

R4 Rural Resilience Initiative

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World Food Programme



OXFAM
America

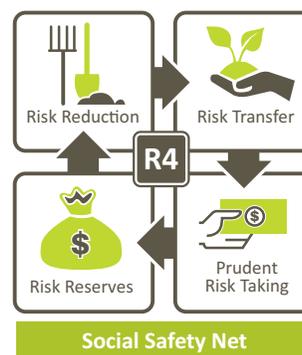
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EXECUTIVE SUMMARY

The R4 Rural Resilience Initiative (R4) is a strategic partnership between Oxfam America (OA) and the United Nations World Food Programme (WFP). R4 was initiated in 2011 to respond to the challenges faced by food insecure communities enduring increasingly frequent and intense climate disasters and other shocks. The program builds on the initial success of HARITA (Horn of Africa Risk Transfer for Adaptation), an integrated risk management framework developed by Oxfam America, the Relief Society of Tigray (REST), Ethiopian farmers and several other national and global partners. R4 refers to the four risk management strategies integrated in the project to strengthen farmers' food and income security. The initiative combines improved **resource management** (risk reduction), **insurance** (risk transfer), **livelihoods diversification and microcredit** (prudent risk taking), and **savings** (risk reserves).



This quarter marked the end of Phase I of R4 in Malawi and Zambia, during which the program was piloted in the two countries. The second phase of the program will start in July, thanks to funds from the Swiss Agency for Development and Cooperation (SDC) and it will focus on expanding R4 operations to new regions. So far in 2017 the initiative has reached 34,099 farmers and their households in Ethiopia, Senegal and Kenya with microinsurance protection.¹

1. In Southern Africa, insurance coverage runs from the end of December to mid-March, therefore registration of participants will take place at the end in the year. In Kenya, insurance covers two seasons, the Long Rains from March to November and the Short Rains from October to April. Thus a second registration of participants for the Short Rains will be carried out in the fourth quarter.

R4 participants gathering materials for a dam to prevent flooding in Amhara, Ethiopia.
Oxfam America/Julio Espinoza

In **Ethiopia** a total of 27,136 farmers (38 percent women) have enrolled so far in Tigray and Amhara.

In **Zambia**, the end-of-season-assessment observed that the 2016/2017 season was 'good' and therefore payouts were not triggered.

In **Senegal**, Food Assistance for Assets (FFA) activities were completed and farmers were registered in all sites except in Kaffrine region, where they will take place during the next quarter. Up to June 2017, 6,800 farmers were reached with risk reduction activities, of which 6,000 people with insurance.

In **Kenya**, a baseline survey was conducted on 333 households in four sub-counties of Kitui, namely Kitui Rural, Kitui East, Kitui South and Mwingi Central. Up to now, 963 participants (90 percent women) are insured.

In **Malawi**, data collection for the baseline in the new districts as well as the final round of outcome monitoring of R4 in Balaka for Phase I were carried out.

Figure 1. R4 achievements

	2009	2010	2011	2012	2013	2014	2015	2016
Payouts			\$ 17,000	\$ 320,000	\$ 24,000	\$ 38,000	\$ 450,000	\$ 74,000
Value of premiums	\$ 2,500	\$ 27,000	\$ 215,000	\$ 275,000	\$ 283,000	\$ 306,000	\$ 370,000	\$ 781,000
Total sum insured	\$ 10,200	\$ 73,000	\$ 940,000	\$ 1,3m	\$ 1,2m	\$ 1,5m	\$ 2,2m	\$ 5,1m
Farmers insured	200	1,300	13,000	18,000	20,000	26,000	32,000	42,000
Countries	Ethiopia	Ethiopia	Ethiopia	Ethiopia Senegal	Ethiopia Senegal	Ethiopia Senegal	Ethiopia Malawi Senegal Zambia	Ethiopia Malawi Senegal Zambia

Our vision: 500,000 insured farmers in 2020.

STATUS SUMMARY

ETHIOPIA

R4 continues to be implemented in 81 villages in Tigray and five villages in Amhara regions. 27,136 farmers registered so far (38 percent female-headed households/FHHs), a 6 percent decrease compared to last year, but the registration cycle has not been completed yet and other farmers are expected to join the program in the third quarter. In Tigray, 23,567 farmers (39 percent FHHs) purchased insurance by contributing 16 percent of their premium in cash and the rest in labor, while 2,322 farmers (25 percent FHHs) paid fully in cash.

In 2017, for the first time R4 enabled recent Productive Safety Net Program (PSNP) graduate farmers to access insurance through different combinations of cash and labor (as opposed to only cash in the past). In Amhara, out of the 1,247 farmers (27 percent FHHs) who registered for insurance, 420 were recent PSNP graduates and contributed 40 percent of their

premium in cash, the rest in labor. In addition to these, a total 308 PSNP participants paid 20 percent of the premium in cash, while 115 non-PSNP farmers paid fully in cash.

The total sum insured amounts to USD 77,435 and total premium amounts to USD 9,582. Under the risk reserves and prudent risk taking components, in Tigray a total of USD 36,401 was accessed by 206 farmers (64 FHHs) with individual loans in the range of USD 129 to 257. In Amhara, 2,574 farmers saved USD 7,160 in 123 Village Economic and Social Associations (VESAs), and 659 farmers took out loans amounting to USD 3,942 in total.

A total of 2,805 farmers (1,016 FHHs), 178 development agents and 56 woreda experts participated in trainings on weather index insurance and DRR (soil fertility management, use and installation of mould boards, micro garden development and others).

Figure 2. R4 Ethiopia timeline for the 2017 agricultural season



SENEGAL

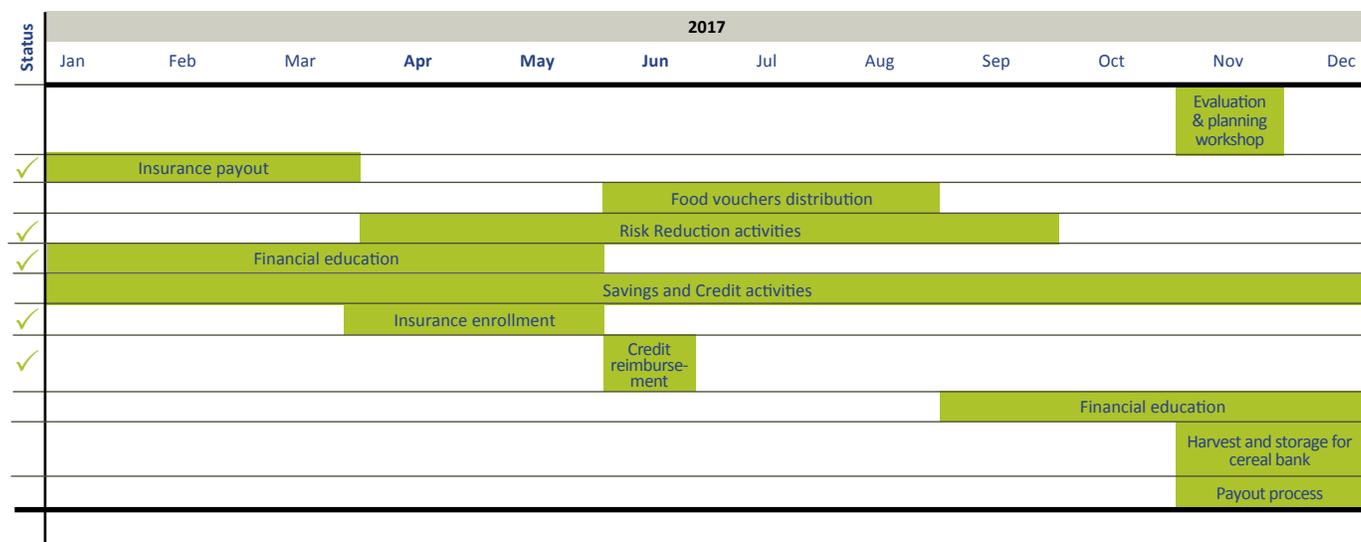
The implementation of R4 continued in the three regions of Tambacounda, Kolda and Kaffrine. In 2017, so far R4 reached 6,800 farmers (45 percent women) with risk reduction activities. Out of the total participants, 6,000 people (49 percent women) have accessed insurance through the Insurance for Assets (IFA) scheme. More specifically, in Tambacounda, R4 engaged 5,000 households with its risk reduction component through Food Assistance for Assets (FFA), of which 4,987 farmers have registered for IFA scheme. In Kolda, where R4 targets the same 1,800 participants of 2016 for FFA activities, 1,013 farmers are enrolled in IFA. In Kaffrine region, registrations will take place in the next quarter.

During this quarter, risk reduction activities were completed, including two trainings on composting technique and stone bunds technique for 370 participants.

Under the risk reserves and prudent risk taking components, 20 new savings groups were created through the Saving for Change (SfC) methodology with 554 farmers (all women). Their savings contribute to the overall 699 savings group for a total savings amount of USD 127,798. A total of 9,800 farmers took out, and fully repaid, loans amounting to USD 171,900.

An environmental screening was carried out by the Direction Régionale de L'Environnement et des Etablissements Classés (DREEC), with the support of the local partner Bantaare in two R4 villages. The screening was piloted by WFP for testing new tools to assess the environmental impact of FFA activities. Three types of activities were tested: reforestation (mauringa species, federbia albida, acacia mellifera), construction of a composite pit and placement of stone bunds. The results of the screening showed that these activities do not have a negative impact on the environment.

Figure 3. R4 Senegal timeline for the 2017 agricultural season



MALAWI

The second quarter marks the end of the 2016/17 agriculture season and the beginning of the program’s Phase II (2017-2022) focused on expansion and building sustainable distribution mechanisms. This year, R4 will expand to the new districts of Zomba and Blantyre, covering an estimated 3,200 and 4,171 households, respectively. For these new districts, a draft index was finalized by the International Research Institute for Climate and Society (IRI) through consultations with communities and relevant district stakeholders.

Under the risk reserves and prudent risk saving components, 108 Village Savings and Lending (VSL) groups (2,624 participant) saved over USD 20,633, a 36 percent- increase compared to last year. A total of 162 participants in 11 groups accessed their second loan, totalling USD 2,552 with an average loan of USD 69 per farmer. For the first time, the other eight groups received loans amounting to USD 2,572.

Data collection for the baseline in the new districts as well as the final round of outcome monitoring of R4 in Balaka for Phase I were carried out in June. In Balaka, the questionnaire survey was complemented by focus group discussions (FDGs) to discuss with participants the impact of the program and their feedback for the next phase. Quantitative and qualitative information will be used to develop a mid-term review of R4 in Balaka from 2014-2017 (Phase I of R4).

Seasonal monitoring of rainfall showed that the 2016/17 season was ‘good’, because the amount of rains as well as their distribution were sufficient and did not affect crop production. As such, no payouts were triggered by the rainfall index.

Figure 4. R4 Malawi timeline for the 2017 agricultural season



ZAMBIA

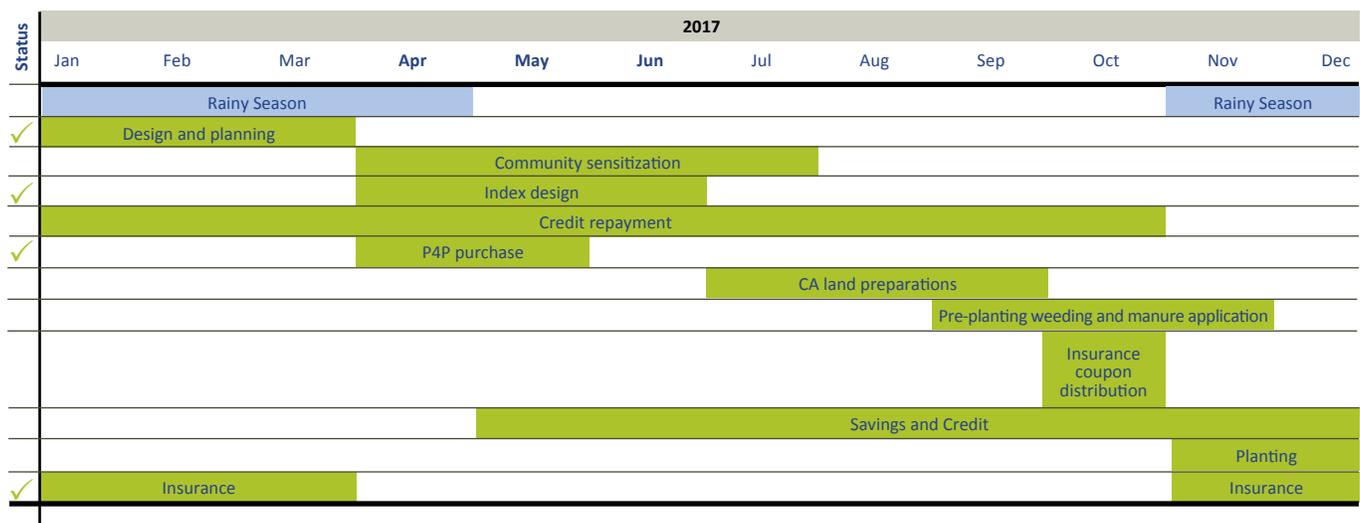
In Zambia, this year R4 aims to reach over 3,500 farmers through participation in FAO's (Food and Agriculture Organization) Conservation Agriculture Scaling Up (CASU) program. As for Malawi, this quarter marked the end of the first phase of R4 in the two countries. During phase II (2017-2021), R4 will reach at least 15,000 vulnerable households in Zambia. During the current quarter, market linkages between farmers and markets are being explored through WFP's innovative Maano Virtual Farmers Market (VFM)² project. So far, 15 farmers have been enrolled and trained as ambassadors to involve other farmers with their farm produce looking for possible buyers.

During the quarter, 1,159 participants (60 percent women) saved around USD 16,935 in 60 savings groups, while 467 farmers took out loans for a total amount of USD 150,034.

Between April and June, trainings were held on: financial services, vegetable production and gardening, and post-harvest and marketing.

An end-of-season assessment was carried out in April and, like for Malawi, the 2016/2017 season was assessed as 'good' and therefore no payouts were triggered by the index.

Figure 5. R4 Zambia timeline for the 2017 agricultural season



KENYA

In Kenya's Arid and Semi-Arid Lands (ASALs), where R4 is being piloted this year, 963 participants (90 percent women) accessed area yield index insurance coverage³ for four drought tolerant crops – cow peas, green grams, millet and sorghum, under the risk transfer component of the initiative. Seasonal monitoring of these crops was conducted with the implementation partners.

During the quarter, a baseline survey was conducted on 333 households (37 percent FHHs) in four sub-counties of Kitui, namely Kitui Rural, Kitui East, Kitui South and Mwingi Central. Treatment and control households accounted for 239 (36 percent FHHs) and 94 households (37 percent FHHs), respectively.

2. VFM builds on Purchase for Progress (P4P), WFP's flagship program connecting smallholder farmers to markets. Using WFP's reputation as a reliable buyer of quality crops, VFM creates a virtual, app based network that allows farmers to interact with traders and other buyers.

3. More details about this specific product can be found in the next section.



R4 DRY RUN IN KENYA

CONTEXT

The Government of Kenya has increasingly recognized the agro-ecological fragility of the Arid and Semi-Arid Lands (ASALs) which puts communities at the risk of recurrent climatic shocks, and has emphasised drought risk management and climate change adaptation as necessary requirements for sustainable development in the region.

With this in view, a feasibility assessment was carried out in 2015 to provide a detailed risk analysis and identify areas in ASALs where agricultural insurance products can be a viable tool to address climate risks faced by smallholder farmers. The study looked at the data on weather trends, agroecology, yield, and farming practices to inform index design as well as evaluated existing distribution channels and risk management strategies in potential target areas.

R4 DRY RUN

The 2015 feasibility study set the basis to conduct a dry run for the 2016 short rain season (October–December) in five sub-counties of Kitui – Kitui Rural, Kitui East, Kitui South, Mwingi Central and Mwingi North. Technical and operational challenges and key lessons learnt during the dry run phase provided a critical input into the strategic planning and design of the scale up phase. Four key activities were undertaken as part of the dry run:

Building agrometeorological data repositories: Weather and yield datasets developed during the feasibility study were further improved with data compiled from other relevant sources such as Kenya Power, Kenya Food Security Steering Group reports, USAID KAVES yield datasets, Ministry of Agriculture yield datasets, Masinga dam level data, and stakeholder interviews

Women just signed up for R4 in Kitui Rural, Kenya.
WFP/Jyothi Bylappa

for the validation and development of index insurance products. Drought risk was found to be one in five years and one in three years for the short and long rain season respectively.

Prototype index development: Three different index insurance contracts including two weather index based (WII) and one area yield index (AYII) insurance were tested during the dry run:

- WII⁴ is a type of index insurance in which payout is based on realizations of specific weather parameters, in this case rainfall.

- AYII⁵ is a type of index insurance in which payout is based on the realized average yield of area, e.g. sub-county.

Criterion	WII under R4	AYII under R4
Concept	<ul style="list-style-type: none"> • A type of index insurance in which payout is based on realizations of specific weather parameters, e.g. rainfall estimates • Input-based (only rainfall is considered) 	<ul style="list-style-type: none"> • A type of index insurance in which payout is based on the realised average yield of area, e.g. district • Output-based (Yield sampling is done)
Type of risks covered	<ul style="list-style-type: none"> • Extensive dry spells and droughts 	<ul style="list-style-type: none"> • Extensive dry spells, droughts, excessive rainfall, pests, excess heat
Dataset required for index design	<ul style="list-style-type: none"> • Credible and consistent rainfall estimates provided by satellites for past 30 years at the required unit area of insurance (e.g. pixels) 	<ul style="list-style-type: none"> • Credible and consistent specific crop yield dataset for more than 10 years at the required unit area of insurance (e.g. district level)
Setting of the trigger	<ul style="list-style-type: none"> • Determined by worst years and selected frequency of payouts 	<ul style="list-style-type: none"> • Based on average historical yield for the specific crop at the set unit area of insurance
Dataset required to assess index performance	<ul style="list-style-type: none"> • Rainfall data based on the selected remote sensing dataset for the current season 	<ul style="list-style-type: none"> • Specific crop yield data collected through standardised crop cut experiments
Expected payout timeframe	<ul style="list-style-type: none"> • Two weeks after end of second window 	<ul style="list-style-type: none"> • 2-3 months after harvest
Major cost	<ul style="list-style-type: none"> • Index design 	<ul style="list-style-type: none"> • Crop cut experiments
Key challenges	<ul style="list-style-type: none"> • Basis risk • Can be too technical/complex • Covers only certain risks (e.g. insufficient and/or excess rainfall) 	<ul style="list-style-type: none"> • Basis risk (but lower than WII) • Credible and consistent yield datasets that is acceptable to the insurer/reinsurer • Can be more expensive due to transaction costs involved (crop cuts, auditor, loss provisioning); • Payouts can be much delayed compared to WII

4. Two different WII product structures offering coverage against late onset and early cessation of rainfall were tested. These included the even risk and constant risk methods of product design. Through the even risk approach, a trigger and exit based on the specific characteristics of rainfall data for each location is set, which ensures an even spatial distribution of payout frequencies. In the constant approach, a common trigger and exit parameter is used for all locations within a sub-county, for operational ease and ease of understanding by all stakeholders.

5. This product offered coverage for a basket of crops including maize, sorghum, millet, cow peas and green grams, and triggers a payout if the observed yield (calculated through standardized crop cut methodologies) fell below the pre-determined threshold at the sub-county level.

These contracts were designed with the guiding principles of simplicity, product quality, affordability, and actuarial pricing. Building on the index design experience in other countries, participatory exercises were conducted to ensure that local communities, partners and WFP personnel can provide input to the prototypes.

Indices testing and interaction with communities in target

areas: During the season, a test monitoring exercise was conducted via active participation of communities, partners and WFP personnel through a Whatsapp group in which photos of insured farms at different stages of crop development were shared. Key risks that impact crop development – dry spells, excess rainfall, pest and others can be identified. This activity also provided real time georeferenced insights such as which risk is more prominent in which village, which can allow an insurer to provision for losses at a significantly low cost. It was found that the 2016 short rains experienced a relatively timely onset in October but failed to continue beyond the start of season, causing widespread failure across all crops, including drought tolerant ones.

End of season assessment: At the end of the coverage period, hypothetical payouts from the two WII and one AYII contract were evaluated. Payouts ranging from 18-43 percent of the sum

insured were recorded in the three sub-counties of Kitui Rural, Kitui South, and Mwingi Central, under the WII even contract. No significant payouts were triggered by the WII constant approach. In case of AYII, as yields were below the exit mark of 1x90 kg bag per acre, a 100 percent payout was hypothetically triggered.

A final assessment of the three insurance contracts was conducted based on the understanding and satisfaction of farmers and partners of the product and the level of payouts, as well as operational challenges and potential for scale up. Based on these inputs, there was a consensus to use the area yield index product as the primary insurance product for scale up during the 2017 long rains. The key reason for this choice was the methodology adopted under AYII, which provides a tangible attribute to the often intangible insurance process, thereby making it easier for partners and participants to understand, accept and actively engage in the process.

MOVING FORWARD

Building on the lessons learnt and the findings of the dry run, R4 is being rolled out on a small scale in the Kitui Rural sub-county by offering AYII coverage for the 2017 long rains to 963 participants engaging in asset creation through WFP's FFA program. Key implementation processes for this roll out are currently being developed with relevant stakeholders.



CONCLUSION

This quarter marked the end of the first phase of R4 in Southern Africa, and the beginning of phase II funded by SDC focused on the expansion of the program in both Malawi and Zambia. Up to June 2017, a total of 34,099 people accessed insurance in Ethiopia, Senegal and Kenya. Furthermore, communities

are continuing to implement risk reduction activities, and in the R4 countries where financial services are active they are participating in credit and savings activities. End-of-season-assessments in Southern Africa did not register this season as a drought year and therefore payouts were not triggered.

Farmers take part in a sensitization activity in Malawi.
WFP/Jyothi Bylappa

APPENDIX I: METRICS FROM THE FIELD

ETHIOPIA



Risk Reduction

Tigray

- 29.6 km of deep trench, 15.3 km trench bund and 14.2 km stone faced trench bund constructed;
- 16 percolation ponds constructed;
- 219,000 pits prepared;
- 7.6 km of simple runoff diversion canals constructed;
- 284 micro-gardens prepared;
- 2,002 compost pits dug.



Risk Transfer

- 25,889 farmers signed up for insurance (9,837 FHHs): 23,567 farmers (9,191 FHHs) in Tigray, 1,247 farmers (339 FHHs) in Amhara;
- 2,322 farmers paid for insurance 100 percent in cash;
- Total sum insured amounts to USD 77,435 (ETB 1,805,000);
- Total premium of USD 9,582 (ETB 223,359).



Risk Reserves and Prudent Risk Taking

Tigray

- 3,051 farmers (1,105 FHHs) participated in 144 VESAs;
- Total savings amount to USD 22,739 (ETB 530,056);
- 1,890 farmers repaid loans worth USD 180,263 (ETB 4,201,911) (78 percent of total loan amount);
- 206 farmers (64 FHHs) accessed loans of USD 36,401 (ETB 848,500) with an individual loan size of USD 129 to 257 (ETB 3,000 to 6,000).

Amhara

- 2,574 farmers (641 FHHs) participated in 123 VESAs;
- Total savings amount to USD 7,160 (ETB 166,906);
- 659 farmers took out loans worth USD 3,942 (ETB 91,896).

SENEGAL



Risk Reduction

- 6,800 farmers (3,100 women) participate in risk reduction activities;
- 85 compost pit completed and 500 households benefited from training;
- 67 pits for biodigestors dug;
- 8,000 m of stone bunds consolidated and 7,100 m completed;
- 143 ha of land recovered through correction dams and gully rehabilitation structures;
- 4,100 m small dikes constructed;
- 10 framed bunds made;
- Two ponds for watering pastures dug;
- Two trainings on composting and stone bunds techniques held for 370 participants.



Risk Transfer

- 6,000 farmers (2,950 women) registered for IFA: 4,987 in Tambacounda and 1,013 in Kolda.



Risk Reserves and Prudent Risk Taking

- 20 new savings groups created with 554 farmers (all women) participating;
- 699 savings groups with total savings of USD 650,850 (CFA 36,751,850) and a total credit of USD 25,994 (CFA 14,508,750);
- 9,800 farmers accessed and repaid loans of USD 171,900 (CFA 95,923,450);
- Total mobilized under the revolving fund amounts to (CFA 12,500,000).

MALAWI



Risk Reduction

- 3,056 farmers participate in risk reduction activities;
- Four trainings held on index insurance design and field data collection; Integrated approach to resilience building organized by WFP and IRI for local stakeholders;
- Two Seasonal Livelihood Programming (SLP) done for Mangochi and Machinga districts for rolling out of R4.



Risk Reserves and Prudent Risk Taking

- 2,624 participants (2,438 women) saved over USD 20,633 (MK 15,000,000) in 108 VSLs;
- 162 participants (120 women) in 11 groups accessed loans worth USD 2,552 (MK 1,855,000) with an average loan of USD 69 (MK 50,135) per farmer.



Risk Transfer

- 2,342 farmers (1,684 women) insured through IFA scheme;
- Total premium of USD 41,864 (MWK 30,183,944);
- Total sum insured of USD 281,289 (MWK 202,809,753).

ZAMBIA



Risk Reduction

- 2,835 farmers participate in conservation agriculture activities;
- 829 farmers participated in trainings on post-harvest and marketing organized by WFP, MoA and DAPP;
- 941 farmers participated in trainings on vegetable production and gardening skills.



Risk Transfer

- 2,835 farmers (1,402 women) access insurance through the IFCA scheme;
- 392 farmers participated in trainings on insurance;
- Total premium amounts to USD 93,320 (ZMW 850,500);
- Total sum insured amounts to USD 104,929 (ZMW 955,500).



Risk Reserves and Prudent Risk Taking

- 1,159 participants (692 women) in 60 savings groups saved USD 16,935 (ZMW 169,355.00);
- 502 loans outstanding of USD 15,034 (ZMW 150,034).

APPENDIX II: RURAL RESILIENCE EVENT SERIES

Event Name	R4 role	Organizer	Focus	Expert Panel/Speakers/Attendants	Event Date & Location
IRI Index design Mission and Training of partners	Mathieu Dubreuil, Daniela Cuellar and Hussein Madih (WFP), facilitators	Columbia University IRI and WFP	Index design training to national and district partners and community representatives from Balaka, Zomba, and Blantyre to SNIID process and data collection.	WFP, IRI experts	1-14 April, Malawi
Index Insurance Workshop	Mathieu Dubreuil, Daniela Cuellar and Hussein Madih (WFP), facilitators and presenters	Department of Climate Change and Meteorological Services; WFP	Consolidating and strengthening expertise on index-based insurance as a key risk transfer mechanism.	WFP, IRI experts	23-24 May, Malawi
Africa Risk Capacity Workshop	WFP Malawi team participant	African Risk Capacity	Sharing information on the operations of ARC and lessons learned for the 2015/16 season.	ARC experts	23 June 2017, Malawi

APPENDIX III: R4 PARTNERS AND INSTITUTIONAL ROLES

OUR LOCAL/NATIONAL PARTNERS IN ETHIOPIA

- **Africa Insurance Company.** Private insurer in Ethiopia operating in the Tigray, Amhara, and Oromiya regions.
- **Dedebit Credit and Savings Institution (DECSI):** Second-largest microfinance institution (MFI) in Ethiopia with nearly comprehensive coverage of Tigray. Named by Forbes magazine as one of the top 50 MFIs in the world.
- **Ethiopian Farmers' Cooperative.** Primary organizing body for farmers in the community.
- **Ethiopian National Meteorological Agency (NMA).** Agency offering technical support in weather and climate data analysis.
- **Institute for Sustainable Development (ISD).** Research organization dedicated to sustainable farming practices.
- **Mekelle University:** Member of the National Agricultural Research System providing agronomic expertise and research.
- **Nyala Insurance Share Company.** Private insurer in Ethiopia with a strong track record of interest in agricultural insurance.
- **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.
- **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).
- **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.

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.
- **BAMTAARE.** Technical agency affiliated with the Ministry of Agriculture, in charge of lowland rehabilitation and rice production activities in Tambacounda.
- **Caritas Kolda.** Religious organization carrying out DRR projects on access to water and sanitation, production and processing, and migration management, and leading voucher distribution in Kolda.
- **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.
- **Ignitia.** Ignitia is a high-technology company and social enterprise that has recently developed the world's first highly accurate tropical weather forecast model. They partner with R4 in providing farmers with climate services in Tambacounda.
- **Institut National de Pédologie (INP) - National Institute for Pedology.** Technical agency affiliated with the Ministry of Agriculture, in charge of soil conservation and restoration projects, including building stone bunds and check dams, and composting.
- **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.
- **Manobi.** Manobi is a Senegalese company specialized in integrated geographical information systems and web-mobile convergence. Manobi will provide R4 farmers with climate services in the region of Kolda.
- **PASA.** Technical agency affiliated with the Ministry of Agriculture, in charge of lowland rehabilitation and rice production activities in Kongehuel.
- **PlaNet Guarantee.** Insurance broker specializing in micro-insurance for development and poverty reduction. In Koussanar, it helps CNAAS commercialize R4's insurance product(s) by conducting awareness-raising and marketing activities among clients.

- **Projet d'Appui à la Petite Irrigation Locale (PAPIL) - Project to Support Small Local Irrigation.** Technical agency affiliated with the Ministry of Agriculture, in charge of lowland rehabilitation and rice production activities in Kolda.
- **Regional Research Centre for the Improvement of Drought Adaptation (CERAAS).** CERAAS helps with the design of insurance product(s) by helping create the rainfall index (including by contributing to studies on the use of remote sensing tools), and by carrying out crop monitoring.
- **Union des Institutions Mutualistes d'Epargne et de Credit (U-IMCEC) - Savings and Credit Cooperatives' Union.**
A microfinance institution with which we are currently implementing the risk taking component particularly the warrantage and other financial products tailored to the needs of rural women. It is a growing institution seeking to expand its network in rural areas especially.
- **Université Gaston Berger de Saint Louis (UGB).** The second university established in Senegal, specialized in Social Sciences, Economics and Business Management, Political Science and Applied Science. UGB provides the enumerators for FERDI's Risk Transfer studies.

OUR LOCAL/NATIONAL PARTNERS IN MALAWI

- **Balaka District Council.** The local government administrative authority 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.
- **Concern Universal (CU).** 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.
- **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 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.
- **Insurance Association of Malawi.** An association of technical experts in the insurance. Approver of insurance products and manages insurance risk in the insurance market.
- **Malawi Meteorological Department.** Responsible for climate change assessments, weather forecast, early warning information and works in collaboration with DoDMA and MOA in the dissemination of early warnings to the people of Malawi.
- **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.

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 Organisation (FAO).** Implements the CASU program together with the Ministry of Agriculture and Livestock (MAL), which aims at increasing crop production and productivity while at the same time ensuring sustainable use of natural resources amongst farmers practicing Conservation Agriculture (CA).
- **Ministry of Agriculture and Livestock (MAL).** Implements the CASU program together with FAO, and provides extension services to farmers.
- **Vision Fund Zambia Limited (VFZ).** Zambia's second largest microfinance institution with the widest rural outreach. VFZ offers credit, operational support on insurance and supports financial education trainings as part of R4.

OUR GLOBAL PARTNERS

- **Fondation pour les Etudes et la Recherche sur le Développement International (FERDI) - Foundation for Studies and Research in International Development.**
The Foundation for International Development Study and Research was created in 2003 on the initiative of CERDI- the *Centre d'Etudes et de Recherches sur le Développement International (Université d'Auvergne, France)* to support research in the field of international economic development.
- **Goulston & Storrs, and Weil, Gotshal & Manges.** Law firms providing pro bono legal expertise.
- **Index Insurance Innovation Initiative (I4) at University of California, Davis (UC Davis).** Research partnership on index insurance between academia and development organizations, with UC Davis, the Food & Agriculture Organization, International Labour Organization, and the US Agency for International Development.
- **Swiss Re:** Global reinsurer and leader on climate change advocacy with funding and technical expertise.
- **The International Fund for Agricultural Development (IFAD).** A specialized agency of the UN focused on rural poverty reduction, hunger and malnutrition.
- **The International Research Institute for Climate and Society (IRI).** Member of Columbia University's Earth Institute offering research and technical expertise in climate data and weather index design for rural farmers.



Crissy Mupuchi R4 farmer in his field in Pemba, Zambia.
DAPP/Crissy Mupuchi

APPENDIX IV: MEDIA CITATIONS AND RESOURCES

IN THE NEWS

- Public Finance International, [Can insurance help the poorest cope with extreme weather?](#) (May 2016)
- Diplomatic Courier, [Ending Global Hunger Through Private Sector, Civil Society and Government Collaboration](#) (September 2016)
- Le Soleil, [Lutte contre la pauvreté : Le projet 4R financé par Oxfam et le Pam soulage les ménages](#) (September 2016)
- The Wire, [UN Working to Tackle Havoc Wreaked by 'El Nino' and 'La Nina'](#) (July 2016)
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[‘Is insurance a climate cure-all? It’s complicated.’](#)

[“How To Dodge A Drought”](#)

[“Putting the missing “p” in public-private-partnerships: Lessons from the R4 Rural Resilience Initiative”](#)

[“Dear G7 Leaders: Insurance is hardly enough. Trust us, we know from experience”](#)

[“Ethiopian Farmers Get a Payout, Easing Effects of Drought”](#)

[“With Insurance, Loans, and Confidence, This Ethiopian Farmer Builds Her Resilience”](#)

[“In Northern Ethiopia, Weather Insurance Offers a Buffer Against Drought”](#)

[“Weather Insurance Offers Ethiopian Farmers Hope—Despite Drought”](#)

[“Medhin Reda’s Best Asset Is Her Own Hard Work”](#)

[“Gebru Kahsay Relies on Rain But Has the Security of Insurance”](#)

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

VIDEOS/MULTIMEDIA

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

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

[R4: The Rural Resilience Initiative](#)

A Tiny Seed and a Big Idea

A New Tool for Tackling Poverty

PHOTOGRAPHY

Project photos are available upon request. See examples of photos used in the enclosed quarterly reports.

PARTNER REPORTS

- [IRI FINAL 2013 End of Season Assessment Report](#): This report provides an assessment of the 2013 rainfall season for the R4 project in Ethiopia in terms of satellite rainfall estimates and their implication for the 2013 indices.
- [HARITA IRI Updated 2012 HARITA Initial End of Season Assessment October 2012](#): This report is a deliverable by the International Research Institute for Climate and Society (IRI) to Oxfam America. It provides an early, exploratory assessment of the 2012 rainfall season for the HARITA/R4 project in Ethiopia in terms of satellite rainfall estimates and their implication for the 2012 indices.
- [HARITA IRI Report to Oxfam America March 2012](#): This report is a deliverable by the IRI to Oxfam America on the 2012 index development processes and presents the final indices offered in the project villages.

- [HARITA IRI Report to Oxfam America May 2011](#): This report is a deliverable by IRI to Oxfam America on the 2011 index development processes. It provides a description of the indices, their structure, their data sources, the design process, and action plans for the project as well as a separate section with the educational materials used to support the 2010/2011 index development process.
- [HARITA IRI Report to Oxfam America June 2010](#): This progress report is a formal deliverable by IRI to Oxfam America and presents an overview of the scalable index insurance product development process for the 2010 growing season. It explains the economic risk simulation games conducted with farmers to understand their risk-management decisions/preferences and also to educate them about index insurance packages.
- [Technical Annex: HARITA IRI Report to Oxfam America June 2010](#): IRI has been working to build a formal statistical methodology that will systematically compare and integrate information on remote sensing of rainfall, ground-based data measurements, and other data sets. This report presents a preliminary analysis that focuses on Adi Ha—the pilot village—modeling rainfall at five neighboring sites, where daily rainfall amounts have been recorded during different intervals for each site over the course of a 49-year time period, from 1961 to 2009. This methodology is intended to be further developed and packaged into tools for contract design and evaluation.
- [HARITA IRI Report to Oxfam America October 2010](#): This progress report is a formal deliverable by IRI to OA that summarizes the 2011 scaling process and presents the education materials developed to support the scaling process.

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R4 farmer participating in a community-based participatory planning exercise in Senegal.
WFP/ Carla De Gregorio

Collaboration

The R4 Rural Resilience Initiative is a strategic collaboration between the World Food Programme and Oxfam America, with no commingling of funds. Each partner has its own sponsors as listed. R4 is inviting donors to support expansion.



The World Food Programme is the world's largest humanitarian agency fighting hunger worldwide.

Each year, WFP assists some 80 million people in around 80 countries.

www.wfp.org/r4

With support from



Oxfam America is an international relief and development organization that creates lasting solutions to poverty, hunger, and injustice, working with individuals and local groups in more than 90 countries. Oxfam America does not receive funding from the US government.

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