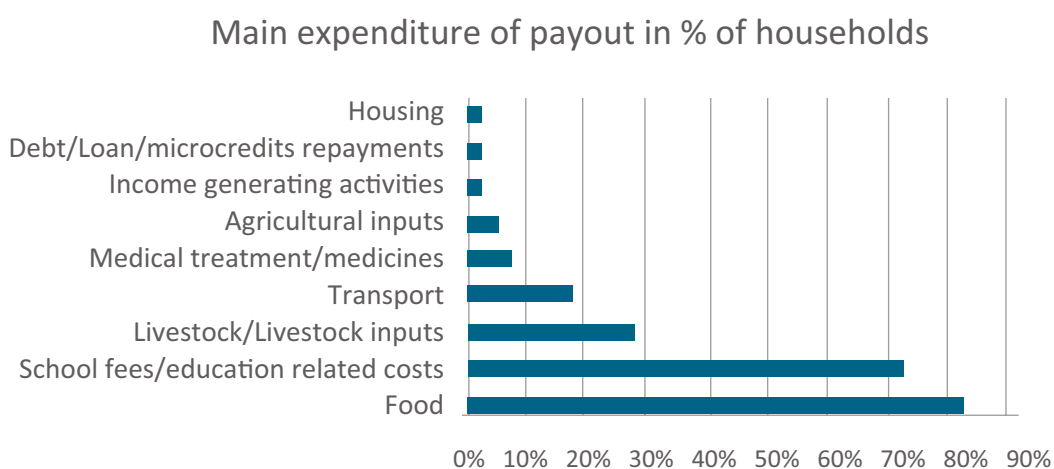
While the level of satisfaction varied according to the amount of payout received, most participants are highly satisfied with the R4 programme and the microinsurance component. In various R4 countries, households that received an insurance payout stated they would enroll again and are willing to pay a cash contribution for insurance in the future. Based on the evidence, it is recommended to set a floor to payouts to both improve user's satisfaction and avoid distributing payouts that are below the transaction cost for retrieving them. Indeed, some participants in Kenya reported that the bank through which payouts were transferred asked them *"to deposit KSh200 in order to withdraw KSh150 which they received as a payout"*.

The training and communication components of the programme were positively rated by all participants independently of the pay-out received. However, in Zambia mobile payments introduced this year did present some implementation challenges. As a result, it was recommended to further enhance farmers understanding of mobile money technology to help facilitate future payments.

Building from the findings of the BCM, R4 countries are developing practical actions that will further enhance the programme. The most relevant recommendations from this process are summarized here:

- In Kenya it was suggested to adopt **agroecological zones** as unit areas of insurance to reduce basis risk and avoid very small payouts;
- Changing the **payout payment channel to mobile** money rather than bank accounts, in an effort to alleviate the impact of withdrawal fees and transport costs. This change needs to be supported with enhanced capacity building in countries like Zambia where farmers have less familiarity with current mobile technology;
- Introducing **VSLAs as the entry point for farmers' organization**, which will not only build their financial capacities to contribute to insurance premiums, but provide a formal space for trainings and community discussions facilitated by partners on nutrition, gender, insurance, GAP, etc.

FIGURE 19. Reported use of payout in Kenya 2019



Measuring Change

Regular Outcome monitoring

A quantitative survey is conducted regularly to understand how R4 participants' situation has evolved from the beginning of the integrated climate risk management intervention. Outcome indicators collect information on the food security, wealth, agricultural production, financial situation and household resilience capacity. These regular evidences provide actionable orientations during the implementation timeframe. Baselines are conducted in intervention areas where the programme is being introduced and in which new participants are enrolled. In 2019, baselines were conducted in Mozambique, where the initiative commenced operations; in Ethiopia and Senegal, where new long-term funding will enable the programme to expand to additional areas with new participants; and in three wards of Masvingo Province in Zimbabwe, due to programme expansion. The overall results of the baselines conducted in 2019 reveal that the initiative has targeted vulnerable households where farming is a main source of income, complemented by some livestock production. In Ethiopia, for example, more than 80 percent have an income below US\$3.10/day Purchasing Power Parity (PPP) considered as the international extreme poverty line. The reference provided by these baselines will be used to compare the evolution of R4 participants in the following rounds of monitoring surveys and presented in the future annual reports.

Regular outcome monitoring surveys are conducted at least once a year with R4 participants and where possible, include a group of non-participants with similar characteristics to serve as control group. The outcome monitoring results of Kenya, Zambia and Zimbabwe indicate that:

In 2019 in Kenya, the cumulative effects of two consecutive seasons with below average rains and low yields have contributed to a reduction in the improvements observed in early 2018 following two important insurance payouts. Despite a better harvest in 2019, food security and socio-economic indicators monitored for the R4 participants deteriorated, such that they are currently in a similar state as the households in the control group that did not receive any support in the period. This situation is the result of several shocks hitting the area of intervention (drought, market price spikes, armyworms and crop and livestock pests), which were aggravated by the cumulative effect of two failed seasons on yield levels and household food stocks, market price volatility, a reduction on external assistance and the meagre effect of a minimal insurance payout. R4 households' income decreased by almost 10 percent in 2019, this reduction coupled with an increase of the price of maize in the market led to an increase in households' food expenditure share to 63 percent of the total. This situation, combined with the reduced insurance payout, contributed to a 20 percent decrease in the number of the households that were able to save from 2018. The same

situation was observed with access to credit, with only 30 percent of households able to access credit that was used primarily for school expenditures. However, in 2019, an important increase in the number of households using loans to invest in income generating activities was observed.

In Zambia, farmers experienced two consecutive dry spells during the 2017/18 and 2018/19 farming seasons. These two seasons were characterized by extremely high temperatures, heavily affecting the country's food security. The southern and western regions of Zambia were the worst affected, leading to high levels of crop loss (more than 50 percent in most cases), high livestock mortality because of reduced pasture, water and increased disease burden. Despite this challenging context, R4 participants in the programme since 2015 have reduced the use of negative coping strategies, with 97 percent of farmers in 2019 not resorting to any coping strategy, a vast improvement when compared to the beginning of the programme, when only 36 percent did not use a coping strategy. During this period, farmers doubled the area cultivated with conservation agriculture practices from 1 to 2 hectares and the percentage of farmers with marketable surplus went from 47 percent to 69 percent. This also coincided with an increase of the number of households investing in agriculture from 10 percent to 50 percent, implying that the farmers had higher solvency due to improved incomes.

Zimbabwe experienced high levels of inflation and currency depreciation from 2018 to 2019, which increased the consumer price index by 64 percent. In addition, the 2018/19 agricultural season was affected by a delayed start of rainfall and erratic rains. In particular, project areas in Masvingo received no significant rains during the first quarter of 2019. Given the inflationary situation, the purchasing power of R4 participants decreased by 10 percent, leading to an 8 percent increase in the share of income dedicated to food expenditure. To cope with this economic shock, households put in place a series of coping strategies in order to maintain their food consumption at constant levels. These strategies helped households maintain constant wealth and food security over the period, with 67 percent of R4 households classified as food secure, albeit still vulnerable, without eroding their assets and livelihoods. The savings component of the programme has been effective in encouraging households to save through this mechanism. Unfortunately, the minimal amount saved in cash on average confirms that due to the economic situation of the country households prefer to invest in livestock as a store of wealth. Compared to the control group, participants of the integrated resilience approach appear to have coped better with the different shocks in the period. However, as insurance has not triggered during this period, it is difficult as of yet to document the effects of this instrument.

Main lessons learnt from the outcome monitoring system in 2019 to guide future programming indicate that:

- Microinsurance should not be considered as a standalone intervention and needs to be embedded into an integrated risk management approach for it to contribute to household's resilience and food security. In addition, a minimum payout amount should be introduced that provides meaningful benefits to farmers.
- There is a need to work on the design of savings and credit systems that can be functional even in case of economic shocks like the ones experienced in Zimbabwe. The saving component of the programme would need to be revised to avoid household loss of purchasing power/decapitalization of savings in the local currency. Recommendations include promoting savings in stable currency/assets but other options should be considered to maintain the functionality of saving systems that can provide an essential buffer to absorb smaller but more frequent shocks.

Evaluations and reviews

On an ad-hoc basis, reviews and evaluations are conducted to understand the relevance, coherence, effectiveness, efficiency, impact and sustainability of the intervention. In 2019, an external Mid Term Review was mandated by SDC on operations in Malawi, Zambia and Zimbabwe. The aim of the review was to assess the effectiveness, efficiency and sustainability of the programme activities as well as the application of principles of gender and HIV and the quality of the programme's monitoring, evaluation and reporting system.

The MTR has shown that *"R4 has potential value added in the target communities and does contribute to household resilience building. Case studies from Zambia and Malawi show that, R4 has led to increased resilience to drought spells and VSLs are contributing to the strengthening of social capital and enhancing financial inclusion of targeted beneficiaries. When implemented together, R4 interventions provide synergies and complementarities which cannot be achieved if each component were to be implemented in isolation."*

In regard to the insurance component, the MTR revealed that it works well when certain conditions are met, including: a broad network of stakeholders are involved, farmers work together to collect and verify information used for claims; affordable and staggered insurance premiums are available; insurance payouts are made to beneficiaries regularly; and insurance covers multiple hazards.

The MTR has shown that R4 has potential added value in the target communities and does contribute to household resilience building. However, its potential positive impacts need to be harnessed and sustained by addressing several challenges as: (i) improving the documentation and communication of the learning framework to a wider audience, (ii) enhance cross-country learning, (iii) implement a clear graduation strategy for R4 participants, (iv) incorporate measures that support government preparedness to take over the initiative in the medium to long term and (v) enhance partner coordination to ensure the integrated model converges at household level.

Specific recommendations provided by the review for addressing the concerns identified will be implemented during 2020 exercise to improve programme quality.

Facilitating Learning Across R4 Countries

In an effort to share best practices, agree on the minimum level of components in interventions, and discuss mainstreaming of R4's integrated climate risk management approach within WFP, a global R4 learning event was held in September in Rome, Italy. The retreat was also an opportunity to discuss scalability, sustainability and evidence building of the model.

The retreat convened R4 coordinators from Ethiopia, Senegal, Zambia, Kenya, Zimbabwe, Malawi, Mozambique and Guatemala Country Offices (COs), and colleagues from Regional Bureau Johannesburg (RBJ) and Headquarters (HQ).

Priority areas of work discussed during the event included: country strategies on long-term sustainability and transition, scale-up, monitoring and evaluation, integration of R4 components, local capacity strengthening and increased coordination of R4 team across WFP's different institutional offices (HQ/RBs/Cos).

Some of the most important issues that were highlighted during the retreat, representing common challenges and opportunities at the operational, strategic and system/management level included:

- Capacity strengthening of staff is needed to understand and manage the R4 programme, particularly the insurance component, including index design, costing and monitoring;
- Minimum technical standards and guidelines are needed to facilitate processes;
- Better integration of R4 with other resilience components is needed;
- Lack of funding, expertise, changing policies and a systematic approach to capacity strengthening hinder the scale up of microinsurance as part of an integrated climate risk management approach;
- Capacity development of partners and increased partner coordination and engagement for integrated resilience is fundamental;
- Evidence generation is key for internal or external buy-in of R4;
- Sustainability and exit strategy need to be well-reasoned and planned from the start.

Discussions and findings from the retreat are guiding the strategy and planning of the integrated approach moving forward. Country missions to discuss challenges, priorities, scalability and sustainability are envisioned and will be conducted in 2020. Moreover, increased coordination and continuous communication and planning between countries and global R4 team will be pursued.



Farmers participate in a focus group in Namarroi district of Zambezia Province, Mozambique. Thanks to financing from the Swiss Agency for Development and Cooperation (SDC), the Mozambique Country Office started activities in Nampula and Zambezia provinces in 2019, conducting focus group activities with farmers in both regions.

WFP/Susanna De Sousa

Where are we and where are we going?

During 2019, the number of participants in the global R4 programme reached approximately 93,000, an increase of only one percent from the previous year. Despite the entry of Burkina Faso among the new countries under the R4 portfolio and a tripling of participants in Zimbabwe, this minor growth rate can be attributed to relatively stable numbers in all other countries, being mainly the result of delayed availability of funds.

The previous years' efforts to mainstream microinsurance into WFP operations are beginning to take hold, with an increasing number of Country Offices (COs) expressing interest and taking steps to introduce risk transfer instruments that strengthen

resilience-building into country programmes. Among the countries where feasibility studies are ongoing or being planned, or where microinsurance products are in various stages of design are Bangladesh, Cuba, El Salvador, Guatemala, Mali, Mozambique and Uganda.

As part of the **sustainability strategy** of the R4 initiative, in 2019 WFP has scaled up investment in technical and programmatic capacity of local stakeholders and governments to ensure national ownership of insurance products and systems. In this regard, in Ethiopia WFP began consultations with two local insurance companies to define the timeline for these

companies to take over design and distribution of microinsurance products from 2020 onwards. In Malawi, trainings on Weather Index Insurance (WII) design were conducted throughout 2019 with the index design team, to support the development of a national pool of experts from both the private and public sector. In Zambia, thanks also to funding from the International Fund for Agricultural Development (IFAD), WFP is working with the Ministry of Agriculture (MoA) to strengthen national skills in product design and support the national insurance system, including through the Farmer Input Support Programme (FISP), which has introduced microinsurance to around one million smallholder farmers.

WFP also continues to support the development of **innovative products** that help vulnerable farmers access insurance policies that best fit their needs across various regions and countries. As a result, during the 2019 short rains season in Kenya, WFP conducted a dry run⁴² pilot of hybrid index insurance products. In Malawi, WFP is already distributing its first hybrid index insurance, which brings together Weather Index Insurance with Area Yield Index Insurance (AYII). The idea is to allow quick payouts in case of rainfall shortages through the weather index product, while at the same time ensuring coverage against a broader range of risks that damage yields, such as pests or excess rains and floods, through AYII.

Starting in 2018, WFP has introduced **pastoral insurance** in the Somali region of Ethiopia through the 'Satellite Index Insurance for Pastoralists in Ethiopia' (SIPE) project. SIPE is a meso insurance scheme, built on the same components as R4, and integrated with the government's Productive Safety Net Programme (PSNP). The index is built to trigger payouts early enough to keep the core breeding animals alive during a drought, instead of providing payouts at the end of the season when the animals might have already perished. This early payout mechanism requires very efficient processes. SIPE saw a 56 percent increase in the number of participants in 2019, with a total of over 7,800 pastoralists insured. Moreover, dry spells during the 2019 season have triggered payouts of over US\$95,000 for 1,721 pastoralists.

As part of an effort to strengthen its **integrated programming approach**, WFP has increasingly focused on combining and layering different climate risk financing instruments, including Forecast-based-Financing (FbF), microinsurance and macro or meso insurance. When implemented in the same geographic region, climate risk financing instruments can ensure that all segments of the population are protected from a wide range of climate-related risks. Better integration and layering between these instruments enhance their cumulative effectiveness in protecting the lives and livelihoods of the most vulnerable

people, reducing the effects of economic losses and damages and reducing expenditures for humanitarian response that arise from repeated climatic shocks. Examples of this work include:

- In Kenya, WFP has been developing a concept for a risk layering mechanism with the National Disaster Risk Management Authority (NDMA) and Pula Advisors that integrates the National Drought Emergency Fund (NDEF) and microinsurance;
- In Bangladesh, WFP is testing and developing a flood insurance model that integrates with and complements an existing FbF mechanism;
- In Zimbabwe, WFP bought its first ARC Replica policy for the 2019/20 season and launched an FbF intervention as part of its broader climate risk financing portfolio. These initiatives complement WFP's existing microinsurance activities and aim at offering a range of innovative and complementary tools to maximize efforts at building resilience to climate risks. Zimbabwe is the first country where all the Disaster Risk Financing (DRF) activities are implemented together, although at limited scale thus far.
- In Mozambique, WFP is working to integrate the R4 model with a drought early warning system intended to enhance national drought monitoring and forecasting capacity.

R4 has continued in its efforts to build a systematic, rigorous, transparent and cost-effective **Monitoring, Evaluation and Learning (MEL)** system⁴³ that is coherent across countries. This starts from tracking participants' access to services over time, assessing the quality of those services—particularly microinsurance—and measuring the effects of the integrated set of services on incomes, food security and livelihoods, as well as the capacity of households to withstand future shocks. This internal MEL system is complemented by and informs externally led analyses, reviews and evaluations of the performance of the R4 model.⁴⁴ Despite uneven implementation between countries there are lessons that can be drawn from information collected in 2019 to inform corporate systems on resilience monitoring.

A major challenge has been **registration of participants** and the digitalization of different processes (like insurance distribution). WFP's corporate system designed for monitoring cash transfers requires substantial modifications to be able to record enrolment by different household members into a variety of services, including insurance, and track that participation over time. Advances have also been slowed down by the need to align the registration and enrolment system with the strategy and needs of each WFP Country Office.

Quality of microinsurance services is a specific focus of the MEL system. In all countries, the amount of financial resources

42. An insurance dry run refers to testing a prototype insurance product and monitoring its performance for one season before the product is introduced into the market.

43. For more detailed analyses, please refer to the Monitoring, Evaluation and Learning (MEL) chapter.

44. For more information on analyses, reviews and evaluations of R4, please refer to Annex 4.

dedicated to consumer protection—including financial literacy, awareness, and communication as a proportion of overall R4 implementation costs—is above 10 percent. This is an indication that the focus of R4 is not only on reaching a large numbers of insurance clients, but in building sustainable numbers of well-informed customers and thus creating the conditions for the scale up of quality services. Also, through monitoring of the utility ratio, there is evidence that the sum insured largely meets the requirements of the insured participants and can address their needs in case of shocks. Finally, despite an overall improvement over the years in the number of days required to settle claims, for 2019 the average time between the triggering of the policy and the actual transfer of money to policy holders in all countries that had a payout is still on average an unacceptable 117 days. This is one of the major issues that needs to be addressed moving forward to bring this figure below the target of 60 days after a payout is triggered.

Most participants seem to be highly satisfied with the R4 programme and in particular with the microinsurance component when an important payout is disbursed. The **Beneficiary Contact Monitoring (BCM)** implemented in Kenya and Zambia in 2019 reveals that the training and communication components of the programme were positively rated by all participants independently of the payout received. Building from the findings of the BCM, R4 countries are developing practical actions that will further enhance the programme through transitioning to mobile money platforms and using VSLAs as the entry point for organizing farmers.

The evidence provided by the **outcome monitoring system** confirm the trends observed in previous years, including that food security of R4 participants steadily increases over time as well as their capacity to withstand future shocks due to higher production and incomes, greater financial inclusion and a stronger asset base. Countries where new long-term funding was received in 2019, such as Ethiopia and Senegal, conducted baseline surveys to ensure a reference is available that can be used to monitor the effects of the programme in expansion areas and over a larger number of participants.

Finally, an external **Mid Term Review (MTR)** was commissioned by the Swiss Agency for Development and Cooperation (SDC) on R4 operations in Malawi, Zambia and Zimbabwe, to assess the effectiveness, efficiency and sustainability of the programme activities. The MTR contributed to the evidence that R4 has positive impacts on target communities and contributes to household resilience. Case studies from Zambia and Malawi show that R4 has led to increased resilience to drought, with Village Saving and Lending groups (VSLs) contributing to the strengthening of social capital and the enhancement of financial inclusion. When implemented together, R4

interventions provide synergies and complementarities which could not be achieved if each component were to be implemented in isolation. However, potential positive impacts need to be harnessed and sustained by addressing the different operational challenges that are currently limiting the effects of R4's integrated approach.

The R4 model continues to receive substantial interest from donors. While KfW and SDC remain the main supporters of the R4 Initiative at global level, a number of bilateral donors (DFID, FICA, KOICA, NORAD, SIDA, USAID), are currently providing contributions, some of them multi-year and directly to WFP Country Strategic Programmes, to support the mainstreaming of microinsurance as part of integrated risk management. Multilateral climate finance, through the Adaptation Fund and the Green Climate Fund, is also bound to become an important source of funding to promote R4 as a model of climate change adaptation in several African countries.⁴⁵

Lastly, 2019 marked the end of Oxfam America's transition from a programmatic to an advisory role, with WFP now taking the lead on the management and scale-up of R4 operations globally. With this shift, Oxfam America is conducting a documentation exercise of the R4 global partnership, reflecting lessons learned and successes over the past nine years.

Looking Ahead

In 2020, R4 will focus on supporting the **development of sustainability plans** for existing R4 programme countries. R4 will continue to focus on building the capacity of governments and local stakeholders in addition to supporting WFP Country Offices in refining their exit strategies and ensuring that the capacity of national systems is being built. In the meantime, the R4 global team will continue to offer advice to those WFP country offices that have expressed interest to introduce microinsurance as part of an integrated risk management strategy and where existing conditions are conducive to developing microinsurance at scale.

WFP will continue promoting the use of corporate registration systems to track participation in the different R4 programme interventions to understand how many households are able to access an integrated package of services. Other programmatic priorities will include **designing more effective products** through pursuing current work on hybrid indices, defining minimum payouts, reducing transaction costs for insurance clients, as well as addressing the obstacles to achieving more rapid payouts. WFP is also planning to expand the geographical coverage of pastoral insurance in Africa, by exploring its application to other countries, such as Senegal.

45. For more information on donor contributions, please refer to Annex 6.

Investing in **evidence building** will be a priority for the upcoming years to inform programme design and implementation as well as for improving the cost effectiveness of the R4 model. WFP will facilitate cross country learning among COs implementing R4, through learning events organized at global and regional level, while also supporting bilateral exchanges and South-South cooperation. WFP will strengthen its evidence reporting on the adoption and utilization of the R4 integrated approach by participants across countries. Once the different R4 interventions (insurance, credit and savings) are included in the corporate registration system, a comparative analysis of participants accessing different combinations of tools can be pursued. Moreover, WFP has defined a **research agenda** to inform the design of more efficient practices in insurance programmes and resilience building. Key areas include identifying the conditions that enable R4 participants to transition into full payment of premiums in cash, testing the effects of the timeliness of insurance payouts, and assessing the effectiveness of coupling risk reduction activities with insurance. WFP plans to invest more on these research areas in the upcoming years, starting in 2020.

WFP will also continue to strengthen its collaboration with the **International Fund for Agricultural Development (IFAD)** through the Insurance for Rural Resilience and Economic Development (INSURED) programme, the Platform for Agricultural Risk Management (PARM), the Weather Risk Management Facility (WRMF), and the Adaptation for Smallholder Agriculture Programme II (ASAP 2). Through these platforms and programmes, WFP supports IFAD initiatives aimed at reducing smallholder farmers' vulnerability to weather and other agricultural risks, building capacity to manage risks, strengthening livelihoods, and increasing resilience. By engaging with IFAD in selected countries, WFP is able to introduce the R4 integrated risk management model to higher income farmers and more productive areas, thereby creating the conditions for the

expansion of insurance services at national level and facilitating the gradual access of resource-poor households to commercial services.

WFP will continue its efforts to **integrate microinsurance with other risk financing instruments**, such as sovereign insurance or Forecast-based Financing, and test the use of insurance indices as parametric triggers for existing contingency finance and/or social protection systems.

There are currently at least seven **new countries** where feasibility studies and project design are ongoing. This year, the Mozambique CO has started preparatory activities for the different R4 components, while in Bangladesh, WFP is piloting the introduction of flood index insurance. In Cuba and Mali, a microinsurance dry run and feasibility studies are being planned for 2020. In Guatemala, a feasibility study and project design were conducted in 2019, which looked into the possibility of linking microinsurance to the country's homegrown school feeding programme. As a result of this study, WFP and partners are currently in the process of designing a new microinsurance product accessible for smallholder farmers and potentially other vulnerable households. In El Salvador, WFP is planning to start implementing an integrated risk management approach, which includes the development of a microinsurance product and the promotion of family-level reserves (family and community savings). A microinsurance dry run is to be conducted in 2020. Finally, in Uganda, a microinsurance feasibility study is being planned in 2020.

WFP's vision is to expand the R4 initiative to reach a total of 500,000 insured farmers in 12 countries by 2022. The objective is to show that the model can be implemented at scale, while documenting the benefits of early payouts and of investments in risk reduction while identifying the factors that can lead to increased demand for commercial insurance services.

COVID-19 Impacts on R4 in 2020

The preparation of this 2019 Annual Report has coincided with the onset of the COVID-19 Pandemic and its subsequent spread to the countries where R4 currently operates. It is too early to understand the impacts the spread of the virus will have on the implementation of the R4 model, and more importantly, on the lives of the people and the economies of countries affected. WFP is preparing for potential impacts on the implementation of R4 due to the restriction of movements for people and goods. These may affect the targeting of participants, the distribution of insurance products and the ability to apply labour conditionality mechanisms to access insurance policies. Furthermore, degrading economic conditions will have implications on smallholders' capacity to pay for insurance premiums. Due to these exceptional circumstances, WFP will assess country by country the possibility of unconditional access to insurance policies in affected communities.

WFP is preparing risk mitigation strategies to continue delivering support to the most vulnerable households while ensuring the safety of its staff, partners and beneficiaries. WFP will periodically update its partners on these strategies, as well as the potential impacts of COVID-19 on operations.

Annex 1. Metrics from the Field

ETHIOPIA



Risk Reduction

- 24,189 farmers (10,617 women) participated in FFA activities.

Tigray

- 39 Km of deep trench, 45 Km of trench bund and 24.5 Km of stone-faced trench bund constructed on degraded communal lands;
- 84,633 trees planted on communal lands and agro-forestry sites;
- 13 Km of simple runoff /flood diversion canals constructed by excavating 7,614 m³ of soil to support 410 ha of land with flood diversion directly benefiting 1,632 farmers;
- 2,000 households prepared micro-garden, perma-garden and keyhole garden on their homesteads for growing vegetables;

- 1,640 compost pits prepared by 820 FHHs for growing vegetables and/or for rain-fed farming;
- 110 Roof Rain Water Harvesting (RWH) installed for 95 FHHs and 15 male headed with disabilities.

Amhara

- 1.75 Km of bench terrace constructed;
- 7.45 Km of hill side terrace with trenches constructed;
- 2,625 trenches constructed;
- 142 m of Micro Basins constructed;
- 643 m³ of gabion check dam constructed;
- 1.2 Km of terraces maintained;
- 4.25 Km of hill side terraces constructed;
- 220 m³ of compost prepared;
- 84,710 of pitting prepared and seedlings planted.



Risk Transfer

- 28,692 farmers (12,075 women) insured;
- 24,189 farmers (10,617 women) paid 25 percent of their insurance premium in cash;
- 2,312 farmers paid their insurance fully in cash;
- 2,016 farmers accessed insurance through the DFSA⁴⁶ programme;
- 175 farmers accessed insurance through the PASIDP⁴⁷ programme;
- Value of premium amounts to US\$392,012;
- Total sum insured amounts to US\$2,514,317.



Risk Reserves



Prudent Risk Taking

Risk Reserves and Prudent Risk Taking

- 9,150 farmers (3,671 women) participated in 404 saving groups;
- Total capital held by savings groups amounts to US\$35,024 (ETB1,128,131);
- Cumulative saving value from RUSACCOs amounts to US\$757,353 (ETB 24,394,345);
- 946 farmers (71 women) accessed RLF loans worth US\$53,033 (ETB1,708,173).

46. Development Food Security Activity (DFSA) is a USAID supported programme.

47. The Participatory Small-Scale Irrigation Development Programme (PASIDP) is an IFAD supported programme.

SENEGAL



Risk Reduction

- 9,001 farmers (3,061 women) participated in FFA activities;
- 6,001 farmers in Tambacounda and 3,000 farmers in Kolda.

Tambacounda

- 119 ha of rice plots managed;
- 73 ha of maize/sorghum cultivated;
- 50,000 trees planted;
- 200 fruit plants achieved;
- 5 village woods established;
- 10 composting boxes established;
- 10,000 ml of consolidated stone bunds;
- 5,000 ml of stones bunds constructed;
- 126 farmers (91 women) trained on maintenance and management of dikes and bunds;
- 224 farmers (158 women) trained on Intensive Rice System;
- 122 farmers (82 women) trained on composting and phosphates techniques;
- 154 farmers (102 women) trained in agroforestry techniques.

Kolda

- 190 ha of rice plots cultivated;
- 50 ha of maize and 10 of cowpea plots cultivated;
- 2,000 ml of stones bunds rehabilitated;
- 36 bunds in frame established;
- 190 ha plowed for rice cultivation;
- 3 ha of village wood established;
- 2 market gardening established in two schools with canteens;
- 246 farmers (235 women) trained on Intensive Rice System;
- 305 farmers (269 women) trained in technical market gardening;
- 277 farmers (256 women) trained in composting;
- Training of community relays on monitoring and reporting delivered to 10 participants (1 woman).



Risk Transfer

- 8,206 farmers (3,988 women) insured;
- 533 farmers paid their premium fully in cash;
- 7,673 farmers paid 24 percent of their premium in cash;
- Total sum insured amounts to US\$2,056,176;
- Premium amounts to US\$271,625;

- Total cash contributions amount to US\$32,672;
- Total cash contributions from full cash paying participants amount to US\$6,688;
- 30 participants (14 women) trained by CNAAS on RFE satellite index parameters and agricultural insurance management mandates;
- 26 participants (14 women) trained by Inclusive Guarantee on parameters of rainfall index and the agricultural insurance management mandates.



Risk Reserves and Prudent Risk Taking

- 11,646 farmers (9,467 women) participated in 748 savings groups;
- Total capital held by saving groups amounts to US\$143,340;
- Total savings amounts to US\$93,658;
- 8,788 farmers (7,792 women) accessed loans worth US\$195,247;
- 7,618 farmers (3,432 women) trained in Mobile Money;

- 2,443 farmers (1,600 women) trained in Financial Education;
- 705 farmers (511 women) trained in Gender Equality;
- 470 farmers (23 women) trained in Rural Entrepreneurship;
- 2,828 farmers (2,145 women) trained in Nutrition;
- 40 community mobilization events conducted in Kolda with 3,624 farmers (2,036 women);
- 10 financial education trainings delivered to 241 farmers (201 women);
- 12 nutrition awareness events delivered to 251 farmers (186 women).



Risk Reduction

- 154,435 farmers (26,928 women) enrolled in FFA activities in Balaka, Zomba, Blantyre, Chikwawa, Mangochi, and Nsanje;
- 18,000 households accessed weather and agro-climatic advisories via 534 community radio listening hubs.

Blantyre

- 293 km of swales constructed;
- 0.61 ha of sweet potato multiplication site created;
- 0.41 ha of cassava multiplication site created;
- 1,980 fruit trees planted.

Mangochi

- 58,110 fruit trees seedlings raised;
- 514 km of swales constructed;
- 14 vetiver nurseries established;
- 78 group vegetable gardens established;
- 19 sweet potato multiplication centers established.

Chikwawa

- 5,863 m of eyebrow basin constructed;
- 10,568 m of individual trenches built;
- 32,990 of assorted seedlings raised at community level;
- 12,448 m of swales constructed;
- 203 m of deep trench constructed;
- 1,000 of compost manure heaps prepared;
- 7 potato sees multiplication sites established.

Balaka

- 403.37 km of swales constructed;
- 9,949 m³ of deep trenches constructed;
- 10,676 m³ of check dams constructed;
- 45,407 of compost manure heaps prepared;
- 31,622 m of eyebrows constructed;
- 106,362 m of individual trenches constructed;
- 150.52 km of road rehabilitation conducted.

Phalombe

- 13,550 m of individual trenches constructed;
- 20,650 m of eyebrows constructed;
- 5,580 m³ of gully controlled through check dams;
- 153,300 m of swales constructed;
- 700 m of deep trench constructed;
- Vetiver propagation conducted on 15.20 ha of land.

Zomba

- 230 individual trenches constructed;
- 577 m³ of check dams constructed;
- 8 tree nurseries at community level established;
- 35,000 tree seedlings at community level raised;
- 435 heaps of compost prepared;
- 6 group of vegetable gardens established with 60 participating households;
- 2,011 backyard gardens at household level managed;
- 56 km of roads rehabilitated;
- 16,000 trees planted;
- 0.06 ha of banana suckers seed multiplication site established;
- 0.3 ha of soya seed multiplication site established;
- 0.2 ha of OFSP seed multiplication site established;
- 0.2 ha of cassava cuttings seed multiplication site established.



Risk Transfer

- 37,891 farmers (26,928 women) insured;
- 4,171 farmers paid 14.33 percent of their insurance premium in cash;

- Total sum insured amounts to US\$5,871,590 (MK4,309,747,159);
- Premium amounts to US\$679,869 (MK499,023,695);
- Total cash contributions amount to US\$10,047 (MK7,374,530).



Risk Reserves and Prudent Risk Taking

- 37,857 farmers (29,723 women) participated in 1,666 saving groups;
- Cumulative value of saving amounts to US\$559,973 (MK412,699,780);
- Farmers accessed loans worth US\$436,557 (MK 321,742,540);
- Repaid loan amounts to US\$240,849 (MK176,783,779);
- 42 VSL community agents (30 women) trained on VSL methodology;

- 13 apiculture clubs trained in bee keeping and honey processing;
- IRM Orientation for Cooperating Partners and Government staff conducted;
- Trainings in enterprise selection and business management; gender and protection; community monitoring champion on fruit tree propagation and management; and community sensitization on Weather Index insurance parameters delivered to 245 farmers (120 women).

ZAMBIA



Risk Reduction

- 18,035 applied Conservation Agriculture (CA) on 9,895 ha of land;
- Average land size under CA per farmers amounts to 1.17 ha;
- 9,279 farmers (5,934 women) attended trainings on early warning systems, promotion of CA practices and CA refresher trainings;
- 5,934 (3,056 women) trained in CA to enhance uptake and adoption of CA practices.



Risk Transfer

- 7,822 farmers (3,907 women) insured;
- Total sum insured amounts to US\$466,962;
- Premium amounts to US\$90,282;
- Total cash contribution amounts to US\$4,457;
- Payouts amounted to US\$452,170 for 7,821 farmers.



Risk Reserves and Prudent Risk Taking

- 402 saving groups, of which 298 are supervised with 6,369 members (4,421 women);
- Cumulative value of savings amounts to US\$96,215 (ZMW1,347,019);
- Average savings amount per farmer per month amounts to US\$17.5 (ZMW245);

- 321 farmers accessed loans from saving groups amounting to US\$6,3644 (ZMW 89,103);
- 3,690 farmers accessed input credit;
- 5 workshops conducted on loan products, saving groups formalization, refresher savings training, insurance capacity building, financial education, and improved farming methods.

KENYA



Risk Reduction

- 8,862 (7,561 women) farmers participated in risk reduction activities



Risk Transfer

- 8,862 farmers (7,561 women) insured for the 2019 Short Rains season;
- Payouts amount to US\$128,323 (Ksh 12,832,348) for 5,612 farmers for the 2018 Short Rains season;
- Total sum insured amounting to US\$1,037,604 (Ksh 110,556,706);
- Premium amounts to US\$179,406 (Ksh 18,771,249).

ZIMBABWE



Risk Reduction

- 1,999 farmers (1,288 women) enrolled in FFA activities.

Disaster Risk Reduction and Asset Creation Activities

- 3 nutritional gardens established (7 hectares) for selected garden beneficiaries;
- One orchard established and 500 fruit trees planted (avocados, mangoes, lemon trees, oranges and peaches);
- Water conveyance system for drinking water created in all 4 wards;
- 7 km of feeder roads (from the FFA sites to the main road that leads to markets) were maintained. Works included construction of culverts, clearing of bushes and drain construction;
- 40 beehives distributed and installed in two wards;
- 4 poultry houses (indigenous and broiler 300 birds capacity) were constructed in two wards;
- 2,000 m² of new nurseries established. 4,000 tree seedlings are being produced at nursery units which will be sold to the surrounding communities and planted in the orchards;
- One borehole for household, agriculture and livestock use established;
- Two livestock drinking troughs for livestock watering established;
- 4 double squats hole latrines toilets were constructed in 3 wards;
- 2 infield 5,000-liter water tanks for irrigation/ livestock/ domestic use installed;
- 40 meters of concrete water reservoir constructed;
- 35 m of masonry dam was rehabilitated and an additional step measuring 1 m was added.

Income generating activities

- Garden beneficiaries raised an income of ZWL22,000 throughout the year from the sale of chickens and vegetables such as tomatoes, green pepper, onions, carrots, kale and green pepper;

- 20 goats purchased by the garden beneficiaries;
- The nursery group nursed 1,000 trees in polythene bags and have sold 250 trees at an average of ZWL35 to date.

Soil and water conservation works

- 2000 m³ of compost heaps were constructed through the use of biodegradable/organic matter;
- 300 hectares of land was cleared in order to improve pastures;
- 600 hectares of cultivated land were managed and conserved with physical soil and water conservation measures.

Watershed Management Activities

- 150 m³ of water harvesting systems constructed;
- 30 m³ of water retained by sand/sub-surface dams rehabilitated;
- 50 households engaged in construction of dead level contours protecting 34 ha of land;
- 100 ha of land protected using mechanical and biological measures. 100 m³ volumes of check dams and gully rehabilitation structures were constructed;
- 2 m sandbag dam wall constructed.

Promotion of Appropriate Seeds and Agricultural Practices

- 1,020 kg of Compound D, 100 kg of PAN 53, 10 kg SC 513, 10 kg of Mama MQ 623, 10 kg ZS 242, 10 kg of ZM 309, 10 kg of PGS 63, 30 kg of ground nuts, 130 kg of cowpeas, 10 kg of finger millet, 340 kg of white sorghum, 10 liters of glyphosate, 200 ripper tines, 4 strings, 3 bicycles distributed to farmers in Chebvue;
- 192 kg of Compound D, 20 kg of white sorghum, 10 kg of cowpeas, 10 kg of pearl millet, 20 kg of mucuna, 19 rain gauges, 10 liters of glyphosate, 10 ripper tines, 6 strings, 3 knapsacks distributed to farmers in Mwenezi;
- 210 farmers (142 women) received mechanization tools in Chebvue and 10 farmers (5 women) in Mwenezi;
- 210 farmers (142 women) trained in mechanized conservation agriculture and appropriate seeds in Chebvue and 10 farmers (5 women) in Mwenezi.



Risk Transfer

- 1,652 farmers (1,097 women) insured;
- 158 farmers (106 women) paid a percentage of their insurance premium in cash;
- Total sum insured amounts to US\$165,100;
- Premium amounts to US\$27,597;
- Cash contributions amount to US\$355.50.



Risk Reserves

- 1,281 farmers (1,193 women) participated in 129 VSL groups;
- Cumulative value of savings amounts to US\$12,024 (RTGS\$ 108,312);
- 361 farmers (366 women) accessed loans worth RTGS\$157,684, with a 100 percent repayment rate;
- 151 farmers (107 women) took out input loans worth ZWL40,159;
- 6.502 MT of white sorghum from R4 farmers procured through the SAMS programme.

BURKINA FASO



Risk Reduction

- 500 farmers trained on Post-Harvest Losses (PHL) management in the East Region;
- 202 farmers trained on Post-Harvest Losses (PHL) management in the North Region;



Risk Transfer

- 702 farmers (373 women) insured;
- Sum insured amounts to US\$91,627;
- Value of premiums amounts to US\$10,537.

MOZAMBIQUE



Risk Reduction

- 2,600 farmers (1,813 women) enrolled in risk reduction activities.

Annex 2. Rural Resilience Event Series

Event Name	R4 role	Organizer	Focus	Expert Panel/Speakers/Attendants	Event Date & Location
GCF Validation Workshop for WFP-Ministry of Environment, Water and Climate Proposal	R4 is a fundamental part of the proposal submitted to the GCF	WFP Zimbabwe CO	Presentation of the final proposal to the various stakeholders for the possible future implementation of the project.	Stakeholders from Zimbabwe Government Ministries, Met Service Department, NGOs, Academia, Private Sector	8 January, Harare, Zimbabwe
Technical Regional Workshop on Needs assessment for Climate Services for improved Water Resources Management in vulnerable regions to Southern Africa	Presenter	UNESCO and Government of Flanders	Focus on integrated approach to combine climate services and other interventions towards better water resource management.	UN Agencies, Governments, NGOs	30-31 January, Harare, Zimbabwe
Multi-Donor Meeting	Organizer	WFP Zimbabwe CO	Presentation of R4 developments in country to key donors.	USAID, SDC, French Embassy, Swedish Embassy	5 February, Harare, Zimbabwe
R4 First Quarterly Meeting	Organizers	WFP	Improve Coordination and Integration across partners to enhance impacts.	USAID, SDC, WFP, SNV, Old Mutual, Blue Marble, Aquaculture, CIMMYT	12-13 February, Harare, Zimbabwe
Dialogue Platform on Forecast Based Financing	Participant	Red Cross	Networking and learning event on Forecast Based Financing.	IFRC, RC societies in Africa, Met Offices, UN agencies, Governments.	21-22 March, Nairobi, Kenya
Building Resilience and Adding Value to Agriculture	Providing inputs based on R4 Experience in implementation of resilience work	IFAD	Simplify BRAVA design and focus on increased crop production, food and nutrition security, promotion of good agricultural practices leading to commercialization and entrepreneurship.	Stanley Ndhlovu	14 March, Lusaka, Zambia
National workshop on Agriculture Risk Management	Providing lessons on support of Warehouse Receipt Systems (WRS) activities in Zambia	PARM	i)Enhancing the Zambian Warehouse Receipt System (WRS) and aligning the Food Reserve Agency strategic plans to WRS, and, ii) Improving access to agricultural risk information for meso level stakeholders in Zambia.	Allan Mulando	25 March, Lusaka, Zambia
Workshop to review the crop year	Organizer	WFP	Review of the 2018 crop year	CNAAS, P2RS, La Lumière, WFP, Oxfam, Regional Government Prefect	20 March, Kolda, Senegal
Panel discussion on community-based approaches	Presentation of R4 approach and index-based insurance	FAO	R4 approach and index-based insurance	WFP, Oxfam	March, Dakar, Senegal
Developing Guidelines for Screening Climate Change in Sector Policies, Plans and Strategies	Participant	Pilot Programme for Climate Resilience	Guide the process of objective screening of different policy instruments to determine gaps in climate change mainstreaming in those policy instruments	Oneworld and PPCR staff, WFP (Siamunza Mwiinga)	24-26 April, Lusaka, Zambia

Annex 2: Rural Resilience Event Series

Event Name	R4 role	Organizer	Focus	Expert Panel/Speakers/Attendants	Event Date & Location
Thinking Outside the box... the dam workshop. Enhancing resilience and advancing the humanitarian and development nexus by focusing on livelihoods and landscapes	Organizer	WFP	Training on multi-year, watershed-level FFA activities of WFP, Partners and Agritex Staff.	WFP CO, FO and HQ Staff (OSZPR), Cooperating Partners, Agritex Officers	5-11 May, Masvingo, Zimbabwe
Discussion on piloting area yield index insurance	Participant	Disaster Management and Mitigation Unit and PULA	Discussions on how to pilot and scale up area yield index insurance products.	PULA, MoA (FISP Coordinator), Insurance association of Zambia, WFP	10 May, Lusaka, Zambia
R4 Zimbabwe Second Quarterly Meeting	Organizer	WFP	Forum for discussing major issues/challenges in the programme and plan the way forward.	WFP CO, FO, and RBJ staff, R4 Partners, Agritex, Met Service Department, USAID, SDC	15-16 May, Masvingo, Zimbabwe
Annual Planning Workshop	Organizer	WFP	Implementation of R4 integrated rural resilience activities.	Oxfam, CNAAS, P2RS. La Lumiere, ANCAR	21-23 May, Kolda, Senegal
Dialogue on Climate Risk Management in Kenya: supporting vulnerable and food insecure households through an Area Yield Index Insurance in Kitui	Organizer	WFP Kenya	Share lessons learned from the R4 Resilience programme and how it contributes towards Government's priorities for climate resilience and the development of risk management tools in Kenya.	Government of Kenya: Emmanuel Kisangau, Kitui County Minister of Agriculture, Livestock and Water Management; Mr. Tom Dienya, Kenya Agricultural Insurance Programme; Mr. Tom Kinara, Kenya Livestock Insurance Program (KLIP); Mr. Paul Kimeu, National Drought Management Authority. WFP: Fabio Bedini, Climate and Disaster Risk Reduction Programmes Unit; Shaun Hughes, Resilient Livelihoods and Nutrition Unit, CO Kenya; James Kamunge, Resilient Livelihoods and Nutrition Unit, CO Kenya; Partners: Rose Goslinga, Pula Advisors; Sarfraz Shah, APA Insurance.	26 June, Nairobi, Kenya
Weather index Insurance Product testing and feedback meeting	Co-organiser	Old Mutual/ blue Marble	Present the improved index (based on farmers feedback) to farmers.	Old mutual, blue marble, WFP FO, CO, SNV.	13-16 August, Zimbabwe
R4 Third Quarterly meeting	Organizer	WFP	Forum for discussing major issues/challenges in the programme and plan the way forward.	WFP CO, FO, R4 Partners, Agritex, Met Service Department, SDC.	10-11 September, Zimbabwe
Weather index training	Lead technical discussant	WFP	Inter-ministerial working group on weather index design.	MoA, IFAD, WFP	16-30 September, Zambia

Annex 3. R4 Achievements

Ethiopia	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Participants	200	1,300	13,000	19,407	20,465	24,143	28,577	29,127	31,942	29,300	28,692
Value of premiums	US\$2,500	US\$27,000	US\$215,000	US\$265,686	US\$282,169	US\$253,687	US\$275,557	US\$420,929	US\$372,285	US\$354,649	US\$392,012
Sum insured	US\$10,200	US\$73,000	US\$940,000	US\$1,343,820	US\$1,238,567	US\$1,294,699	US\$1,501,098	US\$2,508,437	US\$2,307,808	US\$2,139,979	US\$2,514,317
Payouts	-	-	US\$17,000	US\$318,911	US\$27,138	US\$34,187	US\$364,094	US\$3,529	US\$88,014	US\$7,576	US\$86,983

Senegal	2014	2015	2016	2017	2018	2019
Participants	1,989	3,621	7,563	6,739	9,245	8,206
Value of premiums	US\$29,823	US\$70,975	US\$221,497	US\$239,743	US\$305,062	US\$271,625
Sum insured	US\$200,776	US\$592,888	US\$1,625,696	US\$1,752,115	US\$2,404,465	US\$2,056,154
Payouts	US\$3,929	US\$80,969	US\$73,186	US\$264,145	US\$2,197	US\$21,792

Malawi ⁴⁸	2015	2016	2017	2018	2019
Participants	500	2,342	10,327	36,969	37,891
Value of premiums	US\$5,351	US\$41,864	US\$191,582	US\$685,105	US\$679,869
Sum insured	US\$39,285	US\$281,290	US\$994,061	US\$3,806,479	US\$5,871,590
Payouts	US\$3,341	-	US\$404,599	-	-

Zambia	2015	2016	2017	2018	2019
Participants	499	2,835	3,835	7,821	7,822
Value of premiums	US\$9,568	US\$85,996	US\$114,743	US\$130,677	US\$90,282
Sum insured	US\$77,158	US\$508,799	US\$723,970	US\$769,562	US\$466,962
Payouts	-	-	US\$175,025	US\$452,170	-

Kenya	2017	2018	2019
Participants	5,715	9,485	8,862
Value of premiums	US\$155,430	US\$211,968	US\$179,406
Sum insured	US\$826,481	US\$1,127,489	US\$1,037,604
Payouts	US\$631,772	US\$128,323	-

Zimbabwe	2018	2019
Participants	500	1,651
Value of premiums	US\$7,795	US\$27,597
Sum insured	US\$50,000	US\$165,100
Payouts	-	-

Burkina Faso	2019
Participants	702
Value of premiums	US\$10,537
Sum insured	US\$91,627
Payouts	-

48. Potential payouts for Malawi, Zambia, and Zimbabwe for the 2019/20 season will only be determined in April 2020.

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- [“Selas Samson Biru Faces Uncertainty with the Seasons”](#)

Videos/multimedia

[The R4 Rural Resilience Initiative in Senegal](#)

[Africa’s Last Famine](#), a documentary co-produced by Oxfam America and Link TV, featuring HARITA

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A Tiny Seed and a Big Idea

A New Tool for Tackling Poverty

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Annex 5. R4 Partners and Institutional Roles

Our local/national partners in Ethiopia

- **Africa Insurance Company.** Private insurer in Ethiopia operating in the Tigray, Amhara, and Oromiya regions.
- **Dedebit Credit and Savings Institution (DECSI).** Second-largest microfinance institution (MFI) in Ethiopia with nearly comprehensive coverage of Tigray. Named by Forbes magazine as one of the top 50 MFIs in the world.
- **Ethiopian Farmers' Cooperative.** Primary organizing body for farmers in the community.
- **Ethiopian National Meteorological Agency (NMA).** Agency offering technical support in weather and climate data analysis.
- **Institute for Sustainable Development (ISD).** Research organization dedicated to sustainable farming practices.
- **Mekelle University.** Member of the National Agricultural Research System providing agronomic expertise and research.
- **Organization for Rehabilitation and Development in Amhara (ORDA).** Established in 1984 with a focus on natural resource management, food security and agricultural development in Amhara.
- **Oromia Insurance Company (OIC).** Private insurer in Ethiopia operating in Amhara.
- **Relief Society of Tigray (REST).** Local project manager for HARITA, responsible for operating the Productive Safety Net Program (PSNP) in six districts of Tigray and overseeing all regional coordination. Established in 1978. Working with Oxfam since 1984 on development issues. Largest nongovernmental organization in Ethiopia (and one of the largest in Africa).
- **RIB Union.** International brokers offering reinsurance services in Amhara.
- **Tigray Regional Food Security Coordination Office.** Office with oversight of the PSNP in the pilot area.
- **Tigray Cooperative Promotion Office.** Office responsible for helping organize farmers at the village level.
- **Willis Towers Watson.** Leading global advisory, broking and solutions company.

Our local/national partners in Senegal

- **Agence Nationale de Conseil Agricole et Rural (ANCAR) - National Agency for Rural and Agricultural Assistance.** Technical agency affiliated with the Ministry of Agriculture. In Koussanar, it is responsible for leading community awareness and mobilization activities, and providing seeds as well as technical advice to farmers. Like PAPIL and INP (listed below), ANCAR is a key partner for the Risk Reduction component.
- **Agence Nationale pour l'Aviation Civile et de la Météorologie (ANACIM) - National Meteorological and Civil Aviation Agency.** ANACIM helps with the design of insurance product(s) by providing historical and current climate data, and installing and maintaining weather stations.
- **Compagnie Nationale d'Assurance Agricole du Senegal (CNAAS) - National Agricultural Insurance Company of Senegal.** Senegal's only agricultural insurance company (public-private company founded in 2008 by the government). It is the insurance provider for the product(s) offered under the Risk Transfer component.
- **Inclusive Guarantee.** Insurance broker specializing in microinsurance for development and poverty reduction.
- **International Research Institute for Climate and Society (IRI).** IRI is part of the Earth Institute of the Columbia University, conducting research, education, capacity building, and providing forecast and information products to understand, anticipate, and manage the impacts of climate change. As WFP's technical partner, IRI supports WFP Senegal in index insurance product design.
- **La Lumière.** A grass-root Senegalese NGO which provides financial services to low-income rural households. It is the current implementation partner for Oxfam's Saving for Change program in Senegal, and the implementation partner for the Risk Reserves component.
- **Ministere de L'Agriculture et de L'Equipement Rural (MAER). Ministry of Agriculture and Rural Equipment.** WFP's partner supporting implementation of the programme.
- **Programme multinational de renforcement de la resilience a l'insecurite alimentaire et nutritionnelle au Sahel (P2RS). Multinational programme to build resilience to food and nutrition insecurity in The Sahel.** P2RS is responsible for the organization and supervision of the Insurance for Assets (IFA) activities, which include building community and household level assets.
- **Université Gaston Berger.** WFP's academic partner in Senegal.

Our local/national partners in Malawi

- **CUMO Microfinance.** A well-established microfinance institution in Malawi with the widest rural outreach which seeks to improve low income entrepreneurs with access to sustainable and integrated financial services to unlock their potential. Responsible for the delivery of the risk reserves and saving components of R4 and provides operational support on insurance.
- **Department of Climate Change and Meteorological Services (DCCMS).** Mandated to provide reliable, responsive and high quality weather and climate services to meet national, regional and international obligations through timely dissemination of accurate and up to-date data and information for socio-economic development.
- **Department of Disaster Management Affairs (DoDMA).** An institution mandated to plan, coordinate and monitor disaster risk reduction, preparedness and response activity in country. Provides overall strategic oversight and guidance for R4 in Malawi and supports R4 implementation and coordination through its local structures.
- **District Councils.** Local government administrative authorities responsible for the implementation of FFA in the district, which includes activities like community mobilization and training, distribution of project inputs, supervision and monitoring, as well as liaising with other relevant District authorities.
- **Emmanuel International Malawi.** An international partnership of Christian and development organizations conducting relief and development projects.
- **Find your Feet Malawi.** A local non-governmental organization focused on agriculture, agri business and value chains, strengthening local governance systems and health as the precursor for growth and rural livelihoods improvement.
- **Foundation for Irrigation and Sustainable Development (FISD).** With expertise in irrigation and water development, FISD supports R4 with sensitization, targeting, registration, monitoring and implementation of DRR activities and provides supervision and monitoring of R4 activities at district level.
- **Hannover Re.** One of the largest reinsurance companies in the world, offering reinsurance services in Malawi.
- **Insurance Association of Malawi.** An association of technical experts in the insurance. Approver of insurance products and manages insurance risk in the insurance market.
- **International Research Institute for Climate and Society (IRI).** IRI is part of the Earth Institute of the Columbia University, conducting research, education, capacity building, and providing forecast and information products to understand, anticipate, and manage the impacts of climate change. As WFP's technical partner, IRI supports WFP Malawi in index insurance product design.
- **Ministry of Agriculture (MOA).** Responsible for agriculture policies and programs at national and local level. It supports provision of extension services in the R4 project areas.
- **Ministry of Finance Economic Planning and Development (MoFEP&D).** Oversees the National Social Support Policy that governs the establishment of sub-programs including Social Cash Transfer Scheme (SCTS), Public Works Programme (PWP), School Meals, Village Savings and Loans (VSL) and Microfinance. Strategic partner to establish technical and operational synergies with existing programs.
- **NICO Insurance Company.** Main insurance underwriter for index-based insurance products in Malawi.
- **Plan International Malawi.** Humanitarian organization working with children, youth and communities to address the structural and root causes of poverty.
- **United Purpose (UP).** Long term presence in the country with a strong community-oriented approach, and experience in agriculture and savings projects. Supports R4 with sensitization, targeting, registration, monitoring and implementation of DRR activities and provides supervision and monitoring of R4 activities at district level.
- **University of Reading (UoR).** UoR is a public university located in Reading, supporting WFP with the implementation of the climate services component. UoR trains government and NGO extension officers in Participatory Integrated Climate Services for Agriculture (PICSA), supporting Monitoring & Evaluation process and building capacity of interpretation of historical climate data and seasonal forecast.
- **World Vision Malawi.** Implementing relief, development and advocacy interventions in Malawi since 1982, World Vision operates in all 28 districts. They support R4 with sensitization, targeting, registration, monitoring and implementation of DRR activities and provides supervision and monitoring of R4 activities at district level.

Our local/national partners in Zambia

- **Development Aid from People to People (DAPP).** Key R4 implementation partner with a strong community-oriented approach, long-lasting presence in the country, and experience in agriculture and savings projects. Ensures collaboration with Food and Agriculture Organization (FAO) and Ministry of Agriculture and Livestock (MAL) implementing the Conservation Agriculture Scaling Up (CASU) program.
- **Disaster Management and Mitigation Unit (DMMU).** The central planning, coordinating and monitoring institution for all Disaster prevention, preparedness and response activity implementation in the country. Supports R4 implementation and coordination at national level through the Disaster Management Consultative Forum (DMCF) and at local level through the Office of the District Commissioner.
- **Heifer International.** A global non-profit working to eradicate poverty and hunger through sustainable, values-based holistic community development.
- **Hannover Re.** One of the largest reinsurance companies in the world, offering reinsurance services in Zambia.
- **International Research Institute for Climate and Society (IRI).** IRI is part of the Earth Institute of the Columbia University, conducting research, education, capacity building, and providing forecast and information products to understand, anticipate, and manage the impacts of climate change. As WFP's technical partner, IRI supports WFP Zambia in index insurance product design.
- **Ministry of Agriculture (MoA).** WFP's partner for implementation, providing extension services to farmers.
- **Mayfair Insurance Company Zambia.** A General Insurance company registered and licensed by the Pensions and Insurance Authority of Zambia and underwriter of the index-based insurance products for R4.
- **MTN Zambia.** Mobile operator in Zambia facilitating the electronic distribution of insurance payouts.
- **Pula Advisors.** Specialist advisory firm offering comprehensive risk analysis and assessment, quantifying risks and developing mitigation and transfer options like index-based insurance. Together with partners, the firm is conducting a dry run on Area-Yield insurance (AYII) in one district for the 2019/20 season.
- **Vision Fund Zambia Limited (VFZ).** Zambia's second largest microfinance institution with the widest rural outreach. VFZ offers credit, operational support on insurance and supports financial education trainings as part of R4.
- **Zambia Meteorological Department (ZMD).** The primary provider of meteorological services in Zambia, ZMD has offices in every Provincial capital and some districts, and is responsible for providing weather and climate information to the public and various sectors of the economy. It is also the custodian of the official records of Zambian Weather and Climate, and collaborates with R4 on seasonal monitoring processes.
- **Zanaco.** Zambia National Commercial Bank and banking regulator supporting WFP through the Farmer to Market Alliance (FtMA), linking aggregators to financial institutions.

Our local/national partners in Kenya

- **Caritas Kitui.** Caritas works with sixteen partners across a wide portfolio of projects in water, food security, livelihoods and disaster risk reduction, justice and peace, environmental management, promotion of renewable energy and alternative income generation. A key implementing partner of R4, Caritas focuses on awareness raising and mobilisation, subscribing to the insurance policy on behalf of the participants, seasonal monitoring and claims settlement/communications in addition to its engagement in asset creation together with NDMA and county government.
- **County Government of Kitui.** In collaboration with NDMA, county government officers play a vital contributory role in index design, community sensitization, seasonal monitoring and provision of extension services.
- **Kenya Agriculture Insurance Pool.** Composed of seven insurers, the Pool underwrites risks in the name and for the account of all members and has the purpose of sharing the underwritten risk between all members. R4 has engaged with the Pool through its lead insurer, APA Insurance, to provide insurance coverage under the Kenya Agriculture Insurance Program for the 2017 Short Rains.
- **Ministry of Agriculture, Livestock and Fisheries (MoALF).** Through interventions such as R4, WFP is committed in its support and engagement with the MoALF to improve the livelihood of Kenyans and ensure food security through creation of an enabling environment and ensuring sustainable natural resource management.
- **National Drought Management Authority (NDMA).** An agency of the Government of Kenya, NDMA is mandated to establish mechanisms which ensure that drought does not result in emergencies and that the impacts of climate change are sufficiently mitigated. It is WFP's principal partner at the national level, which coordinates asset creation activities through a County Drought Coordinator and Asset Creation Coordinator in each county in which WFP support asset creation.
- **Pula Advisors.** Pula Advisors offer services in eight countries across Africa and Asia, and in 2016 alone, facilitated crop and livestock insurance cover to 400,000 farmers in Kenya, Rwanda, Uganda, Nigeria, Ethiopia and Malawi. As R4 Kenya's technical service partner, Pula provides technical support in index design, reinsurance/insurance arrangements, capacity strengthening, seasonal monitoring and crop sampling.

Our local/national partners in Zimbabwe

- **Aquaculture Zimbabwe (AQZ).** Aquaculture Zimbabwe is a local NGO with several years of experience across the country in livelihoods and asset creation projects. AQZ is the key partner for R4 on asset creation activities, focusing on the construction/rehabilitation of weirs/dams, watershed management and soil and water conservation, establishment of fishponds, and income generating activities.
- **Blue Marble Microinsurance.** Blue Marble Microinsurance is a UK-incorporated startup with a mission of providing socially impactful, commercially viable insurance protection to the underserved. Blue Marble incubates and implements microinsurance ventures that support the economic advancement of underserved populations, working in collaboration with local partners, such as Old Mutual in Zimbabwe. Its unique business model brings together nine multinational insurance entities, including Africa-based Old Mutual Limited, that provide governance, talent and risk capacity.
- **Foundations for Farming.** An initiative aimed at bringing transformation to individuals, communities and nations through faithful and productive use of the land.
- **International Centre for Maize and Wheat Improvement (CIMMYT).** CIMMYT is the global leader in publicly-funded maize and wheat research and related farming systems, with headquarters near Mexico City. CIMMYT is one of the founding and lead centers of the worldwide CGIAR partnership. In Zimbabwe, CIMMYT has operated since 1985 and has established extensive partnerships with national agriculture research and extension partners. Under the R4 project, CIMMYT in collaboration with AGRITEX, is implementing the appropriate seeds and agricultural practices component, establishing demo plots with drought tolerant maize varieties and other drought-tolerant crops, and promoting mechanised conservation agriculture practices.
- **Ministry of Lands, Agriculture, Water, Climate and Rural Resettlement (MLAWCRR).** One of the key ministries in the Zimbabwean Government, the MLAWCRR collaborates with WFP and the R4 initiative through several departments. **The Department of Agricultural Technical and Extension services (Agritex),** supports project implementation at the local level, providing agronomical support to R4 participants for increased crop and livestock production. The **Climate Change Management Department** plays an oversight role on the climate change governance architecture and programming in Zimbabwe in line with the country's National Climate Policy provisions. The **Meteorological Service Department** provides support on weather and climate information for farmers in the project areas, delivering rainfall and weather information (including daily, 10 days and seasonal forecasts) and installing meteorological equipment, which will become part of the national grid. In case of extreme weather events the department also provides advisories and warnings.
- **Old Mutual Insurance Company Private Limited (OMICO).** Old Mutual Limited is an African financial services group that offers a broad spectrum of financial solutions to customers across key markets in 17 countries. OMICO is the sole insurance provider for R4 in Zimbabwe, covering target food insecure communities with weather index insurance.
- **The Netherlands Development Organisation (SNV).** In Zimbabwe, SNV provides market-based, sustainable solutions in Agriculture, Energy and Water, Sanitation & Hygiene, paying particular attention to gender equity, opportunities for youth and climate change. Within the R4 Initiative, SNV is the leading actor in the establishment of Village Savings and Lending (VSL) groups, financial education for insurance, and fostering access to markets.

Our local/national partners in Burkina Faso

- **Inclusive Guarantee.** Insurance broker specializing in microinsurance for development and poverty reduction.
- **Allianz Burkina.** Burkina's insurance branch of the Allianz Africa and part of the Allianz Group, one of the world's leading insurers and asset managers.

Our local/national partners in Mozambique

- **Aceagrarios.** Smallholder farmers association supporting WFP with the implementation of the risk reduction component.
- **Adventist Development and Relief Agency (ADRA).** A global humanitarian organization working with people in poverty and distress to create just and positive change. ADRA Mozambique is involved in emergency relief and community-based project targeting food security, economic development, primary health and basic education.
- **Blue Marble Microinsurance.** Blue Marble Microinsurance is a UK-incorporated startup with a mission of providing socially impactful, commercially viable insurance protection to the underserved. As WFP's technical partner, Blue Marble is supporting WFP Mozambique with the design of the prototype index insurance product and dry run in Nampula and Zambezia provinces.
- **Mozambique National Meteorology Institute (INAM).** INAM is part of the Ministry for Transportation and Communication (MTC). provides daily weather forecasts (twice a day) to the public and INGC. The regional seasonal outlook is downscaled for Mozambique by INAM and an interpretation is provided to the different users.

- **InovAgro.** SDC-funded programme that uses a market systems approach. WFP is working with InovAgro partners in Zampula and Nambezia provices.
- **International Research Institute for Climate and Society (IRI).** IRI is part of the Earth Institute of the Columbia University, conducting research, education, capacity building, and providing forecast and information products to understand, anticipate, and manage the impacts of climate change. As WFP's technical partner, IRI supports WFP Mozambique in index insurance product design.
- **National Institute of Disaster Management (INGC).** INGC manages day-to-day matters relating to disasters. This is an autonomous institution under the Ministry of Foreign Affairs and Cooperation.
- **Ministry of Agriculture and Food Security (MASA).** MASA will support WFP with the implementation of R4's risk reduction component. MASA will provide training, demonstrations, and agricultural implements in addition to providing extension services to farmers.
- **Ministry of Land, Environment, and Rural Development (MITADER).** MITADER will support WFP and MASA with the implementation of R4's risk reduction component
- **University of Reading (UoR).** UoR is a public university located in Reading, supporting WFP with the implementation of the climate services component. UoR trains government and NGO extension officers in Participatory Integrated Climate Services for Agriculture (PICSA), supporting Monitoring & Evaluation process and building capacity of interpretation of historical climate data and seasonal forecast.

Annex 6. Donor contributions to R4

Donor	Recipient	Total contribution (US\$)	Countries	Funding period
Swiss Agency for Development and Cooperation - SDC	WFP	6,579,000	Malawi, Zambia	(2014-2017)
France	WFP	539,407	Senegal	(2016-2017)
Swiss Re	Oxfam America	1,250,000	Ethiopia, Senegal	(2012-2016)
Margaret A. Cargill Foundation	Oxfam America	5,000,000	Ethiopia, Senegal	(2015-2016)
United States Agency for International Development - USAID	WFP	7,958,453	Senegal	(2012-2015)
USAID - iDIV Award	WFP	500,000	Senegal	(2014-2015)
Norway	WFP	2,700,000	Senegal	(2013-2014)
Rockefeller Foundation	Oxfam America	599,000	Senegal	(2012-2013)
Oxfam America	Oxfam America	1,100,000	Ethiopia	(2010-2013)
Swiss Agency for Development and Cooperation - SDC	WFP	9,691,542	Malawi, Zambia, Zimbabwe	(2017-2021)
Canadian International Development Agency - CIDA	WFP	500,000	Kenya	2018
France	WFP	500,000	Senegal	2017
Oxfam America	Oxfam America	1,273,833	Ethiopia, Senegal	2017
KfW	WFP	20,000,000	Ethiopia	(2018-2022)
Department for International Development- DFID	WFP	5,000,000	Malawi	2018
Flanders International Cooperation Agency - FICA	WFP	2,750,000	Malawi	(2017-2020)
Korea International Cooperation Agency - KOICA	WFP	1,200,000	Zambia	(2017-2020)
France	WFP	250,000	Zimbabwe	(2017-2018)
USAID	WFP	146,666	Zimbabwe	2018
USAID	WFP	3,800,000	Zimbabwe	(2019-2021)
Swiss Agency for Development and Cooperation - SDC	WFP	1,000,000	Zimbabwe	2019
Swiss Agency for Development and Cooperation - SDC	WFP	450,382	Mozambique	(2019-2020)
Flanders International Cooperation Agency- FICA	WFP	2,740,500	Mozambique	(2019-2022)
Swedish International Development Cooperation Agency- SIDA	WFP	1,192,783	Ethiopia	2019

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Donor	Recipient	Total contribution (US\$)	Countries	Funding period
IFAD- ASAP 2	WFP	450,000	Kenya, Ethiopia, Zambia	2019
Korea International Cooperation Agency - KOICA ⁴⁹	WFP	4,600,000	Bangladesh	(2018-2021)
Department for International Development- DFID	WFP	12,976,200	Malawi	(2019-2022)
USAID	WFP	10,120,200	Malawi	2019
NORAD	WFP	560,000	Malawi	2019
Green Climate Fund- GCF	WFP	4,459,828	Zambia	(2019-2025)
Swedish International Development Agency (SIDA)	WFP	4,860,000	Zambia	(2018-2022)
Forthcoming Donor Contributions				
Green Climate Fund- GCF	WFP	10,000,000	Senegal	(2020-2024)
Green Climate Fund- GCF	WFP	8,860,000	Zimbabwe	(2020-2023)
Green Climate Fund- GCF	WFP	9,250,000	Mozambique	(2020-2025)
Adaptation Fund	WFP	9,989,335	Malawi	(2020-2024)

49. KOICA's contribution is supporting both the insurance work and the ongoing Forecast-based Financing programme in the country.

R4 Rural Resilience Initiative

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