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R4 RURAL RESILIENCE INITIATIVE

ANNUAL REPORT | 2020



R4 farmer and her child in the field in Amboasary, Madagascar.

WFP/Mathieu Dubreuil

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Acronyms

AF	Adaptation Fund
ARC	African Risk Capacity
AYII	Area Yield Index Insurance
ASALs	Arid and Semi-arid Lands
ASAP	Adaptation for Smallholder Agriculture Programme
BCM	Beneficiary Contact Monitoring
CO	Country Office
CSP	Country Strategic Plan
DFID	UK Department for International Development
FAO	Food and Agriculture Organization of the United Nations
FbF	Forecast-based Financing
FEWS NET	Famine Early Warning Systems Network
FFA	Food Assistance for Assets
GCF	Green Climate Fund
GIZ	German Agency for International Cooperation
HGSF	Home-Grown School Feeding
HII	Hybrid Index Insurance
IDF	Insurance Development Forum
IFAD	International Fund for Agricultural Development
IGP	InsuResilience Global Partnership
IPC	Integrated Food Security Phase Classification
IRI	International Research Institute for Climate and Society
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
MIN	Micro Insurance Network
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PICSA	Participatory Integrated Climate Services for Agriculture
PSNP	Productive Safety Net Program
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
SIIPE	Satellite-Index Insurance for Pastoralists in Ethiopia
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WII	Weather Index Insurance
WFP	World Food Programme
VESA	Village Economic and Social Associations
VFM	Virtual Farmer's Market
VSL	Village Savings and Lending Group



A micro-garden in Sinkata Kebele, Ethiopia.

WFP/Kires Ybrah

Foreword

2020 will be remembered by many as the year in which the global COVID-19 pandemic has changed our ways of life - but it was also another year of global warming and one of the hottest years on record.¹ In many countries, the global climate crisis has compounded social and economic tensions and resulted in cascading threats to lives, livelihoods, and food security. Over 50 million people have been hit by both climate-related disasters and COVID-19,¹ with the number of acutely food insecure people estimated to increase to 270 million in 2021, representing an 82 percent increase compared to the pre-COVID-19 situation.²

On top of a global public health emergency, extreme weather events kept hitting vulnerable communities throughout the year with increasing severity and catastrophic consequences. In East Africa, a combination of heavy flooding and locust invasions has led to food system breakdowns in great parts of the region. Several

countries in Asia and Africa have experienced damages from cyclones, extreme rainfall and flooding events. In Central America, the 2020 Atlantic hurricane season was unparalleled, registering 30 destructive storms with sustained high windspeeds and causing a combined cost of US\$41 billion in losses and damages. Heatwaves and wildfires have affected Australia, the USA and South America.³

These climate hazards keep reminding us that we do not live in a single-hazard world. Today's challenges and threats for countries do not arise separately but simultaneously, reaching across national borders and multiplying their respective impacts on populations and national economies. The interconnected nature of these challenges calls for a better integration and layering of interventions to manage increasingly compound and dynamic risks.

To help communities build resilience in a riskier and more uncertain environment, WFP promotes the

1. World Meteorological Organization. 2021. The State of the Global Climate Report 2020. <https://public.wmo.int/en/our-mandate/climate/wmo-statement-state-of-global-climate>.

2. WFP. 2020. WFP Global Response to COVID-19: September 2020. <https://reliefweb.int/report/world/wfp-global-response-covid-19-september-2020>.

3. Christian Aid. 2020. Counting the cost 2020: A year of climate breakdown. <https://reliefweb.int/sites/reliefweb.int/files/resources/Counting%20the%20cost%202020.pdf>.

principle of integrated climate risk management. This approach refers to a combination of strategies that address both the climatic as well as non-climatic drivers of vulnerability and enables people to manage different levels of risk. Against this backdrop, WFP has led the way in developing and testing innovative microinsurance solutions, which - when integrated with better access to financial services and nature-based solutions for risk reduction - help to diversify livelihoods, unlock investment potential, and provide vulnerable communities with an effective protection against different types and levels of shocks.

Now in its 9th year of operation, the R4 Rural Resilience Initiative continues to be WFP's flagship program to demonstrate an effective approach to integrated climate risk management. The programme integrates and combines four strategies:

- 1) Reducing the impact of climate shocks through nature-based solutions and improved agricultural practices;
- 2) Transferring the risk of potentially catastrophic climate hazards to private insurance markets;
- 3) Enabling better risk absorption of households and communities through the promotion of group savings and integration with social protection systems; and
- 4) Promoting prudent-risk taking through a combination of financial education, livelihoods diversification, and easier access to credit to enable better investments.

In 2020, despite the challenges posed by COVID-19, the R4 Rural Resilience Initiative has allowed nearly 180,000 farmers (55 percent women) to access index insurance products and a range of complementary risk management services in ten countries. This represents a growth of nearly 90 percent from the previous report. The initiative has expanded to three new countries (Bangladesh, Madagascar and Mozambique), supported the development of WFP's first flood index insurance policy in Bangladesh, supported the launch of a new livestock insurance scheme in Zambia, and laid the groundwork for expansion into the Latin American and Caribbean region in 2021.

In 2020, WFP has intensified its engagement with global insurance networks and platforms - notably the

InsuResilience Global Partnership (IGP), the Insurance Development Forum (IDF) and the Micro Insurance Network (MIN). The WFP Risk Transfer team, which is hosted by the Climate and Disaster Risk Reduction Programmes Unit (PRO-C), kept strengthening partnerships with other international agencies and institutions, including the International Fund for Agricultural Development (IFAD), the German Agency for International Cooperation (GIZ), the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and the United Nations Development Programme (UNDP). These partnerships enable the scaling-up of insurance solutions for the most resource-poor and food insecure households and communities.

Unlike for COVID-19, there will be no vaccine to protect vulnerable communities around the world from the worsening climate crisis. Its consequences can be expected to go far beyond the scale of the public health crisis of 2020. Integrated risk management approaches and layered solutions to address climate risk can enable governments, communities and individuals to better prepare for, respond to, and recover from climate-related disasters - and thereby enhance their capacities to manage compound risks in other areas as well.

In 2021, WFP will aim to continue the consistent growth trajectory of R4, scaling up the reach of investments in existing program countries and transferring the programming model to the Latin America and Caribbean region. At the same time, efforts will be intensified to codify and document the evidence related to the sustainability of microinsurance solutions. Making insurance accessible to large numbers of resource-poor households requires long term investments, predictable resources, and a balance between public and private sector financing. WFP is making every effort to improve this balance so that the R4 program can continue to operate with maximum impact.

We are grateful for the continuous support of our partners and donors who are committed to the R4 program and to the mainstreaming of microinsurance as part of integrated climate risk management. We look forward to continuing this important work in 2021.

Gernot Laganda

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



A village in the Androy region, Madagascar.

WFP/Mathieu Dubreuil

Executive summary

2020 was a year of compound and cascading shocks. The COVID-19 pandemic was an unprecedented test of governments' abilities to manage risks, which are continuing to be challenged by compounding climate-related disasters and economic crises. Today, more than ever, the need for risk financing solutions and integrated and layered approaches that provide an early response after a shock, while reinforcing the ability of food insecure communities to cope with future shocks seems evident – humanitarian assistance and government response budgets cannot provide enough assistance to meet the increasing demand.

Despite the challenges posed by the COVID-19 pandemic, WFP has continued to support vulnerable and resource-poor communities to better manage climate risks and build their resilience against climate and other shocks. In 2020, the R4 Rural Resilience Initiative reached nearly 180,000 farming households (55 percent women), benefitting approximately 900,000 people in Bangladesh, Burkina Faso, Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Senegal, Zambia and Zimbabwe. Of these farmers, nearly 3,500 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.

COVID-19 related restrictive measures called for quick programmatic adjustments in the different R4 countries. This included the development of new processes for the distribution of insurance products; adapting the conditionality to access insurance; promoting digital

solutions to ensure farmers continued receiving information and accessing services; shifting to remote monitoring tools; and ensuring appropriate COVID-19 preventive measures when disbursing payouts and during in-person trainings. Despite the challenging situation, R4 saw a nearly 90 percent growth in the number of farmers insured in 2020.

The initiative has expanded to three new countries, namely Bangladesh, Madagascar and Mozambique. In Bangladesh, WFP introduced its first Index-based Flood Insurance product protecting households from catastrophic flooding, which triggered approximately US\$30 in payouts per participant in its first year. In Madagascar, R4 introduced an Area Yield Index Insurance (AYII) product to 3,500 farmers (72 percent women), while in Mozambique R4 insured 2,400 farmers (79 percent women) against drought and dry spells for the 2020/21 agricultural season.

In Ethiopia, R4 significantly scaled up from 28,000 to 67,000 farmers (42 percent women). This year, activities focused on building the index design capacity of local stakeholders and defining the handover strategies with the local insurance companies in charge of taking over distribution and management of microinsurance products. Under the Satellite Index Insurance for Pastoralists in Ethiopia (SIIPE), 15,500 pastoralists accessed index-based livestock insurance. Following the roll out of the Adaptation Fund (AF) project, R4 scaled-up in Malawi, where the initiative insured nearly

67,000 households (62 percent women), a 71 percent growth compared to last year. The number of farming households more than doubled in Zimbabwe, reaching nearly 6,000 farmers insured (62 percent women) and in Burkina Faso, where the initiative insured 2,500 farmers (56 percent women). In Senegal, WFP started implementing its first Green Climate Fund (GCF) project, which will scale-up access to microinsurance for 45,000 vulnerable farming households. In Zambia, WFP continued to provide assistance to the Government to strengthen its capacity on Weather Index Insurance (WII) product development and monitoring and insured over 7,800 farmers (48 percent women).

In 2020, WFP also laid the groundwork for expansion into the Latin American and Caribbean region, with the regional office establishing a Risk Financing Strategy to encourage the adoption of innovative, responsible, sustainable and scalable risk financing tools. A number of

countries in the region are currently exploring pathways to integrate risk financing tools within their programmes, with some countries starting implementation in 2021. R4 also continued building the technical and programmatic capacity of local stakeholders and governments to ensure national ownership of insurance products and systems. In addition, the initiative supported the development of innovative insurance products such as hybrid indices and promoted the integration and layering with other WFP climate risk financing programmes. R4 also made investments in strengthening and standardizing monitoring, evaluation and learning across the entire portfolio as well as defining a comprehensive research agenda. Finally, WFP strengthened its engagement with global insurance-related platforms and fostered partnerships with other international agencies and institutions to promote the scaling-up of insurance solutions for the most resource-poor and food insecure households and communities.

Figure 1. R4 achievements

Planting year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
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	 US\$394,000
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	 US\$2.6m
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	 US\$25.4m
Cash contribution							 US\$38,000	 US\$71,000	 US\$68,000	 US\$114,000	 US\$43,000	 US\$53,000
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)	 87,661 (55)	 88,790 (60)	 173,279 (55)
Non-R4 Farmers insured*							 3,918	 4,448	 6,603	 5,659	 5,036	 3,429
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	Burkina Faso Ethiopia Kenya Malawi Senegal Zambia Zimbabwe	Bangladesh Burkina Faso Ethiopia Kenya Madagascar Malawi Mozambique Senegal Zambia Zimbabwe

* 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.



R4 farmers showing their harvest in Gaza, Mozambique.



Farmer Kavemba Nzuki holds freshly harvested cowpeas from her farm in Kitui County, Kenya.

WFP/ Alessandro Abbonzio

The R4 Rural Resilience Initiative

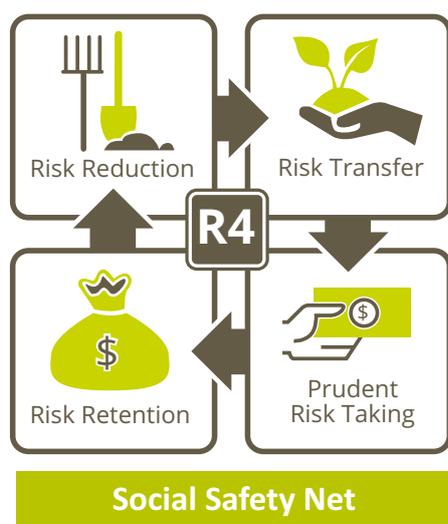
Background

Resource-poor and food insecure households are faced with a wide range of shocks, including climate variability, extreme weather events, conflict, and socio-economic crises. While vulnerable communities have a greater likelihood to suffer heavy losses from these shocks, they often lack access to efficient and effective formal risk management and social protection mechanisms. WFP's vision is to end global hunger by helping reduce risk and vulnerability to shocks and achieving sustainable food security and nutrition. WFP recognizes that in order to achieve its objective, it is essential to rely on a comprehensive set of integrated risk management strategies and tools that address both the climatic as well as non-climatic factors contributing to people's vulnerability.

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 nearly 180,000** vulnerable households (55 percent women) and their families in Bangladesh, Burkina Faso, Ethiopia, Kenya, Madagascar,

Malawi, Mozambique, Senegal, Zambia and Zimbabwe 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 retention). Of these farmers, nearly 3,500 accessed insurance products developed through R4, either through subsidies from other donor-funded programmes or by paying their insurance premium fully in cash.



R1. Risk Transfer

R4 enables the poorest farmers to access agricultural insurance. The initiative has been one of the most successful efforts to develop and scale up index-based insurance products among the most vulnerable and food insecure communities. Index-based insurance- an innovative type of insurance based on a proxy for losses- compensates farmers based on changes in a pre-determined index. Insurance payouts are distributed to insured farmers if the index falls beyond the pre-determined threshold. Rapid compensation for losses means that farmers can avoid selling productive assets and recover faster from climate-related shocks. 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 supports the development of a wide range of innovative products that help farmers access insurance policies that best fit their needs across regions and countries, including:

- **Weather Index Insurance (WII):** This product uses a weather index, such as rainfall, measured either by weather stations or satellites, to determine payouts, rather than actual yields, thus eliminating the need for in-field assessment. It can cover farmers against drought, dry spells, or excess rainfall.
- **Area Yield Index Insurance (AYII):** This product can offer coverage against a host of risks affecting an entire area including pests and diseases 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 WII, but shorter than traditional agriculture insurance.
- **Hybrid Index Insurance (HII):** This product is a combination of WII and AYII. It helps protect farmers against low yields due to several risks, including pests and diseases, as well as unpredictable weather.
- **Index-based Livestock Insurance (IBLI):** This product uses vegetation indexes such as the Normalized Difference Vegetation Index (NDVI) to measure pasture availability. If the vegetation measured is below average historical growth thresholds, the product automatically triggers payouts that can be used to provide supplementary feeding, inputs, as well as timely veterinary care, which can be critical in keeping livestock alive during the season.



R2. Risk Reduction

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. Farmers can also access insurance by adopting Conservation Agriculture (CA) practices, growing drought resistant crops, or by participating in trainings on financial inclusion, financial education, and Post-Harvest Loss (PHL) management. The risk reduction component is usually built into government safety net and other programmes, as well as WFP Food Assistance for Assets (FFA) initiatives.



R3. Risk Retention

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, retaining risks within households and communities and increasing their ability to cope with shocks. Group savings can be loaned to individual members with particular needs, providing a self-insurance mechanism for the community. Setting up several savings funds for different purposes, including for agricultural investment, insurance premium payment, and for risk management can support participants' graduation and build their resilience to climate and other shocks. Finally, savings can also be accumulated in-kind, for example through cereal banks which allow farmers to stock surplus yields or livestock.



R4. Prudent Risk Taking

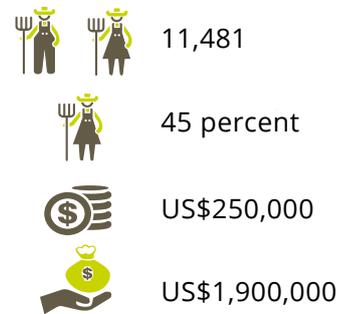
Smallholder farmers are often reluctant to invest in productive inputs or hired labour as their farms are vulnerable to external shocks. They may, thus, prefer low input – low output production systems that guarantee a predictable, although low, income. Microfinance institutions may limit investments 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 or invest in productive inputs, including hired labour and livelihoods diversification knowing that the financial risks of climate-related shocks are minimized.

Figure 2.

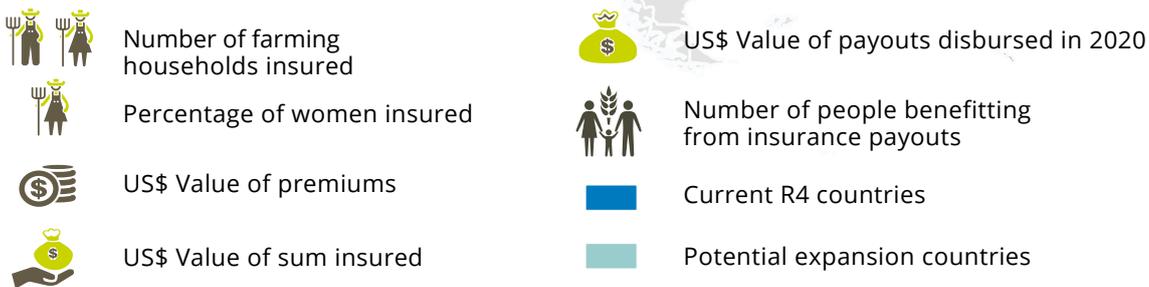
OUR REACH AND

WFP has allowed nearly **180,000 farming households** (55 percent women) to access index insurance products and a range of complementary risk management services in **ten countries during the 2020/21 agriculture campaign**, benefitting approximately **900,000 people***.

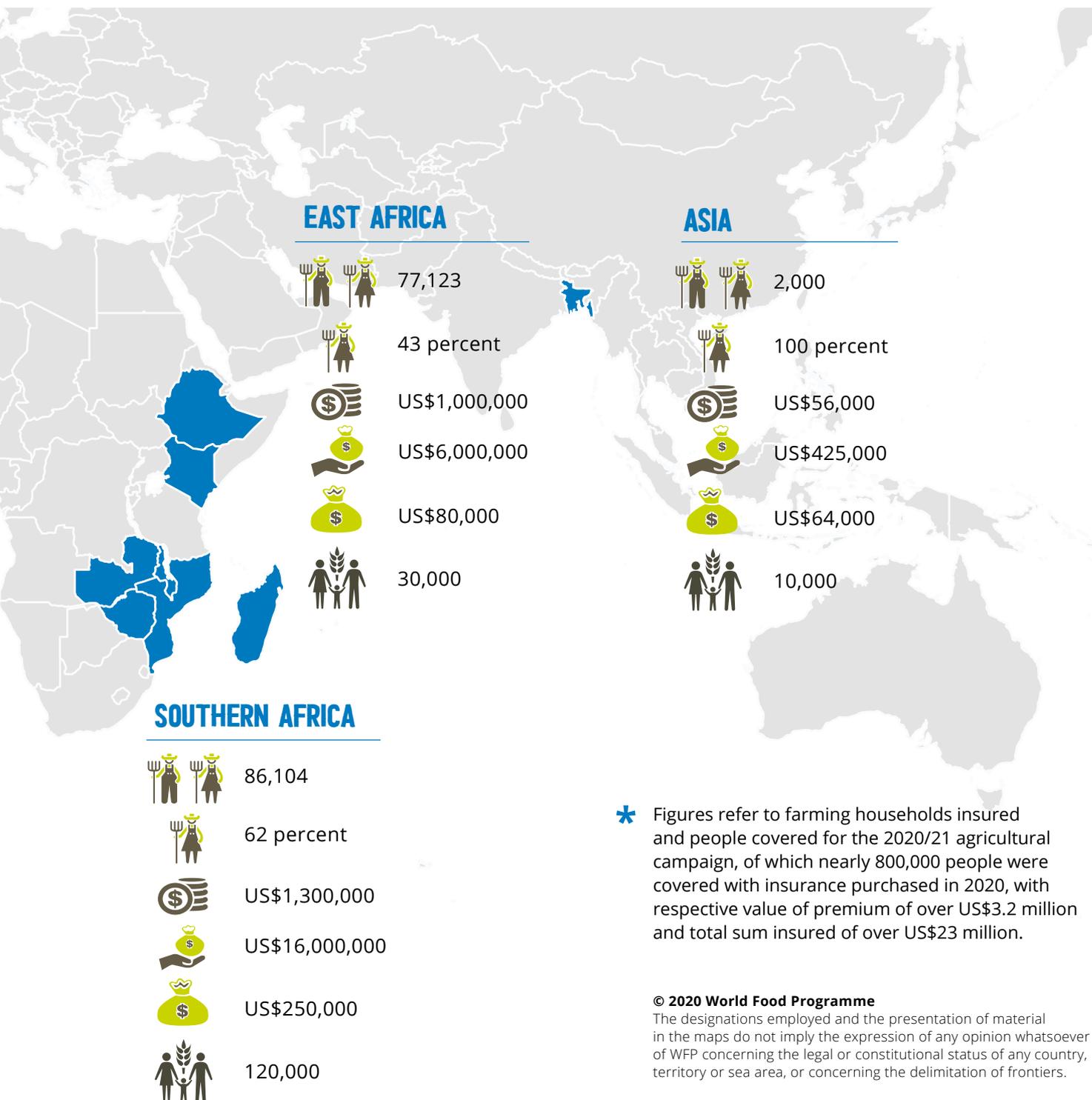
WEST AFRICA



LEGEND



SCALE IN 2020



* Figures refer to farming households insured and people covered for the 2020/21 agricultural campaign, of which nearly 800,000 people were covered with insurance purchased in 2020, with respective value of premium of over US\$3.2 million and total sum insured of over US\$23 million.

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Figure 3.

2020 HIGHLIGHTS



Nearly **180,000 FARMING HOUSEHOLDS** insured



Total sum insured amounts to **US\$25 MILLION**



Over **US\$390,000 OF INSURANCE PAYOUTS** distributed in 2020



55% of insured farmers are **WOMEN**



Total value of premiums amounts to **US\$2.6 MILLION**



Nearly **165,000 PEOPLE** benefitting from insurance payouts



Over **85,000 FARMERS** participated in **Village Savings and Lending groups (70 PERCENT WOMEN)**



Over **US\$1 MILLION** saved through **Village Savings and Lending groups**



Over **US\$400,000** in loans accessed by participants of savings groups



Over **25,000 FARMERS** received financial education trainings and over **20,000 FARMERS** trained on **Weather Index Insurance**



Nearly **4,000 SAVINGS GROUPS** supported



Nearly **25,000 FARMERS** applied **Conservation Agriculture** practices



Over **65,000 FARMERS** provided with access to information on weather and climate risks to support informed agricultural decisions.



Nearly **160,000 FARMERS** engaged in **risk reduction** and **assets creation** activities, including working on soil and water conservation, water harvesting, small scale irrigation, agroforestry and reforestation.



R4 ACHIEVEMENTS IN 2020

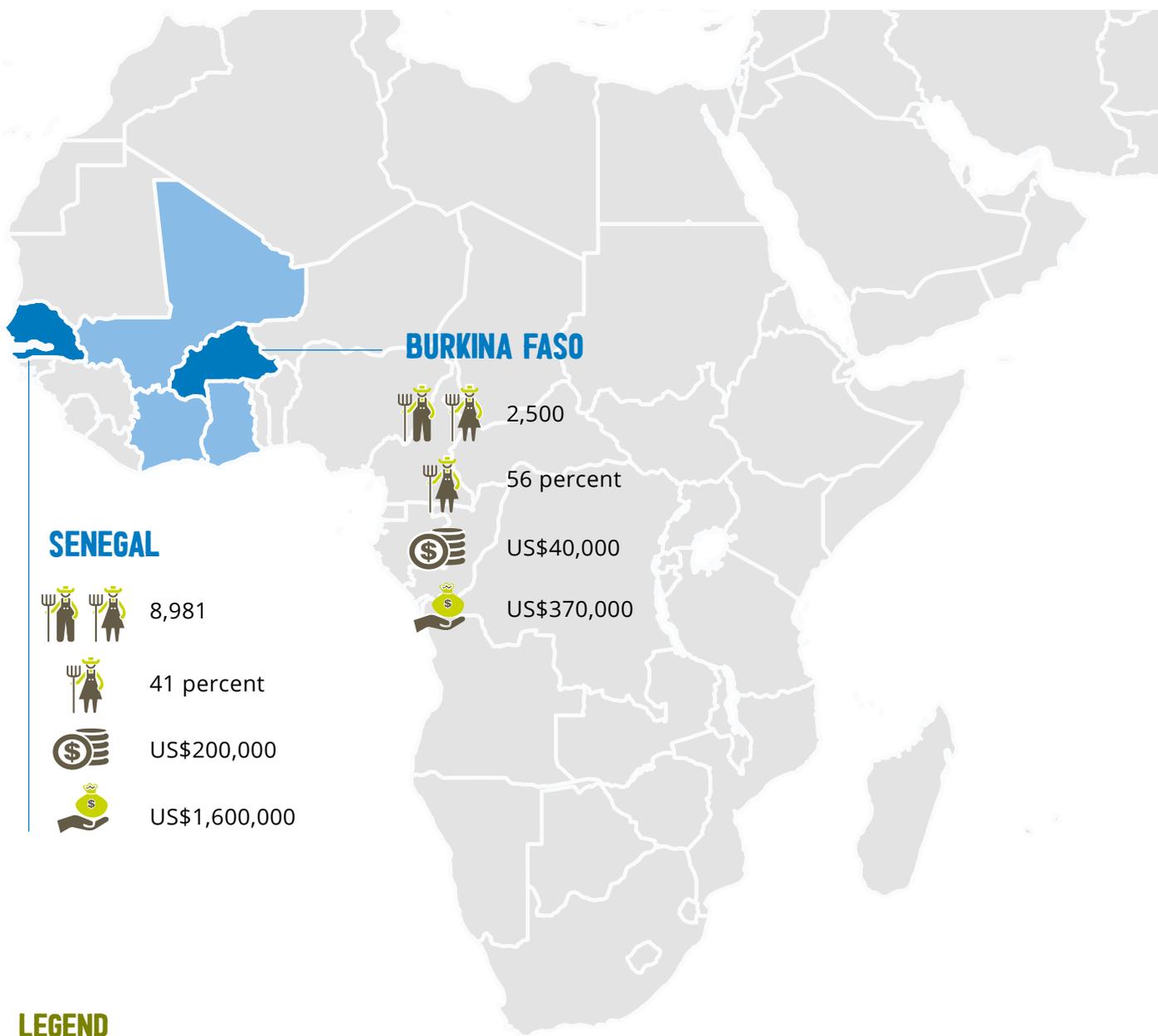
COUNTRY
SNAPSHOTS

*R4 farmer holds harvested green grams at a farm
in Kitui County, Kenya.*

WFP/ Alessandro Abbonizio

Figure 4.

R4 WEST AFRICA 2020



LEGEND

- Number of farming households insured
- Percentage of women insured
- US\$ Value of premiums
- US\$ Value of sum insured
- Current R4 countries
- Potential expansion countries

R4 Burkina Faso

2020

Since 2019



2,500 households (17,500 people covered)



56 percent of insured are women



Centre-Nord and Est Regions



Inclusive Guarantee, Yeleen assurance



BMZ

R4 programme in Burkina Faso

Risk Reduction: Farmers are supported to reduce their Post-Harvest Losses (PHL), engage in Food for Asset (FFA) activities, including building composters, as well as accessing markets through the Smallholder Agriculture Market Support (SAMS) programme.

Risk Transfer: Farmers gain access to insurance by participating in trainings on financial inclusion, insurance, and PHL.

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

2020 Context

Early cessation of rains during the 2020 agricultural season negatively impacted cereal production in Burkina Faso. Furthermore, increased numbers of security incidents and terrorists' attacks caused growing population displacements, severely disrupting agricultural activities, and deteriorating the food security situation of vulnerable households, already challenged by the impacts of COVID-19. According to the Government of Burkina Faso, approximately 3.3 million people were estimated to be severely food insecure and in need of food assistance during June to August 2020.

2020 Key Achievements



24 participants (29 percent women) took part in Training of Trainers (ToT) on Post-Harvest Losses (PHL) management, microinsurance and financial inclusion in Centre-Nord and Est regions of Burkina Faso. Participants were then expected to further disseminate learnings into their own communities to raise awareness on the integrated approach. Farmers' participation to these trainings was used as a conditionality to subscribe to the insurance policy.



500 farmers (60 percent women) participated in savings groups with a total savings amount of over US\$6,000. Farmers were also supported in accessing credit through the warrantage system, an inventory credit system, whereby farmers can deposit grain in secure warehouses, serving as collateral to access credit. In addition, equipment to reduce Post-Harvest Losses (PHL) was provided to targeted farmers, including 3,500 Purdue Improved Crop Storage (PICS) bags and 127 silos to better store food.



WFP Burkina Faso scaled up its insurance coverage from 700 farmers in 2019 to 2,500 farmers (56 percent women) in 2020, with a total sum insured of US\$374,833 and total premium of US\$40,108. During the season, over 700 farmers were trained on index insurance and financial education.

R4 Senegal

2020

Since 2012



8,981 households (44,905 people covered)



41 percent of insured are women



Kolda and Tambacounda regions



ANCAR, ANACIM, CNAAS, Inclusive Guarantee, IRI, La Lumière, MAER, Orange Finances Mobiles Sénégal, Oxfam America, PROVAL-CV, Université Gaston Berger



BMZ, French Cooperation, GCF

R4 programme in Senegal

Risk Reduction: By participating in WFP's Food for Assets (FFA) programme, farmers build assets that decrease their vulnerability to climate shocks over time.

Risk Transfer: Farmers access Weather Index Insurance (WII) by investing their time in building assets.

Risk Retention and Prudent Risk Taking: Insurance policies are delivered through Saving for Change (SfC) Associations, which support participants in establishing small-scale savings that are used to build 'risk reserves'. Farmers are also supported to diversify their livelihoods and make small-scale investments through easier access to formal credit.

2020 Context

The 2020 agricultural season was characterized by above-average rainfall, positively impacting crop yields. Despite the positive rainfall season, the agricultural sector was severely affected by COVID-19 restrictive measures. Markets closures, curfews, and movement restrictions limited farmers and intermediaries' ability to access markets and labors, causing losses of revenues. Before the outbreak of the pandemic, the number of food insecure people was estimated at approximately 766,000 during the lean season -between June and August 2020- with the number expected to deteriorate due to COVID-19.

2020 Key Achievements



Farmers participated in risk reduction activities, including building of dikes for plotting protection dikes, stone bunds to prevent soil erosion and reforestation. To support the dissemination and adoption of sustainable agricultural practices, 25 farmers' field schools were set up during the year. In addition, participants engaged in crop cultivation, including rice, maize, cowpeas and vegetable farming.



8,981 farmers (41 percent women) accessed insurance during the 2020 agricultural season. Of these farmers, 7,650 enrolled under the Insurance for Assets (IfA) programme and 1,331 paid their premium fully in cash. During the year, 30 sensitization tours, 12 radio programs and 27 advertising spots on insurance were carried out in the regions of Tambacounda and Kolda to raise awareness among farmers on Weather Index Insurance (WII).



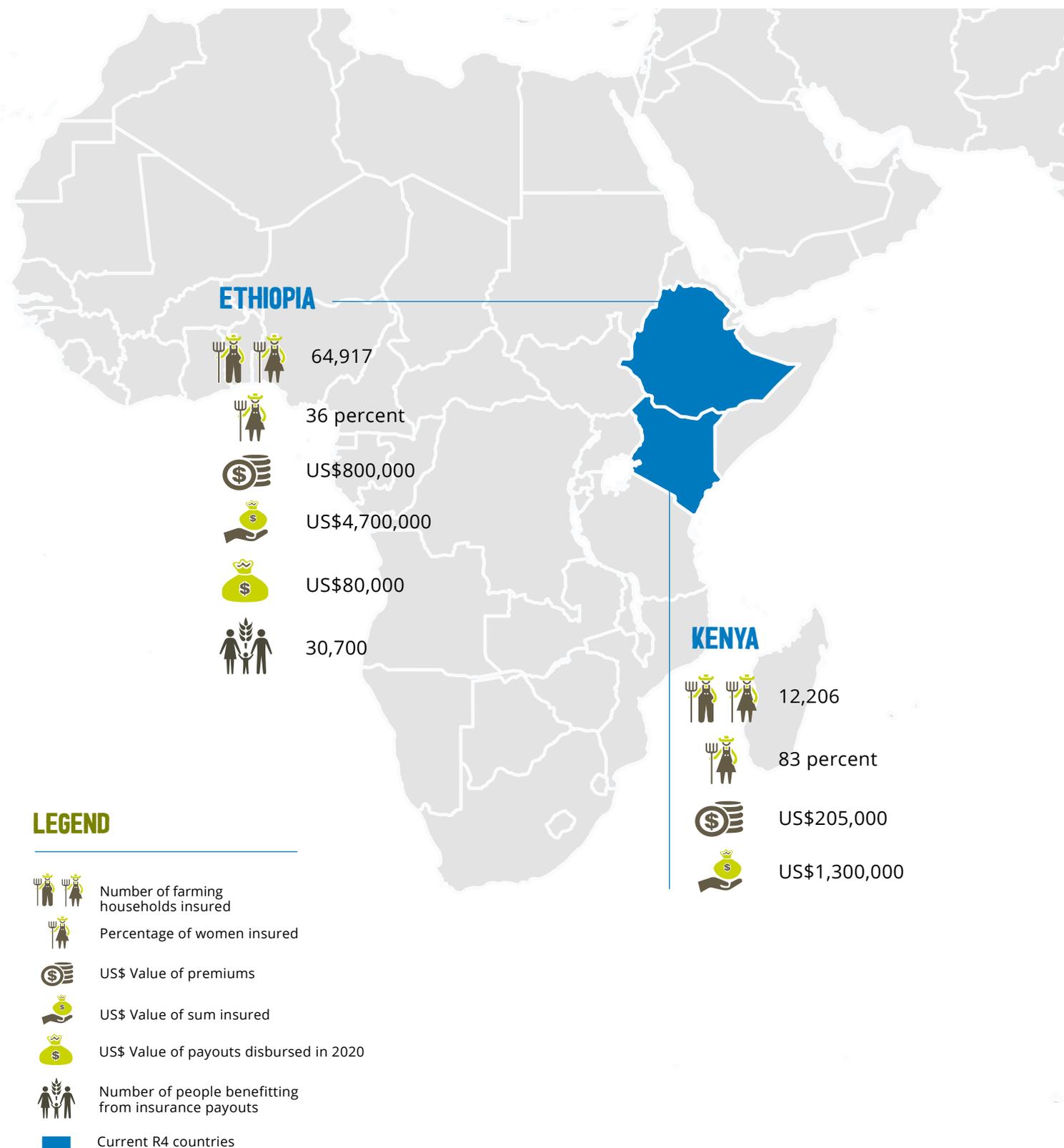
Over 14,000 farmers (84 percent women) participated in 655 savings groups in 2020. In addition, 4,651 farmers (90 percent women) received financial education trainings during the year.



To raise awareness among farmers about weather and climate information, six radio programs were broadcasted, in collaboration with the National Agency for Civil Aviation and Meteorology, the Rural Development Departmental Services (SDDR) and members of the GTP, the interdisciplinary technical working group working on climate information services. A total of 88,793 SMS messages were sent to 6,995 farmers to help them access reliable climate information and improve their agricultural practices.

Figure 5.

R4 EAST AFRICA 2020



R4 Ethiopia

2020

Since 2009



64,917 households (324,585 people covered)



36 percent of insured are women



Tigray and Amhara regions



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



KfW, IFAD

R4 programme in Ethiopia

Risk Reduction: Farmers work on soil and water conservation, agroforestry and reforestation for a number of selected days in addition to the Productive Safety Net Programme (PSNP) public works requirements.

Risk Transfer: Through participating in asset creation and training activities, farmers can access weather index insurance.

Risk Retention and Prudent Risk Taking: Farmers practice regular savings in Village Economic and Social Associations (VESAs) and Rural Saving and Credit Cooperatives (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.

2020 Context

The 2020 agricultural season was above average in terms of satellite-measured rainfall in the Tigray and Amhara regions of Ethiopia. Despite the relatively positive rainfall conditions, the compounding impacts of COVID-19, desert locusts, flooding, and conflict in Tigray region negatively affected crop production and the livelihoods of Ethiopian farmers, driving greater than previously anticipated humanitarian assistance by the end of 2020. Consequently, according to the Integrated Food Security Phase Classification (IPC) analysis, most poor and very poor households in the eastern half of the country are expected to continue facing Crisis (IPC Phase 3) outcomes through May 2021.

2020 Key Achievements



In 2020, over 58,600 farmers (40 percent women) participated in risk reduction activities. To contain the spread of the virus, priority was given to individual households' activities. Farmers engaged in building trench bunds, flood diversion canals, tree plantings, home garden development and adopting climate-smart agriculture practices.

The initiative supported the construction of 105 Roof Rainwater Harvesting Technologies (RRWH) for 84 Female Headed Households. RRWHs enable households to improve hygiene and reduce the workload of women and female children in fetching water and support home garden development and vegetable production.



64,917 farmers (36 percent women) accessed insurance through WFP support during the 2020 agricultural season. In addition, 2,098 farmers accessed insurance through other donor-funded programmes or by paying fully with their own cash, for a total of 67,015 farmers (42 percent

women) insured in Amhara and Tigray regions. Due to the COVID-19 pandemic, all R4 farmers accessed insurance policies through their own labour, instead of farmers contributing a percentage in cash.

To build the capacity of local stakeholders and support national ownership of insurance processes and systems, the initiative supported the establishment of index design teams at national and regional level and developed handover plans with local insurance companies.



9,500 farmers (40 percent women) participated in 436 VESAs, reaching a cumulative capital of over US\$73,000 in 2020. 1,626 farmers (37 percent women) accessed loans worth US\$28,000 that were used for purchasing agricultural inputs, shoa fattening and rearing. In addition, over 6,000 participants (40 percent women) were trained in financial literacy, business development and management, and VESA leadership, in both regions.



 Since 2017



12,206 households (48,824 people covered)



83 percent of insured are women



Kitui and Makueni Counties



APA Insurance, MoALF&I, County Governments of Kitui and Makueni, Kenya Agriculture and Livestock Insurance Pool, Pula Advisors



Global Affairs Canada, USAID

R4 programme in Kenya

Risk Reduction: Farmers receive technical assistance from extension services and field partners on improved agricultural practices, including soil and water conservation techniques.

Risk Transfer: By growing at least one drought resistant crop in one acre of land and adopting recommended agricultural practices and by working on soil and water conservation structures, farmers can access Area Yield Index Insurance (AYII) and Hybrid Index Insurance (HII).

2020 Context

The 2020 Short Rains season was characterized by a mixed performance across the country, with below-average rainfall across eastern and central Kenya, while western, northwestern and southern parts of the country received above-average rainfall. Reduced access to quality agricultural inputs, incidence of pests and diseases, as well as the impacts of COVID-19 posed multiple challenges for smallholders in the Arid and Semi-Arid Lands (ASALs), negatively affecting crop production, with harvest foreseen to be below average.

2020 Key Achievements



12,206 farmers participated in risk reduction activities as their conditionality to access insurance. This included: being engaged in the production of drought resistant crops, including sorghum, millet, cowpeas or green grams; having one acre of land available for cropping activities; and applying new terraces and zai pits for greater water retention and soil fertility.



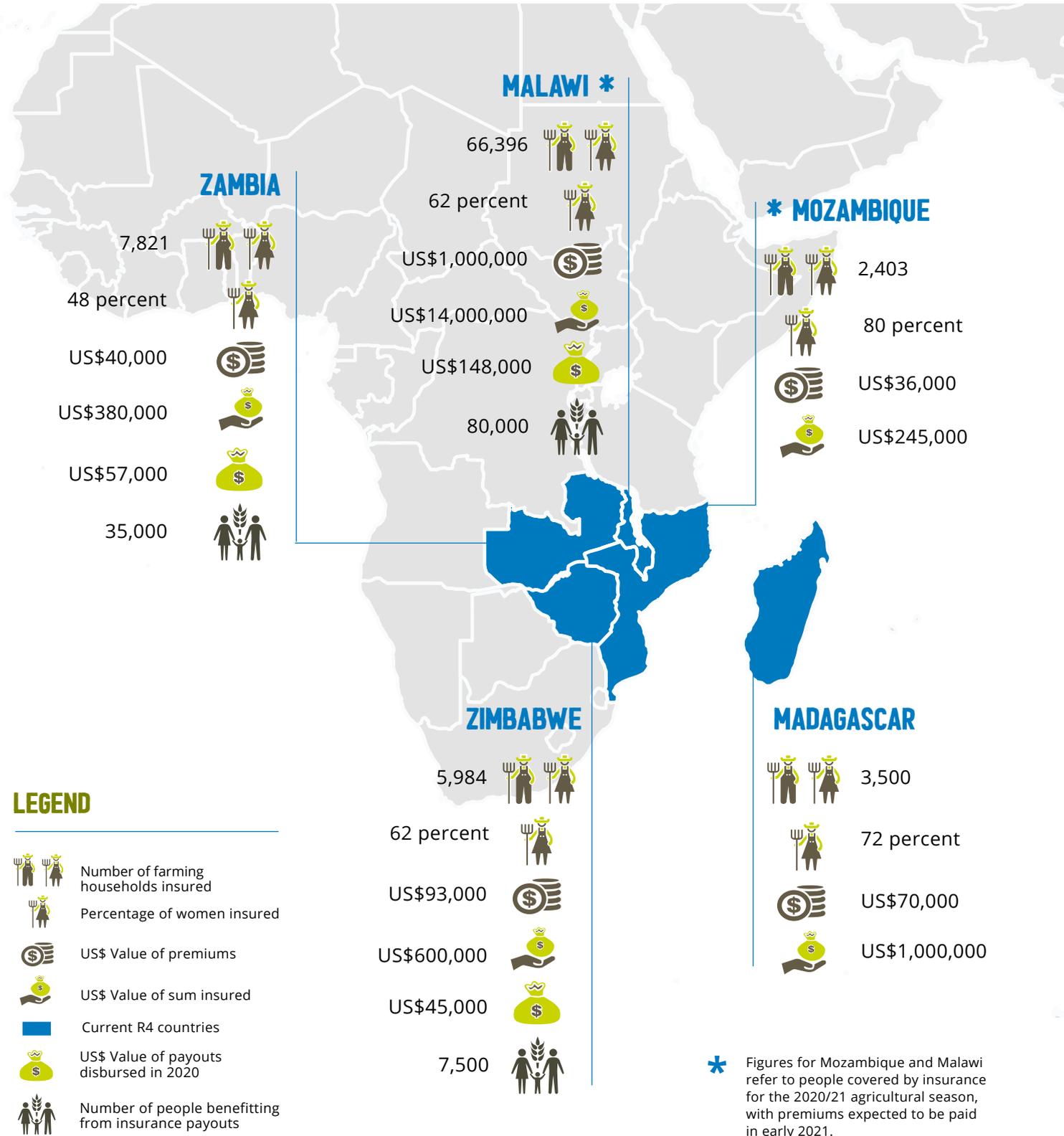
In 2020, WFP Kenya expanded to a new district, namely Makueni county and introduced a Hybrid Index Insurance (HII) product, combining a Weather Index Insurance (WII) component and an Area Yield Index Insurance (AYII) one. 12,206 farmers (83.5 percent women) registered for insurance for the 2020 Short Rains season in both Kitui and Makueni counties.

Due to COVID-19 movement restrictions, the programme adapted its registration modality to phone-based surveys in the old districts, while face-to-face interviews were a necessary approach in new insured areas to build trust among farmers.

Given COVID-19 limits to in-person interaction, WFP Kenya worked on innovative ways to communicate with farmers, including a radio talk show aired in partnership with Pula Advisors, the Makueni Department of Agriculture and the local radio Ene FM radio station. The show allowed for the dissemination of several topics, including, WFP's mandate and mission in Kenya, R4 objectives, participants' eligibility criteria and insurance compensation procedures.

Figure 6.

R4 SOUTHERN AFRICA 2020



R4 Madagascar

2020

Since 2020



3,500 households (17,500 people covered)



72 percent of insured are women



Anosy and Androy Regions



ARO, CTAS, DEFIS (IFAD), GIZ, Ministry of Agriculture, Livestock and Fisheries, Pula Advisors, OTIVTANA, Réseau VSLA



SDG Fund

R4 programme in Madagascar

Risk Reduction: Farmers are supported to reduce their Post-Harvest Losses (PHL) through capacity strengthening and trainings on improved storage and transformation techniques as well as improving their access to markets.

Risk Transfer: Farmers access insurance by participating in PHL trainings and by adopting post-harvest technologies.

Risk Retention and Prudent Risk Taking: Insurance is provided through the Village Savings and Loans Associations (VSLAs). Farmers are trained on the insurance product as well as the importance of savings and best practices to run a VSLA group efficiently.

2020 Context

Madagascar experienced a long drought during the 2019/20 agricultural season, leading to significant crop losses, particularly affecting the southern parts of the country. Rice production was estimated to be 50 percent lower compared to the previous year. The impacts of COVID-19, coupled with the severe drought, seriously affected the availability and access to food in the country. The Integrated Food Security Phase Classification analysis released in December 2020, and covering the October-December period, estimated approximately 1.06 million people to be facing high levels of acute food insecurity (IPC Phase 3 or above).

2020 Key Achievements



3,500 farmers (72 percent women) were trained and supported to apply best practices and tools for post-harvest management. Training of Trainers (ToT) were delivered to 25 participants from various partners and stakeholders, familiar with farmers' realities in the field. Participants were trained on PHL management, savings and loans for risk management techniques and insurance.



2020 marked the first year of R4 implementation in Madagascar, with the initiative insuring 3,500 farmers for the 2020 dry and rainy season. Farmers accessed an Area Yield Index Insurance (AYII) product

covering maize for the rainy season (November 2020-April 2021) and maize and beans for the dry season (May 2021 to October 2021). To sensitize and raise awareness on insurance and risk management among farmers, while complying to COVID-19 restrictive measures, WFP Madagascar developed and broadcasted a series of radio programmes.



3,500 farmers participated in over 200 VSLAs. The initiative supports farmers to build up savings for risk management as well as for investing in agricultural production and livelihoods diversification. Farmers are also provided with financial education trainings.



R4 Malawi

2020

Since 2015



66,396 households (331,980 people covered)*



62 percent of insured are women



Southern Region



CUMO, DoDMA, DCCMS, Emmanuel International, CARE, Find Your Feet FISD, Hannover Re, Insurance Association of Malawi, IRI, MoA, MoFEP&D, NICO Insurance, Plan International Malawi, Pula Advisors, UoR, UP, World Vision Malawi, Farm Radio Trust



SDC, USAID, BMZ, DFID, Flanders, Norway, Adaptation Fund

* This figure refers to the number of farming households insured for the 2020/21 season. Insurance premiums are expected to be paid in early 2021.

The Integrated Risk Management (IRM) approach in Malawi

Risk Reduction: By participating in WFP's Food for Assets (FFA) programme, farmers build assets such as soil and water conservation structures and apply conservation agriculture techniques.

Risk Transfer: Farmers access insurance by participating in FFA activities and investing their time in building homestead assets to improve agricultural productivity.

Risk Retention and Prudent Risk Taking: Savings are promoted through Village Savings and Lending groups (VSLs). The uptake of credit is promoted through microfinance institutions to support farmers in making larger investments in their livelihoods, for prudent risk taking.

2020 Context

The 2019/2020 agricultural season was mostly above average, resulting in increased crop production. Nonetheless, some districts in southern Malawi and one district in central Malawi experienced localized production shortages. According to the Famine Early Warning Systems Network (FEWS NET) Food Security Outlook, access to food and incomes in these districts were anticipated to be insufficient to meet all food needs. Stressed (IPC Phase 2) outcomes were expected in these areas in the presence of humanitarian assistance. COVID-19 restrictive measures particularly affected Malawi's urban population, with low-income households in several cities expected to be facing Crisis (IPC Phase 3) outcomes.

2020 Key Achievements



128,000 households (55 percent women) participated in WFP's FFA programme and engaged in land resource management, irrigation, crop and livestock production and reforestation activities.



Nearly 38,000 farmers participated in VSL groups, saving a total of approximately US\$650,000. In 2020, WFP identified areas of collaboration with the Malawi University of Science and Technology (MUST) to support efficient savings operations, including the development of digital solutions.



Following the roll out of the Adaptation Fund (AF) project, WFP Malawi scaled up provision of insurance from 38,000 farmers in the 2019/20 season to almost 67,000 in 2020/21, with premiums expected to be paid in early 2021. The Weather Index Insurance (WII) product was readjusted into an Area Yield Index Insurance (AYII) product to include other risks contributing



to yield loss, as demanded by participating households in the previous season.

WFP scaled up the Participatory Integrated Climate Services for Agriculture (PICSA) approach to reach 11,800 households in eight districts through extension officers and lead farmers. WFP Malawi also delivered messages on COVID-19 awareness and preventive measures through an integrated radio program with the help of WFP's partner Farm Radio Trust.



WFP Malawi fostered linkages between the Smallholder Agriculture Market Support (SAMS) programme and FFA, IRM, and Home-grown School Feeding (HGSF) activities, targeting surplus and potential surplus producing farmers. This included, among others, linking horticulture farmers in FFA-supported irrigation schemes to local supermarkets.



Farmers were trained on post-harvest handling and loss prevention (PHL) to reduce yield losses associated with poor harvesting and storage techniques.

R4 Mozambique

2020

Since **2019**



2,403 households (12,015 people covered)*



80 percent of insured are women



Gaza, Tete, Nampula, Zambezia



MADER, MTA, INGC, INAM, ADRA, Aceagrarios, Blue Marble, Pula Advisors, University of Reading, IRI, InovAgro, ICS, SDAE



FICA, SDC, GCF

* This figure refers to the number of farming households insured for the 2020/21 season. Insurance premiums are expected to be paid in early 2021.

R4 programme in Mozambique

Risk Reduction: Farmers apply Conservation Agriculture (CA) techniques such as minimal soil disturbance, permanent soil cover and crop rotations. Farmers also receive climate information services to help them make informed decisions in the context of increasing climate variability and change.

Risk Transfer: Farmers access insurance by applying CA techniques.

Risk Retention and Prudent Risk Taking: Farmers participate in Village Savings and Lending groups (VSLs). Gross margins analysis and market assessments were conducted to plan the roll out of prudent risk taking in future years. Farmers are also supported to diversify their livelihoods and make small-scale investments through easier access to formal credit.

2020 Context

The 2019/2020 agricultural season was characterized by normal to below normal rainfall. The northern part of Mozambique experienced heavy rainfall and floods, causing damages to nearly 200,000 hectares of crops, while the southern part of the country experienced drought conditions, affecting over 160,000 hectares. Ongoing conflicts in Cabo Delgado led to increased displacement in the region, with Internally Displaced People (IDPs) losing access to basic livelihoods and experiencing Crisis (IPC Phase 3) outcomes. In drought-affected areas, due to below-average harvests, households started resorting to negative coping strategies and facing Crisis (IPC Phase 3) outcomes. COVID-19 particularly affected urban and peri-urban areas, where poorest households started facing Stressed (IPC Phase 2) outcomes.

2020 Key Achievements



Nearly 5,000 farmers (70 percent women) were supported in Tete and Gaza with the application of CA practices. Farmers were also trained in CA techniques and received agricultural inputs ahead of the agricultural season.



2020 marked the introduction of insurance among targeted farmers. A total of 2,403 farmers (80 percent women) registered for insurance for the 2020/2021 season, with insurance premiums expected to be paid in the first quarter of 2021. The Weather Index Insurance (WII) product protects farmers against the risk of drought and dry spells.



3,240 farmers (66 percent women) participated in 104 savings groups, saving a total of US\$30,109 and accessing loans of up to US\$27,508. Farmers also received trainings on financial literacy, group formation, savings and loans, and governance.



In 2020, WFP supported the production and dissemination of monthly climate monitoring bulletins and agro-meteorological bulletins, in collaboration with the National Meteorological Institute (INAM) and the Ministry of Agriculture and Rural Development (MADER).

In coordination with INAM and local authorities, WFP installed manual rain gauges in 17 communities, tracking the amount of rainfall during the agricultural season.

33 Government staff were trained in the Participatory Integrated Climate Services for Agriculture (PICSA) methodology. Ahead of the agricultural season, trainers supported over 4,000 farmers to make informed agricultural decisions in Tete and Gaza provinces.

R4 Zambia

2020

Since 2015



7,821 households (39,105 people covered)



48 percent of insured are women



Southern Region



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



SDC, KOICA, Green Climate Fund, SIDA

R4 programme in Zambia

Risk Reduction: Farmers apply Conservation Agriculture (CA) techniques such as minimal soil disturbance, permanent soil cover and crop rotations.

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

Risk Retention and Prudent Risk Taking: Savings are promoted through Village Savings and Lending groups (VSLs). Improved access to credit facilities is promoted as part of the prudent risk-taking activities, including savings-credit linked products that support farmers' application of CA practices and agricultural investments.

2020 Context

The 2019/2020 agricultural season was characterized by normal to above normal rainfall, with some dry spells experienced in the southern parts of Zambia. The overall favorable rainfall conditions resulted in above average agricultural production, although southern areas experienced production shortfalls. COVID-19 restrictions negatively impacted supply chains, markets and incomes, increasing existing vulnerabilities and the prevalence of food insecurity among the rural population. According to the Integrated Phase Classification (IPC) food insecurity analysis, 1.98 million were expected to be facing high levels of acute food insecurity (IPC Phase 3 or above) during the lean season.

2020 Key Achievements



Over 18,000 farmers (49 percent women) applied CA practices and crop diversification on 24,630 hectares of lands.



14,707 farmers (58 percent women) participated in 649 VSL groups, saving over US\$200,000. Farmers received trainings on financial literacy, record keeping, entrepreneurship, leadership and governance. In 2020, 3,924 farmers accessed input credit from savings groups and 4,789 were linked to formal financing. Moreover, 1,000 farmers were supported to adopt drought tolerant crops, thanks to the partnership between WFP and ABInBev (Zambia breweries), providing input credit to sorghum value chain smallholder farmers.



7,821 farmers (48 percent women) accessed insurance for the 2020/21 agricultural season. Through the Technical Working Group (TWG), WFP provided technical assistance to the Government to enhance its capacity to develop and manage index insurance products. In addition, WFP supported the Government to design and launch an Index-based Livestock Insurance (IBLI) scheme.



33 government extension staff and 194 rain gauge minders were trained on climate information services. Moreover, 97 rain gauges were installed, two seasonal forecasts were produced, and weather information was translated into four major local languages and shared among farmers to inform their agricultural decisions.



To support farmers' access to markets, 550 micro-aggregators and 110 intermediary aggregators facilitated market linkages for over 21,000 farmers (78 percent women) who managed to bulk and supply a total of 23,600 MT of diverse value chains on the market. In addition, WFP Zambia is working on the operationalization of the Warehouse Receipt System (WRS), enabling farmers to deposit their commodities in exchange for a warehouse receipt. The system allows farmers to store their commodities while decreasing the need to sell them soon after harvest.

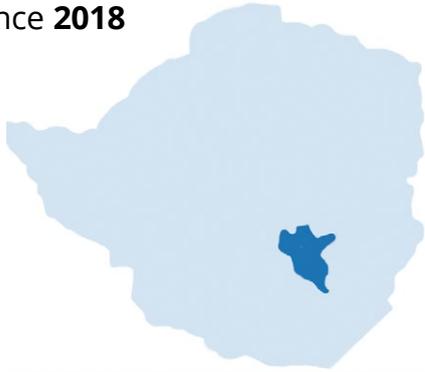


To promote awareness on Post-Harvest Losses (PHL) in a COVID-19 environment, WFP Zambia developed radio programmes on PHL in four major local languages, to be broadcasted on national and community radio stations targeting all the implementing districts.

R4 Zimbabwe

2020

Since 2018



5,984 households (29,920 people covered)



62 percent of insured are women



Masvingo, Rushinga, Mwenezi



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



SDC, USAID, GCF

R4 programme in Zimbabwe

Risk Reduction: Farmers participate in WFP's Food for Assets (FFA) programme and engage in activities that increase the adoption of appropriate seeds and agricultural practices.

Risk Transfer: Farmers access weather index insurance by contributing their labour and time to the development of risk reduction assets.

Risk Retention and Prudent Risk Taking: 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 to start income generating activities as well as cover their expenses.

2020 Context

In 2020, Zimbabwe suffered from the compounded impacts of a poor rainfall season, a deteriorating macroeconomic environment and COVID-19, resulting in an increased number of people facing high levels of acute food insecurity, estimated at 2.61 million, according to latest Integrated Food Security Phase Classification (IPC) analysis, covering the 2020 October-December period.

The 2019/2020 agricultural season was characterized by a late start of the season, long dry spells in late December and January as well as early cessation of the rains, negatively affecting the planted crops. The situation was made worse by COVID-19 restrictions which resulted in household income reductions amounting to over 50 percent.

2020 Key Achievements



6,000 farmers (65 percent women) participated in asset creation activities, including check dam construction, gully reclamation, tree planting, compost making and rehabilitation of roads.



Over 2,000 farmers (78 percent women) participated in 234 VSL groups, saving a total of US\$10,798. Moreover, 414 farmers (78 percent women) accessed and fully repaid their loans worth US\$10,798. Farmers also received trainings on financial education, including on VSL, record keeping, governance, and leadership.



5,984 farmers (62 percent women) were insured against drought for the 2020/21 agricultural season in Rushinga and Masvingo districts. WFP Zimbabwe developed an interactive mobile-based game for Weather Index Insurance (WII) to increase farmers' awareness about insurance.



1,036 farmers received trainings on appropriate post-harvest handling and storage techniques to minimize yield losses and better store their commodities. Moreover, selected farmers were trained to build post-harvest infrastructure, including metal silos and solar driers.



248 Producer and Marketing groups (PMGs) were registered, with 2,544 members (74 percent women) receiving capacity building trainings on market research, identification of viable and reliable markets, and conducting gross margin. To support farmers' access to market in a COVID-19 environment, farmers were also supported through a digital platform providing tips on how to reach local markets, as well as agricultural information.



As part of the efforts to promote appropriate agricultural practices and access to inputs, WFP Zimbabwe and its partners continued promoting conservation agriculture through the 'mother-baby trial' approach. A total of 55 mother trials and 400 baby trials were prepared, allowing farmers to observe appropriate agricultural practices in 'mother trials' to be tested and replicated in 'baby trials' plots.

Figure 7.

R4 ASIA 2020



LEGEND

- Number of farming households insured
- Percentage of women insured
- US\$ Value of premiums
- US\$ Value of sum insured
- US\$ Value of payouts disbursed in 2020
- Number of people benefitting from insurance payouts
- Current R4 countries

R4 Bangladesh

2020

Since 2020



2,000 households (10,000 people covered)



100 percent of insured are women



Kurigram



Oxfam Bangladesh, Green Delta Insurance, International Water Management Institute, National Development Programme, Save Earth Climate Services, Weather Risk Management Services



KOICA

R4 programme in Bangladesh

Risk Reduction: Casual agricultural labourers engage in risk reduction activities such as planting coconut trees, as their contribution to the insurance premium.

Risk Transfer: Casual labourers access index-based flood insurance that protects them against catastrophic flooding during the monsoon season. The overall goal of the initiative is to increase the ability of vulnerable households living in flood-affected areas to manage climate-related shocks, while improving their ability to reduce and cope with the risks that can affect their food security.

2020 Context

Bangladesh was hit by tropical Cyclone Amphan in May 2020 and experienced widespread floods during the monsoon season in July and August, affecting the livelihoods of approximately five million people and destroying houses and vital infrastructures. The climate-related shocks were exacerbated by the impacts of COVID-19, with restrictive measures to contain the spread of the virus negatively affecting households' income and food security. In June 2020, an estimated 29.5 percent of the total population was classified as poor, increasing from the 20.5 percent registered in June 2019.

2020 Key Achievements



As part of the risk reduction component, casual agricultural labourers engaged in activities for reducing risks such as planting coconut trees. These activities are aimed at decreasing their vulnerability to shocks over time and allow households to access insurance policies.



In 2020, WFP in partnership with Oxfam Bangladesh and Green Delta Insurance Company Ltd (GDIC) launched a new flood insurance product to protect 2,000 female agricultural labourers in the Northern Kurigram district of Bangladesh from catastrophic flood events. Following extensive floods, the index triggered US\$63,936 in insurance payouts, protecting labourers against wage losses. All participating households in the two unions received payouts of US\$32, benefitting a total of 10,000 people.

Forecast-based Financing in Bangladesh

Under the Resilience Innovation Programme, WFP also implements Forecast-based Financing (FbF), an innovative approach that uses reliable weather forecasts to trigger anticipatory actions and release humanitarian funds for pre-agreed activities when weather/climate forecasts indicate an elevated risk. In July 2020, WFP supported 6,000 vulnerable households in five unions of Kurigram district with early warning messages and anticipatory cash-based transfers of US\$53, ahead of severe flood impact. In total, in Bangladesh, WFP reached 29,000 households (145,000 people). These interventions supported the most vulnerable households -including families with persons with disabilities and elderly people, and households headed by single women- to prepare and protect themselves from the impacts of the upcoming floods.

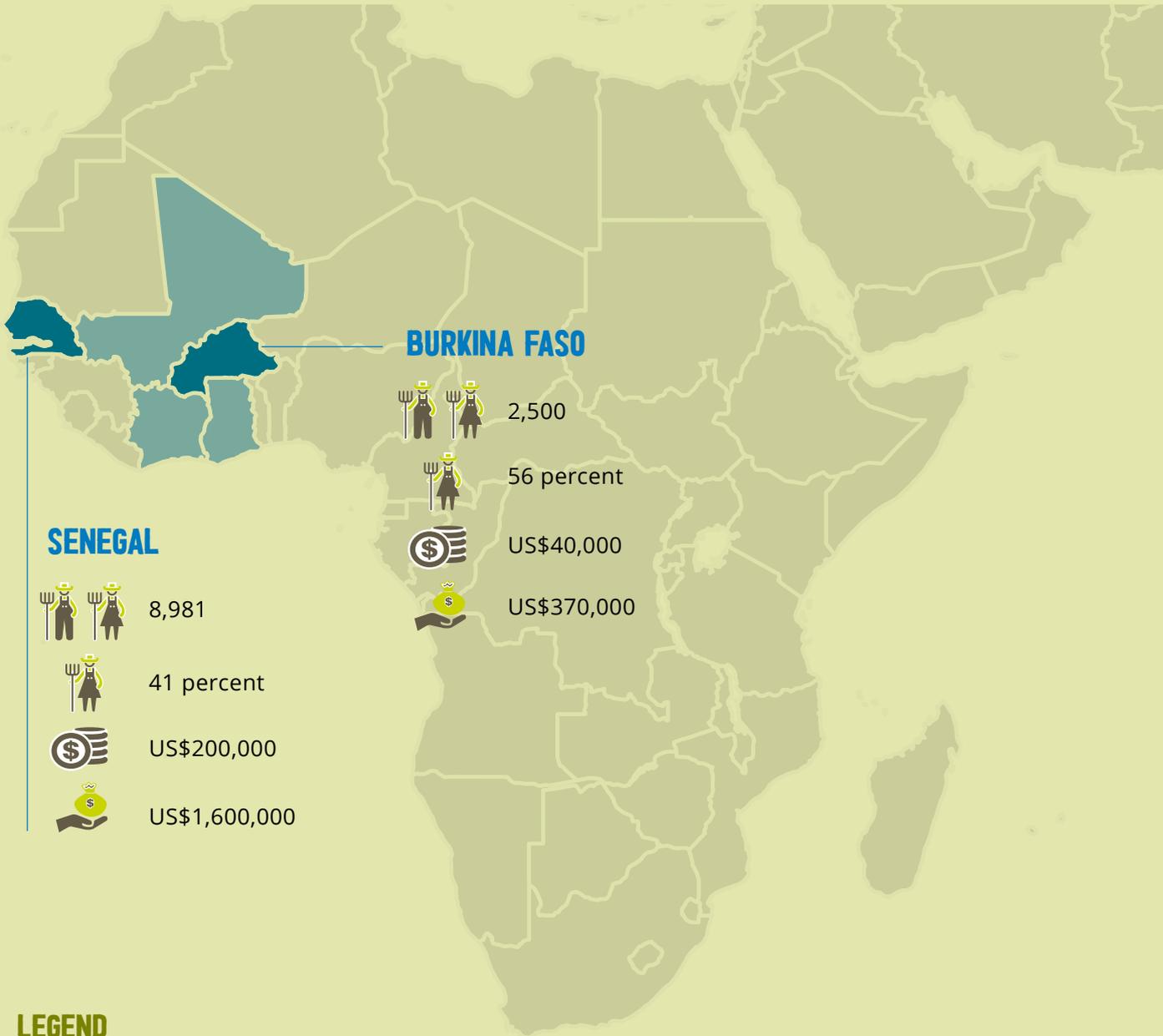
R4 ACHIEVEMENTS IN 2020

COUNTRY FOCUS

A farmer watering a tree seedling with a bottle lid in the Dry Corridor of Guatemala.

WFP/Rocío Franco

R4 WEST AFRICA 2020



LEGEND

- Number of farming households insured
- Percentage of women insured
- US\$ Value of premiums
- US\$ Value of sum insured
- Current R4 countries
- Potential expansion countries



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

WFP/ Mathieu Dubreuil

R4 Burkina Faso 2020

 Since **2019**



 **2,500** households (17,500 people covered)

 **56 percent** of insured are women

 Centre-Nord and Est Regions

 Inclusive Guarantee, Yeleen assurance

 **BMZ**

KEY ACHIEVEMENTS

- Scaled-up insurance coverage from 700 to 2,500 farmers (56 percent women) in 21 villages of Centre-Nord and Est regions.
- Trained 700 farmers on insurance and financial inclusion.
- Facilitated access to credit to 700 farmers through a warrantage system.

R4 Programme in Burkina Faso

2020 marked the second year of R4 implementation in Burkina Faso, with the initiative scaling-up from 700 participants to 2,500. The Country Office used its own funds to initiate the pilot in 2019, with a clear plan to support the Government's strategy to introduce agricultural index insurance into the market. WFP Burkina Faso focuses its interventions on resilience building and market access activities in Centre-Nord and Est regions.



Risk Reduction component: In Burkina Faso, R4 supports farmers to reduce their Post-Harvest Losses (PHL) and promotes access to credit and markets through WFP's Smallholder Agriculture Market Support (SAMS) programme. The initiative also promotes farmers' participation in Food for Asset (FFA) activities, including the construction of composters, as part of the integrated package of services.



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



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



Project Status

In 2020, microinsurance activities in Burkina Faso scaled up from 700 participants to 2,500 (56 percent women), with an increase of almost 300 percent. The initiative is now spread across 21 villages, four departments and two regions of Centre-Nord and Est.

2020 AGRICULTURAL SEASON: EARLY END OF RAINS AND INCREASED INSECURITY LEADING TO REDUCED AGRICULTURAL PRODUCTION

Below-average rainfall towards the end of the season negatively impacted the main cereals season in Burkina Faso. In addition, increased numbers of security incidents and terrorists' attacks caused growing population displacements, severely disrupting agricultural activities, and deteriorating the food security situation of already vulnerable households. As a result, field access for agricultural activities was considerably reduced. Moreover, early cessation of rains and lower access to agricultural inputs contributed to below-average agricultural production from 20 to 50 percent. Coupled with the dire security situation, the impacts of COVID-19 negatively affected the livelihoods and food access of vulnerable communities across the country. During June to August 2020, approximately 3.3 million people were estimated to be severely food insecure and in need of food assistance, with a drastic increase from the 687,000 food insecure people predicted in 2019. This was mainly the result of the deteriorated security situation in the Centre-Nord and Sahel regions coupled with the impacts of COVID-19 related restrictions on households' ability to earn income.

Sources: FEWSNET. 2020. Burkina Faso Remote Monitoring Report. <https://fews.net/west-africa/burkina-faso/remote-monitoring-report/december-2020>; GIEWS.2020. Country Brief Burkina Faso. <http://www.fao.org/giews/countrybrief/country.jsp?code=BFA>.

Capacity strengthening activities were also conducted during the year, with farmers trained on Post-Harvest Loss (PHL) management, warrantage,⁴ financial inclusion and agricultural insurance.

4. Warrantage refers to an inventory credit system, usually known as the Warehouse Receipt System (WRS). Through this system, farmers can deposit grain in secure warehouses, acting as a collateral to access credit.

COVID-19 IMPACTS ON R4 OPERATIONS IN BURKINA FASO

The COVID-19 pandemic negatively impacted vulnerable households' incomes and farming activities, with movement restrictions limiting the possibility for farmers to buy or transport inputs, including seeds and fertilizers. Despite the challenges posed by the pandemic, WFP Burkina Faso was able to successfully continue implementation of R4 activities, adapting to the new measures and restrictions. To contain the spread of the virus, community activities were suspended in favour of individual household activities, while in-person trainings were conducted observing social distancing and in reduced numbers.

Risk Reduction

The integration of the insurance component with other resilience building activities in Burkina Faso was conceived around the installation of composters in the communities, allowing for maximum alignment between Food for Asset (FFA) and Smallholders Agricultural Market Support (SAMS) activities. Composters allow communities to produce organic manure, used on the zai pits, favoring soil restoration and increased productivity, as well as generating income and sale of activities, such as packaging of manure.

To raise awareness on the integrated approach, WFP conducted Training of Trainers (ToT) on Post-Harvest Losses (PHL) management, microinsurance and financial inclusion in both regions in November 2020. In total, 24 trainers benefitted from capacity strengthening activities, including seven women. Participants were then expected to further disseminate learnings into their own communities. Farmers' participation to these trainings was used as a conditionality to subscribe to the insurance policy.

Risk Transfer

In 2020, 2,500 farmers (56 percent women) accessed insurance in both Est and Centre-Nord regions of Burkina Faso, with a total sum insured of US\$374,833 and premium amounting to US\$40,108. The index insurance product was provided by Yeleen Assurance based on the Water Requirement Satisfaction Index (WRSI) developed by the National Technical Working Group (TWG) as part of the African Risk Capacity (ARC) product customization.

Inclusive Guarantee was responsible for the index validation, monitoring and season assessment, as well as for interacting with communities for insurance enrollments, financial education, awareness raising and trainings. The index triggered approximately US\$6,000 in payouts in some locations of the Centre-Nord region for over 400 farmers, with payouts to be distributed in 2021.

As part of the climate risk financing portfolio, Burkina Faso is also part of the ARC Replica⁵ instrument. In 2020, US\$700,000 were paid in insurance premium to cover 109,944 vulnerable people from catastrophic drought. According to the end of season assessment, no major drought events were detected in the country during the season.

Risk Retention and Prudent Risk Taking

Through the Village Savings and Loans Association (VSLA) groups, WFP aims to support vulnerable households to better manage more frequent and idiosyncratic risks, but also to help them generate a small capacity for investments. In 2020, 500 farmers (60 percent women) participated in savings groups with a total savings amount of US\$6,561. For the next years, WFP will work with the implementing partners to establish and train savings groups and Farmers Organizations (FO), aiming to align VSLAs with FOs in order to facilitate purchase of inputs, insurance, access to credit and aggregation of stocks to facilitate sales.

This year, the warrantage system helped to mobilize US\$5,277 (FCFA 2,900,000) in credit for 46 producers, including 43 women from the Mutuelle d'Épargne et de Crédit (MFN)⁶ JOUNLIMANI of the FIMBA association. During the year, equipment has been provided to reduce post-harvest losses, including 3,500 PICS⁷ bags and 127 silos to better store food. In addition, informal FOs have used WFP storage to store food throughout the year.

5. 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 and improve the effectiveness of emergency humanitarian response 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.

6. Mutual Savings and Credit cooperative.

7. Purdue Improved Crop Storage (PICS).

Gender and Nutrition

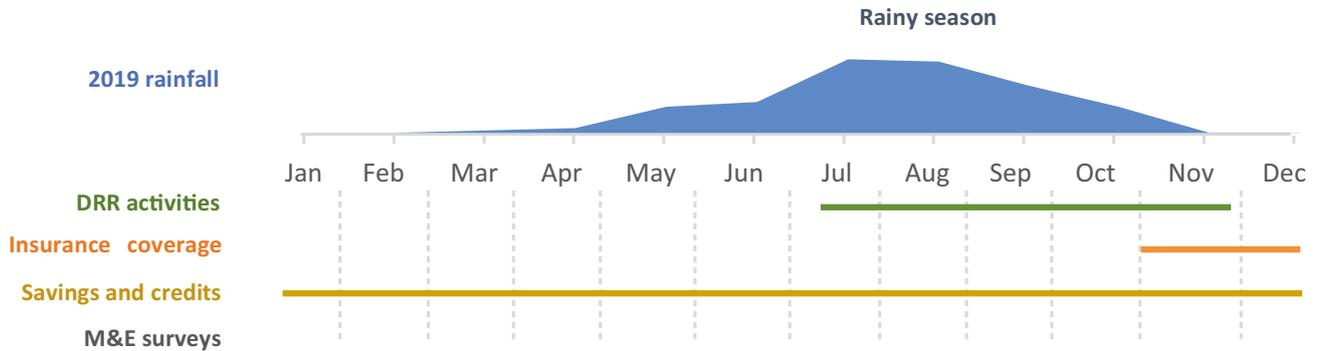
Women represent 60-70 percent of the workforce in the communities, with the vast majority lacking access to productive assets, finance and education. The integrated approach promotes equal gender participation and inclusion, with women accounting for 56 percent of farmers insured. In line with WFP’s pursuit of gender equality to achieve its mandate, R4 in Burkina Faso is promoting equal participation of women and men across the integrated approach while including gender-specific considerations throughout the program cycle.

In addition, specific actions will be developed to strengthen women’s technical and managerial capacities in order to provide them with the appropriate tools to identify and manage climate risks. Specific trainings will be developed on access to assets, financial education, agricultural production and processing.

Outlook for 2021 and beyond

In 2021, the initiative is expected to expand to the Sahel and Northern regions as well as scaling-up from 2,500 to 5,000 farmers. A strategy for 2021-2026 has been elaborated, with funding to be mobilized in the near future. Main activities for next year include, among others, coordination at national level and implementation of integrated interventions at community level.

Figure 8. Burkina Faso 2020 seasonal calendar





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 2020

 Since 2012



 **8,981** households (44,905 people covered)

 **41 percent** of insured are women

 Kolda and Tambacounda regions

 ANCAR, ANACIM, CNAAS, Inclusive Guarantee, IRI, La Lumière, MAER, Orange Finances Mobiles Sénégal, Oxfam America, PROVAL-CV, Université Gaston Berger

 BMZ, French Cooperation, GCF

KEY ACHIEVEMENTS

- Started implementation of WFP's first Green Climate Fund (GCF) project, scaling-up access to microinsurance for 45,000 vulnerable farmers by 2024.
- 638 participants (57 percent women) trained in agricultural insurance and index-based insurance.
- 30 sensitization tours, 12 radio programs and 27 advertising spots on index-based insurance conducted during the year.
- 4,651 farmers (90 percent women) received financial education trainings.
- 88,793 SMS messages sent providing farmers with climate information.
- 182 farmers (36 percent women) trained on the use of climate information.

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 towards 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 Retention and Prudent Risk

Taking component: 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. Savings and microcredit also enable investments in livelihoods, increasing household production and income, gradually allowing them to access insurance commercially and contributing to the general sustainability of the initiative.



2020 AGRICULTURAL SEASON: ABOVE-AVERAGE RAINFALL HAVING POSITIVE IMPACTS ON YIELDS

The 2020 agricultural season was characterized by abundant rains since June, allowing positive moisture conditions for crops germination and establishment. Above-average rainfall in October in most parts of Senegal positively impacted yields. Despite the relatively positive rainfall season, the agricultural sector was severely affected by COVID-19 related restrictive measures. Markets closures, curfews, and movement restrictions limited farmers and intermediaries' ability to access markets and labors, causing losses of revenues due to increased product deterioration. As a result, the Government of Senegal increased this year's agricultural program budget by US\$33 million to provide larger support to the sector. While the country presents an overall satisfactory food security situation, pockets of food insecurity are still present, with food assistance needed among the most vulnerable population. Before the outbreak of the COVID-19 pandemic, the number of food insecure people was estimated at approximately 766,000 during the lean season between June and August 2020 -considerably higher than the 341,000 food insecure people estimated in 2019- with the number expected to deteriorate due to COVID-19 related restrictions and socio-economic impacts.

Sources: FAO. 2020. GIEWS - Global Information and Early Warning System. Country Brief Senegal. <http://www.fao.org/giews/countrybrief/country.jsp?code=SEN&lang=en>; USDA. 2020. Senegal Agricultural Program. <https://www.fas.usda.gov/data/senegal-senegal-agricultural-program>.

Project Status

In 2020, WFP Senegal provided access to microinsurance to nearly 9,000 smallholder farmers, protecting them against the risks of compound shocks. The Country Office also officially launched WFP's first Green Climate Fund (GCF) project. The project will scale up the integrated approach and access to microinsurance for 45,000 vulnerable farmers by 2024.

COVID-19 IMPACTS ON R4 OPERATIONS IN SENEGAL

In March 2020, the Government of Senegal (GoS) declared a state of emergency, enacting several measures to limit the spread of COVID-19, including restrictions to mobility and ban of public gatherings. This impacted the launch of the GCF project as well as the regular implementation of R4 activities in the field. WFP promptly engaged in discussions with partners and stakeholders to adapt to the new context and define the strategies and contingency plans to overcome the challenges posed by the pandemic. As a result, dry season asset creation activities were cancelled while rainy season activities were delayed to July. Given the difficulties to reach the field for participants' registration due to COVID-19 associated restrictions and delays, the project continued to insure the same beneficiaries as in 2019, removing the conditionality for farmers to access insurance. WFP also covered the full price of the insurance premium and did not collect beneficiaries' contributions for 2020.

Risk Reduction

While COVID-19 caused some implementation delays, participants were still able to engage in risk reduction activities during the year. Given the restrictive measures, asset creation activities were not conducted during the dry season but were postponed to the rainy season. Some of the main activities conducted in 2020 included: construction of dikes for plotting, protection dikes, stone bunds to prevent soil erosion and reforestation. To support the dissemination and adoption of sustainable agricultural practices, 25 farmers' field schools were set up during the year. In addition, participants engaged in crop cultivation, including rice (1,668 Ha), maize (312 Ha), cowpeas (77 Ha) and vegetable farming (21 Ha), the latter mainly practiced by women. Low realization rates were noted in some activities in the region of Tambacounda. This was mainly a result of delays in the start of field activities due to COVID-

19 restrictions, which caused missing of the rainy season for sowing, poor performance/germination of rice seeds and difficulty of pre-financing to procure seeds/fertilizer for the cooperating partner.

Several trainings were also provided during the year on a number of topics, including on System of Rice Intensification (SRI), reforestation methods, plants production methods and production and utilization of compost organized by WFP's partner ANCAR⁸ and on management and maintenance of hydro-agriculture provided by PROVAL-CV.⁹

Risk Transfer

A total of 8,981 farmers (41 percent women) were covered by insurance for the 2020 agricultural season. Of these farmers, 7,650 enrolled under the Insurance for Assets (IfA) programme and 1,331 accessed insurance paying their premium fully in cash. In 2020, the total premium amounted to US\$212,300 while the sum insured amounted to US\$1,607,003. The number of farmers paying fully in cash was lower than expected as a result of COVID-19. Notably, the pandemic led to increased vulnerabilities among farmers, limiting their ability to pay for insurance, as well as delaying the start of many activities, such as sensitization, training, and awareness raising. Nevertheless, 30 sensitization tours, 12 radio programs and 27 advertising spots on insurance were carried out during the year in the regions of Tambacounda and Kolda to raise awareness on weather index insurance among farmers. A total of 630 participants (57 percent women) were trained on insurance in general and more specifically on index-based insurance in 2020. Moreover, data monitored during the season showed that the index did not trigger in the areas covered by the project.

Risk Retention and Prudent Risk Taking

A total of 14,615 farmers (84 percent women) participated in 655 savings groups in 2020. Moreover, 4,651 farmers (90 percent women) received financial education trainings organized by WFP's partner La Lumière.

8. Agence Nationale de Conseil Agricole et Rural.

9. Projet de valorisation des eaux pour le développement des chaines de valeur.

Climate Information Services

To raise awareness among farmers about weather and climate information, six radio programs were broadcasted, in collaboration between the National Agency for Civil Aviation and Meteorology, the Rural Development Departmental Services (SDDR) and members of the GTP.¹⁰ A total of 88,793 SMS messages were sent to 6,995 farmers to help smallholder farmers access reliable climate information and improve their agricultural practices. In addition, five training sessions on the use of climate information were carried out with 182 participants (36 percent women), including farmers, field agents, press agents and GTP members.

Gender and Nutrition

WFP's partner La Lumière delivered a number of trainings on gender and nutrition during the year. A total of 1,468 participants (82 percent women) were sensitized on participation in decision making at community level and management and control of community resources. Moreover, 1,250 participants (85 percent women) were trained on nutrition and vaccination for infants/small child and nutrition for pregnant women.

Monitoring, Evaluation and Learning

In August 2020, WFP Senegal conducted a baseline, as part of the newly launched GCF project. The baseline allowed the analysis of R4 participants and a control group of the food security status, the socio-economic situation (livelihoods, wealth, access to land, productive assets and financial services, income sources, etc.), the shocks experienced recently (frequency and seasonality) and households' resilience capacity. The baseline will be used as a reference to analyze the effects of the programme over the years.

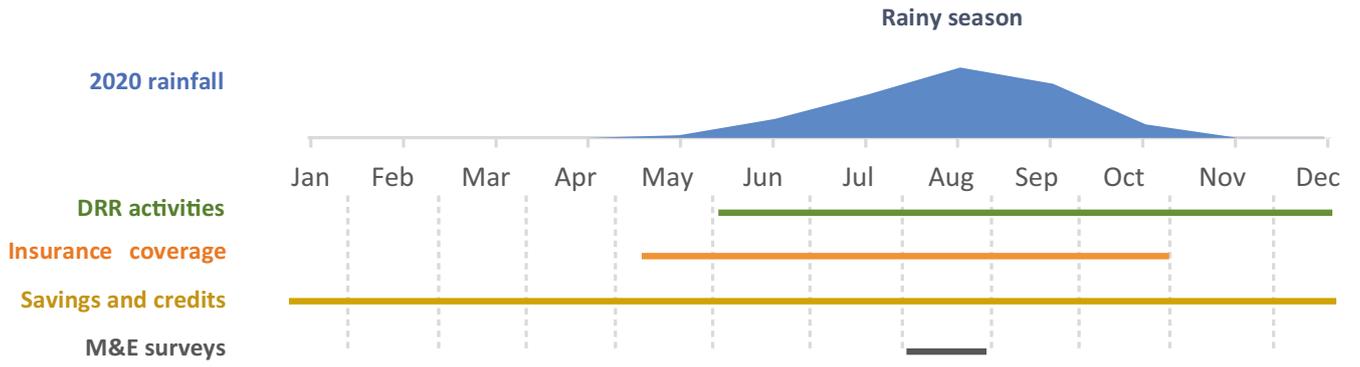
¹⁰ The GTP - Groupement de Travail Pluridisciplinaire - is an interdisciplinary technical working group working on climate information services. The working group develops information and advisory messages for farmers and local stakeholders.

Overall, results indicated that the targeted households had a fairly limited number of sources of income, ranging around two sources or less, with a very small proportion of savings and loans being reinvested in Income Generating Activities (IGAs). A quarter of households surveyed accessed insurance and one in five has currently access to climate information, with 70 percent of farmers not receiving climate information services expressing their desire to access them. Key recommendations from the exercise are in line with the proposed R4 interventions and highlighted, among others, the need to: improve integration with the government's social safety net programs; train and sensitize participants on entrepreneurship and development of IGAs to diversify income; sensitize households on investing in agricultural inputs to increase productivity; strengthen awareness on the importance of insurance, and raise awareness about taking climate information into account for households' agricultural decisions.

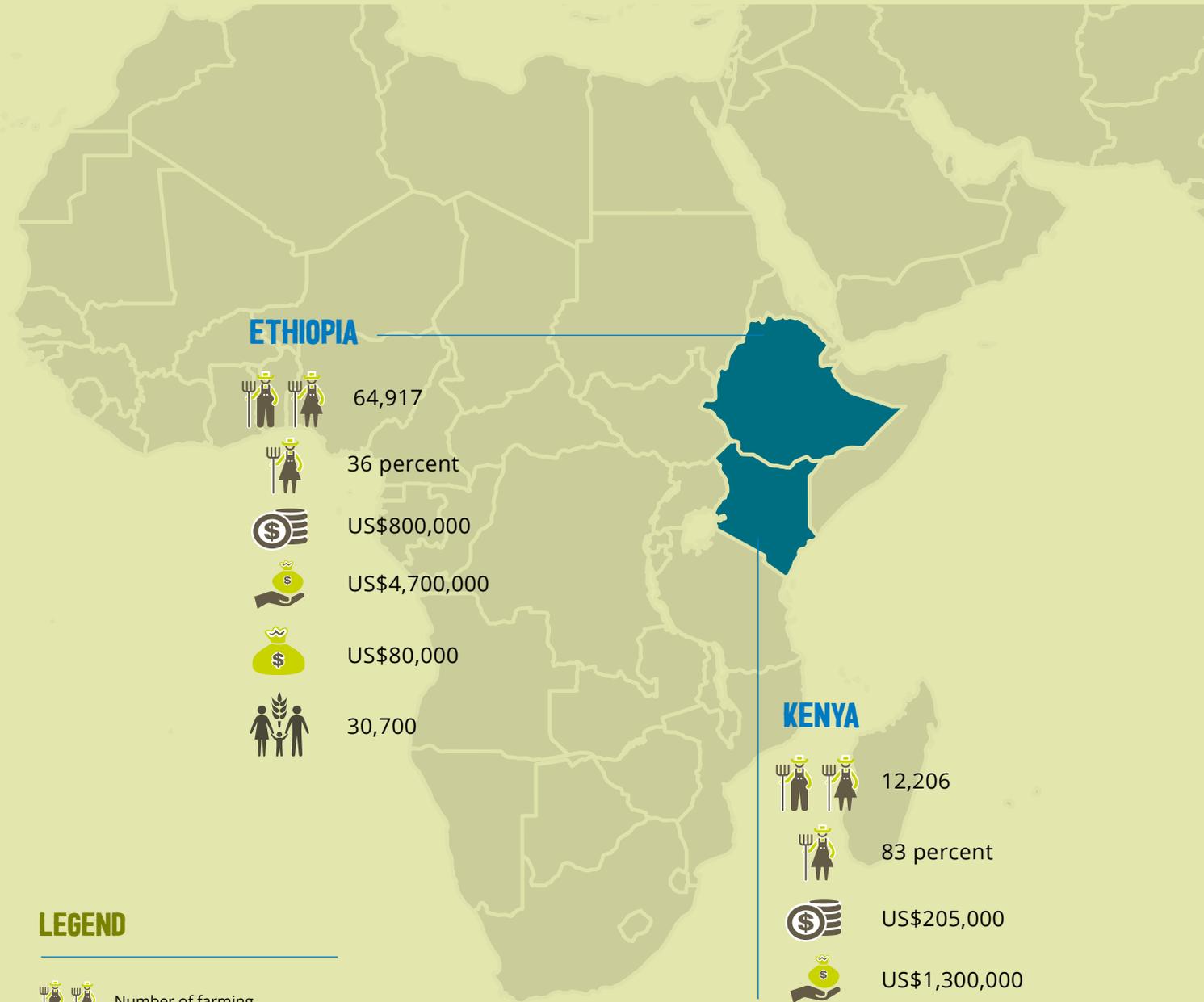
Outlook for 2021 and beyond

In 2021, the initiative plans to cover 7,000 smallholder farmers in Tambacounda and 5,000 in Kolda regions. The programme also plans to expand to an additional 3,000 farmers in the new regions of Kaolack, Fatick and Kaffrine. As part of the risk reduction component, planned activities for next year will include three Seasonal Livelihood Programming (SLPs), nine Community-based Participatory Planning (CBPPs) in the new regions and nine CBPPs in the current regions. For the risk transfer component, a hybrid index combining both Area Yield (AYII) and Weather Index Insurance (WII) will be adopted in Tambacounda and Kolda, while a rainfall index will be used in the new regions. Activities under the risk transfer component will include, among others, awareness raising and trainings, insurance distribution, and monitoring and evaluation of the agricultural season.

Figure 9. Senegal 2020 seasonal calendar



R4 EAST AFRICA 2020



LEGEND

-  Number of farming households insured
-  Percentage of women insured
-  US\$ Value of premiums
-  US\$ Value of sum insured
-  US\$ Value of payouts disbursed in 2020
-  Number of people benefitting from insurance payouts
-  Current R4 countries



R4 female farmer watering her micro-garden in Ethiopia. Under the risk reduction component of R4, Female Headed Households (FHHs) engage in homestead gardening to improve their nutritional status and income generation.

WFP/Kires Ybrah

R4 Ethiopia 2020

 Since **2009**



64,917 households (324,585 people covered)



36 percent of insured are women



Tigray and Amhara regions



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



KfW, IFAD

KEY ACHIEVEMENTS

- Scaled up access to insurance to nearly 65,000 farmers, representing a 126 percent growth from 2019.
- Developed handover plans with local insurance companies to ensure the sustainability of index insurance products and systems.
- Established index design teams to strengthen the index design capacity of national and regional stakeholders.

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 the risk reduction component activities on the government's Productive Safety Net Programme (PSNP) in addition to supporting non-PSNP through the integrated risk management approach.



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 (SWC), water harvesting, small scale irrigation, agroforestry and reforestation programmes for a number of selected days in addition to the PSNP public works requirements to receive an insurance policy. The activity is executed by the regional cooperating partners.



Risk Transfer component: Through participating in asset creation and training activities, farmers can access weather index insurance. In order to be insured, farmers work on assets between two and seven days, depending on the sum insured participants require, as the 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), which then pay the insurance company branch.



Risk Retention and Prudent Risk Taking component: 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.

2020 AGRICULTURAL SEASON: COMPOUNDING IMPACTS OF COVID-19, DESERT LOCUSTS, FLOODS, AND CONFLICT NEGATIVELY AFFECTING CROP PRODUCTION

The 2020 agricultural season in the Tigray and Ahmara regions of Ethiopia was above average in terms of satellite-measured rainfall and was characterized as low-to-moderate in terms of crop risk. Nevertheless, the compounding impacts of COVID-19, desert locusts, flooding, and conflict negatively affected crop production and the livelihoods of Ethiopian farmers, driving greater than previously anticipated humanitarian assistance by the end of 2020. Nearly all participating farmers reported 2020 as not being among the eight worst years out of the last 35 in terms of rainfall, and roughly half of participating farmers reported sufficient rain at the beginning of the season. However, farmers faced a large number of non-drought related threats to their livelihoods this season, including desert locust infestations, reduced availability of agricultural inputs as a result of COVID-19 movement restrictions, poor macroeconomic conditions, flooding and conflict, resulting in reduced crop production. In general, high inflation, the prolonged impact of the COVID-19 pandemic, and the adverse impacts of flooding and desert locusts are likely to continue to negatively affect food access from own crops, livestock production, and markets. As a result, most poor and very poor households in the eastern half of the country are expected to continue facing Crisis (IPC Phase 3) outcomes through May 2021.

Sources: FEWSNET. Food Security Outlook Update. December 2020. <https://fews.net/east-africa/ethiopia/food-security-outlook-update/december-2020>; FEWSNET. Food Security Outlook Update. October 2020 to May 2021. <https://fews.net/east-africa/ethiopia/food-security-outlook/october-2020>; FAO. 2020. Crop Prospects and Food Situation - Quarterly Global Report No. 2, July 2020. Rome. <http://www.fao.org/3/ca9803en/CA9803EN.pdf>.

Project Status

Through October 2020, the WFP Ethiopia Country Office continued successful implementation of the R4 project despite the significant challenges that emerged related to the outbreak of the global COVID-19 pandemic, which continues to affect Ethiopia. However, with the onset of conflict between the federal Ethiopian National Defence Forces (ENDF) and the regional Tigray People's Liberation Front (TPLF) since November 2020, WFP was unable to communicate with staff and partners on the ground and R4-related activities were halted in the Tigray region until the security situation stabilized and *woredas*¹¹ became partially accessible.

Despite these challenges, WFP Ethiopia achieved key milestones in 2020, including allowing access to index insurance to 64,917 households (36 percent women) in Amhara and Tigray regions. Moreover, an additional 2,098 farmers accessed insurance through other donor-funded programmes or by paying in cash, for a total of 67,015 households covered by insurance for the 2020 agricultural season.

Building on existing partnerships, WFP Ethiopia cooperated closely with a national team of partners to strengthen the index design capacity in the country and developed handover plans to ensure the sustainability of the Weather Index Insurance (WII) product. This has been achieved through mobilizing the Index Design Team (IDT) to develop indexes for the WII products for 2021; engaging with national policy structures; and refining the work planning with insurance companies to develop a sustainable insurance product.

Risk Reduction

Despite the challenges posed by the COVID-19 pandemic, the R4 project successfully implemented risk reduction activities with 58,655 farmers (40 percent women). Women invested 50 percent less of their time in these activities compared to men, with less labor-intensive activities and income-generating opportunities being particularly emphasized for Female Headed Households (FHHs). In addition, due to COVID-19 and to minimize the risk of exposure, priority was given to those risk reduction

COVID-19 IMPACTS ON R4 OPERATIONS IN ETHIOPIA

Following the outbreak of the COVID-19 pandemic, the Government of Ethiopia (GoE) declared a State of Emergency, which hindered farmers' free movement and rural markets, affecting households' ability to generate income for their livelihoods. Restrictive measures to limit the spread of the virus negatively impacted the regular implementation of R4 field level activities, leading to the postponement of most of the planned trainings. As a result, the project was unable to implement a number of cross-cutting activities, as most of the trainings on financial literacy, business skills development, Income Generating Activities (IGAs), Village Economic and Social Associations (VESAs) establishment had to be postponed until 2021. To ease some of the challenges associated with COVID-19, R4 farmers were allowed to exceptionally pay their premium fully in labour instead of farmers contributing in cash. While this allowed farmers to be covered by insurance during a difficult season, it could create a burden for the non-PSNP beneficiaries who are supposed to contribute more cash for next year's enrolment, as well as delaying farmers' graduation path towards paying their premium fully in cash. COVID-19 movement restrictions also required a revision of some risk reduction and public works activities, with priority given to selected risk reduction activities which had less risk of exposure, such as working on homesteads assets.

activities that could be implemented at the individual farm level. As a result, farmers engaged in building trench bunds, micro basin damns construction and maintenance, cut off drains and flood diversion canals, tree plantings, home garden development and adopting climate-smart agriculture practices.

R4 risk reduction activities in the Amhara region focused on developing participatory watershed management plans in 75 *kebeles*.¹² These plans will support communities to construct and rehabilitate natural and physical community assets with locally available resources as part of the Insurance For Work (IFW) scheme, while will help to address the underlying causes of food insecurity and reduce exposure to climate risk through soil and water conservation (SWC) measures. Watershed committee members, community representatives, development agents, local government administrators and NGO technical staff were actively engaged in the planning process.

11. Districts.

12. Villages.

The project also provided support to tree nurseries through the Woreda agriculture offices, which contributed to producing 1,350,000 tree seedlings for the biological SWC activities. Farmers also participated in care and maintenance for the seedlings planted in all of the R4 watershed interventions.

In Tigray, the R4 risk reduction component focused on reducing exposure to downstream run-off hazards, reduce erosion, improve soil moisture content and groundwater recharge through various SWC structures. This included the construction of 138 km of trenches, 1.6 km of stone-faced trench bund, 21 km of deep trench, and 63,767 micro trenches constructed on 217 ha, benefiting approximately 860 households (43 percent women). To support the SWC structures with biological measures 132,000 tree seedlings were planted by preparing plantation pits on communal and agro-forestry areas. In addition, 26 km of simple flood diverting canals were constructed this year that will directly or indirectly benefit 3,908 farmers (42 percent women).

The risk reduction component also promoted home garden development as part of the IfW arrangement to improve the food consumption and nutritional status of targeted households. In 2020, 4,680 households (95 percent women) have prepared home garden, including micro- garden, perma-garden and keyhole garden on their homesteads. In addition to increasing and diversifying food consumption, these gardens enable beneficiaries to generate additional income through sales of surplus vegetable production.

R4 also supported the adoption of Roof Rainwater Harvesting Technologies (RRWH) as a reliable alternative source of household drinking water in locations where surface and groundwater are either unavailable, out of reach, or unsafe. The RRWH enables households to improve hygiene and reduce the workload of women and female children and supports home garden development and vegetable production. R4 supported the construction of 105 RRWH for 84 FHHs, out of a planned 100 RRWH this year. There is high demand for this technology due to the scarcity of water in project areas.

To promote the adoption of Climate-Smart Agriculture practices, 450 lead farmers (52 FHH) were selected in 30 *kebeles* in 15 woredas and provided with technical training, seed and material inputs.

Risk Transfer

In 2020, a total of 64,917 farmers (36 percent women) accessed insurance through WFP support, with a total sum insured of US\$4,786,639 and premium of US\$798,311. In addition, 2,098 farmers accessed insurance through other donor-funded programmes or by paying fully with their own cash, for a total of 67,015 farmers (42 percent women) insured for the 2020 agricultural season in Amhara and Tigray regions. Due to the COVID-19 pandemic, all of the R4 participant farmers accessed insurance policies through 100 percent IFW contribution. As the Government of Ethiopia (GOE) had declared a state of emergency until August 2020, majority of farmers were not able to engage in their usual farming and income generating activities, as it affected free movement and access to rural markets. This also resulted in the postponement of many trainings planned for the year, which will have impacts on the planned handover of responsibilities to the insurance companies and MFIs as part of the R4 project's sustainability strategy.

As part of the efforts to build the capacity of local stakeholders and support national ownership of insurance processes, Index design teams (IDTs) were established at national, regional and local levels to transfer knowledge from international stakeholders to the national design team. In 2020, the IDTs continued receiving technical support from the International Research Institute for Climate and Society (IRI) and WFP to build their capacity in index design. At the end of 2020, the IDTs were fully engaged in developing the 2021 index with IRI's technical support and guidance. Activities included optimizing the village-level indexes using IRI's online platform to calibrate indexes to the crop calendars and rainfall amounts in the location, based on scientific understandings of crop and water stress models. The start and end of each index were set by considering the following: local expert opinion through discussions with the farmer design team in each district; precision of satellite measurements during the window; rainfall patterns during the window with the greatest risk for crop production; how absence of rainfall during the window agrees with actual on-the-ground crop loss, as reported by farmers; and output of crop and water stress models.

At the end of the 2020 agricultural seasons, a small percentage of payouts amounting to US\$83,390 was triggered for 17,316 farmers in three districts of Amhara and Tigray regions. Due to the conflict in Tigray and administrative delays with the insurance company in

Amhara, the payout is still being processed and not yet been transferred to beneficiaries.

In 2020, R4 continued implementing the Picture-based Index (PBI)¹³ insurance data collection, starting with selection of woredas and villages for the project and training VESA facilitators in selected villages as data collectors. The PBI exercise was completed for all target plots until harvesting, followed by the crop cutting exercise data collection that was performed for each sample during harvesting. The results will be analysed along with the index performance for the previous year and further research will explore how the PBI can potentially be integrated into the actual insurance product design.

Risk Retention and Prudent Risk Taking

The project's risk retention component aims to help farmers increase savings through VESAs as well as improving farmers' financial literacy and income generating skills. Despite the challenges of COVID-19 restrictive measures, a total of 9,500 farmers (40 percent women) were organized into 436 VESAs and were supported by the initiative to save regularly on a monthly basis. In total, VESAs registered a cumulative capital of US\$73,755 in 2020, which was partly used as a funding source for loans for small-scale IGAs and as buffer for shocks and other emergencies. In total, US\$28,088 was disbursed to 1,626 farmers (37 percent women) for the purchase of agricultural inputs, shoa fattening and rearing, among others. Moreover, 6,892 participants (40 percent women) in both regions were trained in financial literacy, business development and management, and VESA leadership to strengthen institutional and individual capacity for successful livelihoods development.

In 2020, the project also implemented the Credit Guarantee Fund (CGF) scheme in partnership with Dedebit Credit and Saving Institution (DECSI) in Tigray region, which provided a 10 percent guarantee offer to the total loans disbursed to R4 beneficiaries who engaged in different IGAs. Under this scheme, a total of US\$1,086,686 (ETB 41,228,900) was disbursed as loans for 2,929 R4 beneficiaries (37 percent women) for shoa fattening and rearing, cattle fattening and poultry business.

13. PBI studies the use of digital repeat photography through smartphone cameras as a tool to strengthen seasonal monitoring of crop health and damage in Ethiopia.

SATELLITE INDEX INSURANCE FOR PASTORALISTS IN ETHIOPIA

In 2020, under the Satellite Index Insurance for Pastoralists in Ethiopia (SIPE), WFP scaled up access to index-based livestock insurance for pastoral and agropastoral households in the Somali region of Ethiopia, reaching 15,500 households, with a total sum insured of over US\$6,000,000 and a premium of over US\$900,000. SIPE provides households with insurance products that protect their herds when extreme drought impacts the availability of pasture. Contrary to existing indemnity insurance covers, which insure against the loss of livestock, SIPE moves from asset replacement to an asset protection approach. The payouts in times of drought happen during and at the end of the season, to allow pastoralists to keep their core breeding animals alive.

Unfortunately, the status of DECSI and its ability to restart operations is still in question at the end of 2020, as the conflict in Tigray has resulted in the MFI's operations being suspended. As a result, CGF's next steps and the loans that R4 participants received are still to be determined, as stability returns to the Tigray region.

As part of the capacity building and strengthening plan for local financial services providers (FSPs), VESAs and RuSACCOs, a total of 591 RuSACCO leaders (33 percent women) received financial management trainings with an emphasis on governance and management, savings and loans administration, record keeping and accounting, in collaboration with the local cooperatives offices. Moreover, a total of 1,342 VESA leaders (42 percent women) were trained on VESA governance, women leadership empowerment, saving and loan modalities.

Gender, Nutrition and Complaint and Feedback Mechanism

As part of the efforts to promote gender quality and mainstreaming of gender considerations, in 2020, a Trainer of Trainers (ToT) on gender mainstreaming was delivered to 1,243 VESA leaders (40 percent women) and 68 community facilitators (26 percent women) to be further cascaded to VESA members and other targeted community groups.

Moreover, as part of the efforts to mainstream nutrition considerations, capacity building trainings on home-gardens and soil fertility were delivered to 4,846 households of which 4,407 were FHHs. To supplement these trainings, different agricultural inputs, including vegetable seeds, and agricultural materials were provided to 4,680 farmers (95 percent women) with the aim of enabling farmers to easily consume and access nutritious foods with the potential for surplus produce for sale, as an additional source of income. In addition, technical trainings on various IGAs were provided to 317 households (37 percent women), enabling women to have greater access to productive resources.

Cooking demonstrations were also organized to share best practices at Rubafeleg, Atsbi Wonberta woredas. ToT training on Social Behavioral Change Communication (SBCC), nutrition and practical food cooking demonstrations were delivered to 68 community facilitators (26 percent women) and 1,243 VESA leaders (40 percent women). The training was further cascaded to VESA members and other targeted community groups using different platforms.

A Complaints and Feedback Mechanism (CFM) was also designed for project beneficiaries, as part of the project's accountability efforts. Accordingly, beneficiaries access the service through their village design teams, RUSACCOs and project officers. Moreover, beneficiaries were encouraged to raise their complaints during various occasions, including trainings, meetings and general assembly meetings, to get feedback from the community through their village design teams and project officers.

CFMs were also incorporated in new scale-up and existing villages during the index design data collection process that was conducted for the 2021 R4 scale-up in Amhara. This will allow WFP to ensure the quality and effectiveness of assistance, establish stronger relationships with communities, strengthen accountability and transparency of local governments and implementing partners, establish links to accountability, while also ensuring the dignity, respect and security of affected populations.

Monitoring, Evaluation and Learning

Following dry spells during the 2019 agricultural season, a total of approximately US\$80,000 in insurance payouts were triggered to 6,157 farmers in Ethiopia. As a result, payouts distribution took place in May 2020 for 5,103 households in Tigray. A Beneficiary Contact Monitoring (BCM) survey was conducted shortly after to capture farmers' access and use of the insurance payouts as well as participants' satisfaction on the claim settlement process. The survey showed that almost half of the payout amount was spent on agriculture, indicating that majority of farmers are reinvesting in agricultural production and income-generating activities after a failed season. The second highest payouts' expenditure was on food purchases, with R4 participants having improved their food consumption and diet diversity compared to the previous year. Farmers also spent their payouts on insurance premium payments, indicating that participants are starting to see the value of insurance and are beginning to invest in it with their own money. In addition, over 80 percent of participants were satisfied with the timeliness of the payout, the information received, and the ease of access.

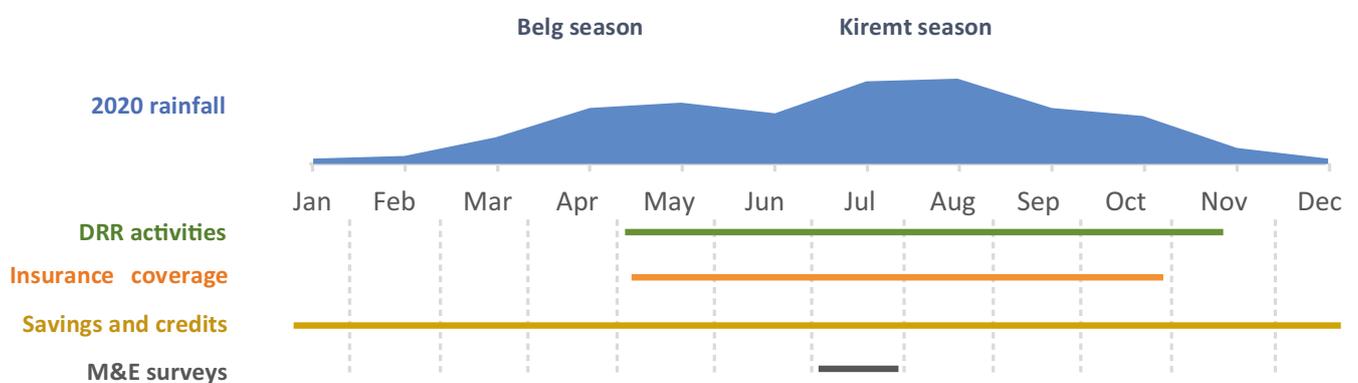
Outlook for 2021 and beyond

The ability of the R4 Rural Resilience project to ensure the food security, nutrition, livelihoods and climate risk resilience of vulnerable households and smallholder farmers in Tigray (up to 185,000 households by 2022 in Ethiopia) will be greatly undermined by the impacts of the conflict and insecurity situation and the elimination of the income generating activities (IGAs) for many households in the Tigray region. R4 beneficiary households will require immediate support to prevent households from falling into extreme poverty and re-establish their livelihoods to ensure achievements of the project in reducing vulnerability and building resilience are not lost.

WFP will work closely with its partner in Tigray, REST, to conduct a more in-depth, on the ground assessment by their field-level staff to determine the status of the existing R4 beneficiaries in accessible and partly accessible *woredas*. The assessment will quantify the number of beneficiaries that are still present in each *woreda* and those that are potentially displaced. This assessment will allow WFP and REST to determine the number of households that require a recovery package and co-develop a logistics plan for distributing these packages to the accessible households that were enrolled in the R4 programme in 2020.

WFP will continue implementing R4 activities and expanding to new districts and villages in the Amhara region during 2021, with a focus on expanding activities implemented through VESAs to ensure R4 participants continue to build their savings, access new livelihood opportunities and transition to accessing insurance through their own cash contributions.

Figure 10. Ethiopia 2020 seasonal calendar





R4 farmer Josephine Mutwii standing next to a water pan on her farm in Kitui County, Kenya.

WFP/Alessandro Abbonizio

R4 Kenya 2020

Since 2017



12,206 households (48,824 people covered)

83 percent of insured are women

Kitui and Makueni Counties

APA Insurance, MoALF&I, County Governments of Kitui and Makueni, Kenya Agriculture and Livestock Insurance Pool, Pula Advisors

Global Affairs Canada, USAID

KEY ACHIEVEMENTS

- Registered 12,206 farmers for the 2020 October- December Short Rains season in the semi-arid region of Kenya.
- Expanded the insurance coverage to a new district, benefitting an additional 3,500 farmers.
- Introduced a Hybrid Index Insurance product with two payout windows.

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), County Governments of Kitui and Makueni 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) and Hybrid Index Insurance (HII). 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. With the hybrid index, AYII is coupled with a weather index, which protects farmers against insufficient rains at the onset of the season as well as early cessation of rains before crop maturity. 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, as well as creating soil and water conservation structures. When a major shock affecting the community hits, compensation for losses prevents farmers from selling productive assets and stimulates faster recovery.

2020 SHORTS RAINS SEASON: BELOW-AVERAGE RAINFALL LIKELY TO NEGATIVELY IMPACT CROP PRODUCTION

The 2020 Short Rains season was characterized by a mixed performance across the country, with below-average rainfall across eastern and central Kenya, with some localized areas recording 25-50 percent of average, while western, northwestern and southern parts of the country received above-average rainfall. Due to below-average rainfall in October, the onset of rains was delayed by 20-30 days. Reduced access to quality agricultural inputs such as certified seeds and fertilizer and incidence of pests and diseases also remain a challenge for smallholders in the Arid and Semi-Arid Lands (ASALs) and will affect average crop production, foreseen to be lower once harvest is completed in January and February 2021. The Government of Kenya and development partners have invested in robust surveillance systems and in training local authorities on the Desert Locust outbreak, contributing to infestation controls being conducted during the year, with low incidence observed among R4 farmers. The Integrated Food Security Phase Classification (IPC) analysis for both Kitui and Makueni followed the ASAL trend, with both counties classified as experiencing Stressed (IPC Phase 2) outcomes.

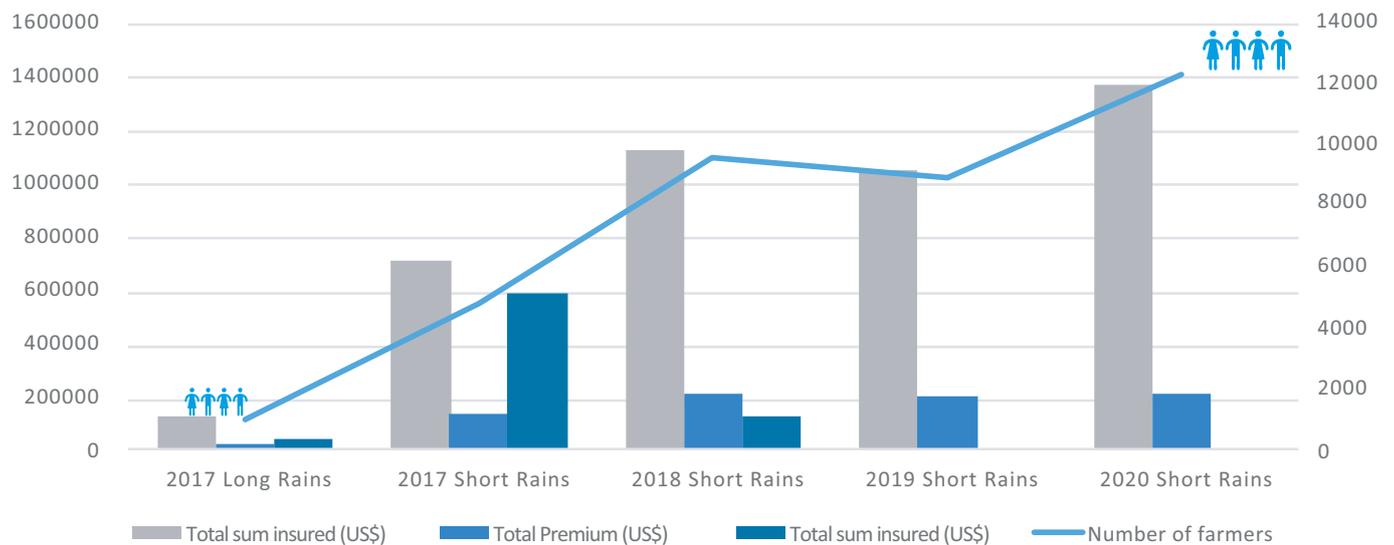
Sources: FEWSNET. 2020. Kenya Food Security Outlook Update.
<https://fews.net/east-africa/kenya/food-security-outlook-update/december-2020>.

Project Status

In Kenya, R4 managed to increase its participants by 37 percent in 2020 compared to 2019, expanding operations to an additional district in the semi-arid region. A total of 12,206 farmers (83.5 percent women) signed up for the 2020

Short Rains season (October-December) in Kitui and Makueni counties. Over 8,600 (84 percent women) farmers in Kitui county benefitted from an Area Yield Index Insurance (AYII) product, whereas approximately 3,500 (80 percent women) new farmers in Makueni county participated in the Hybrid Weather-Area Yield Index Insurance scheme.

Figure 11. Evolution of R4 in Kenya's semi-arid (2017-2020)



COVID-19 IMPACTS ON R4 OPERATIONS IN KENYA

Kenya has hardly been hit by the economic impacts of the pandemic, leading to a rise in unemployment, loss of GDP and reduced household income. COVID-19 movement restrictions imposed by the Government affected R4 operations, largely dependent on routine monitoring, extension support and farmers' capacity building activities, regularly conducted in the field. As a result, the R4 programme adapted its beneficiary communication modalities to ensure continued outreach to farmers. In partnership with Pula Advisors, the 2020 Short Rains sign up process was carried out through phone calls. Moreover, farmers sensitization on R4 and insurance was conducted through a local radio station. Regular programme monitoring activities were negatively affected by COVID-19 restrictions, with WFP not being able to undertake its annual Outcome Monitoring data collection. These activities will be prioritized in the next year, as soon as conditions allow it.

Risk Reduction

R4 farmers have long standing experience with risk reduction approaches, having participated in the former Food Assistance for Assets (FFA) programme, phased out in 2018. Building on the knowledge acquired with soil and water conservation structures, R4 farmers were required to apply terraces and/or zai pits in their farms as main condition for receiving the insurance coverage. In 2020, 12,206 farmers signed up to the programme according to the main conditionalities to access insurance, which include:

- Having one acre of land available for cropping activities.
- Being engaged in the production of drought resistant crops (sorghum, millet, cowpeas, green grams).
- Applying new terraces and zai pits for greater water retention and soil fertility.

Increasing access to quality inputs and to rural extension services remained a challenge for the R4 programme in 2020. Lessons are paving the way for mainstreaming this component in 2021, with increased support to the Counties' agricultural departments being a priority.

Risk Transfer

WFP Kenya is acting as a catalyst in connecting County governments, private sector and partners to offer insurance products for underserved markets in the semi-arid region. Entering its fifth season in 2020, the programme in Kitui county has been offering an Area Yield Index Insurance (AYII) product to smallholder farmers, aligning to the priorities set by the Ministry of Agriculture, Livestock, Fisheries and Irrigation (MoALF&I) under its Kenya Agricultural Insurance Programme (KAIP). The AYII product has evolved to adopt Agro Ecological Zones (AEZs) as main Unit Area of Insurance (UAI),¹⁴ aiming at capturing the great variations observed within administrative county boundaries.

Closure of 2019 Short Rains season in the first quarter of 2020

In early 2020, following the crop cuts exercise for the 2019 Short Rains season, no payouts were triggered for the 8,862 farmers (85 percent women) registered in 2019. The yield was generally good with approximately 80 percent of target farmers harvesting more than 50 Kgs on average for Kitui region. The MoALF&I, through APA Insurance, disbursed a 50 percent premium subsidy to the R4 programme for the 2019 season, amounting to US\$93,000 as part of the Kenya Agriculture Insurance Programme (KAIP). The subsidy allowed WFP to save on costs and increase targets for the 2020 season.

Due to COVID-19 movement restrictions imposed by the Government of Kenya in March 2020, WFP and Pula Advisors delivered robocalls and SMS messages to farmers with the results of the 2019 season. On average, approximately 90 percent of households accepted the call and 71 percent listened to the message until the end. Furthermore, as part of WFP's complaints and feedback mechanism, a total of 55 farmers reached out to WFP Kenya's Toll-Free number to submit their questions on payouts and on programme implementation.

14. This refers to a geographical area whose farmers are expected to experience similar agronomic conditions and similar systemic exposures.

Testing the Hybrid Weather-Area Yield Index in Makueni County

The 2020 season saw the introduction of a new index product and expansion to an additional semi-arid county. Combining the Weather Index (40 percent of TSI¹⁵) and the AYII (60 percent of TSI), the hybrid product was designed by Pula Advisors, with a dry run completed in 2019. Over 3,500 farmers have been selected to test the Hybrid Index in three AEZs across the county for cow peas, green grams, millet or sorghum.

Assessing payouts for the Weather Index component in Makueni County

The payout assessment for the hybrid product includes assessments of both the Weather Index and the Area Yield Index components. The Weather Index is composed of three windows, spanning from October to December. For the 2020 season, based on the analysis of satellite data, the weather index did not trigger any payouts in the targeted AEZs. Ongoing crop cuts in both Makueni and Kitui county will inform the extent of the losses under the AYII in the first quarter of 2021.

Scaling up the 2020 Short Rains in the third and fourth quarters of 2020

WFP and Pula Advisors successfully collaborated during the 2020 Short Rains sign ups, succeeding in insuring 12,206 farmers (83.5 percent women) in Kitui and Makueni counties in September 2020, increasing the number of farmers insured by 37 percent compared to last year. In total, the sum insured amounted to US\$1,356,222 (KES 146,472,000) and premiums paid by WFP amounted to US\$205,768 (KES22,626,225).

The programme adapted its registration modality to phone-based surveys due to COVID-19 movement restrictions. Complementary face-to-face interviews were a necessary approach in new insured areas to build trust among farmers. Lessons were drawn from the challenges of using remote technology for beneficiary outreach, including:

15. The Total Sum Insured (TSI) is the maximum value that is paid to farmers in a Unit Area of Insurance in the event of a total loss.

- Network challenges in remote rural areas requiring recalls at different days and times.
- Low literacy levels calling for simplified registration questionnaire in local language.
- Leverage existing survey agents who have been trained on insurance and agricultural-related questions to ensure effective communication with farmers.

Ensuring farmers' awareness of the programme and its conditionalities remains a critical component of the R4 sustainability approach. With the restrictions and challenges imposed by the pandemic, WFP worked on innovative ways to communicate with farmers in 2020, including a radio talk show aired in partnership with Pula, the Makueni Department of Agriculture and the local radio Ene FM radio station. The show allowed for the dissemination of several topics, including, WFP's mandate and mission in Kenya, R4 objectives, participants' eligibility criteria and insurance compensation procedures. This experience proved that mass media channels can be an effective and more accessible platform for sharing more detailed information on microinsurance for local communities if done on a regular basis.

Partnerships with Kenya's Rome Based Agencies

The Kenya Cereal Enhancement Programme – Climate Resilient Agricultural Livelihoods (KCEP-CRAL), jointly implemented by FAO, IFAD and WFP, launched its insurance e-wallet during the 2020 Long Rains season (March to May). The insurance coverage complements the input e-voucher package offered to participant farmers in the semi-arid. With funding from IFAD's "Adaptation for Smallholder Agriculture Programme" (ASAP), WFP shared its experience with the R4 programme and provided technical support to KCEP-CRAL for the design of the KCEP-CRAL insurance product. In coordination with key insurance partners also supporting the R4 programme, more than 8,100 farmers in Kenya's coastal and semi-arid region registered for an Area Yield Index Insurance (AYII) - valued at an estimated premium of U\$140,000 for green grams, cow peas, maize and sorghum.

Gender and Nutrition

WFP Kenya Country Strategic Programme (2018-2023) prioritizes gender transformative approaches in all its programmes and operations. In this context, R4 intends to integrate the Gender Action Learning System (GALS) methodology as a gender transformative tool and as part of its sustainability strategy. The GALS intends to promote changes in attitude and behaviour, discuss access to resources between men and women, and expose social norms and policies that shape gender roles in the household and communities. These social factors can ultimately influence the vulnerability of men and women to shocks to different degrees, for instance on norms related to asset ownership and access to financial services. In 2020, a consultant was hired to support design of a GALS implementation plan, which should be completed in 2021.

Nutrition-sensitive message cards for Village Savings and Loans Associations (VSLAs) were developed to support the integration of nutrition-related topics during community group discussions. The messages are aligned to national guidelines on health and agrinutrition, representing a step further in strengthening the impacts of R4 on food and nutrition security. Roll out in selected VSLA groups is planned for 2021.

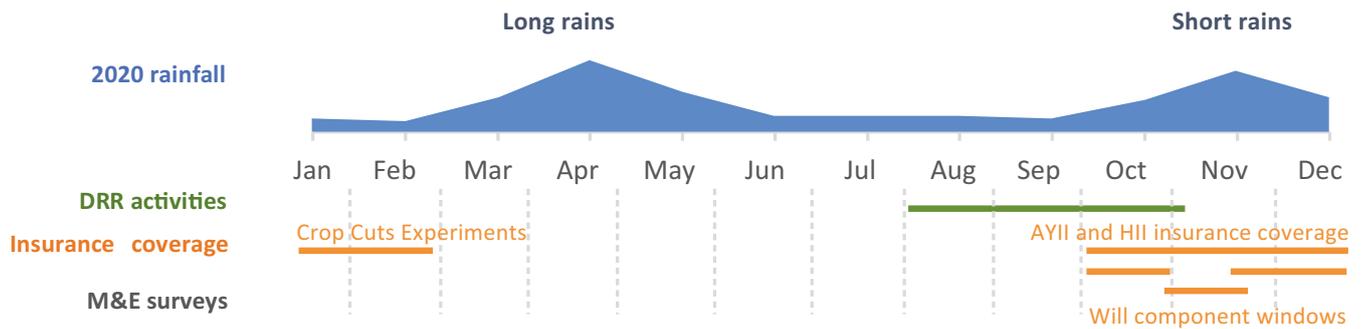
Outlook for 2021 and beyond

WFP Kenya is striving to upscale integrated risk management approaches in Kenya's semi-arid as part of its food systems portfolio. The expansion of the R4 programme in 2020 paved the way to define more ambitious targets for 2021, aiming to reach between 14,000 and 17,000 households, and expanding geographically to a third semi-arid district.

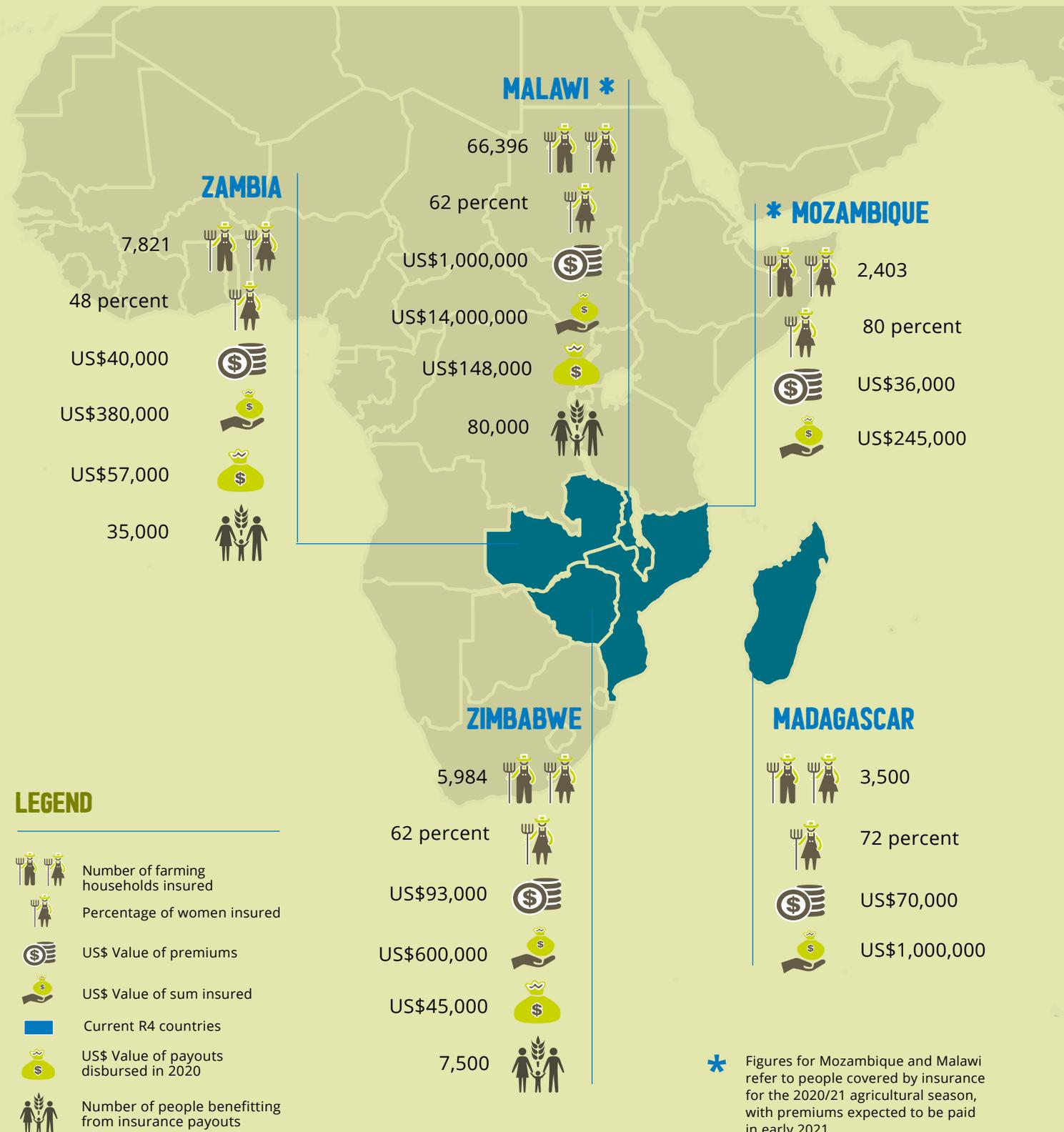
In 2021, the programme will also introduce the Risk Reserves component in an effort to strengthen the programme's risk management strategy. In collaboration with World Vision Kenya, R4 farmers will be organized into Village Savings and Loans Associations (VSLAs), promoting R4 households' capacities to save, invest in income generating activities and gradually increase their premium payment contributions.

The collaboration with County Governments, through their Departments of Agriculture will also be reinforced, with more investments channeled to extension services to improve farming practices and value chain efficiency.

Figure 12. Kenya 2020 seasonal calendar



R4 SOUTHERN AFRICA 2020





R4 farmers and their children in the field in Amboasary, Madagascar.

WFP/Mathieu Dubreuil

R4 Madagascar 2020

 Since 2020



3,500 households (17,500 people covered)



72 percent of insured are women



Anosy and Androy Regions



ARO, CTAS, DEFIS (IFAD), GIZ, Ministry of Agriculture, Livestock and Fisheries, Pula Advisors, OTIVTANA, Réseau VSLA



SDG Fund

KEY ACHIEVEMENTS

- 2020 marked the first year of R4 implementation in Madagascar, with the initiative insuring 3,500 farmers for the 2020 dry and rainy seasons.

R4 Programme in Madagascar

In 2020, implementation of R4 was rolled out in the Anosy and Androy regions of Madagascar, thanks to funding from the Sustainable Development Goals (SDG) Fund. The initiative builds on the Joint Programme “*Development of an integrated social protection system for Madagascar, sensitive to the needs of people living with disabilities*”, implemented by various UN agencies, including WFP, UNICEF, ILO and UNFPA. The programme aims to improve the effectiveness of social protection interventions through an integrated package of programmes to protect households from risks and promoting human and productive investments, adapted to the needs of poorest households, including people living with disabilities.



Risk Reduction component: In Madagascar, R4 supports farmers reduce their post-harvest losses (PHL) by providing post-harvest support, promoting improved storage and transformation techniques and linkages to markets. Under this component, WFP delivers trainings to increase farmers' awareness on key biological and environmental factors leading to harvest losses. Capacity development focuses on preventing these issues during five stages: harvesting, drying, threshing, solarisation and on-farm storage. In addition, WFP provides field support and new farming equipment, such as hermetic grain bags and silos.



Risk Transfer component: By transferring the risks of agriculture loss to a third party, insurance subsidies help stabilize revenues of vulnerable smallholders who become more inclined to invest in their agricultural production. Over the medium term this will translate in increased agricultural production. Under this component, farmers gain access to Area Yield Index Insurance (AYII) by participating in PHL training and by adopting post-harvest technologies.



Risk Retention and Prudent Risk-Taking components:

Insurance coverage is delivered through the Village Savings and Loans Associations (VSLA) groups. The integrated strategy aims to support farmers from various types of vulnerabilities, including limited financial means. Farmers receive trainings that help them understand how the insurance product works, are sensitized on the importance of savings, and learn best practices on how to run a VSLA group efficiently. Ultimately, the accumulated savings will help farmers progressively bring their own cash contributions to pay for increased portions of the insurance premium over the years.



2019/20 AGRICULTURAL SEASON: DROUGHT COMPOUNDED BY THE IMPACTS OF THE COVID-19 PANDEMIC HAS LED TO CRITICAL LEVELS OF FOOD INSECURITY IN SOUTHERN MADAGASCAR

The Integrated Food Security Phase Classification analysis released in December 2020, and covering the October-December period, estimated approximately 1.06 million people to be facing high levels of acute food insecurity (IPC Phase 3 or above), including 204,000 people in Emergency (IPC Phase 4) and 859,000 in Crisis (IPC Phase 3). The situation is expected to deteriorate between January to April 2021, with approximately 1.35 million people projected to be highly food insecure (IPC Phase 3 or above). The impacts of COVID-19, coupled with the long drought during the 2019/2020 crop year and subsequent crop losses, seriously affected the availability and access to food in the country. The Rapid Crop and Food Security Assessment conducted in the main producing districts for the 2019/20 cropping season highlighted severe drought impacts in southern producing areas, with a decrease in rice production amounting to over 50 percent compared to last year. COVID-19 preventative measures exacerbated food insecurity especially in southern Madagascar, negatively affecting the livelihoods and income of already vulnerable communities, pushing them into further distress. Vulnerable households in the most drought-affected communes of the Southwest were found to have poor food consumption score (FCS). Moreover, poor households are accumulating debt, selling land as well as reducing the frequency of their daily meals. Households' food consumption is expected to deteriorate during the first quarter of 2021, with very poor households likely to start selling their assets and animals.

Sources: FEWSNET. 2020. Madagascar Food Security Outlook. <https://fewsn.net/southern-africa/madagascar/food-security-outlook/october-2020>; IPC. 2020. IPC Acute Food Insecurity and Acute Malnutrition Analysis. <https://reliefweb.int/report/madagascar/madagascar-ipc-acute-food-insecurity-and-acute-malnutrition-analysis-october-2020>; WFP. 2020. WFP Madagascar- How COVID-19 is threatening food security and nutrition in Madagascar. <https://www.wfp.org/publications/wfp-madagascar-how-covid-19-threatening-food-security-and-nutrition-madagascar>.

Project Status

In 2020, WFP Madagascar started the implementation of the R4 Initiative, successfully insuring 3,500 farmers (72 percent women) for the 2020 dry and rainy seasons in nine communes of the Anosy and Androy regions. Farmers were also trained on risk management techniques and Post-Harvest Loss (PHL) management before the beginning of the rainy season.

Compounded by the negative impacts of the COVID-19 pandemic, the Southern part of Madagascar suffered from a severe drought during the first quarter of 2020. Vulnerable farmers went through difficult times and some had to use negative coping strategies, such as selling productive assets. Farmers actively involved in VSLAs were able to preserve their assets and use their individual and group savings to face daily needs.

In addition to the coordinated emergency response with cash and food distribution, the insurance product was distributed through active VSLAs, that have been supported throughout the year with best practices on savings groups management.

Risk Reduction

The compounded impacts of the drought and COVID-19 deeply affected the targeted population, making it difficult to mobilise farmers on large-scale collective work or sustainable agriculture practices as a prerequisite to join the risk transfer component of the programme. WFP's priority focused on ensuring the efficient storage and preservation of the remaining harvest to avoid additional income and food loss. As a result, 3,500 farmers (72 percent women) were trained and supported to apply best practices and tools for post-harvest management.

COVID-19 IMPACTS ON R4 OPERATIONS IN MADAGASCAR

COVID-19 posed a number of challenges to R4 field operations in Madagascar, being also the first year of R4 implementation in the country. The pandemic delayed insurance implementation and limited face-to-face sensitization and training activities. Nonetheless, WFP Madagascar delivered key insurance messages through radio programmes and distributed the insurance coverage during regular Village Savings and Loans Associations (VSLAs) meetings to avoid large group gatherings. In addition, the conditionality to access insurance was favoured towards Post-Harvest Loss (PHL) management activities, rather than the conventional asset creation approach, with a focus on preserving and storing yields, given the precarious food security situation.

Risk Transfer

In November 2020, 3,500 farmers were insured for the 2020/2021 agricultural campaign, covering both the dry and rainy seasons. WFP paid the full insurance premium amounting to US\$69,253, with a total sum insured of US\$1,015,000. The insurance product is an Area Yield Index Insurance (AYII), that compensates farmers if their harvest falls below a predefined threshold. For the rainy season (November 2020 to April 2021) the insurance covers maize, while for the dry season (May 2021 to October 2021), the product covers both maize and beans.

COVID-19 delayed the implementation of insurance-related activities, with movement restrictions limiting in-person meetings, sensitization and training activities. As a result, WFP Madagascar conducted a sensitization campaign in the targeted area through various type of radio programmes and meetings about insurance, savings, and other risk management topics. Insurance was distributed during regular Village Savings and Loans Associations (VSLAs) meetings to avoid large group gatherings.

WFP conducted Training of Trainers (ToT) with over twenty participants from local NGOs, VSLAs, the regional office for communication and the district office of Farmers Organization. Trainers were then expected to visit VSLAs members in the nine targeted communes and conduct sensitization on agriculture insurance. Together with staff from the MFI partner OTIVTANA, trainers also supported farmers during the insurance registration process and the MFI group account creation.

Risk Retention and Prudent Risk-Taking

R4 in Madagascar has been strategically implemented in partnership with the IFAD-funded project,¹⁶ supporting financial inclusion and value chains development. The two programmes joint efforts to allow access to insurance but also to formal financial systems for IFAD-supported VSLAs members. IFAD's preliminary study identified the support needed for the VSLAs. As a result, WFP's insurance product was offered to the identified active VSLAs to build the sustainability of the risk transfer component, but also to support the savings component. Only members of active VSLAs can access the insurance product. Other types of support, such as trainings for diversified income generating activities, are planned for the other VSLAs to allow them to join the insurance programme in the future.

Gender and Nutrition

In addition to R4 interventions, specific trainings and market access support were provided to targeted group of women to transform cassava into gari¹⁷ through WFP-supported gari transformation programme. The group delivered 3,000 kg of gari to the food bank as their first production.

A celebration for Rural Women's Day was organised in one of the R4 communes to celebrate rural women. The event aimed to highlight the decisive role that women play in food security and nutrition, but also to stress their vulnerability, with women not having access to productive assets, public services such as education and health, and infrastructure such as water and sanitation.

In addition, the global campaign "Orange the World" consisting of 16 days of activism against Gender-Based Violence was translated into the local language in one of the R4 commune in Ambovombe. The objective was to draw the attention of regional and local decision-makers on the need to develop effective mechanisms for the prevention and management of gender-based violence as well as to raise awareness among the population about the devastating consequences of violence against women through radio dramas and info commercials.

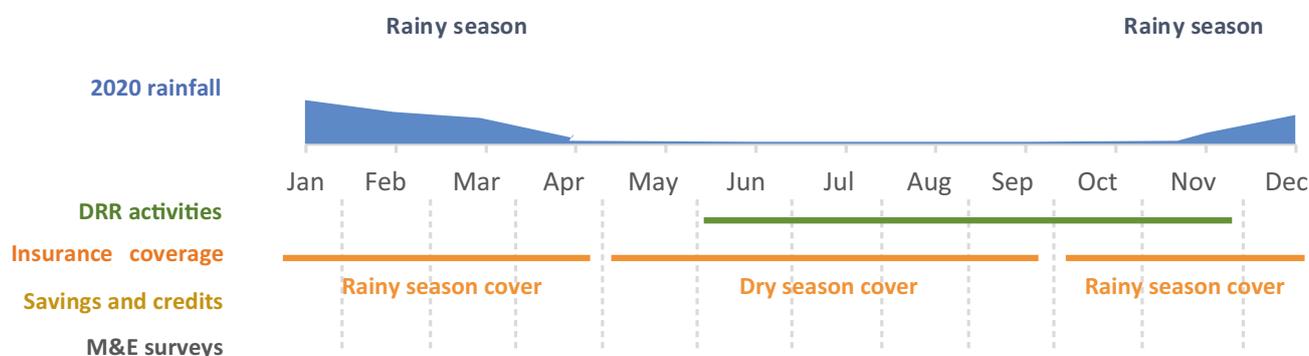
Outlook for 2021 and beyond

In the second year of intervention, R4 activities are planned to fully cover all four components. Risk reduction activities will be identified and implemented within the Joint Programme on social protection but also with other UN agency partners. The goal is to showcase the efficiency of a joint programme, addressing different types of risks through different types of interventions, offering the best fitted solutions for the most vulnerable population.

Efforts will be made to sensitize and encourage first-year insurance participants renewing their insurance subscriptions to voluntarily contribute a part of their insurance premium in cash. Farmers will be supported throughout the agricultural campaign to monitor their crop development. This will also serve to collect and analyse their understanding and knowledge of agriculture risk management and insurance to better adjust the product and systems for year two.

Additional funding has been sought to expand the risk retention and prudent risk-taking components, through trainings and credit line support to VSLAs to drive these savings groups to self-sufficiency in the near future.

Figure 13. Madagascar 2020 seasonal calendar



16. IFAD's DEFIS project. For more information on the project, please refer to this [link](#).

17. A type of locally processed cassava flour/flakes. When cassava is processed into gari, its shelf life is extended and fortified during transformation. Gari contributes to food diversification as well as representing a source of income.



Farmers participating in a Village Savings and Loans (VSL) group in Malawi.

WFP/ Badre Bahaji

R4 Malawi

2020

 Since **2015**



66,396 households (331,980 people covered)*



62 percent of insured are women



Southern Region



CUMO, DoDMA, DCCMS, Emmanuel International, CARE, Find Your Feet FISD, Hannover Re, Insurance Association of Malawi, IRI, MoA, MoFEP&D, NICO Insurance, Plan International Malawi, Pula Advisors, UoR, UP, World Vision Malawi, Farm Radio Trust



SDC, USAID, BMZ, DFID, Flanders, Norway, Adaptation Fund

* This figure refers to the number of farming households insured for the 2020/21 season. Insurance premiums are expected to be paid in early 2021.

KEY ACHIEVEMENTS

- Improvement of the insurance product to include other risk factors demanded by participating households, with farmers now contributing up to 25-50 percent of insurance premium in cash.
- Scaled up the Participatory Integrated Climate Services for Agriculture (PICSA) approach to reach 11,800 households in eight districts through extension officers and lead farmers.
- Communicated messages on COVID-19 awareness and preventive measures through an integrated radio program with the help of WFP's partner Farm Radio Trust.
- Roll out of the Adaptation Fund (AF) project, allowing scale-up of insurance from 39,000 households in 2019/20 to nearly 67,000 households in 2020/21.
- Implementation of a graduation strategy which saw 60,904 households (47 percent women) implementing FFA activities without cash/food transfers, while accessing social services through the creation and maintenance of communal assets.

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, helping 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 Framework for Climate Services), agricultural insurance, savings and diversification of livelihoods, as well as market access 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), focusing 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 follows:



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 component: By participating in WFP's FFA programme and investing their time in building homestead assets to improve productivity, farmers access Insurance cover in all the eight districts (Balaka, Zomba, Phalombe, Mangochi, Machinga, Nsanje, Blantyre, Chikwawa). Smallholder farmers work for an average of 14 days on this component. Farmers who have enrolled on the insurance programme for three years are requested to make partial cash contributions towards the insurance premium. As farmers gradually provide own cash to purchase insurance, the number of working days under this component decreases.



Risk Retention and Prudent

Risk-Taking components: 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.



2019/20 AGRICULTURAL SEASON: ABOVE-AVERAGE SEASON LEADING TO INCREASED CROP PRODUCTION

The 2019/2020 agricultural season was mostly above average, leading to increases in the production of most crops. The Ministry of Agriculture and Food Security (MoAFS) estimated crop production at approximately 3.7 million tons for maize, about 11 percent above last year and 28 percent above the five-year average. Nonetheless, some districts in southern Malawi registered below-average production due to poor rainfall performance. Given the 2019/20 above-average production, cereal stocks at the household level will mainly be above average for most households through the end of the consumption season in March 2021. However, those areas that recorded reduced production due to localized climate-related shocks will be below average. In December 2020, the Integrated Food Security Phase Classification analysis estimated Minimal (IPC Phase 1) outcomes to prevail across most of the country. However, some districts in southern Malawi and one district in central Malawi experienced localized production shortfalls. Access to food and incomes in these districts are expected to be insufficient to meet all food needs. Stressed (IPC Phase 2) outcomes are expected in these areas in the presence of humanitarian assistance. COVID-19 restrictive measures particularly affected Malawi's urban population, with low-income households in several cities expected to be facing Crisis (IPC Phase 3) outcomes.

Sources: FEWSNET. 2020. Malawi Food Security Outlook. <https://fews.net/southern-africa/malawi/food-security-outlook-update/december-2020>; FEWSNET. 2020. Malawi Food Security Outlook June 2020 to January 2021. <https://fews.net/southern-africa/malawi/food-security-outlook/june-2020>.

Project Status

In 2020, WFP Malawi provided support to smallholder farmers through a number of integrated resilience building interventions, building on WFP's Food Assistance for Assets (FFA) programme, in the districts of Balaka, Mangochi, Machinga, Zomba, Phalombe, Blantyre, Chikwawa and Nsanje. FFA activities were aimed at increasing agricultural productivity by supporting 128,000 households in the eight districts with land resource management, irrigation, crop and livestock production, and reforestation, among other activities. FFA serves as WFP Malawi's cornerstone for integration with other interventions, including: Climate Services (CS) which includes the Participatory Integrated Climate Services for Agriculture (PICSA) methodology; Forecast based Financing (FbF); Integrated Risk Management (IRM) activities that provide access to microinsurance, savings and credit; and Smallholder Agricultural Market Support (SAMS), capacitating farmers with knowledge and skills for post-harvest loss management and marketing produce. Other complementary activities provided to farmers include Water, Sanitation and Hygiene (WASH), nutrition-sensitive activities, Social Behaviour Change Communication (SBCC) and gender mainstreaming.

COVID-19 IMPACTS ON IRM OPERATIONS IN MALAWI

With the outbreak of the COVID-19 pandemic, the Government of Malawi enforced preventive measures to minimize the spread of the virus, including suspension of cross-border travel, restrictions on public transport, suspension of international flights except for essential services and closure of all schools, colleges and universities. As more COVID-19 cases were confirmed in the country, strict prevention measures were reinforced, impacting WFP's work and operations, including limitations on in-person gatherings and travel for WFP staff. This necessitated some programmatic adjustments with operational implications in adherence with COVID-19 restrictions and prevention measures. Activities such as trainings, radio listening group meetings as well as coordination meetings were mostly affected as participation was restricted to a limited number of individuals. Virtual trainings and workshops were organized to support partners and field staff continue with the implementation of project activities. Field activities were conducted at a reduced scale in compliance with preventative measures imposed by the Government, while sanitary equipment including Personal Protective Equipment (PPE) was distributed to support continuity of operation in all project sites. In addition, COVID-19 preventive messages were disseminated through Farm Radio Trust, a radio platform contracted to support dissemination of climate messages.

Risk Reduction

Resilience building activities were only funded 50 percent of requirements in 2020, necessitating a reduction of households covered through geographical retargeting, based on a historical shock analysis and focusing on food-insecure households living in the areas repeatedly affected by shocks. Based on the historical data analysis on the frequency of occurrence of dry spells and floods covering the last nine years (2011-2019), WFP refined its geographical targeting to better target the most food-insecure populations in Southern Malawi, also aligning to the Integrated Context Analysis (ICA) prioritization. Seasonal Livelihood Plans (SLP) workshops were held in the targeted districts followed by 61 Community-Based Participatory Planning (CBPP) exercises to ensure the integration of all planned activities based on the community needs. WFP invested significantly in the ICA to ensure capacities of local stakeholders are built to support the process. Academic institutions have also been adequately engaged and supported to manage the process going forward.

More focus under the risk reduction component this year was on the implementation of a graduation strategy, which saw FFA participating households implement some activities without cash/food transfer. Notably, WFP significantly reduced cash/food transfers while ensured access to social services through the creation and maintenance of communal/group assets, like check dams and roads, directly supporting aggregation and market access activities. Linkages to markets were also promoted during the season, with horticulture farmers participating in FFA-supported irrigation schemes supplying vegetables to Peoples Trading Centre Limited (PTC), a private company dealing in horticulture with over 51 shops across the country. Farmers are supplying vegetables on weekly basis and have signed a forward contract¹⁸ with the company.

Further, in collaboration with WFP's Vulnerability Analysis and Mapping (VAM), to enhance monitoring of assets being created, WFP Malawi successfully piloted the use of Unmanned Aerial Vehicles (UAV) imagery for the detection of 73 small assets and their maintenance status. This will go a long way in improving monitoring of assets in the coming season.

¹⁸. A forward contract is a customized contract between two parties to buy.

Risk Transfer

Based on the lessons learnt from the 2019/2020 season regarding some challenges¹⁹ with Weather Index Insurance (WII), WFP, together with the risk modelling institution Pula Advisors and the International Research Institute for Climate and Society (IRI), scaled up Area Yield Index Insurance (AYII) products to all the eight implementing districts. The readjustments from WII to AYII created greater expectations among participating households and are expected to increase buy-in among farmers, fostering scaling up of insurance.

Following the roll out of the Adaptation Fund (AF) project, WFP Malawi scaled up provision of insurance from 38,000 farmers in the 2019/20 season to almost 67,000 in 2020/21, with insurance premium expected to be paid in early 2021. Premium contributions have also grown, although not to the expected level, due to dropping out of farmers resulting from the geographical retargeting and inability to make cash contributions in some areas. Approximately US\$55,000 of premium contributions were paid by farmers for the 2020/21 season in 2021.

Following dry spells registered during the 2019/20 agricultural season in four districts (Blantyre, Zomba, Mangochi and Phalombe) approximately US\$148,000 in insurance payouts were triggered by both the AYII and WII products, benefitting over 80,000 people.

During the year, WFP continued to engage different stakeholders, including the Government, the Insurance Association and academia to support their capacities for taking over WFP's roles and responsibilities to manage financial services interventions, including insurance. The discussion with Malawi University of Science and Technology (MUST), IRI, and the Insurance Association, mapped out the way forward for in-house responsibilities including, among others, the management of expert services currently offered by international partners and digitisation of insurance processes - such as premium collection and payout distribution- to be taken over and managed by the insurance sector. Likewise, IRI and

¹⁹. The WII product presented some challenges, including the fact that it was not entirely meeting the population's needs, as farmers in the previous season suffered from weather induced shocks as well as non-weather induced shocks, including Fall Army Worms. As a result, farmers requested a more comprehensive insurance cover that would consider multiple risks contributing to yield loss.

WFP will support the Department of Climate Change and Meteorological Services (DCCMS) and MUST to develop Disaster Risk Management and Climate Science curricular programmes both at undergraduate and postgraduate levels to build in-country knowledge and capacities.

Risk Retention and Prudent Risk-Taking

While most of the Village Savings and Loans (VSLs) groups were formed by women (69 percent), this year saw an increase in the number of men and youth participating in savings groups. With over \$650,000 saved by approximately 38,000 farmers, a strong variation has been noted between the highest and lowest saving groups/individuals, indicating the need to work on improving the savings activities for the lowest saving groups/individuals. In 2020, WFP worked with the Foundation for Irrigation and Sustainable Development (FISD) to trial a revolving fund²⁰ to analyze whether this could improve the capital base for VSLAs as well as provide a short-term financing instrument, allowing participants to pursue meaningful and more rewarding enterprises. The pilot provided valuable lessons in the implementation of VSLAs, which could be scaled up in the coming season to target the lower level groups, that are facing challenges to raise initial capital to finance the savings.

Moreover, WFP identified areas of collaboration with MUST, including the development of digital solutions to support efficient savings operations and improvement of VSLA activities for the upcoming season. Mobile banking platforms will be considered to make operations and progress tracking easy and ensure security of the group funds.

Climate Information Services

Together with the Government, in 2020 WFP scaled up the PICSA methodology to reach 11,800 households in eight districts with weather and climate information, through extension officers and lead farmers. Among the PICSA activities were the analysis of historical

climate information and the development of adaptation strategies to the variable and changing climate, using participatory methodologies. Subsequently, agricultural extension officers communicated the 2020/2021 district-specific seasonal rainfall forecasts and the associated agro-advisories to vulnerable communities for their decision-making.

Daily weather updates and weekly agricultural tips were sent to all registered mobile contacts through SMS. Messages to farmers included COVID-19 prevention measures, nutrition messages, post-harvest handling and loss prevention, pests and disease control, and marketing. Moreover, through Farm Radio Trust, a partner supporting the dissemination of climate information services through radio, WFP communicated messages on COVID-19 awareness and preventive measures through the radio program.

Market Access

Under the Smallholder Agriculture Market Support (SAMS) programme and as part of WFP Malawi's graduation model for the livelihoods programme, WFP fostered increased integration and linkages with FFA, IRM, and Home-grown School Feeding (HGSF) activities, targeting surplus and potential surplus producing households with the aim of increasing households' nutrition, diversifying production, and promoting access to markets. SAMS' focus in 2020 included: crop diversification; building partnerships with local stakeholders to boost surplus production for smallholder farmers in targeted districts; context-specific investment solutions across value chains for smallholder farmers; and enhanced FFA and school feeding linkages.

Gender and Nutrition

WFP Malawi mainstreams gender and nutrition considerations in its programming to ensure that i) women are actively participating and hold leadership positions in the project implementation structure and ii) to ensure that assets and activities are nutrition sensitive. The Malawi Country Office (CO) has worked with its partners to ensure that all decision-making entities have 50 percent of women participants in leadership positions,

²⁰ A revolving fund is when a reserve of money (the fund) is used to lend to one or more borrowers. Over a given period, the borrower is expected to repay the original sum that restocks the fund. An additional sum can be charged to the borrower to act as a fee for providing the service.

in an effort to promote gender equality and women's empowerment. In addition, Malawi CO was selected to be part of a joint Rome-based Agencies (RBAs) gender transformative approach project and has contributed to the drafting of a joint concept note. The project will allow WFP Malawi to enhance and reinforce its efforts on gender equity and equality.

In 2020, nutrition activities continued to be implemented as part of the integrated resilience interventions. A number of activities were promoted to influence social behaviour change and adoption of appropriate nutrition practices for improved nutrition at individual, household and community levels, including: care groups; cooking demonstrations and food displays; various media channels and innovation, such as radio programmes and jingles, awareness campaigns through drama sessions, mobile vans, public address system and Social Behaviour Change Communication (SBCC) talking walls. The aim of these awareness raising activities was to disseminate nutrition and WASH messages to prevent malnutrition, particularly targeting children under the age of five and pregnant and lactating women, as well as to strengthen the prevention of COVID-19 in the implementing districts.

Considerable efforts to link and integrate nutrition activities with livelihoods and school meals interventions were also made during the year, where nutrition care groups have benefitted from VSL groups, SAMS, FFA and R4 activities and vice versa. During the year, nutrition SBCC took a centre stage in almost all FFA and integrated risk management activities, which both nutrition and IRM beneficiaries are embracing. All activities took into consideration gender issues that affect nutrition and therefore deliberately supported both women and men to take part in nutrition promotion activities.

Monitoring, Evaluation and Learning

To help reflect on the learnings and experiences from Phase I and II of the SDC funded R4 Southern Africa Programme, and in preparation for a third phase, WFP Malawi convened a virtual national stakeholder consultation workshop, bringing together stakeholders across all relevant sectors. The main objectives of the

workshop included: reviewing the implementation of the IRM interventions, specifically for insurance and climate services; revalidating the lessons learnt and key recommendations from the 2019 Mid-Term Review and examine the adjustments already made; discussing sustainability and exit plan for IRM interventions with a clear capacity development plan for local stakeholders; and gathering inputs from partners on the design of a third phase.

A workshop report was produced, capturing the Malawi country learnings and experiences from partners and stakeholders. Some of the recommendations made during the workshop include: increasing the Government's capacity and its structures to implement IRM activities, with the Adaptation Fund providing a good opportunity for handing over some interventions; and ensuring alignment of activities implemented by partners during implementation. The lessons learnt, key suggestions and feedback from national stakeholders, including from the Mid-Term Review, will be incorporated in the design of the third phase and will inform the exit strategy for some interventions.

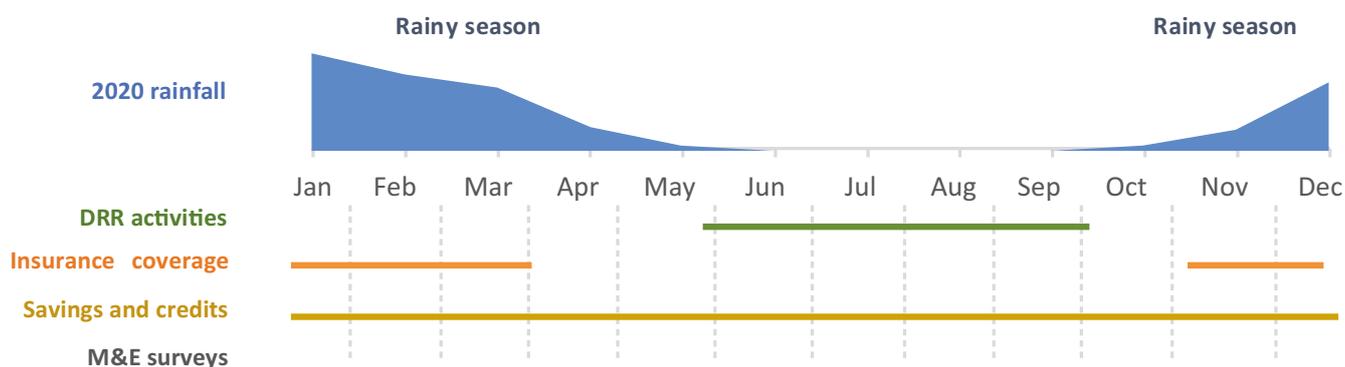
Outlook for 2021 and beyond

WFP Malawi is doubling its efforts to advocate for donor support, allowing it to continue implementation of the IRM activities in upcoming years. With regards to operations, the Country Office will review its processes and implementation modalities to ensure cost-efficiency while continuing to adapt to the changing COVID-19 environment as needed. Lessons learned from the past year will inform the way forward, with the Country Office reviewing how some activities could be digitized to ensure continuity of operations, while minimizing overall risks. WFP Malawi will continue seeking sources of funding to support this digital transformation that would allow for continuation of several interventions without reducing the numbers of people reached. Some of the planned activities for next year include:

- Design of FFA activities: WFP will continue to improve the use of the 3PA tools to ensure that communities are set at the center of the design, with activities fully designed around the needs and root cause barriers of the communities as a whole.

- **Seasonal assessment and index design:** WFP will work with MUST and other stakeholders to institutionalize index design, utilizing expertise in mathematical modelling, ICT, climate sciences, DRM, mobilising and deploying technical capabilities necessary to drive the development of in-house expertise.
- **Training and awareness raising:** WFP will work with different stakeholders to develop tailor-made training programmes on IRM, learning from practical work being carried out by development partners in Malawi. In addition, WFP and IRI will support MUST to develop climate-related curricular programmes.
- **PICSA Scale-up:** WFP will be working with Lilongwe University of Agriculture and Natural Resources (LUANAR) and the United Nations Development Programme (UNDP) to develop a PICSA manual for lead farmers to address the need for increased PICSA trainings among smallholder farmers.
- **Monitoring and Evaluation:** The CO will enhance the use of Asset Impact Monitoring System (AIMS)²¹ for measuring changes in vegetation and improvement of the water table, while it will review the cost efficiency on the use of drones for smaller scales assets, based on the initial pilot. WFP will also focus on ensuring the completion of the planned M&E activities which had been delayed due to inability to access communities considering the COVID-19 pandemic.
- **Distribution:** WFP will work with partners, including insurance companies and financial service providers, to design information management platforms and systems for insurance distribution as well as developing digital solutions, including digital innovations to support VSLAs.
- **Seasonal Monitoring:** Current seasonal monitoring methods need to be improved to deploy Geographic Information System (GIS) and Remote Sensing technologies. As a result, WFP Malawi will work with partners like MUST, through their Drone Academy in the country, to utilize technologies to support seasonal monitoring activities.
- **Other insurance innovations:** WFP Malawi will explore the possibility of using innovative platforms and technologies for livestock monitoring and data acquisition, essential for the development of livestock insurance product, as well as exploring other insurance innovations and schemes.
- **Sustainability analysis:** In June 2021, the second phase of the SDC funded R4 Southern Africa regional programme will transition into a third and final phase. To this end, the Malawi CO and SDC have jointly commissioned a sustainability analysis of the IRM that will help feed into the design of the next phase.

Figure 14. Malawi 2020 seasonal calendar



21. The Asset Impact Monitoring System (AIMS) uses satellite imagery and landscape monitoring software to monitor the long-term landscape changes of Food Assistance for Assets and engineering projects.



R4 farmer registering for insurance for the 2020/21 agricultural season in Mozambique.

WFP/Mozambique

R4 Mozambique 2020

Since **2019**



2,403 households (12,015 people covered)*



80 percent of insured are women



Gaza, Tete, Nampula, Zambezia



MADER, MTA, INGC, INAM, ADRA, Aceagrarios, Blue Marble, Pula Advisors, University of Reading, IRI, InovAgro, ICS, SDAE



FICA, SDC, GCF

* This figure refers to the number of farming households insured for the 2020/21 season. Insurance premiums are expected to be paid in early 2021.

KEY ACHIEVEMENTS

- Scaled up the integrated approach from 2,600 to 5,000 farming households.
- Successfully introduced insurance to 2,403 farmers in Gaza and Tete.
- Supported capacity strengthening of public and private stakeholders to increase local capacity, knowledge and awareness on Weather Index Insurance.
- Supported the development of climate monitoring bulletins and agro-meteorological bulletins in collaboration with the National Meteorological Institute and the Ministry of Agriculture and Rural Development.

R4 Programme in Mozambique

WFP Mozambique implements an integrated risk management programme based on the R4 initiative. Thanks to funding from the Government of Flanders, in 2020 the initiative expanded to nearly 5,000 participants in the provinces of Tete and Gaza and introduced insurance for the first year. The integrated risk management approach is based on four components:



Risk Reduction component: In Mozambique, farmers apply Conservation Agriculture (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 cope with increasing climate variability and adapt their decision-making and farming practices.



Risk Transfer component: Farmers access insurance by applying CA techniques. The insurance product was designed and customized for the local context, protecting farmers against the risk of drought during the agricultural season.



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



2019/20 AGRICULTURAL SEASON: COMBINATION OF HEAVY RAINS, LOCALIZED FLOODS AND DROUGHT RESULTING IN REDUCED CROP PRODUCTION

The 2019/20 agricultural season in Mozambique was characterized by normal to below normal rainfall. While the northern province of Tete, Zambezia, and the central region in Manica and Sofala provinces experienced a relatively good rainfall performance, the central semiarid of southern Tete province, northern Manica, southern parts of Manica and Sofala province experienced erratic rainfall, dry spells and high temperature, resulting in widespread crop losses. The northern part of the country experienced heavy rainfall and floods, causing damages to infrastructures and negatively affecting nearly 200,000 hectares of crops in Maputo, Gaza, Manica, Sofala, and Tete provinces. Contrarily, the southern part of the country experienced drought conditions, affecting over 160,000 hectares. Overall, the 2019/20 crop production in the northern region was estimated to be above the five-year average while it was close to average in the central region and below average in the southern region. Moreover, ongoing conflicts in Cabo Delgado led to increased displacement in the region, with Internally Displaced People (IDPs) losing access to basic livelihoods and experiencing Crisis (IPC Phase 3) outcomes. In drought-affected areas, due to below-average harvests, households started resorting to negative coping strategies and facing Crisis (IPC Phase 3) outcomes, with the situation expected to improve with the start of the next harvest in April 2021. COVID-19 particularly affected urban and peri-urban areas, where poorest households started facing Stressed (IPC Phase 2) outcomes.

Sources: FEWSNET. 2020. Mozambique Food Security Updated. December 2020. <https://fews.net/southern-africa/mozambique/food-security-outlook-update/december-2020>; FEWSNET. 2020. Food Security Outlook. February to September 2020. https://fews.net/sites/default/files/documents/reports/MOZAMBIQUE_Food_Security_Outlook_02.2020_FINAL_EN.pdf; Africa RiskView. 2020. End of season report. Mozambique 2019/20 season. https://www.africanriskcapacity.org/wp-content/uploads/2020/07/MZ_ARV-End-Of-Season-Report_2019_2020.pdf.

Project Status

2020 marked the second year of implementation of R4 in Mozambique, where the initiative scaled up from 2,600 to 5,000 participants (75 percent women) in the provinces of Gaza and Tete with the support from the Government of Flanders. With financing from Korea International Cooperation Agency (KOICA), the project will expand geographically to reach more households in Sofala province, and with financing from the Green

Climate Fund (GCF), the initiative will expand further in Tete province. 2020 also marked the introduction of the insurance coverage, reaching 2,403 households (79 percent women) in its first year. As a result, the integrated package now includes Conservation Agriculture, Village Savings and Loans group (VSLs), climate services, and insurance. Work is ongoing to define the most appropriate strategy for intruding the prudent risk-taking component.

Risk Reduction

From March to April 2020, following COVID-19 restrictive measures, farmers were subdivided within their farmer clubs to groups of five from the original 25 members, with the 2019/2020 agricultural season coming to a close. As the COVID-19 situation stabilized within the country, for the 2020/21 agricultural season, farmer groups were able to meet again altogether, but observing social distancing through marked spaces and wearing masks at all times during the trainings.

For the 2020/2021 agricultural campaign, WFP Mozambique supported 5,000 farmers (70 percent women) in Gaza and Tete provinces. During the year, farmers were trained in Conservation Agriculture (CA) techniques and a total of 208 CA demonstration plots and farmer clubs were formed, inclusive of the expansions areas, with support and follow up also provided to the original project areas and participants. Farmers from the new farmer clubs were trained on 11 key steps of CA which served as the conditionality to access insurance for the 2020/2021 season. Particularly, 1,998 farmers (66 percent women) were trained in CA in Tete and 889 farmers (92 percent women) were trained in basic principles of CA in Gaza. Moreover, in Gaza, 684 farmers (95 percent women) were trained in mulching, 889 (92 percent women) were trained in opening permanent basins, 684 (95 percent women) were trained in organic fertilization and 1,117 farmers (90 percent women) were trained in sowing. In addition, 4,965 farmers received agricultural inputs in both provinces.

In October 2020, farmers began preparing their farms for planting, engaging in land demarcation, collecting and prepositioning crop residue for mulching and preparing basins for planting. The 2020/21 agricultural season saw a delay onset of rainfall, with the season expected to begin in mid-November, but sufficient rainfall for plantation only began through the second half of December.

COVID-19 IMPACTS ON R4 OPERATIONS IN MOZAMBIQUE

Following the outbreak of the COVID-19 pandemic, the Government of Mozambique declared a first State of Emergency that was in effect from April through July and a second State of Emergency from August to September. To adapt to COVID-19 restrictive measures, WFP Mozambique designed and tested new and innovative approaches to allow continuity of R4 operations. This included the use of loudspeakers and recordings to allow for widespread communication while avoiding in-person meetings. This was further supported by the dissemination of printed material, including posters and fliers, and the use of community champions to further inform community awareness raising.

Risk Transfer

With the dry run for the Weather Index Insurance (WII) finalized in the first half of 2020, and successful back testing of the product, a decision was made to introduce the WII for the 2020/2021 season for both Tete and Gaza, whilst for Nampula and Zambezia provinces, a continued exploration of an Area Yield Index Insurance (AYII) product and a hybrid product were to be tested and explored further with support from Blue Marble. From the targeted 2,600 farmers for the WII in Gaza and Tete province, 2,403 farmers (80 percent women) registered for insurance for the 2020/2021 season, for which premiums are expected to be paid in the first quarter of 2021. The insurance is being provided in partnership with Hollard Insurance, bringing in its wide experience in agricultural insurance in the country.

With support from the International Research Institute for Climate and Society (IRI), a set of virtual trainings focused on index insurance were held with various public and private stakeholders to increase local capacity, knowledge and awareness on weather index insurance.

Risk Retention and Prudent Risk-Taking

In 2020, farmers saved consistently until the beginning of the second quarter, where in May savings activities had to stop due to COVID-19 preventive measures. As the restrictive measures relaxed around September, the 104 Village Savings and Loans (VSL) groups resumed their savings activities to finalize the first saving cycle in November, before the start of the agricultural season. In total, 3,240 farmers (66 percent women) participated in savings groups.

Extension staff of the cooperating partners ACEAGRARIOS in Tete province and UNAC in Gaza, facilitated the closing of the savings cycle, where farmers were able to save and share out a total of US\$30,109, and took loans of up to US\$27,508. Farmers also received financial literacy trainings during the year. In Tete, 1,204 farmers (42 percent women) were trained in group formation while 1,596 farmers (64 women) were trained in savings and loans. In Gaza, 1,640 farmers (91 percent women) were trained in savings and loans, 303 farmers (91 percent women) were trained in internal governance, and 97 farmers (79 percent women) participated in VSL workshops.

Climate Information Services

From December 2019 to December 2020, nine climate monitoring bulletins have been disseminated under the climate services component, developed by the National Meteorological Institute (INAM) with support from WFP. These reports have been complemented by agro-meteorological bulletins subsequently contextualized by the Ministry of Agriculture and Rural Development (MADER), also with support from WFP.

As a result of a climate needs assessment conducted in February 2020, which pointed out to a preference for farmers to receive climate services through private and public extension services, NGOs and radio channels, WFP signed a Memorandum of Understanding (MoU) with six community radios in Nampula, Gaza and Tete provinces and started negotiations to sign agreements with public

extension services – the District Services for Economic Activity (SDAE)- in Nampula and Zambezia and community radios in Zambezia. These agreements will support the dissemination of meteorological and agro-meteorological bulletins prepared by INAM and MADER respectively and will provide extension services to support farmers implementing their livelihood plans.

In coordination with INAM and local authorities, WFP has also installed manual rain gauges in 17 communities, tracking the amount of rainfall throughout the agricultural season. Rain gauges are being leveraged for the insurance component to monitor the performance of the index.

In partnership with the University of Reading and INAM, 33 Government staff, including district staff from MADER, national extension workers and national radio staff, were trained in the Participatory Integrated Climate Services for Agriculture (PICSA) methodology in a Training of Trainers (ToT) workshop held in the third quarter of 2020. These trainers reconvened in September before the start of the agricultural season for the Planning and Review meeting for the campaign and prepared livelihood plans with 4,277 farmers in Tete and Gaza provinces.

In the face of COVID-19, the dissemination of climate services through radio channels became a key necessity for the project. At the community level, radio listening committees were created, which then disseminate the radio messages to their farmer clubs using social distancing. In this respect, megaphones were distributed to the committees and public extension services, to allow for wider dissemination of climate services information.

Outlook for 2021 and beyond

In 2021, WFP Mozambique will continue to support integrated climate risk management approaches to support women and men smallholders in Mozambique to build their resilience and food security against increasing climate risks.

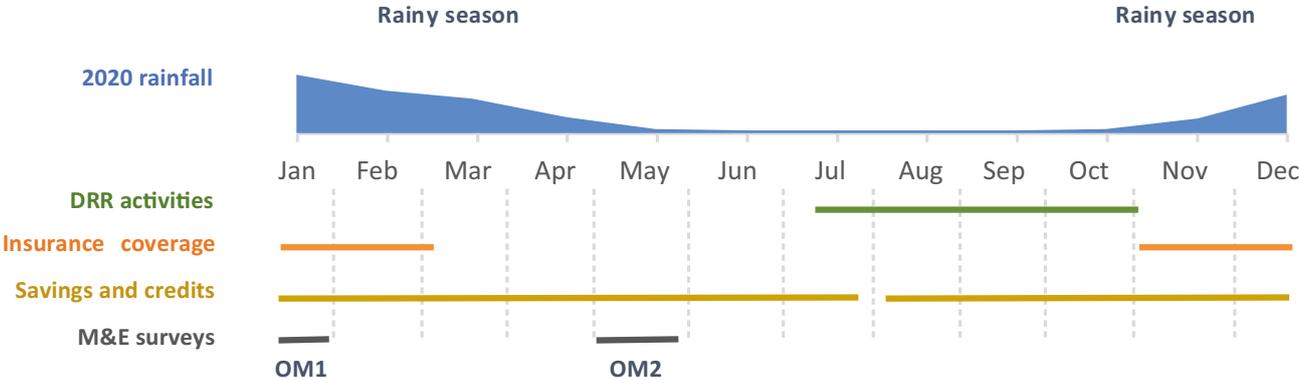
With a new contribution from KOICA, WFP will help expand climate adaptation and resilience building in the province of Sofala, with the region being affected by multiple hazards, including drought, floods, and cyclones. The project aims to build climate-resilient livelihoods and food security through integrated, context-specific climate risk management. Particularly, the project will span for 48 months, from 2021 to 2025, and will target 6,000 beneficiaries (30,000 indirect beneficiaries) in Chemba, Maringue and Caia districts of Sofala.

Thanks to funding from the GCF, 2021 will also mark the kick-off of the *Climate-resilient food security for women and men smallholders in Mozambique through integrated*

risk management project, which will target 80,000 beneficiaries, providing support to smallholder farmers through the integrated approach, and also facilitating forestry and watershed management activities.

Finally, in 2021, WFP Mozambique will also engage with the Government to explore the potential to test sovereign insurance solutions through the Africa Risk Capacity (ARC) and ARC Replica programme. The macroinsurance solution could potentially cover against the risks of drought or cyclones, with the latter raising particular interest following the increased frequency of cyclones affecting the country in recent years.

Figure 15. Mozambique 2020 seasonal calendar





A ceremony to launch the new livestock insurance scheme in Zambia.

WFP/Paul Mboshya Jr.

R4 Zambia

2020

 Since **2015**



7,821 households (39,105 people covered)



48 percent of insured are women



Southern Region



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



SDC, KOICA, Green Climate Fund, SIDA

KEY ACHIEVEMENTS

- Technical assistance provided to the Government of Zambia to strengthen its capacity on Weather Index Insurance (WII) product development and monitoring, including establishment of an inter-ministerial Technical Working Group (TWG) on climate risk financing.
- Collaboration with the Ministry of Fisheries and Livestock (MFL) to launch a new Index-based Livestock Insurance (IBLI) scheme targeting 5,000 livestock farmers.
- Trained over 18,000 farmers (49 percent women) in climate-smart agriculture approaches, including Conservation Agriculture (CA) and crop diversification.
- Supported the Government of Zambia to strengthen the dissemination of climate services and climate information, including training of 33 government extension staff.
- Development and broadcasting of a radio programme in four local languages on access to credit, targeting all implementing districts.
- Development of 13 radio programmes in eight languages on weather index insurance to promote national awareness on insurance.
- Promotion of digital solutions to mitigate the effect of the COVID-19 crisis, ensuring farmers continued receiving access to information and services, supporting their resilience building.

R4 Programme in Zambia

In Zambia, R4 was primarily built on FAO's Conservation Agriculture Scaling-Up (CASU) project, whereby farmers access insurance by applying conservation agriculture (CA) techniques. This approach remains the cornerstone of R4 Zambia, with WFP building on Government capacity since CASU's end. In addition to the components described below, the integrated risk management approach promotes Post-Harvest Loss Management (PHL) and access to markets through WFP's Smallholder Agricultural Market Support (SAMS) programme. Through these interventions, WFP strengthens linkages between smallholder farmers and buyers, creates awareness and enhances access to trade finance through building the capacity of the aggregators centers supported by WFP, as an important off-take avenue for farmers' produce; continuously supports and improves the e-commerce platform, [Virtual Farmer's market \(VFM\)](#); and supports farmers reduce their post-harvest losses, training them on how to use improved post-harvest handling methods and better storage and manage their crops.



Risk Reduction component: In Zambia, farmers apply CA techniques such as minimal soil disturbance, permanent soil cover and crop rotations. This component promotes the use of nutritious crops (legumes and bio-fortified maize), in line with WFP's efforts in mainstreaming nutrition. 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 one hectare of land. If the insurance triggers because of lack of rainfall, farmers will receive timely payouts to help compensate for weather-related losses. WFP and partners have supported the introduction of a digital platform, in collaboration with MTN, to ensure a quick, digital, and safe payout distribution.



Risk Retention and Prudent Risk-Taking components:

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 support households to make prudent choices.



2019/20 AGRICULTURAL SEASON: NORMAL TO ABOVE NORMAL RAINFALL RESULTING IN ABOVE AVERAGE CEREAL PRODUCTION

The 2019/2020 agricultural season was characterized by normal to above normal rainfall, with some dry spells experienced in the southern parts of Zambia. Rainfall was unevenly distributed in parts of the southern and western provinces, including heavy rainstorm that caused localized floods, hindering crop productivity. Overall, the normal to above normal rainfall experienced in most parts of Zambia resulted in good yields for cereals including maize, wheat and sorghum. Total cereal production in 2020 was estimated at 3.7 million tonnes, the second largest output on record, with most of the production being maize, estimated at 3.4 million tonnes, 66 percent above the reduced production in 2019. The significant increase in maize production was a result of the expansion in the area planted and a recovery in yields, following a mostly positive rainy season. Zambia's performance in the 2019/2020 agricultural season improved compared to the 2018/2019 season, with the agricultural sector's growth rate improving from -21.2 percent registered in 2018/19 to -2.9 percent this season. COVID-19 was not expected to affect agricultural production since the pandemic hit after the 2019/2020 agricultural season had begun. However, its impacts on supply chains, markets and incomes had negative impacts on farmers, increasing existing vulnerabilities. Notably, the number of food insecure people more than doubled in 2019/2020 compared to previous year, with the COVID-19 pandemic aggravating these conditions. According to the Integrated Phase Classification (IPC) food insecurity analysis, 1.98 million were expected to face high levels of acute food insecurity (IPC Phase 3 or above) during the lean season.

Sources: FAO. GIEWS - Global Information and Early Warning System. Country Brief Zambia, November 2020. <http://www.fao.org/giews/countrybrief/country.jsp?code=ZMB>; IPC. December 2020. IPC Acute Food Insecurity Analysis July 2020-March 2021. https://reliefweb.int/sites/reliefweb.int/files/resources/IPC_Zambia_Acute_Food_Insecurity_2020July2021March_Report.pdf; IAPRI. Zambia Agriculture Status Report 2020. https://www.iapri.org.zm/wp-content/uploads/2020/12/2020_asr.pdf; FAO. GIEWS - Global Information and Early Warning System. Country Brief Zambia, April 2020. https://reliefweb.int/sites/reliefweb.int/files/resources/ZMB_19.pdf.

Project Status

In 2020, WFP Zambia continued supporting smallholder farmers to build their resilience in the face of increasing climate and other risks through the integrated approach, promoting Conservation Agriculture (CA) practices, tailored weather and climate information services for better farming practices, access to index insurance, savings and credit, Post-Harvest Loss Management (PHL) techniques to minimize post-harvest losses and access to markets.

WFP also provided technical assistance to the Government on the insurance product distributed through the national Farmer Input Support Programme (FISP) that has introduced microinsurance to one million smallholder farmers. In addition, WFP supported the Government to design and roll out a new livestock insurance scheme, under the leadership of the Zambia Ministry of Fisheries and Livestock (MFL).

COVID-19 IMPACTS ON R4 OPERATIONS IN ZAMBIA

The COVID-19 pandemic significantly disrupted supply chains, affected markets and incomes, exacerbating existing vulnerabilities and deteriorating farmers' ability to cope with shocks. While the pandemic posed several challenges to the regular implementation of field operations, WFP Zambia promptly put in place a series of measures to ensure delivery of planned activities. To reduce the need for in-person trainings and interactions, WFP promoted the use of digital technologies to disseminate messages in local languages on radio stations, including information on how to better access markets, reduce post-harvest losses, or access financial services. When in-person trainings needed to be held, groups were limited to ten participants, with farmers required to follow COVID-19 preventive measures, including social distancing, mask-wearing and hand-washing. Other measures adopted by the Country Office included: the use of bulk messaging to spread COVID-19 preventive messages; using technology such as mobile assessments for collecting monitoring data; and the use of e-commerce trading platforms with embedded payment channels such as the *Virtual Farmer's market (VFM)* to reduce the risk of exposure for smallholder farmers, aggregators and buyers. WFP Zambia also encouraged farmers to join mobile marketing and savings groups to help limiting the need for physical gatherings. Additionally, WFP partnered with the national mobile network operator MTN to ensure farmers received their insurance payouts using mobile money, minimizing community gatherings.

Risk Reduction

In 2020, WFP Zambia trained over 18,000 farmers (49 percent women) in sustainable agriculture practices including Conservation Agriculture (CA) and crop diversification. These practices aim to improve soil fertility, making more efficient use of natural resources, thus contributing to increased crop production. In total, CA practices were applied on 24,630 hectares of land.

Sensitization meetings on crop management were conducted throughout the year among Farmers Clubs in collaboration with the Ministry of Agriculture (MoA) and trained lead farmers to monitor and support farmers' adherence to recommended crop management practices. Regular monthly Farmers Clubs meetings were held during the year to foster learning and sharing of best practices. Monitoring activities at farm level showed increased adoption among farmers of drought resistant crops, such as cowpeas and sorghum.

Additionally, partnerships were formed during the year with Conservation Farming Unit (CFU), the Food and Agriculture Organization (FAO) and Harvest Plus to enhance farmers' access to inputs.

Risk Transfer

This year, 7,821 farmers (48 percent women) accessed insurance for the 2020/21 agricultural season, with a total premium amounting to US\$40,970 and a sum insured of US\$382,358. The rainfall deficit experienced in Zambia during the 2019/2020 agriculture season triggered an

insurance payout of over US\$57,000 in August 2020. A total of 7,016 farmers received a payout of approximately US\$10 that was used mainly to purchase food and agricultural inputs. For the second consecutive year, farmers received payouts through a mobile money payment platform, developed in partnership with the mobile network operator MTN Zambia and Mayfair insurance company. This was a major step, especially in the context of COVID-19, as it allowed farmers to receive payouts in a fast and efficient manner, limiting the need for in-person gatherings. Surveys conducted with farmers after payouts distribution indeed indicated high level of satisfaction with the timeliness of disbursement (96 percent of participants). In addition, 99 percent of farmers surveyed indicated their willingness to enroll again in the R4 programme as well as being willing to pay a contribution in cash in the future, showing the potential sustainability of the approach.

As part of the technical assistance on climate risk financing, WFP supported the establishment of an Inter-Ministerial Technical Working Group (TWG) to enhance the capacity of the Government and agro-based private companies, including Mayfair insurance company, and ZEP-RE (PTA Reinsurance Company) to develop and improve national Weather Index Insurance (WII) products. Through the TWG, WFP aims to enhance participants' technical knowledge and capacity to develop and manage WII products. Main objectives of the TWG include: strengthening its capacity on index design and seasonal monitoring; support awareness raising activities and trainings on index insurance; and developing frameworks and guidelines for designing WII products.

Notably, WFP supported the national awareness training on WII to the Ministry of Agriculture (MoA), with a total of 136 (19 percent women) MoA provincial and district level staff being trained and expected to cascade their training and knowledge to an additional 2,071 agricultural extension staff. Agricultural extension officers are critical to sensitizing smallholder farmers on the benefits of the insurance scheme, providing technical support and serving as an essential feedback link between the farmers and the insurance providers.

To promote national awareness on WII, WFP in partnership with the National Agriculture Information Services (NAIS), developed 13 radio programmes in eight languages, including seven local languages and English. The radio programmes are being aired on national radio stations, reaching smallholder farmers with WII messages in all the targeted districts. Additionally, WFP provided technical assistance to the Government in strengthening the index insurance product distributed under the FISP, including support to the national data collection process.

Risk Retention and Prudent Risk-Taking

In 2020, WFP supported 649 saving groups including 14,707 farmers (58 percent women) to save over US\$200,000. Throughout the year, farmers received trainings on financial education, including record keeping, savings-loans linkages, different loan products, among others. Moreover, WFP trained 44 staff (59 percent women) from the MoA and Ministry of Community Development and Social Services on community-based savings, with staff expected to cascade their trainings to farmers.

To strengthen farmers' informal savings activities and to promote access to formal financial institutions, WFP Zambia has supported the introduction of digital financial services through partners such as Vision Fund (VFZ), Zambia National Commercial Bank (Zanaco), and Madison Finance company Limited (MFinance) that offer digital financial services such as digital savings wallets and mobile banking services. These financial service providers are also supporting VSLs with financial literacy and information.

INDEX-BASED LIVESTOCK INSURANCE

The Zambia Ministry of Fisheries and Livestock (MFL), supported by WFP, in collaboration with the International Fund for Agricultural Development (IFAD), Pula Advisors and a consortium of four insurance companies launched a new Index-based Livestock Insurance (IBLI) scheme targeting 5,000 livestock farmers. The scheme protects livestock farmers from the risk of drought, fire, delayed rainfall and widespread destruction of grasslands by pests and diseases. The insurance covers the value of fodder required to keep livestock alive throughout the season.

As access to credit is among the major hindrances to increased production among smallholders, WFP partnered with One Acre Fund and Zambia National Commercial Bank (Zanaco) to extend credit to targeted smallholder farmers for the 2020/21 farming season. Zanaco has onboarded the first batch of 500 farmers in the Southern Province districts on their AgriPay application, a mobile-based platform offering farmers a number of digital financial services. In 2020, over 3,600 smallholder farmers accessed inputs credit through savings groups. Moreover, A total of 4,789 smallholder farmers have been linked to formal financing, including with Zanaco and Vision Fund, where they can access credit following comprehensive financial literacy trainings. In addition, nearly 1,000 farmers were supported to adopt drought tolerant crops, thanks to the partnership between WFP and ABInBev (Zambia breweries), providing input credit to sorghum value chain smallholder farmers.

Additionally, radio programmes on access to credit were developed and broadcasted in all implementing districts to raise awareness and knowledge among farmers. The radio programmes were produced in four major local languages, including Nyanja, Bemba, Lozi and Tonga, and were particularly critical to ensuring farmers had access to information during the COVID-19 pandemic.

Post-Harvest Loss Management and Market Access

To promote farmers' awareness on Post-Harvest Loss Management (PHL) while minimizing human-to-human interactions in a COVID-19 environment, WFP Zambia developed radio programmes on PHL in four major local languages (Nyanja, Bemba, Lozi and Tonga) to be broadcasted on national and community radio stations targeting all the implementing districts.

During the year, a total of 27 MoA extension staff from the provincial, district and field levels were trained on PHL to strengthen their capacities and knowledge to support smallholder farmers minimize yield losses and store food for longer periods. Additional PHL training material was produced and distributed to the MoA, partner staff, lead farmers, aggregators and follower farmers. In total, WFP and the MoA trained over 54,900 smallholder farmers in post-harvest management. WFP also facilitated the engagement of two private companies, AgroZ and Polythene Products Zambia (PPZ), to develop marketing and sales strategies to ensure availability of post-harvest handling technology to improve post-harvest management.

To strengthen market systems for smallholder farmers, 550 micro-aggregators and 110 intermediary aggregators facilitated market linkages for 21,829 smallholder farmers (78 percent females) who managed to bulk and supply a total of 23,628 MT of diverse value chains on the market.

Finally, to increase access to markets and financial services for smallholder farmers through the aggregation model, WFP signed a Memorandum of Understanding (MoU) with the Lusaka Securities Exchange (LuSE) and the Zambia Commodity Exchange (ZAMACE) to operationalize the electronic Warehouse Receipt System (WRS).²² Once operationalized, the WRS will protect smallholder farmers from seasonal price variability by offering opportunities to storage their commodities. WRS also decreases farmers' need to sell their produce soon after harvest, when prices are usually low. Farmers can thus have the option to sell the commodity when prices are more favorable, while the commodity is in the warehouse.

²² Warehouse Receipt Systems (WRS) enable farmer to deposit their commodities in exchange for a warehouse receipt. This document provides proof of ownership of commodities, as security to access credit, inputs, etc.

Climate Information Services

WFP Zambia continued its support to the Government in strengthening the dissemination of weather and climate information services to enable farmers make informed decisions in a context of increasing climate variability and change. In 2020, a total of 97 rain gauges were installed, two seasonal forecasts were produced, and weather information was translated into four major local languages (Nyanja, Bemba, Lozi and Tonga) and shared among farmers.

In addition, 194 rain gauge minders and 33 Government extension staff were trained on how data is collected from the rain gauge, how it should be shared with the fellow farmers, as well as how it can be interpreted to make agricultural decisions.

Gender and Nutrition

To promote equal gender participation and women's empowerment, in 2020 a total of 7,389 smallholder farmers (51 percent women) participated in awareness raising trainings on leadership and governance with a focus on women inclusion and participation in decision-making. Moreover, the initiative fosters greater gender balance and women's empowerment in decision-making processes, with women taking the role of lead farmers, acting as key interlocutors between farmers and extension workers, promulgating knowledge and trainings and providing support to their respective farmers' clubs, in addition to regularly participating in farmers' club committee members.

A gender, HIV, Leaving no one behind (LNOB) and governance analysis of the integrated approach under R4 will be commissioned in the first quarter of 2021 to uncover gaps in current project implementation as well as identify entry points for the design of the next SDC funded phase of R4 in Zambia (June 2021-June 2025). Outputs of the research will include a comprehensive report of the context and findings as well as a practical and detailed roadmap of how to better address gender, HIV, LNOB and governance in the last four years of the programme.

In an effort to foster a nutrition sensitive approach, WFP Zambia trained 18,036 farmers on crop diversity with a focus on nutrient-dense crops, with these crops having higher nutrients, minerals and vitamins compared to other types of crops. Moreover, to mainstream nutrition considerations across the integrated approach, the risk reduction component promotes the adoption of nutritious crops such as legumes and bio-fortified maize.

Monitoring, Evaluation and Learning

To reflect upon best practices, challenges and learnings on the SDC funded R4 Southern Africa Programme Phase II (2017-2021) and in preparation for a third phase, WFP Zambia carried out a virtual national stakeholder consultation workshop in November 2020. The workshop convened local stakeholders and partners to reflect on achievements, experiences and learnings as well as drawing recommendations to inform a third phase.

A workshop report was produced, incorporating best practices and suggestions for all the different R4 components, recommending, among others: the development of district level stakeholder coordination platforms to consolidate and coordinate activities; enhancing linkages between savings groups (with a focus on women and youth) and private sector input suppliers to effectively provide timely agricultural inputs; increase digitalization and use of innovative digital platforms; increase linkages between savings groups and financial institutions to enhance access to credit; continue linking micro aggregators with savings groups to enhance access to financial resources to support market aggregation activities; and enhance gender mainstreaming to ensure all-inclusive participation among smallholder farmers.

Due to COVID-19, regular project monitoring was carried out prioritizing the use of technology, including ODK platforms and mobile assessment to collect monitoring data, limiting the need for in-person interactions. Outcome monitoring exercises were conducted for Phase I and Phase II participants, with some of the findings highlighted below:

- While results show an overall reducing food security situation – due to consecutive crop failures as a result of prolonged droughts experienced during the 2017/2018 and 2018/2019 farming seasons– farmers’ adoption of livelihood coping strategies was minimal, indicating that households are engaging in coping mechanisms that are in the short term reversible and thus not likely to significantly affect their future productivity and ability to withstand small-scale shocks.
- Findings also show positive trends in ownership of assets among participating households, critical for protecting households against shocks and for building their resilience.
- Awareness and adoption of CA practices was high, with majority of households knowing and having applied different CA practices on their farms, including minimum tillage, crop rotation, mulching and soil fertility practices.
- Results also showed that majority of participants were aware and had accessed WII products, as well as having contributed to paying part of the insurance premium. Some participants also indicated their willingness to pay for the insurance premiums in full in the future.
- Access to credit remains low, with very few people requesting loans from the various lending institutions and groups. This calls for increased awareness across the various camps on the criteria to access loans and support to negotiate with the lending institutions to provide flexible repayment conditions, as well as reasonable collateral for the loans, in order to motivate most of the targeted households to request for loans.
- Post-harvest losses continue to remain a driving factor to food insecurity at household level, with most losses occurring at harvest stage, storage and transportation as a result of rainwater, weevils and poor harvesting and storage techniques. To mitigate this risk, WFP and its partners provided training on post-harvest management and handling to the targeted smallholder farmers.

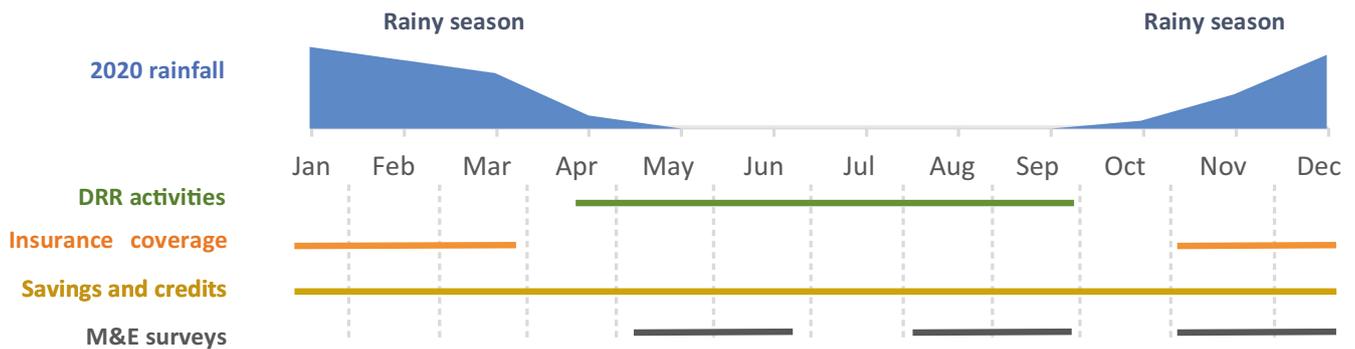
Outlook for 2021 and beyond

In 2021, WFP Zambia plans to scale-up the integrated climate risk management approach to 24,000 new farmers and streamline WFP’s technical assistance to the Government, thanks to funding from SDC. Building on the positive achievements, best practices and learnings gathered during the implementation of the R4 Southern Africa Programme Phase II, the next phase of the project aims at strengthening Government systems and improve community participation in the programme to enhance sustainability of the integrated model. Given the rapid transition to digital technologies prompted by COVID-19 and based on this year’s positive experiences, WFP Zambia will continue to leverage the use of digital means for some of its

interventions, including broadcast media to reach farmers with educational messages on insurance, savings, Post-Harvest Loss (PHL) management and market information. Particularly, WFP Zambia will invest in the further development of the e-commerce trading platform, the Maano -Virtual Farmer’s market (VFM) app- as a central platform to include a wide range of services, reducing the risk of exposure for smallholder farmers.

Moreover, over the next five years, WFP plans to scale-up the different interventions of the integrated approach to reach approximately 400,000 smallholder thanks to donor support from Germany, SDC, the Swedish International Development Cooperation Agency (SIDA), and the Green Climate Fund (GCF).

Figure 16. Zambia 2020 seasonal calendar



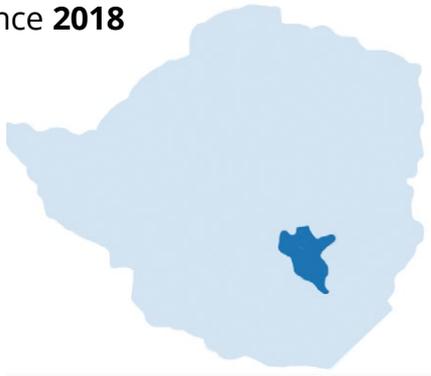


Weather index insurance product testing at Makasi primary school in Ward 19, Zimbabwe ensures that the product meets the protective needs of the households who enroll in R4.

WFP/ Sikhumbuzo Moyo

R4 Zimbabwe 2020

 Since **2018**



5,984 households (29,920 people covered)



62 percent of insured are women



Masvingo, Rushinga, Mwenezi



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



SDC, USAID, GCF

KEY ACHIEVEMENTS

- Expansion of R4 to reach an additional 4,000 households for a total of nearly 6,000 households in Masvingo and Rushinga districts.
- Scale-up of the integrated approach through the Zambuko Livelihoods Initiative, supported by USAID, currently reaching 5,000 households in Masvingo and Mwenezi districts.
- Launching of a pilot on small-scale mechanization under the R4 project to address issues of labor constraint and boost crop production.
- In-house development of an interactive mobile-based game for weather index insurance and sensitization of 20,000 participants.
- Development of a gender analysis and gender mainstreaming strategy for the integrated approach to resilience building.
- Finalization of a lessons learned exercise for R4 to inform the next phase of the project.
- Development of a learning framework for improving the monitoring system to capture and fulfil the objectives of demonstrating the effectiveness of R4 components and the integrated approach.
- Strengthening the humanitarian-development nexus by providing resilience building trainings as part of R4 to 4,000 Lean Season Assistance beneficiaries in Masvingo.

The Integrated Approach to resilience building in Zimbabwe

WFP in Zimbabwe has been promoting an integrated approach to resilience building through the implementation of the R4 Rural Resilience Initiative as well as the Zambuko Livelihoods Initiative,²³ supported by SDC and USAID, respectively. The integrated approach brings together productive asset creation through Food Assistance for Assets (FFA), access to Weather Index Insurance (WII), promotion of appropriate agricultural practices and seeds and access to savings, credit as well as markets. After receiving trainings on private sector engagement and business management, farmers are also organized across value chains and linked to potential markets for their produce, for improved food security and incomes.



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 activities that increase the adoption of appropriate seeds and agricultural practices through the establishment of demonstration plots that feature improved drought-tolerant and nutritious varieties and conservation agriculture practices. Supported by trainings, farmers are encouraged to practice conservation agriculture techniques on their farmlands and are linked to input suppliers to facilitate adoption of improved varieties.



Risk Transfer component: Farmers gain access to Weather Index Insurance (WII) policies by contributing their labour and time to the development of risk reduction assets. When a drought occurs, compensation for weather-related losses prevents farmers from selling assets and stimulates faster recovery. In good years, insurance gives farmers confidence to invest in activities deemed to be riskier but that have higher returns.

23. The Zambuko Livelihoods Initiative, supported by USAID, is part of Zimbabwe's integrated climate risk management portfolio. The initiative focuses on strengthening communities' social cohesion, improving smallholders' crop and livestock production, access to finance and markets and strengthening post-harvest handling.



Risk Retention and Prudent Risk-Taking components: 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 to start income generating activities as well as cover their expenses.

2020 AGRICULTURAL SEASON: COMPOUNDED IMPACTS OF POOR RAINFALL SEASON, CHALLENGING MACROECONOMIC SITUATION AND COVID-19 LEAD TO ACUTE FOOD INSECURITY

The latest Integrated Food Security Phase Classification analysis estimated that 2.61 million people in rural Zimbabwe faced high levels of acute food insecurity (IPC Phase 3 or above), while nearly 2.9 million people were in Stressed (IPC Phase 2) during October to December 2020. The food insecurity situation is mainly a result of compounded shocks and hazards experienced in Zimbabwe, including drought, reduced livelihood opportunities as a result of COVID-19 restrictions, pests and diseases, and high food prices. The 2019/2020 agricultural season was characterized by a late start of the season, long dry spells in late December and January as well as early cessation of the rains, negatively affecting the planted crops. The 2020 Second Round Crop and Livestock Assessment estimated the total maize production to be around 908,000 million tonnes, which is 17 percent above last year, but 30 percent below the five-year and ten-year averages. The Government estimated the national food deficit to be nearly 1.2 million tonnes for the 2020/21 marketing and consumption year. The poor rainfall season resulted in reduced harvests, consequently resulting in low household food stocks from own production. The situation was exacerbated by the continued deterioration of the macroeconomic environment, the economic impacts of COVID-19 as well as two consecutive years of drought and poor harvests. COVID-19 restrictions imposed by the Government resulted in household income reductions amounting to over 50 percent, with the situation made worse by the sharp price increases in all areas of Zimbabwe, forcing many households to reduce expenditures on essential items and get rid of their assets.

Sources: FEWSNET. 2020. Zimbabwe Food Security Outlook: June to January 2021. <https://fews.net/southern-africa/zimbabwe/food-security-outlook/june-2020>; IPC Analysis October 2020 – March 2021 (issued in Nov, 2020) https://reliefweb.int/sites/reliefweb.int/files/resources/IPC_Zimbabwe_Acute_Food_Insecurity_2020Oct2021Mar_Report.pdf; Ministry of Lands, Agriculture, Water and Rural Resettlement. Second Round Crop and Livestock Assessment Report 2019/20 Season.

Project Status

In 2020, WFP Zimbabwe scaled up implementation of integrated resilience building activities under the R4 and the Zambuko initiatives. Farmers participated in asset creation activities under Food Assistance for Assets (FFA) and a total of 5,984 households signed up for Weather Index Insurance (WII). Farmers were also organized into village savings and loan groups, trained in conservation agriculture techniques, linked to financial institutions for in-kind loans and linked to potential markets for their produce.

Risk Reduction

In 2020, a total of 6,000 farmers (65 percent women) engaged in asset creation activities. Farmers created and maintained assets across eight wards in Masvingo and four wards in Rushinga. Activities included, among others, compaction of weir earth walls, subdivision of fish-pond dikes, borehole drilling (irrigation and drinking water), excavation of trenches, check dam construction, construction of fowl run, gully reclamation, toilet pit excavation, tree planting, compost making and rehabilitation of roads. Participants also received trainings in conservation agriculture, small livestock production, fuel efficient stove making, post-harvest handling, small grains production, apiculture, nutrition, COVID-19 awareness and gender-based violence as part of FFA. Income generating activities at FFA sites continued, with farmers linked to potential local markets.

Risk Transfer

Index design for the 2020/21 season was jointly developed by Blue Marble, Old Mutual and WFP. An option for an in-kind claims modality was also developed to address some of the challenges arising out of the volatile macroeconomic conditions. However, based on multiple rounds of consultations with local stakeholders, it was not deemed to be operationally viable due to supply-side constraints i.e. no stock guarantee, no forward contract to lock in price, etc. Due to the enabling environment in the country, the only feasible option for claims settlement was found to be through ZWL bank accounts. WFP will continue to monitor the situation and work with the local insurer to change the modality in case the environment becomes more conducive.

COVID-19 IMPACTS ON R4 OPERATIONS IN ZIMBABWE

The COVID-19 pandemic presented a major change in context requiring WFP, partners and communities to adapt quickly. Movement restrictions and limits on the size of gatherings had for instance a direct impact on trainings. Cooperating Partners (CPs) had to increasingly rely on existing structures including Agricultural Technical and Extension Services (Agritex) as well as community facilitators for implementation and monitoring. WFP also developed remote monitoring tools and where feasible conducted physical monitoring to mitigate delays in implementation.

Communities were directly affected by the pandemic as their income generating activities suffered due to limited access to markets as a result of movement restrictions and closure of some local market outlets. This has compromised their capacity to save and invest in productive activities. To help address the issue of market access in a COVID-19 environment, farmers have been supported to access market and agricultural information through a digital platform. Most households also indicated that they were borrowing for consumptive purposes during the COVID-19 lockdown period (March 2020 – June 2020) as income generating activities were affected.

A total of 5,984 farmers (62 percent women) were insured against drought for the 2020/21 season in both Rushinga (2,000 farmers) and Masvingo (3,984 farmers). In total, the sum insured amounted to US\$598,400 and the total premium amounted to US\$93,274.

Following a continuous dry spell experienced in Zimbabwe during the 2019/20 agricultural season, a payout of US\$30 triggered for over 1,500 farmers in March 2020. Payout received was mostly used to bridge the food gap caused by the drought but was not enough to cover additional household needs. Participants' feedback captured by the monitoring system highlighted the need to use in-kind modality to disburse the insurance payout in the next agricultural season given the economic challenges and the unstable policy environment. However, as mentioned above, while an option for in-kind claims modality was developed, this could not be operationalized due to the uncondusive environment in the country.

On the macro-insurance front, WFP Zimbabwe has used its ARC Replica²⁴ payout, amounting to US\$290,000, to

24. ARC Replica, currently supported by KfW and USAID, is an innovative risk-financing solution offered to WFP and Start Network (the two 'Replica Partners') by the African Risk Capacity (ARC). The Replica partners purchase "Replica" policies that ensure a greater number of vulnerable people receive ex-ante assistance when extreme droughts in covered countries trigger insurance payouts.

support vulnerable and food insecure households of the Lean Season Assistance programme with food assistance, reaching over 40,000 women, men, boys and girls. In 2019, WFP Zimbabwe purchased its first ARC Replica policy for the 2019/20 season, becoming the first ever country in Southern Africa region to test the tool in collaboration with the Government of Republic of Zimbabwe and the African Risk Capacity (ARC). This innovative instrument supports a coordinated early response to drought and has the potential to significantly reduce humanitarian funding needs. ARC Replica provides WFP with a risk financing tool that addresses the different dimensions of risk at the macro level, complementing, through a risk layered approach, WFP's efforts at the micro level.

Risk Retention and Prudent Risk Taking

A total of 4,691 participants (66 percent women) were trained on financial education in Masvingo, Mwenezi and Rushinga districts to be able to make informed financial decisions as well as manage finances, under both R4 and Zambuko Initiative. Farmers also received Village Savings and Lending (VSL) trainings that focused on member self-selection, leadership, governance, group fund development and record keeping. Emphasis was given on promoting inflation hedging saving methods such as asset-based and foreign currency-based saving given the inflationary macro-economic environment in Zimbabwe.

Farmers have also been accessing loans from their saving groups for their income generating activities (IGAs). Unfortunately, IGAs were affected by the COVID-19 induced lockdown, with some participants borrowing to simply sustain their businesses. Some VSLs have also completed their share out and members have used the funds to purchase household utensils and pay school fees, among other activities. In total, 2,132 farmers (78 percent women) participated in 234 savings groups under R4, with a total saving amount of US\$10,798. Of those farmers, 414 (78 percent women) accessed and fully repaid their loans, with a repaid loan amount of US\$10,798. Under the Zambuko Initiative, a total of 2,610 farmers (84 percent women) participated in 218 saving groups, with a total savings amount of US\$6,906. 1,047 farmers (83 percent women) accessed and fully repaid their loans worth US\$9,467.

Through R4, sorghum farmers have been able to access in-kind loans, in the form of sorghum seeds, from Zimbabwe Women's Microfinance Bank (ZWMB). ZWMB agreed to the provision of such loans given that the farmers were linked to markets for their produce and since sorghum is a drought tolerant and a less risky dry land crop to finance. The design of the package allowed hedging against inflation.

Appropriate Seeds and Agricultural Practices

To improve crop production among participants, WP and partners continued promotion of conservation agriculture practices, facilitated access to inputs and introduced a pilot on small scale mechanization.

55 mother trials²⁵ and 400 baby trials were set up to showcase appropriate agricultural practices. Yield analysis of the 2019/2020 season showed that conservation agriculture practices achieved higher yields compared to conventional agriculture. As of end of 2020, all demo plots in expansion wards were planted successfully.

As access to inputs is a major factor preventing farmers from adopting improved agricultural practices and enhancing their production, seed fairs were organized targeting R4/Zambuko beneficiaries and participants have also registered to access input packages through WFP's Smallholder Agriculture Market Support (SAMS) programme.

To supplement promotion of conservation agriculture techniques with increasing power supply to boost production, in 2019 WFP introduced a small-scale mechanization pilot, as part of the R4 project. Selected service providers received a set of critical equipment pieces (a 2-wheel tractor, a trailer, a sheller and a double row direct seeder), on a lease to own basis, to provide services to farmers for a fee. After receiving trainings on the technical aspects of the machinery and business management, the service providers have been providing

25. The 'mother-baby trial' is a participatory methodology to promote sustainable agricultural practices and climate resilient crops. Farmers are shown different technologies and crop management practices in 'mother trials', allowing them to select their preferred options to be tested and replicated in 'baby trials' plots.

transport, land preparation and seeding services to farmers. Such a model has eliminated the need for each farmer to invest in mechanization while providing farmers an opportunity to establish their crops quickly in the face of a narrowing window. This will also reduce labor demand and free up their time which they can direct towards income diversification and resilience building activities.

Access to Markets

Farmers' access to markets was severely curtailed during the lockdown due to movement restrictions and closure of local markets, especially for fresh produce. Farmers have been supported to access market and agricultural information through a digital platform known as Kurima Mari²⁶ which has contributed to addressing the issue of market access in a COVID-19 environment.

248 Producer and Marketing groups (PMGs) were registered during the reporting year, with 2,544 members (74 percent women) receiving capacity building trainings in conducting market research, identification of viable and reliable markets, engaging and negotiating with buyers, supplying markets, conducting gross margin analysis and maintaining sales and marketing records.

Potential value chains were identified based on rapid market assessments and engagement meetings were organized between farmers and private sector companies for contract farming and off-take arrangements.

As part of the access to markets component, a total of 1,036 farmers received trainings on appropriate post-harvest handling and storage techniques to minimize post-harvest yield losses. 24 artisans participating in the R4 and Zambuko initiative, including tinsmiths, carpenters and builders were trained in constructing post-harvest infrastructure, namely metal silos, improved brick granaries with compartments and solar driers. The artisans are working as local service providers and offering their services for a fee mutually agreed between the artisan and the farmer to construct these infrastructures for farmers interested in having these technologies.

26. Kurima Mari is a marketing application for farmers and extensions agents. It aims to boost and enhance farming production. It features information on crops and livestock, direct links with experts and tips for farmers on how to reach local markets.

Zambuko Livelihoods Initiative

Social Cohesion - Improved Management of Shared Resources

Under the Zambuko Livelihoods Initiative, farmers in Masvingo and Mwenezi have been participating in Psychosocial Awareness and Coping Skills (PACS) workshops to help strengthen social cohesion for better resilience outcomes. Participants managed to identify barriers and enablers to development, went through a visioning process, initiated joint planning and produced their community action plans. Equal participation of men, women and youth in the PACS workshops was observed, as the approach used in the workshops was successful in breaking barriers that hindered women's and youths' participation. Communities have already started implementing their community plans and visions with the assistance of Community Cohesion Facilitators trained by the project.

Improved livestock management

A total of 1,000 households in Mwenezi -where livestock production is the main source of livelihoods- participated in improved livestock management activities. Households received trainings in small livestock management, disease controls, housing structures construction and livestock related asset management. Farmers are also participating in chicken and goat pass-on schemes,²⁷ allowing them to engage in chicken and goat production.

Humanitarian-development nexus

In order to strengthen the humanitarian-development nexus, 4,000 Lean Season Assistance (LSA) beneficiaries in Masvingo received resilience building trainings in conservation agriculture (in partnership with Foundations for Farming), financial education, village savings and loans principles, market linkage and post-harvest handling and storage techniques with support from the Swiss Agency for Development and Cooperation (SDC) and the French Government. This will help build household resilience and reduce dependency on humanitarian aid, including LSA, in the future.

27. Pass-on schemes allow households to receive chicken and goats as well as trainings on how to raise the animals. Recipients are then expected to pass-on chicken or goats kids to other community members.

Gender and Nutrition

In the last quarter of 2020, R4 commissioned a gender analysis to better understand the gender differences, inequalities, and power relations between women and men and identify gaps in the integration of gender issues in R4 while developing an actionable strategy to better address gender inequalities in R4.

Findings from the study indicated higher participation of women in all R4 activities compared to men, including in leadership positions. However, low participation of men in the R4 project is resulting in an increased burden of labour for women, with female participants involved both in project work and reproductive activities at the household level, such as cooking and fetching water, with no assistance from men. This highlighted the need for redistribution of reproductive tasks and equal distribution of gender roles through promotion of changes in gender norms and practices.

Findings also showed that R4 had significantly positive effects on gender roles and responsibilities by promoting gender equality in work, with women participants also acquiring new skills, enabling them to engage in new areas of income generation, including building houses. Moreover, the project has significantly improved the participation and power of women in community development projects and decision-making processes, with the project requiring all leadership positions to be filled following a ratio of 60 percent women and 40 percent men. A gender mainstreaming strategy was also developed based on the findings and will inform activities going forward.

Nutrition considerations are incorporated in Zimbabwe's integrated climate risk management portfolio. R4 supports the establishment of nutrition garden and fruit tree planting in addition to promoting nutrition-related sensitization and trainings. Promotion of nutrition gardens aims to diversify farmers' nutritional intake as well as provide a source of revenue, enabling farmers to sell surplus vegetables to increasing their incomes and reduce their expenditures.

Monitoring, Evaluation and Learning

In order to address the recommendation made in the SDC commissioned Mid Term Review 2019, WFP conducted a lessons learned exercise and developed a learning agenda using participatory methods. The lessons learned exercise was aimed at carrying an in-depth review of lessons learned, successes and challenges and highlight recommendations to inform project implementation and scale up. The exercise was conducted through a desk-based review of existing R4 reports, Focus Group Discussion (FGDs) to incorporate beneficiary perceptions regarding R4 project implementation, and a lessons learned workshop with partners and project stakeholders. A final lessons learned report incorporating findings of the three processes was developed and used to inform the design of the next phase of the R4. The learning agenda was also developed using participatory approaches in order to focus and structure learning and strengthen evidence generation and adaptive programming. The learning agenda was drafted by identifying information gaps and issues requiring further learning and through consultations with partners and relevant stakeholders.

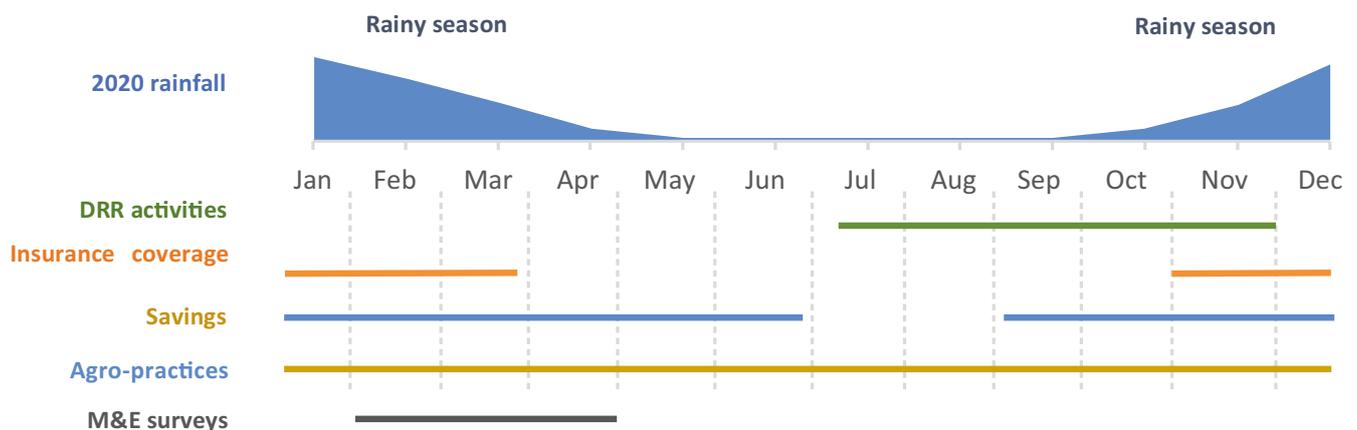
Monitoring of project activities was done using both qualitative and quantitative methods. Due to restrictions that were put in place by the Government of Zimbabwe and WFP Zimbabwe Country Office to curb the transmission of the COVID-19 pandemic, traditional tools and face to face data collection methods to monitor programme implementation and outcomes could not always be relied upon. WFP Zimbabwe then introduced remote monitoring strategies as a measure to reduce transmission risks and reduce the spread of the virus. R4 activity monitoring was conducted both remotely, through cooperating partners and physically, where possible. The outcome monitoring and baseline surveys planned for 2020 could not be finalized due to the second wave of COVID-19 which affected Zimbabwe and resulted in a second strict lockdown, with the CO aiming to finalize these monitoring exercises next year, as soon as conditions allow it.

Outlook for 2021 and beyond

In 2021, through its integrated resilience building activities, WFP Zimbabwe plans to reach a total of 10,000 households in Masvingo and Rushinga districts. Primary focus will be on filling gaps identified through the lessons learned exercise, including enhancing linkages across the various components, mainstreaming gender and improving coordination with FFA and SAMS programs, within WFP. The second phase of the SDC funded regional “R4 in Southern Africa” programme will come to an end in June 2021 and a third phase funding should be kick-started in July 2021 with interventions continuing until June 2025. Additional funding for the integrated approach is anticipated to be secured through the Green Climate Fund (GCF) project in the first quarter of 2021 and synergies with on-going resilience building initiatives will be leveraged.

WFP Zimbabwe will continue to adapt its implementation strategy based on the evolving COVID-19 situation in the country. For trainings, the Country Office will continue to learn from and refine remote methodologies while intensifying in-person interactions whenever the situation allows, as per Governments’ measures and guidelines. For M&E exercises and studies, WFP Zimbabwe is in the process of putting in place remote monitoring tools so that subsequent surveys can be conducted in March/April 2021 even if the COVID-19 situation does not improve and the lockdown continues. With regards to physical monitoring of activities, while the Country Office has mainly obtained the required information through remote monitoring, WFP Field Offices have also been carrying out physical monitoring where feasible. Moreover, WFP Zimbabwe will continue to learn from and refine remote monitoring tools while undertaking physical monitoring where feasible.

Figure 17. Zimbabwe 2020 seasonal calendar



R4 ASIA 2020



LEGEND

-  Number of farming households insured
-  Percentage of women insured
-  US\$ Value of premiums
-  US\$ Value of sum insured
-  US\$ Value of payouts disbursed in 2020
-  Number of people benefitting from insurance payouts
-  Current R4 countries



Afroza Begum and her family are part of the climate risk insurance scheme that protects vulnerable casual agricultural labourers against catastrophic flooding during the monsoon season in Bangladesh.

WFP/Sayed Asif Mahmud

R4 Bangladesh 2020

 Since **2020**



 **2,000** households (10,000 people covered)

 **100 percent** of insured are women

 Kurigram

 Oxfam Bangladesh, Green Delta Insurance, International Water Management Institute, National Development Programme, Save Earth Climate Services, Weather Risk Management Services

 KOICA

KEY ACHIEVEMENTS

- Introduced WFP's first insurance product protecting households from catastrophic flooding.
- Successfully designed and tested two climate risk financing solutions, including Climate Risk Insurance and Forecast-based Financing.
- 10,000 people benefited from insurance payouts amounting to US\$32.

R4 Programme in Bangladesh

In 2020, WFP launched an index-based flood insurance product in the Northern Kurigram district of Bangladesh, in partnership with Oxfam Bangladesh and Green Delta Insurance Company Ltd. The insurance component builds on the Resilience Innovation Programme funded by the Korea International Cooperation Agency (KOICA). The Resilience Innovation Programme is aligned with the adoption of integrated approaches for risk management, aiming to improve the food security of Bangladesh's chronically flood-affected households. The Resilience Innovation Programme has three components: a microinsurance product for vulnerable households to transfer the risk of climate-shocks to the insurance market; a Forecast-based Financing (FbF) approach to support anticipatory actions before the floods, helping communities prepare for and protect themselves from flooding; and the Seasonal Livelihoods Planning component that aims to enhance understanding of the relationship between seasonality and household economics.



Risk Reduction component: In Bangladesh, casual agricultural labourers engage in risk reduction activities such as planting coconut trees, as their contribution to the insurance premium.



Risk Transfer component: Casual labourers gain access to index-based flood insurance. Under this innovative insurance cover, labourers are protected against catastrophic flooding during the monsoon season. Households will receive a payout if the Union's geographical area is inundated above a certain number of days and above a certain surface (excluding permanent water body areas).

2019/20 AGRICULTURAL SEASON: CEREAL PRODUCTION ESTIMATED AT ABOVE-AVERAGE LEVEL, ALTHOUGH LOCALIZED LOSSES WERE REPORTED DUE TO SEVERE FLOODS

Generally, the 2020 aggregate cereal production was estimated to be above-average, amounting to 60 million tonnes. Overall positive weather conditions benefitted maize yields in the 2020 main season, although localized losses were reported in the north, due to floods between July and August 2020. This particularly affected the production of Aman paddy, which accounts for approximately 40 percent of the annual output, now estimated at its lowest level in three years. Tropical Cyclone Amphan in May 2020 in southwestern parts of the country and widespread floods in July and August 2020 negatively affected the livelihoods of about five million people, causing damages to houses and vital infrastructures. This was compounded with the effects of COVID-19, with restrictive measures to contain the spread of the virus negatively affecting households' income and food security. In June 2020, an estimated 29.5 percent of the total population was classified as poor, increasing from the 20.5 percent registered in June 2019. Moreover, high food prices seriously constrained the purchasing power for food for a large portion of the vulnerable population above the poverty line.

Sources: FAO. 2021. GIEWS Country Brief Bangladesh. <http://www.fao.org/giews/countrybrief/country.jsp?code=BGD&lang=ar>.

Project Status

In 2020, WFP in partnership with Oxfam Bangladesh and Green Delta Insurance Company Ltd (GDIC) launched a new flood insurance product to protect agricultural labourers in the Northern Kurigram district of Bangladesh from catastrophic flood events. The scheme compensates vulnerable families for wage losses due to destructive flooding. The overall goal of the initiative is to increase the ability of vulnerable households living in flood-affected areas to manage climate-related shocks, while improving their ability to reduce and cope with the risks that can affect their food security.

Risk Reduction

As part of the risk reduction component, casual agricultural labourers engaged in activities for reducing risks such as planting coconut trees. These activities are aimed at decreasing their vulnerability to shocks over time and allow households to access insurance policies.

Risk Transfer

To address the increasing climate-related challenges faced by agricultural laborers living in flood-affected areas of Bangladesh, a new flood index insurance product was designed and tested during the 2020 monsoon season in two Unions of Northern Kurigram district. In total, 2,000 households were protected from the risks of catastrophic flooding from July to September 2020.

The product was offered by Green Delta Insurance Company Ltd (GDIC) and distributed by the local partner organization, National Development Programme (NDP). The product was developed based on the analysis of satellite data collected over 19 years, backed by the latest water level and rainfall data, in collaboration with technical partners, including the Weather Risk Management Services (WRMS), the International Water Management Institute (IWMI) and Save Earth Climate Services Limited. In total, the sum insured amounted to US\$425,289 (BDT 36,000,000) and the premium amounted to US\$56,370 (BDT 47,61,000).

COVID-19 IMPACTS ON R4 OPERATIONS IN BANGLADESH

The pandemic and its containment measures negatively affected vulnerable communities in Bangladesh, resulting in income losses and remittances, which led to an increase in poverty and food insecurity among vulnerable populations. Casual agricultural labourers were particularly affected by the compounded effects of the pandemic and the 2020 prolonged floods. Despite the challenges posed by COVID-19, WFP Bangladesh was able to successfully introduce a new flood-index insurance product, protecting these vulnerable communities from compound shocks.

FORECAST-BASED FINANCING IN BANGLADESH

Under the Resilience Innovation Programme, WFP also implements Forecast-based Financing (FbF), an innovative approach that uses reliable weather forecasts to trigger anticipatory actions and release humanitarian funds for pre-agreed activities when weather/climate forecasts indicate an elevated risk. These actions minimize losses and damages caused by climate hazards and reduce the need for humanitarian assistance in their aftermath. In July 2020, WFP supported 6,000 vulnerable households in five unions of Kurigram district with early warning messages and anticipatory cash-based transfers of US\$53, ahead of severe flood impact. In total, in Bangladesh, WFP reached 29,000 households (145,000 people) with mobile-based cash transfers approximately four days before the floods. These interventions supported the most vulnerable households -including families with persons with disabilities and elderly people, and households headed by single women- to prepare and protect themselves from the impacts of the upcoming floods.

During the 2020 monsoons season, Bangladesh experienced the largest and longest flooding event in 20 years, leading to widespread damage across many areas including the project locations. As a result, the index triggered US\$63,936 in insurance payouts, protecting labourers against wage losses. All participating households in the two unions received payouts of US\$32 (BDT 2700), benefitting a total of 10,000 people. To ensure quick and effective delivery of payouts, GDIC and NDC collaborated with the digital financial service provider bKash, to deliver the insurance compensation through their mobile banking platform.

Seasonal Livelihood Programming

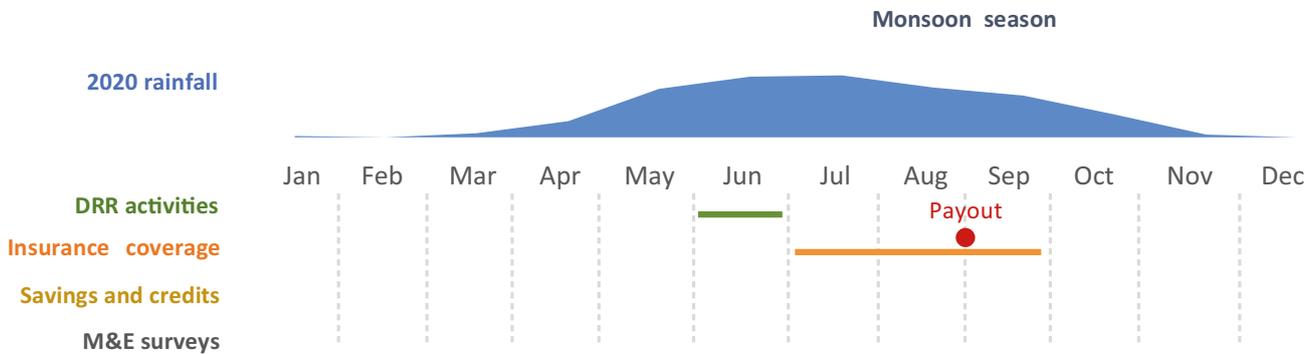
The Seasonal Livelihood Programming (SLP) is a tool to enhance understanding of the relationship between seasonality and household economics. Through the SLP component, the programme expects to unlock income generating activities (IGAs) in the areas of intervention. This will increase vulnerable households' disposable income, enabling them to contribute towards premium payment in the future. As part of this component, Community based Participatory Planning (CBPP), entrepreneurship development trainings and verification of income generating activities (IGAs) were conducted during the year.

Outlook for 2021 and beyond

In 2021, WFP will scale up climate risk insurance, establishing partnerships with data service providers, microfinance institutions, local government institutions and other relevant organizations through its technical partner Oxfam Bangladesh. WFP will review the existing policy and regulatory framework to identify key policy barriers to climate risk insurance, as well as continuously collaborate with the insurer and reinsurer to implement the climate risk insurance scheme.

WFP will also provide technical support to national institutions such as the Ministry of Disaster Management and Relief (MoDMR), the Insurance Development and Regulatory Authority (IDRA) and the Ministry of Agriculture (MoA) to design and test climate risk transfer solutions for vulnerable populations. WFP will advocate to Government institutions for the adoption and scale-up of the climate risk insurance scheme, including potential linkages with the Government's disaster risk management and social protection programmes.

Figure 18. Bangladesh 2020 seasonal calendar





Enumerators measuring the field to set up boxes for the Crop Cuts Experiments (CCEs) in Madagascar.

WFP/ Jaona Rafanomezantsoa

The Risk Transfer Component

Resource-poor and food insecure households are faced with a wide range of shocks, including climate variability, extreme weather events, conflict, and socio-economic crises. While vulnerable communities have a greater likelihood to suffer heavy losses from these shocks, they often lack access to efficient and effective formal risk management and social protection mechanisms. WFP's vision is to end global hunger by helping reduce risk and vulnerability to shocks and achieving sustainable food security and nutrition. WFP recognizes that in order to achieve its objective, it is essential to rely on a comprehensive set of integrated risk management strategies and tools that address both the climatic as well as non-climatic factors contributing to people's vulnerability.

Weather Index Insurance

Payouts are triggered by the actualization of a specific weather parameter such as rainfall measured exceeding 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 suffered by the policyholder. WII utilized by R4 is designed to cover different perils such as: late start of season, early cessation of rains, dry spells, overall low rainfall during the entire season, insufficient rain for specific crop needs, catastrophic floods due to monsoon and river flooding. 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 the defined area receive the same payout levels.

Area Yield Index Insurance

Payouts are based on the realised average yield of an area, particularly an Agro Ecological Zone (AEZ), determined by existing data and computation of satellite datasets, 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 of an insured crop for the area is less than a percentage of the historical 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. Crop cuts are conducted on the fields of R4 farmers to ensure that the index is accurate to their overall productivity levels.

Hybrid Index Insurance

This product includes both the Weather Index Insurance (WII) and Areal Yield Index Insurance (AYII) components, thus offering a more comprehensive cover, not only protecting farmers against weather and climate-related risks, but also from a broad range of risks damaging yields, including pests and diseases. The Hybrid Index Insurance (HII) combines the advantages of quick payouts, through the WII component, while also ensuring that farmers are properly covered against any type of risk that may occur at large scale. The product's downside is that the premium is split between the two indices and thus the sum insured is also lowered. That is, if only one index triggers, the payout would be lower than a non-hybrid index product.

FLOOD INDEX INSURANCE

Payouts are based on the percentage of the inundated areas (excluding permanent water bodies) of the insured region beyond a certain duration. For example, if more than 60% of the insured region, excluding permanent water bodies, is inundated for more than 24 consecutive days, then the index would trigger a payout.

INDEX-BASED LIVESTOCK INSURANCE

Index-based Livestock Insurance (IBLI) products with a focus on asset protection use a pre-emptive approach, by providing regular payouts during the season to keep the core breeding animals alive, instead of providing insurance compensation at the end of the season when the animals might have already perished. 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. IBLI uses vegetation indexes such as the Normalized Difference Vegetation Index (NDVI) to measure pasture availability. If the vegetation measured is deviating too much from the historical NDVI, the product automatically triggers payouts. IBLI products are currently offered to pastoralists in the Somali region through the Satellite Index Insurance for Pastoralists in Ethiopia (SIIPE) and to livestock farmers in Zambia, under the leadership of the Ministry of Fisheries and Livestock.

Table 1

Risk transfer component per country

COUNTRY	TYPE OF PRODUCT	RISKS COVERED	COVERAGE PERIOD	CONDITIONALITY TO ACCESS INSURANCE
Bangladesh	Flood Index Insurance based on satellite data on inundated area	Catastrophic flooding during the monsoon season	July-September	Planting trees
Burkina Faso	Weather Index Insurance based on Water Requirement Satisfaction Index (WRSI) designed for ARC cover	Drought and dry spells	July – October	Participating in trainings on financial inclusion, insurance, and Post-Harvest Losses (PHL) management and by adopting post-harvest technologies
Ethiopia	Weather Index Insurance based on satellite rainfall data (rainfall estimates and NDVI)	Drought and dry spells	May-October	Contributing their time to the construction and rehabilitation of community assets. Participants work on soil and water conservation, agroforestry and reforestation programmes for a number of selected days on top of the Productive Safety Net Programme (PSNP) public works
	Index-based Livestock Insurance Insurance based on NDVI	Drought and dry spells	October-December March-May	
Kenya	Area Yield Index Insurance based on Crop Cuts Experiments at the end of the season	Rainfall ending early, drought, floods, pests, disease, heat	October-December	Growing at least one drought resistant crop (sorghum, millet, cowpeas, green grams) in one acre of land and working on soil and water conservation structures
	Hybrid Index Insurance , combining a WII component based on satellite rainfall data (40% of sum insured) and an AYII component (60% of sum insured)	Germination failure, rainfall ending early, drought, floods, pests, disease, heat		
Madagascar	Area Yield Index Insurance based on Crop Cuts Experiments at the end of the season	Rainfall ending early, drought, floods, pests, disease, heat	November-April May-October	Participating in PHL training and by adopting post-harvest technologies

COUNTRY	TYPE OF PRODUCT	RISKS COVERED	COVERAGE PERIOD	CONDITIONALITY TO ACCESS INSURANCE
Malawi	Area Yield Index Insurance based on Crop Cuts Experiments at the end of the season	Rainfall ending early, drought, floods, pests, disease, heat	November-March	Participating in WFP's FFA programme and investing their time in building homestead assets
	Hybrid Index Insurance combining a WII component based on satellite rainfall data (50% of sum insured) and an AYII component (50% of sum insured)	Germination failure, rainfall ending early, drought, floods, pests, disease, heat		
Mozambique	Weather Index Insurance based on satellite rainfall data	Drought and dry spells	November-February	Applying Conservation Agriculture (CA) practices
Senegal	Weather Index Insurance based on satellite rainfall data, or rain gauges data	Drought and dry spells	June-October	Participating in WFP's FFA programme and investing their time in building productive assets
Zambia	Weather Index Insurance based on satellite rainfall data	Drought and dry spells	November-March	Applying Conservation Agriculture (CA) practices
	Index Based Livestock Insurance (IBLI) based on NDVI and Pasture Rangeland Coefficient (PRC)	Drought, delayed rainfall, fire, widespread destruction of grasslands by pests and diseases	November-October	No conditionality, the product is offered under leadership of the Zambia Ministry of Fisheries and Livestock
Zimbabwe	Weather Index Insurance based on satellite rainfall data	Drought and dry spells	November-March	Participating in WFP's FFA programme and investing their time in building risk reduction assets

Inclusive risk finance to build the resilience of the most vulnerable and food insecure in Latin America and the Caribbean²⁸

A wide range of shocks, from extreme climatic events, to financial crises and pandemics, threaten people's livelihoods, food security and nutrition across Latin America and the Caribbean (LAC). 2020 illustrates these challenges clearly, with countries experiencing a combined impact of the COVID-19 pandemic compounded by major weather events, including hurricanes Eta and Iota that hit Central America in November 2020. These shocks disproportionately affect resource-poor and food insecure populations, with vulnerable communities having a greater likelihood to suffer heavy losses from shocks while also having limited access to suitable risk management tools.

Risk finance approaches help equip governments, communities and individuals with a range of financial instruments that provide timely resources to confront the financial and food security impacts of shocks. Financial services also contribute to wider resilience outcomes when developed with an inclusive purpose. For governments, designing these instruments to be connected to social protection systems— so that they are more shock-responsive— is increasingly being seen as a cost-effective measure to channel finance to affected populations.

Globally, WFP has been a lead advocate in promoting risk finance as a piece of the puzzle for integrated risk management approaches. LAC offers a series of opportunities to sustainably scale risk finance solutions to support the region's most vulnerable and food insecure populations.

Inclusive risk finance for Latin America & The Caribbean

The LAC context offers a range of challenges but also opportunities in the design of risk finance approaches. While the region is highly exposed to shocks that can

reverse food security and development gains, the potential benefits of risk finance remain largely untapped because vulnerable people's access to formal financial services is still limited.

The challenges

Some of the challenges for inclusive risk finance in the region include: limited access to financial services meeting the needs of vulnerable and food insecure populations; reliance on informal financial tools that are insufficient for large and severe (covariate) events; lack of institutional risk finance tools for organizations that support vulnerable populations; limited product innovation to serve vulnerable people due to concerns on product development costs, profitability, risk coverage and uncondusive regulatory environment; and a general lack of examples of sustainable and scalable inclusive risk finance instrument, requiring more experience through public-private partnerships.

The opportunities

WFP's Risk Finance Strategy for LAC aims to learn from these challenges and shift them into opportunities, taking advantage of WFP's expertise in assessing and analysing the needs of vulnerable and food insecure populations as well as its global experience in the development and implementation of inclusive and risk layered financial solutions. WFP's programmes also present a number of entry-points for integrating inclusive risk finance instruments in LAC, including its support to government social protection systems and its own safety net programmes, cash-based transfers and innovative climate resilience and digitisation initiatives. WFP's established and longstanding relationships with communities and government entities can also facilitate public-private partnerships to catalyse sustainable scaling of risk finance products.

All these factors present invaluable opportunities for promoting the development and integration of responsible, scalable and sustainable financial instruments that will support vulnerable and food insecure communities.

28. This section is a summary and re-adaptation of the brochure [*Inclusive risk finance to build the resilience of the most vulnerable and food insecure in Latin America and the Caribbean*](#) published in December 2020. To read the complete brochure, please find the links in [English](#) and [Spanish](#).

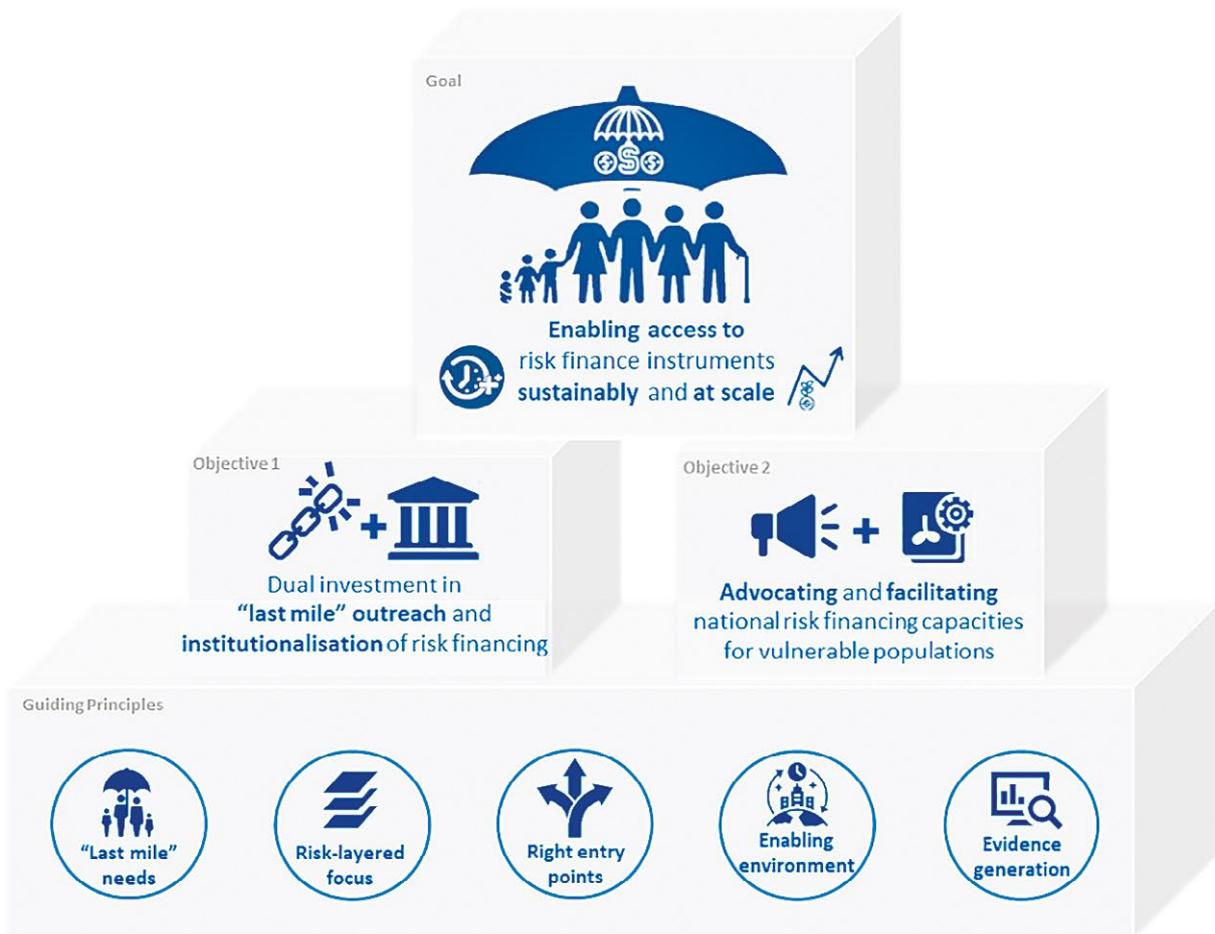
WFP's risk finance strategy for Latin America & The Caribbean

WFP's Risk Financing Strategy for LAC aims to enhance the resilience of the most vulnerable and food insecure in the region against major shocks, through the integration of risk finance into sustainable climate resilience policies, programmes and partnerships through two objectives:

1. Objective 1 focuses on enabling the offer of risk finance instruments to vulnerable and food insecure populations who do not have access to these financial services. WFP aims to actively design and implement instruments to support these populations in LAC, but with a concurrent emphasis on creating the enabling environment through testing all avenues to institutionalise products and services within public- and private-sector programmes.

2. Objective 2 speaks to the role WFP can play as an advocate for governments and private sector players to invest in inclusive risk finance approaches that ensure the most vulnerable and food insecure populations are considered. This advocacy also focuses on WFP's role as a partner in enabling holistic risk finance endeavours that promote integrated approaches towards disaster risk management, resilience, climate change adaptation and social protection.

Figure 19. WFP's Risk Finance Strategy for Latin America and the Caribbean



Principles

WFP's Risk Finance Strategy for LAC is guided by five guiding principles that ensure a common vision across the region for risk finance design that also allows flexibility for innovation.



- 1. Define “last mile” target populations to ensure risk finance instruments best suit their needs**

WFP sees it as essential to understand the vulnerabilities, needs and preferences of “last mile” populations who are typically not able to access market-based financial services (including women and indigenous people). A consumer centric approach helps define the most suitable risk finance instruments to be promoted, with attention also on how to scale these tools to benefit wider populations (or clientele). WFP's in-depth experience working with these communities and its range of analysis tools offer particular advantages to financial service providers developing new and inclusive risk finance products.



- 2. Consider risk-layered approaches to address the risk financing needs of vulnerable populations**

Risk-layered approaches ensure more cost-effective ways for risk finance instruments to address the different types and levels of risk that people face. No single financial instrument is optimal to respond to all shocks, thus interventions should consider a diverse portfolio of instruments to appropriately address the frequency and severity of events. Meso-and macro-level instruments can support vulnerable populations indirectly by rapidly getting needed resources to governments and other entities. Integrating these instruments more holistically into wider disaster risk management, resilience and climate change adaptation enables further success, with WFP having analysis tools to help identify the most appropriate options.



- 3. Find the best entry points for integrating risk finance instruments into programme activities and initiatives**

Risk finance instruments are most effectively provided to WFP beneficiaries already participating in existing activities, given the trust and understanding developed

between communities, WFP and partners. These activities can involve support to governments' social protection systems alongside a range of safety nets that WFP implements, including cash-based transfers, smallholder farmers support, community-based asset creation and innovative climate resilience initiatives. These activities can serve as platforms to test how such instruments can be scaled up through programmes led by governments and private sector actors.



- 4. Encourage and advocate for an enabling environment and strong public-private partnerships**

There are a wide number of actors involved in risk finance at the local to global scales and WFP is a willing supporter of efforts to encourage and advocate governments and organisations to adopt robust risk finance approaches, with an emphasis on ensuring that the most vulnerable and food insecure have access to such services. WFP often has a unique voice in this arena, given its understanding of the “last mile” and its work with different public-private actors supporting vulnerable populations. WFP's experience in working with governments can also support the promotion of the enabling environment for inclusive risk finance policies, regulatory frameworks and public programmes, along with facilitating public-private synergies.



- 5. Generate robuste evidence and knowledge that will support advocacy and investment by governments, the private sector and donors**

Evidence on how sustainable models for risk finance can contribute to building resilience and climate change adaptation is a growing request from the international community. Governments especially need such evidence to ensure continued investment, that will enable greater possibilities for such initiatives to be sustainably continued - and replicated - in the future. WFP in LAC has been investing in establishing a robust set of monitoring and evaluation tools to ensure such evidence is generated, alongside establishing knowledge management approaches that support sharing of information between practitioners, governments and other partners.

WFP's initiatives in Latin America & The Caribbean

There is an array of examples of WFP's risk finance work with governments and partners in LAC, including:

GUATEMALA: A ROBUST COUNTRY STRATEGY WITH RISK-LAYERED APPROACHES

A holistic strategy has been adopted in Guatemala, with activities involving microinsurance and microfinance, community credit and savings group support, the connection of Forecast-based Financing (FbF) to social protection programmes, and the assessment of potential synergies between macro, meso and micro insurance.²⁹ All of these elements are embedded in a broader resilience-building intervention. It is expected that from May 2021, approximately 1,300 WFP participants, the majority being women, will be protected against droughts and excess rain through an index insurance product offered by a local insurer with the reinsurance support of Swiss Re. The product is being designed to be scaled up at the national level, ensuring government engagement and private sector adoption from the beginning, and considering all demand and supply factors. Notably, the project raised the interest of other stakeholders to take part in the pilot, including the German Agency for International Cooperation (GIZ). In 2021, WFP Guatemala will also start working on developing a FbF protocol for drought.

THE CARIBBEAN: RISK FINANCING AS A KEY COMPONENT OF A SHOCK RESPONSIVE APPROACH TO SOCIAL PROTECTION

The Caribbean is heavily exposed to a range of climate-related disasters, which led to WFP opening an office in Barbados in 2017 to augment governments' emergency preparedness and response mechanisms and social protection systems. WFP's risk finance work fits well as a major component of the financial pillar of shock-responsive social protection systems, with its aim to enable rapid and adequate finance to reach social protection beneficiaries after a major shock. WFP is looking at how to mirror existing risk financing instruments so that social protection needs can be met, primarily at the meso- and macro-levels. [WFP's Caribbean risk finance strategy](#) also emphasizes close partnerships and advocacy for holistic risk-layered approaches with national governments, technical partners, donors and the private sector.

Inspired by the regional Risk Financing Strategy, a number of additional countries such as Dominica, Dominican Republic, Haiti and Nicaragua are currently exploring pathways to integrate risk financing tools within their programmes.

²⁹ To know more on Guatemala's risk-layered approach, please refer to this [link](#). To know more about the power of risk finance for women in Guatemala, read this [success story](#), available in [English](#) and [Spanish](#).

EL SALVADOR: INNOVATIVE PATHWAYS TO ENHANCE ACCESS TO MICROINSURANCE

Most farmers and micro entrepreneurs in El Salvador do not have access to insurance products to protect their productive investments. This is especially the case for the most vulnerable for whom affordable and conventional insurance products do not exist or are not accessible. This general lack of financial inclusion contributes to further reducing the ability of families to protect themselves from extreme climatic events and other shocks. WFP, with the support of the local cooperative insurer, Seguros Futuro, tailored a weather-index microinsurance product for the most vulnerable providing them additional protection against drought, excess rain and earthquake. WFP is looking at innovative ways to integrate the insurance product to reach the most vulnerable who are not aggregated through associations or cooperatives.

CUBA: REDUCING FARMERS' VULNERABILITY TO DROUGHT AND CLIMATE CHANGE THROUGH A SMART COMBINATION OF MICROINSURANCE, CROP MONITORING AND COMPREHENSIVE RISK ASSESSMENT

The Cuba Country Office is applying a comprehensive approach to reduce the vulnerability of farmers to drought and climate change by promoting innovation on three fronts:

1) WFP Cuba has developed the concept of 'preventive' insurance, which is meant to promote the adoption of disaster risk reduction activities in order to guide the pricing of insurance products according to the level of vulnerability of farmers. This is built on the work done with the risk assessment working group (Peligro, Vulnerabilidad y Riesgo - PVR) of the Environment Agency (AMA) which produced a matrix of four variables and 28 indicators that measure the level of vulnerability of cooperatives and municipalities. Based on the farmers' vulnerability index, the local insurer ESEN has adjusted the premium to be paid by farmers when purchasing a policy of their traditional crop microinsurance in the selected pilot municipalities of Manatí and Niceto Pérez, in the regions of Guantánamo and Las Tunas. The Country Office is now assessing the work of local expert teams to define the disaster risk reduction activities that will be part of the resilience building programme, to be partly financed by the Country Office.

2) In parallel, WFP Cuba, ESEN and the external technical provider Pula Advisors are developing an Area Yield Index Insurance (AYII) prototype for farmers in the regions of Guantánamo and Las Tunas. A crop cut exercise to guide product design is taking place in selected farms for maize, beans and coffee producers.

3) In order to strengthen the early warning system of the agricultural sector in Cuba and to also validate the data generated during the insurance pilot, a crop monitoring and yield forecast system based on analysis of agrometeorological data and satellite images has been developed with the support of WFP's Vulnerability, Analysis and Mapping (VAM) Unit and in partnership with the Agricultural Meteorology Centre of the Cuban Institute of Meteorology in five selected provinces.



Female farmers standing in a tree seedlings field in the Dry Corridor of Guatemala.

WFP/ Rocío Franco

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)



Measure the changes promoted by the programme

- Regular Outcome Monitoring
- Evaluation and Reviews



Consider the perception of participants

- Qualitative Focus Group Discussion (FGD)
- Beneficiary Contact Monitoring Survey (BCM)



Research Agenda & Facilitating Learning between R4 Countries

While WFP adapted to the evolving COVID-19 situation to the extent possible in the different countries of operation, restrictive measures and national lockdowns to contain the spread of the virus significantly limited the possibility to conduct in-person data collection. WFP promptly shifted to remote monitoring tools wherever possible, while undertaking physical monitoring activities where feasible. Nonetheless, outcome monitoring surveys were particularly affected due to restrictions on face-to-face data collection, limiting the possibility to conduct these comprehensive surveys in almost all R4 countries.

Key Findings and Recommendations

Level of implementation

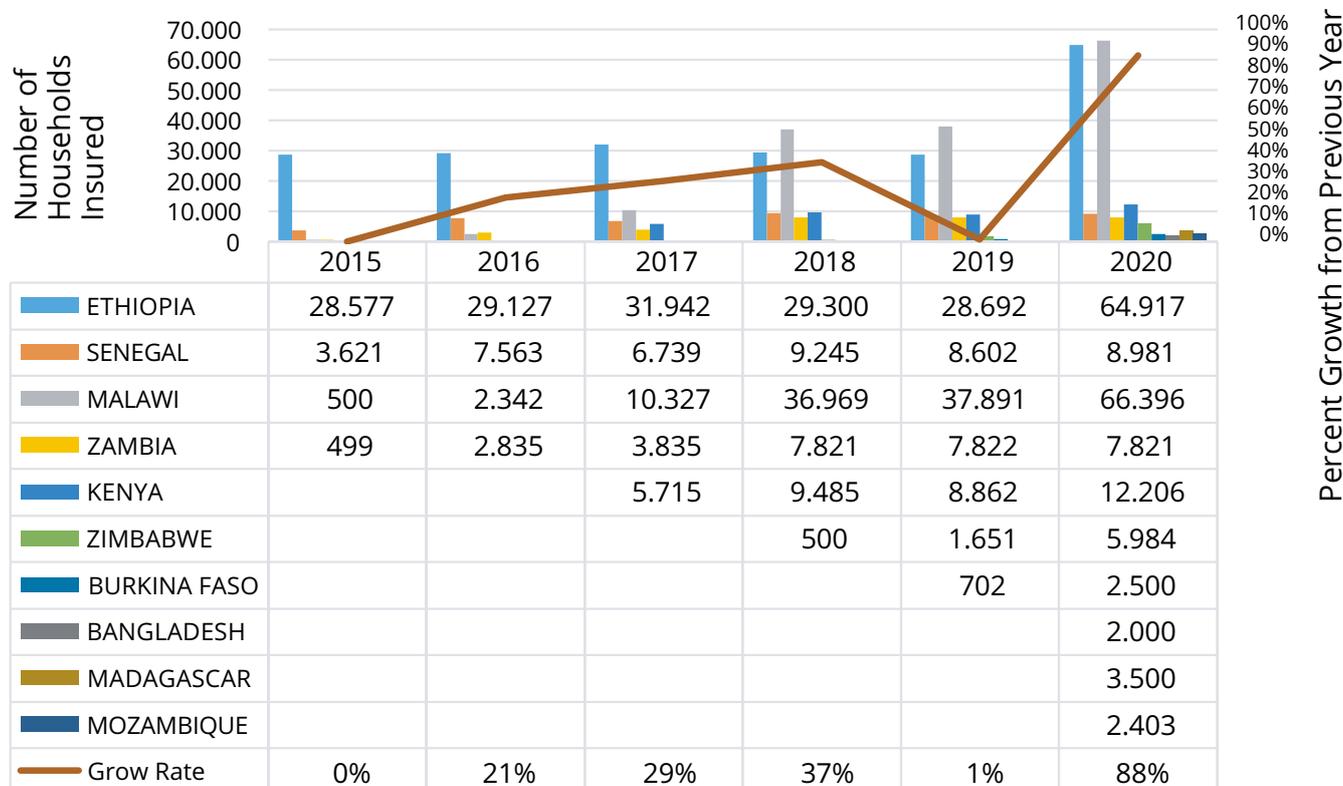
Household registration and output monitoring is done periodically with the support of implementing partners to inform WFP on the magnitude of the intervention,

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. Below is presented one of the KPI measured by R4, the Growth Rate, which determines the increase in number of insured participants on an annual basis.

Figure 20. Growth Rate indicator in R4 countries

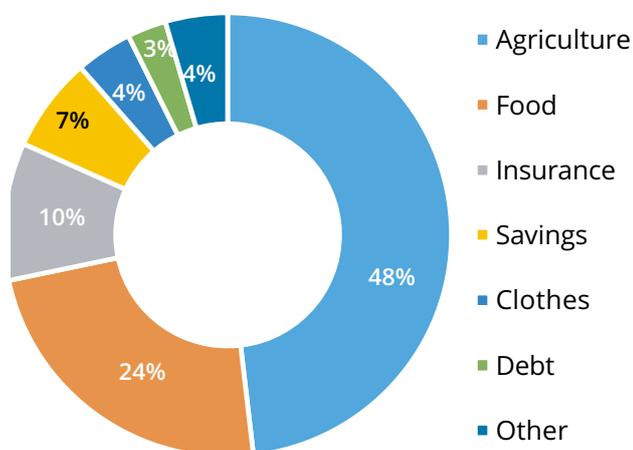


Despite the challenges posed by the COVID-19 pandemic, the R4 initiative saw a nearly 90 percent increase in the number of insured farmers in 2020. Ethiopia and Malawi registered the highest number of participants insured, showing a +126 percent and +75 percent growth respectively, in line with the scale-up plans of both countries. Zimbabwe and Burkina Faso also showed high growth rates, +262 percent and +257 percent respectively, with the number of participants almost tripling in both countries. Kenya has expanded geographically to a new district, benefitting an additional 3,500 farmers and registering a +37 percent increase. No new insurance enrolments were undertaken in Zambia, in line with the recommendations made by the 2019 Mid-Term Review (MTR) of the R4 Southern Africa programme, commissioned by the Swiss Agency for Development and Cooperation (SDC). Finally, the initiative expanded to three new countries, namely Bangladesh, Madagascar and Mozambique, contributing to the overall growth of the insurance portfolio.

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.

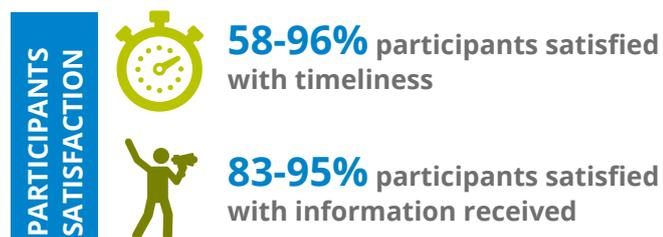
Figure 21. Average use of payout in Ethiopia



Surveys conducted after the disbursement of payouts in Ethiopia, Zambia and Zimbabwe showed that insurance payouts were mainly used to purchase food and agricultural inputs. Utilizing the payouts for these purposes has the potential to limit the degradation of households' food security after a failed growing season. In Ethiopia, almost half of the payout amount was spent on agriculture, indicating that majority of farmers are reinvesting in agricultural production and income-generating activities after a failed season. The second highest payouts' expenditure was on food purchases, with R4 participants having improved their food consumption and diet diversity compared to the previous year. Farmers also spent their payouts to buy insurance coverage for the next agriculture season, showing that participants start seeing the value of insurance and begin investing own resources to purchase it. In Zambia, 56 percent of respondents in Monze and 38 percent in Pemba district indicated that they used the payout to purchase agricultural inputs, while in Gwembe 54 percent of households indicated they used the payout to buy food. In Zimbabwe, the payout was mostly (88 percent) used to bridge the food gap caused by the drought and the challenging macro-economic situation but was not enough to cover additional household needs. Only a very small portion was used for agricultural inputs and education.

While the level of satisfaction on the payout amount varied according to the sum received in the different countries, most participants were satisfied with the timeliness and information received during the payout process (Figure X). In Ethiopia and Zambia participants were also satisfied with the ease of access of payout collection, 98 and 92% respectively, while in Zimbabwe, 77 percent of respondents reported not being satisfied. Reasons for dissatisfaction included high transactional costs during purchasing of commodities, limited payment methods in their respective areas, and high transport costs to Masvingo town. Overall, the challenges experienced with payout disbursement in Zimbabwe were to a large extent a result of the unstable macro-economic and monetary policy environment, which were characterized by cash shortages and ban on the use of foreign currency as a legal tender which were a major setback for effective implementation of the insurance component in the country.

Figure 22. Range of satisfaction with the timeliness and information received in Ethiopia, Zambia, and Zimbabwe

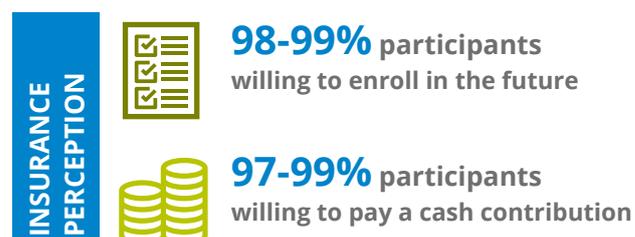


Positive perceptions on the insurance product were found in all three countries, aligned with the willingness to enroll in subsequent years even if a contribution in cash is requested. Despite the challenges experienced in Zimbabwe, almost all farmers (99.7 percent) reported to be willing to enroll in the insurance programme again. The probing conducted during the survey showed that farmers understood the advantages of insurance and also the limiting factors to its effectiveness. They explained how the challenges of inflation, cash shortages and multiple pricing system affected the value of their payout.

Building on the findings from the BCMs, R4 countries are developing practical actions that will further enhance the programme in the future. The most relevant recommendations that arose from this process in 2020 are summarized below:

- In Zimbabwe, due to the economic challenges and unstable policy environment, participants recommended to use an **in-kind modality to disburse the insurance payout** in the next agricultural season. However, while an option for in-kind claims modality was developed, this could not be operationalized due to the unconducive environment in the country. WFP will continue to monitor the situation and work with the local insurer to change the modality in case the environment becomes more conducive.
- All countries highlighted the need to strengthen sensitization and awareness raising efforts on the use of **Complaints and Feedback Mechanisms (CFMs)**, including the promotion of visibility material such as toll-free/hotline banners to be used at training sites.

Figure 23. Range of participants' willingness to enroll or pay for insurance in the future in Ethiopia, Zambia, and Zimbabwe



- The need for **extensive financial education**, including on index insurance, was also highlighted. In Zimbabwe, an interactive mobile based game was developed during the year, helping WFP to provide basic awareness about insurance among communities in a more structured manner.
- Lastly, surveys stressed the need for **continuous engagement with participants** at all crucial stages of planning and implementation, including product design, insurance policy subscription and claims settlement process.

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. Despite the efforts to ensure continuity of monitoring activities, COVID-19 particularly affected the regular collection of outcome monitoring data, due to the restrictions on in-person data collection. Nonetheless, WFP was able to conduct a limited number of outcome monitoring exercises in few R4 countries.

In 2020, a baseline was conducted in Senegal, where the Country Office started the implementation of WFP's first Green Climate Fund (GCF) project, that will scale-up access to microinsurance for 45,000 vulnerable farming households. Baseline surveys are conducted in intervention areas where the programme is being introduced and when new participants are being enrolled. Key recommendations from the exercise in Senegal highlighted, among others, the need to: improve integration with the government's social safety net programs; train and sensitize participants on entrepreneurship and developing Income Generating Activities (IGAs) to diversify income; sensitize households on investing in agricultural inputs to increase productivity; strengthen awareness on the importance of insurance; and raise awareness about taking climate information into account for households' agricultural decisions. The reference provided by this baseline will be used to compare the evolution of R4 participants in the following rounds of monitoring surveys and presented in 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. In 2020, outcome monitoring surveys were conducted only in Zambia due to COVID-19 restrictions. Other R4 countries are planning to conduct these surveys in early 2021 through face-to-face data collection if conditions allow it or through remote monitoring tools where feasible. In Zambia, outcome monitoring exercises were conducted for Phase I and Phase II participants of the SDC-funded R4 Southern Africa Programme in Pemba, Gwembe, Mazabuka, Monze, and Namwala districts.

Some of the key findings from the surveys are highlighted below:

- Awareness and adoption of Conservation Agriculture (CA) practices were found to be high among participating farmers, with majority of households knowing and having applied

different CA practices on their farms, including minimum tillage, crop rotation and mulching. These practices aim to improve soil fertility and productivity as well as fostering environmental benefits that safeguard the soil and make agriculture more sustainable.

- Results showed that majority of participants were aware and had accessed Weather Index Insurance (WII) products, as well as having contributed to paying part of the insurance premium with their own finances. Some participants also indicated their willingness to pay for the insurance premiums in full in the future, giving an indication of the potential sustainability of the approach.
- Findings presented positive trends in assets' ownership among participating households, which are critical for protecting households against climate and other shocks and for building their resilience.

Research Agenda & Facilitating Learning Across R4 Countries

WFP has defined a research agenda that aims at informing the design of more efficient practices in insurance programming for resilience building. Specifically, WFP has determined four key research areas to i) identify the drivers of sustainability of the R4 initiative, ii) assess the effects of early payouts on shock absorption, iii) understand how Disaster Risk Reduction (DRR) investments can make insurance more cost-effective, and iv) determine how insurance can effectively act as an incentive for prudent risk taking. However, efforts to move forward with the research agenda were hampered in 2020. The first set of research actions was initially designed to be conducted in Ethiopia, unfortunately research efforts had to be put on hold first due to the COVID-19 travel restrictions, then to the ongoing conflicts in the country. The research agenda will be further revised and adapted to meet the current challenges.

To reflect upon best practices, challenges and learning from Phase I and II of the SDC-funded R4 Southern Africa Programme and in preparation for a third phase, WFP Malawi, Zambia and Zimbabwe conducted virtual national stakeholder consultations in November 2020. Each country workshop convened local stakeholders and partners across all relevant sectors to reflect on achievements, experiences and lessons learned as well as to gather inputs from stakeholders and draw recommendations to inform a third phase. Findings from the national consultation workshops were then shared among the three Country Offices through a virtual regional workshop. Some of the key lessons learned/ recommendations emerging from these exercises are highlighted below:

Malawi

- Increased strengthening of national capacities, including governmental, institutional -research & universities- and private sector is needed.
- All project components need to be implemented in an integrated manner, with solid coordination among partners being fundamental.

Zambia

- Access to viable markets is key to ensuring that smallholder farmers have increased incomes through selling produce from their farms. Aggregation models are self-sustaining and critical to increasing farmer income through increased sales of farm produce.
- Increased digitalization and use of innovative digital platforms and better linkages between savings groups and financial institutions to enhance access to credit should be strengthened.
- Gender mainstreaming should be enhanced to ensure all-inclusive participation among smallholder farmers.

Zimbabwe

- Ensuring production is informed by market demand and farmers have access to the necessary inputs and skills to produce attractive volumes of high-quality produce for markets is key.
- An integrated approach to implementation and strong coordination among R4 partners is needed.
- Evidence generation on the R4 integrated approach, capacity building of private sector and government partners, strategic partnerships and aligning activities to national policies and priorities is needed for the sustainability of the approach in the country.



Farmer working in her field in Malawi.

WFP/Badre Bahaji

Where are we and where are we going?

While the pandemic presented a set of challenges for implementation, WFP has continued to support vulnerable and resource-poor communities to better manage climate risks and build their resilience against compound shocks. In 2020, WFP has allowed nearly **180,000 farmers (55 percent women)** to access index insurance as part of integrated risk management initiatives in **ten countries**, representing nearly a **90 percent** increase compared to last year. Under the R4 global brand, these initiatives expanded to **three new countries**, namely Bangladesh, Madagascar and Mozambique, while the Risk Transfer global team supported the development of new products, provided technical assistance to governments,

and laid the groundwork for expansion into the Latin American and Caribbean region. In order to boost the operational capacity on risk financing in WFP's regional offices, **four regional insurance advisors** were hired to support the growing portfolio of countries and risk financing solutions.

COVID-19 restrictions and measures to limit the spread of the virus required WFP to adjust its programmes in the different R4 countries. This included: developing new processes for the distribution of insurance products; adapting the conditionality to access insurance; promoting digital solutions to ensure farmers continued

receiving information and accessing services shifting to remote monitoring tools; and ensuring appropriate COVID-19 preventive measures when disbursing payouts and during in-person trainings.

Farmers' **ability to pay for insurance in cash** has been particularly affected by the pandemic, with only about 3,500 farmers being able to pay their premium fully in cash in 2020, down from 5,000 in 2019. In many R4 countries, farmers' premium contribution in cash was waived, with farmers only required to adopt their country-specific conditionality to access insurance. This helped ensure that farmers were covered against drought and other production risks, at a time when they already faced economic challenges associated with COVID-19.

Despite a slowdown in cash contributions, a number of other achievements contributed towards the **sustainability strategy** of the initiative. In Ethiopia, as part of the efforts to increase private sector participation and national ownership of microinsurance programmes, progress was made to handover distribution and management of microinsurance products to two local insurance companies, building their internal capacity to lead on pricing, beneficiary registration, training and awareness creation, and ensuring their involvement in national, regional and local index design teams that continue to be supported by the International Research Institute for Climate and Society (IRI). In Kenya, WFP is fostering linkages with national and county governments insurance programs, with R4-developed products continuing to benefit from a 50 percent premium subsidy from the Ministry of Agriculture, Livestock, Fisheries and Irrigation (MoALF&I) and WFP providing technical assistance to the International Fund for Agricultural Development (IFAD) and the Food and Agriculture Organization (FAO) for insurance product design. As part of the country's sustainability plans, next year WFP Kenya will introduce the risk retention component, strengthening Village Savings and Loan Associations (VSLAs), promoting financial literacy, income diversification and a farmers' savings scheme for premium contribution. In Zambia, WFP continued to provide technical assistance to the Government to strengthen its capacity on Weather Index Insurance (WII) product development and monitoring and helping mainstream the distribution of the insurance product through the national Farmer Input Support Programme

(FISP).³⁰ Lastly, the last phase of the R4 Southern Africa programme supported by the Swiss Agency for Development and Cooperation (SDC) in Malawi, Zambia, and Zimbabwe will have a strong focus on creating national capacities and ensuring the sustainability of the insurance system in the respective countries.

In 2020, WFP continued supporting the development of **innovative products**, including its first Index-based Flood Insurance product protecting households from catastrophic flooding in Bangladesh and two Hybrid Index Insurance (HII) products, combining both Weather Index Insurance (WII) and Area Yield Index Insurance (AYII) in Kenya and Malawi. In Guatemala, WFP supported the design of an index insurance product protecting business interruption against drought and excess rainfall. The product, which will be introduced in May 2021, covers smallholder farmers and small and micro entrepreneurs irrespective of the productive activity being conducted.

WFP has also continued to develop its portfolio of **livestock insurance** products, providing 15,500 pastoralist households with index-based livestock insurance through the Satellite Index Insurance for Pastoralists in Ethiopia (SIIPE) programme in the Somali region of Ethiopia and supporting the launch of a new livestock insurance scheme in Zambia for 5,000 livestock farmers, under the leadership of the Zambia Ministry of Fisheries and Livestock (MFL) and in collaboration with IFAD and Pula Advisors. In case of drought, these products provide regular payouts during the season that can be used to provide supplementary feeding as well as timely veterinary care, thus preventing core breeding animals from dying.

To address the multiple dimensions of risk in an effective and efficient manner, WFP promotes the **integration and layering** of climate risk financing solutions - including Forecast-based Financing (FbF), microinsurance and macro or meso insurance- through a holistic risk layered approach. 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. Together these instruments can better protect vulnerable people's lives and livelihoods, reduce the effects of economic

30. FISP is a government agriculture input subsidy programme for smallholder farmers, that has introduced microinsurance to around one million farmers.

losses and damages and reduce expenditures for humanitarian response arising from repeated climatic shocks, as illustrated by in the following examples:

- In Bangladesh, WFP introduced a flood insurance product as part of its efforts to increase integration and complementarity with the existing FbF mechanism. In 2020, both risk financing instruments were activated, with the FbF mechanism supporting vulnerable households with early warning messages and an anticipatory cash transfer of US\$53 per beneficiary four days before severe flood impact and the insurance product triggering US\$32 in payouts per beneficiary once the catastrophic floods occurred. Anticipatory cash transfers enabled vulnerable households to prepare and protect themselves from the upcoming floods, allowing them to purchase essential supplies, strengthen their shelters and protecting their assets, while insurance payouts compensated vulnerable families for wage losses due to the floods, enabling a faster recovery and preventing long-lasting negative impacts. As there was only a small geographic overlap between the two actions, the benefits of their complementarity are promising and should be the object of further studies.
- In Zimbabwe, WFP bought its first ARC Replica policy for the 2019/20 season, which triggered over US\$290,000 in payouts to support drought response. The country also implements an FbF intervention as part of its broader climate risk financing portfolio. Both instruments aim to complement WFP's existing microinsurance activities, offering a range of innovative and complementary tools to maximize efforts to build resilience to climate risks.
- In Mozambique, WFP has been working to integrate the R4 model with a drought early warning system intended to enhance national drought monitoring and forecasting capacity. Next year, the Country Office will also explore opportunities to foster linkages with the ARC Replica mechanism.
- In Burkina Faso, WFP has partnered with a micro insurance company that uses an index developed using the Africa Risk view (ARV) software, the same used by ARC. In a country where WFP is also an ARC Replica partner, this complementarity strengthens seasonal monitoring, but also product design and

pricing processes, as both programmes can learn one from another.

Investing in a systematic, rigorous, transparent and cost-effective **Monitoring, Evaluation and Learning (MEL)** system³¹ that is consistent across R4 countries, has remained a priority for WFP in 2020. Despite the restrictions and challenges posed by COVID-19 to regular monitoring activities, WFP has continued in its efforts to document and build the evidence on microinsurance as an effective risk management tool to support the resilience of vulnerable communities and households against increasing climate risks. While restrictions to face-to-face data collection limited the possibility to conduct outcome monitoring surveys in almost all R4 countries, some lessons can be drawn from the monitoring activities conducted in 2020 to inform programme decisions.

Beneficiary Contact Monitoring (BCM) surveys conducted after payouts disbursements in Ethiopia, Zambia and Zimbabwe found positive perceptions about the insurance component among a large majority of participating farmers. While the level of satisfaction varied according to the amount of payout received, timeliness of disbursement and ease of access, nearly all participants in the three countries reported to be willing to continue enrolling in the insurance programme and indicated their willingness to pay a cash contribution if requested. The insurance payouts were mainly used to purchase food and agricultural inputs in the three countries, which can potentially limit the degradation of households' food security after a failed growing season. In Ethiopia, farmers also spent their payout to buy insurance coverage for the next agriculture season, showing that participants start seeing the value of insurance and begin investing own resources to purchase it.

Findings from repeated **outcome monitoring** surveys in Zambia revealed that, despite an overall declining food security situation among participating households – due to consecutive crop failures during the 2017/2018 and 2018/2019 farming seasons– farmers' adoption of negative livelihood coping strategies was minimal. This indicates that households have been able to cope with the effects of droughts without significantly reducing

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

their future productivity and ability to withstand small-scale shocks. Findings also showed positive trends in assets' ownership among participating households, which are critical for protecting households against climate and other shocks.

Efforts to move forward with a **research agenda** that aims at informing the design of more efficient practices in insurance programming for resilience building, were hampered in 2020. WFP defined four key research areas to i) identify the drivers of sustainability of R4 initiative, ii) assess the effects of early payouts on shock absorption, iii) understand how Disaster Risk Reduction (DRR) investments can make insurance more cost-effective, and iv) determine how insurance can effectively act as an incentive for prudent risk taking. The first set of research actions was initially designed to be conducted in Ethiopia, but research efforts had to be put on hold first due to the COVID-19 travel restrictions, then to the ongoing conflicts in the country. The research agenda will be further revised and adapted to existing access and primary data collection limitations. WFP also continued to facilitate cross country learnings among Country Offices implementing R4, including through national stakeholder consultations conducted by WFP Malawi, Zambia and Zimbabwe and through a regional workshop where the three countries shared main achievements, experiences and lessons learned from their implementation of the R4 programme.

In 2020, WFP strengthened its **engagement with global insurance-related platforms**, at both strategic and operational level – namely, the InsuResilience Global Partnership (IGP), the Insurance Development Forum (IDF) and the Micro Insurance Network (MiN). WFP's Assistant Executive Director for Partnership & Advocacy was elected as a member of the **InsuResilience Global Partnership High-Level Consultative Group**, the highest governing body and strategic driver of the IGP. At the operational level, WFP actively engaged and contributed to the work of the IGP's Gender and of the Impact Working Groups, participating in panels,³² sharing examples of WFP's work, best practices and achievements in mainstreaming gender and implementing a systematic and rigorous MEL system in climate risk insurance.

32. As part of the IGP's Gender Working Group, WFP participated as panelist to the LIVE TALK 01: Integrating Gender Responsive Strategies into Climate and Disaster Risk Finance and Insurance Solutions.

As a member of the **Micro Insurance Network**, WFP is co-chairing the Best Practice Group (BPG) on Climate Change and Food Security. The aim of the group is to support the development of best practice solutions to improve the quality of microinsurance services in a context of increasing climate variability and change. Particularly, the group investigates the impact of climate change and climate trends in the design and pricing of index insurance products. The group brings together knowledge and experience from the academia and research institutions, but also from actuaries and risk takers from the insurance and reinsurance industry to better understand the expectations and constraints, and provide more transparency and clearer framework to improve index design, pricing process and ultimately offer the best products to end customers, at optimum rates.

WFP is a member of the **Operational Committee of the Insurance Development Forum (IDF)**, as well as an active member of the Inclusive Insurance working group and Sovereign & Humanitarian working group. Through its engagement with the IDF, WFP has the opportunity to promote the value of its inclusive and integrated approach in resource-poor contexts, contribute to enhancing coordination and collaboration between the private sector and Governments to improve the impact and efficiency of technical assistance and public funding, and to access innovative tools and approaches for inclusion in its resilience building programmes that operate in communities prone to recurrent disasters.

Demonstrating that insurance solutions can be made accessible in a sustainable way to large numbers of resource-poor households requires long term investments and predictable resources to ensure the continuity of operations. WFP is grateful for the continuous support from donors committed to promoting R4 and the mainstreaming of microinsurance as part of integrated risk management, including: the Swiss Agency for Development and Cooperation (SDC) and KfW - main supporters of the R4 Initiative at global level; multilateral climate funds, including the Green Climate Fund (GCF) and the Adaptation Fund (AF); and bilateral donors providing contributions directly to WFP Country Strategic Programmes, including the Swedish International Development Cooperation Agency (SIDA), the Government of Flanders, the Department for International Development (DFID), the Korea International Cooperation Agency (KOICA), the US agency for International Development (USAID), and the SDG Fund.

Looking Ahead

In 2021, WFP will continue mainstreaming microinsurance as part of integrated risk management, scaling up its interventions in existing countries as well as expanding to a number of new countries.

Notably, inspired by the recent design of a Risk Financing Strategy by WFP's Regional Office in **Latin America and the Caribbean** to encourage the adoption by countries in the region of innovative, responsible, sustainable and scalable risk financing tools to support the resilience of the most vulnerable and food insecure people, Guatemala Country Office embraced a layered approach where the complementarity between microinsurance, FbF, and macro and meso risk financing tools is at the core. In 2021, the Country Office will launch an insurance pilot targeting 1,300 participants - the majority being women- and is attracting the interest of other national stakeholders to take part in the pilot. In Cuba, WFP is applying an innovative approach to reduce the vulnerability of farmers to drought and climate change through a combination of microinsurance, crop monitoring and comprehensive risk assessments. In 2021, the Country Office will conduct crop cut exercises that will inform the design of an Area Yield Index Insurance prototype for maize, beans and coffee producers. In El Salvador, WFP worked with the local insurer to tailor a weather-index microinsurance product for the most vulnerable communities, providing them with additional protection against drought, excess rain and earthquake. Other countries such as Dominica, Dominican Republic, Haiti and Nicaragua are currently exploring the pathways to integrate risk financing tools within their programmes.

Next year, WFP will continue its efforts to **integrate microinsurance with other risk financing solutions**, exploring opportunities for further layering and integration with FbF, meso and macro insurance; the latter will be pursued through increased integration with the next iteration of ARC Replica, namely ARC Replica Plus,³³ including testing the use of insurance indices as parametric triggers for contingency finance and/or social protection systems. In addition, WFP will explore the potential for developing Forecast Index Insurance (FI) products, leveraging WFP's extensive experience in both insurance and FbF. In this case, insurance would

provide a market-based approach to support scalable and sustainable implementation of Anticipatory Action. An insurance product could be developed to provide payouts when a particular forecast of a weather event is provided rather than when the event occurs; such payout will finance the adoption of Anticipatory Action.

In 2021, efforts will be intensified to collect and document the evidence related to the sustainability of microinsurance and its role in building the resilience of vulnerable communities against increasing climate-related shocks. WFP will continue to promote the adoption of a coherent MEL system across countries, including new countries introducing microinsurance solutions, while continuing to foster sharing of best practices and lessons learned across countries and moving forward with the research agenda.

R4 will focus on supporting the progressive **transition** of insurance participants out of WFP support through a dual path of creating the conditions for commercially viable insurance services and strengthening synergies with government's social protection systems, while continuing to invest in the integration of insurance with risk reduction and risk retention initiatives. WFP will continue to improve access to savings, working to establish savings mechanisms dedicated to agricultural investment, insurance premium payment, and for coping with more frequent and idiosyncratic shocks. Some countries are already moving in that direction, like Mozambique or Madagascar, but the articulation between savings and insurance could be pushed further. WFP will also continue to focus on building the capacity of governments and local stakeholders, ensuring national ownership of products and systems. Meanwhile, 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.

Despite the challenges faced in 2020, WFP has continued to make progress on realizing its vision of expanding the R4 Initiative to insure a total of 500,000 farming households by 2022. There are currently at least **11 new countries** that are exploring ways to integrate risk financing tools within their programmes or where feasibility studies and project design are ongoing. In 2021, R4 will continue to move towards its target, while strengthening the efforts to document the evidence that microinsurance is an efficient tool to support the resilience of vulnerable communities and households to climate shocks and that it can be sustainably delivered at scale.

³³ ARC Replica Plus will go beyond looking at ARC as a stand-alone instrument for financing risk. The Replica Partners will work to integrate ARC and/or ARC Replica policies into a broader, more holistic risk management approach with different layers of risk financed through different instruments or strategies.



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.

WFP/Mathieu Dubreuil

ANNEX I

Media citations and resources*

In the news

- InsuResilience Global Partnership, [World Food Programme-2020, the year of compound risks](#). (Dec. 2020)
- InsuResilience Global Partnership, [Zambia: how smallholder farmers are adapting to climate change despite COVID-19](#) (Sept.2020).
- InsuResilience Global Partnership, [World Food Programme's experience with comprehensive climate risk management in Zimbabwe](#). (June 2020).
- Monserrath Ximena Lascano Galarza. [Resilience to food insecurity: theory and empirical evidence from international food assistance programmes in Malawi](#). (June 2019).
- InsuResilience Global Partnership, [R4, A safety net program in Ethiopia: Helping small-scale farmers to reduce the impact of disasters and increase production](#) (Mar. 2019)
- Dzebo, A. [Effective governance of transnational adaptation initiatives](#). International Environmental Agreements: Politics, Law and Economics. (June 2019)
- Aheeyar, Mohamed & Silva, & Senaratna-Sellamuttu, & Arulingam. [Unpacking Barriers to Socially Inclusive Weather Index Insurance: Towards a Framework for Inclusion](#). Water. 11. 2235. (2019)
- Nephila Climate, [Farmer-focused weather index insurance to protect the most vulnerable. Using risk transfer to achieve climate change resilience](#). (2019)
- Munich Climate Insurance Initiative, [Creating synergies between macro and micro level insurance](#). (2019)
- Insuresilience, [Linking climate risk insurance with shock-responsive social protection](#) (2019)

Academic journals and publications

- InsuResilience Global Partnership Annual Report 2020. [World Food Programme- Guatemala](#). (2020)
- World Bank Group, Columbia School of International and Public Affairs [Using Index Insurance to Promote Climate-Smart Agriculture](#) (2020).
- Eze, Emmanuel et al. [Feasible crop insurance indexes for drought risk management in Northern Ethiopia](#). (2019)
- Jarzabkowski, P. Et al. [Insurance for climate adaptation: Opportunities and limitations](#). Rotterdam and Washington, DC. (2019)

Stories/Blogs

["How flood insurance empowers people facing extreme weather in Bangladesh"](#)

["Investing in Ethiopia's future"](#)

["Conservation agriculture feeds people and protects the environment"](#)

["Keeping food on the table no matter the weather"](#)

["Zimbabwe: Marching towards starvation"](#)

["Three solutions against climate change, simply explained. How to tackle climate change?"](#)

* Media citation and resources included in this Annex are limited to resources published since 2019. If interested in older resources and publications, please do not hesitate to [contact us](#).

Videos/multimedia

[WFP Climate Risk Finance- Beneficiary Stories](#)

[In Malawi, weather insurance boosts farmers resilience](#)

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

[R4: The Rural Resilience Initiative](#)

Evaluations and reviews

- WFP. Decentralized Evaluation. Mid-Term Evaluation of Integrated Risk Management and Climate Services Programme in Malawi from 2017-2019. Final Evaluation Report: Volume I. Catherine Longley, Team Leader. Sithabiso Gandure, International Evaluator. Assa Maganga, National Evaluator. <https://www.wfp.org/publications/malawi-integrated-risk-management-and-climate-services-2017-2019-evaluation> (2019).
- SDC. R4 Rural Resilience Initiative in Southern Africa (Phase II). Midterm Review 2019. Final Report. Development Solutions. (2019).

ANNEX II

Partners and institutional roles

Our local/national partners in Bangladesh

- **Green Delta Insurance Ltd.** Local insurer offering the flood index insurance product.
- **International Water Management Institute.**
- **National Development Programme.** Local partner organization supporting the implementation of the insurance scheme.
- **Oxfam Bangladesh.** Oxfam Bangladesh is in charge for the implementation of the insurance scheme and acts as a policy holder.
- **Save Earth Climate Services.** Technical partners supporting with the design of the flood index.
- **Weather Risk Management Services.** Technical partners supporting with the design of the flood index.

Our local/national partners in Burkina Faso

- **Inclusive Guarantee.** Insurance broker specializing in microinsurance for development and poverty reduction. Inclusive Guarantee supports WFP with index validation, monitoring and seasonal assessment, in addition to interacting with communities for insurance enrollments, financial education, awareness raising and trainings.
- **Yeelen Assurance.** Local insurer offering the index insurance product to targeted households in the country.

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.
- **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 Ethiopia in index insurance product design.
- **International Food Policy Research Institute (IFPRI).** IFPRI provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition in developing countries. IFPRI collaborates with WFP for the Picture-based Index (PBI), that studies the use of digital repeat photography through smartphone cameras as a tool to strengthen seasonal monitoring of crop health and damage in Ethiopia.
- **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 Kenya

- **APA Insurance.** APA Insurance is part of the Apollo Group. Through APA Insurance, the Ministry of Agriculture, Livestock, Fisheries, and Irrigation (MoALF&I) disbursed a 50 percent premium subsidy to the R4 programme.
- **County Government of Kitui and Makueni.** 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 and Livestock 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.

- **Ministry of Agriculture, Livestock, Fisheries, and Irrigation (MoALF&I).** 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.
- **Pula Advisors.** 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 Madagascar

- **Assurances Réassurances Omnibranches (ARO).** Local insurer offering the Area Yield Index insurance product among targeted households.
- **Technical Agroecological Center of the South (CTAS).** CTAS is a Malagasy NGO aiming to improve households' managing capacity to overcome climate-related shocks, including drought. It promotes the use of agroecological methods in the field while creating environmental production systems that are drought resistant and beneficial.
- **DEFIS.** IFAD-funded project supporting financial inclusion and value chains development. R4 has been implemented in partnership with DEFIS, with the two programmes joining efforts to allow access to insurance but also to formal financial systems for IFAD-supported Village Saving and Loans Associations (VSLA) members.
- **GIZ.**
- **Ministry of Agriculture, Livestock and Fisheries.** The Ministry supports support WFP with the promotion of sustainable agricultural practices.
- **OTIVTANA.** Micro Finance Institution supporting WFP with the insurance registration and group account creation.
- **Pula Advisors.** Technical service provider supporting the design of the Area Yield Index.

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.
- **Farm Radio Trust.** Local radio supporting with the implementation of the climate services components. Particularly, it supports the design of the radio programmes, training of the radio hosts and provides a platform to ensure the integration of the radio service with ICTs-based platforms.
- **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.
- **Pula Advisors.** Technical service provider supporting the design of the Area Yield Index.

- **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.
- **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.
- **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.
- **District Services for Economic Activity (SDAE).** Government's extension services supporting the dissemination of meteorological and agro-meteorological bulletins and sustainable agricultural practices.
- **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.

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.
- **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 Rural Development (MADER).** MADER supports WFP 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.

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.

- **Orange Finances Mobiles Senegal.** Mobile operator in Senegal facilitating the digitalization of WFP operations in the country, including through e-cash and e-vouchers.
- **Sénégal - Projet De Valorisation des Eaux pour le Développement des Chaines de Valeur (PROVAL -CV).** The project aims to sustainably increase agricultural production, jobs and income in rural areas through the mobilization of surface water and groundwater. It links with 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 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.
- **Food and Agriculture Organization (FAO).** FAO supports the 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 Fund for Agricultural Development (IFAD).** IFAD supported the work for the launch of the index based livestock insurance scheme in the country, targeting 5,000 livestock farmers.

- **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.
- **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.
- **MFinance.** MFinance provides a range of financial solutions and services. The company supports WFP's work on financial inclusion and access to formal financial services.
- **MET**
- **Ministry of Agriculture (MoA).** WFP's partner for implementation, providing extension services to farmers.
- **MTN Zambia.** Mobile operator in Zambia facilitating the electronic distribution of insurance payouts.
- **Musika.** Musika is a Zambian non-profit company working on stimulating and supporting private investment in the Zambian agricultural market with a specific focus on the lower end of these markets. The company aims to reduce poverty and create wealth in rural Zambia by stimulating the development of a supportive market environment that provides long term and sustainable opportunities for farmers to invest in their own production and to use the markets to graduate out of poverty.
- **Pula Advisors.** Technical service provider supporting the design of the Index-based Livestock Index insurance product.
- **TechnoServe.** TechnoServe is a no-profit organization working with farmers to build competitive farms, businesses, and industries. It aims to lift vulnerable people out of poverty by harnessing the power of the private sector.
- **Vision Fund Zambia Limited (VFZ).** Zambia's second largest microfinance institution with the widest rural outreach. VFZ offers access to financial services, operational support on insurance and supports financial education trainings as part of R4.
- **Zanaco.** Zambia National Commercial Bank and banking regulator supporting WFP through the Farmer to Market Alliance (FtMA), linking aggregators to financial institutions.
- **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.

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.
- **Community Technology Development Trust (CDTO).** CDTO supports WFP with the implementation of asset creation activities in Rushinga district.

- **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.
- **Mwenezi Development Training Center (MDTC).** MDTC supports WFP with the implementation of asset creation activities in Masvingo district.
- **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.

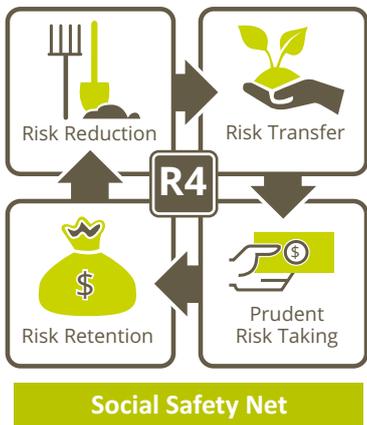


R4 farmer participating in asset creation activities in Blantyre, Malawi

WFP/Badre Bahaji

www.wfp.org/r4

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