

R4 Rural Resilience Initiative

QUARTERLY REPORT | OCTOBER - DECEMBER 2016



CONTENTS

Executive summary	4
Status summary	6
Assessing the risk transfer component - End of the Season Assessment in Ethiopia	10
Conclusion	12
Appendix I: Metrics from the field	13
Appendix II: R4 partners and institutional roles	17
Appendix III: Media citations and resources	20

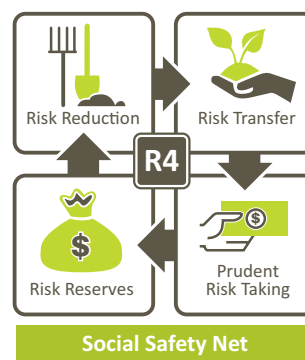
Cover: R4 participants sharing knowledge during a Village Savings and Loans (VSL) group in Chipote Village, Balaka District, Malawi.
WFP / Hussein Madih



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).

During this quarter, end of season assessments were carried out in Ethiopia and Senegal. In Malawi, smallholders registered for insurance for the 2016/2017 season, while in Zambia land preparation activities were completed by the participants. In 2016, a total of 41,867 farmers enrolled in R4.



Country teams from Oxfam's two flagship resilience building projects, R4 and CA-MEL, came together during in November for a face-to-face learning event in Boston. Participants included representatives from partner organizations and Oxfam colleagues from El Salvador, Guatemala, Senegal, Ethiopia, Sudan, Vanuatu, Australia, Spain and the US working on resilience. The purpose of the F2F was to share knowledge, experience and lessons from implementing diverse approaches to building resilience in various contexts. Teams looked at achievements, monitoring tools and systems, gender in resilience, policy and influencing, and the management of resilience programs.

R4 participant in the Farmers Training Centre in Monze, Zambia.
WFP / Mathieu Dubreuil

In **Ethiopia**, a total of 29,127 farmers (32 percent women) participated in R4 in 2016. The index triggered small payouts of US\$ 3,473 for 748 households in two villages in Kolatemben woreda of Tigray, namely Begasheka and Debregenet.































In **Senegal**, under the risk transfer component, 7,563 farmers (50 percent women) accessed the R4 insurance product in 2016. An outcome monitoring survey was completed in the three regions where R4 is currently operating, as well as an end-of-season monitoring of rainfall for the R4 insurance index which was conducted by the partner, International Research Institute for Climate and Society (IRI).

In **Malawi**, the registration for the insurance participants for the 2016/17 season took place, with 2,342 people (1,684 women) registered. Moreover, the 2016/2017 farming and lean season began during the reporting period, and the saving cycle for the Village Savings and Loans (VSLs) groups ended.

In **Zambia**, land preparation activities were completed by 2,835 (1,402 women) participants using Conservation Agriculture (CA) techniques.

This report provides an update on R4 activities from October to December 2016, and presents the results of the end of the season assessment in Ethiopia.

Figure 1. R4 achievements

								
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
	2009	2010	2011	2012	2013	2014	2015	2016
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

In 2016, a total of 29,127 farmers participated in R4 in Ethiopia. The initiative is being implemented in 86 villages with 27,027 farmers (35 percent Female-Headed Households -FHHs) in the region of Tigray and 2,103 farmers (26 percent FHHs) in the region of Amhara. The index triggered small payouts of US\$ 3,473 for 748 households in Begasheka and Debregenet villages, in Kolatemben woreda of Tigray.

Through the project's Insurance for Assets scheme (IFA), a total of 26,299 households (HHs), of which 24,574 in Tigray and 1,725 in Amhara regions have participated in long-term risk reduction activities like watershed management and homestead development identified through vulnerability assessments. The remaining 2,828 participants, 2,450 in Tigray and 378 in Amhara, paid for insurance fully in cash. Across both regions, the total sum insured in 2016 amounts to \$2,618,673 USD (ETB 58,658,294), with a total premium amount of US\$ 432,722 USD (ETB 9,692,974). Out of the total premium amount, 20 percent, US\$ 87,816 (ETB 1,967,094) was paid in cash by the farmers,

while the remaining was covered by the R4 program. The use of a broker allowed to reduce premium rates which increased the sum insured and the coverage for participants with the same insurance amount. The average sum insured per participant has thus shown a 73 percent increase from US\$ 52 (ETB 1,082) last year to US\$ 90 investment (ETB 2,014) this year. In 2016, the index triggered small payouts amounting to around US\$ 3,473 (ETB 78,413) in two villages in Kolatemben, namely Begasheka and Debregenet in Tigray region.

This year US\$ 58,073 (ETB 1,311,000) was delivered to 437 farmers who received US\$ 133 (ETB 3,000) each from a revolving fund¹ set up to facilitate access to loans. Up to present, a total of USD 378,073 (ETB 8,535,000) revolving fund has been provided to 2,845 farmers who purchased weather-index insurance in five districts. All farmers have engaged in different income generating activities (IGA) and are practicing regular savings in both Village Economic and Social Associations (VESAs) and Rural Saving and Credit Cooperatives (RUSACCOs).

Figure 2. R4 Ethiopia timeline for the 2016 agricultural season

Status	2016											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
✓	Payout process				Financial education and outreach							
✓					Financial package development							
✓					Savings and Credit activities							
✓		Insurance enrollment										
✓					Risk Reduction activities							
✓										Payout process		

1. Under the prudent risk taking component, R4 manages a revolving fund providing loans to farmers who want to invest in their agricultural activities through Rural Saving and Credit Cooperatives (RUSACCOs). First, participants become members of RUSACCOs to access loans. Subsequently, the local partner REST provides trainings to the participants before distributing the loan through RUSACCOs. The beneficiaries repay the loan to the RUSACCOs and then it revolves in the village through RUSACCOs.

SENEGAL

A total of 7,563 farmers purchased R4 insurance product in Senegal in 2016. The index triggered payouts of US\$ 69,039 (CFA 42,707,246) for 1,896 subscribers as a result of rainfall deficit.

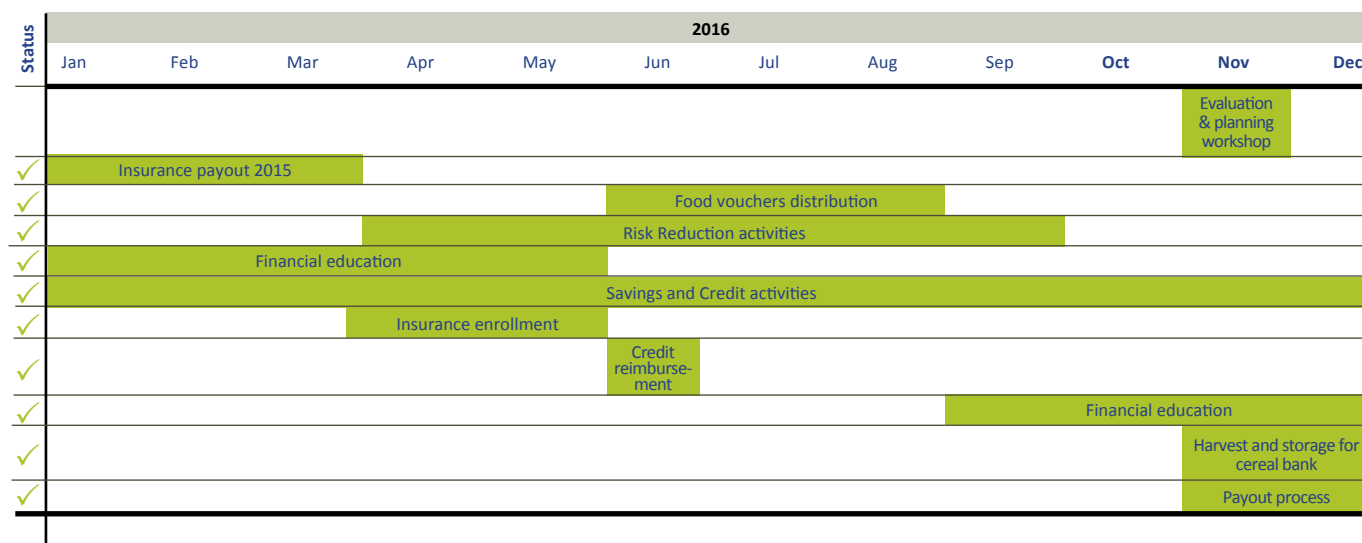
By October, all Food assistance for Assets (FFA) activities under the risk reduction component had been completed for both the dry and rainy seasons. During this quarter, garden cultivation started in Kolda.

Under the risk transfer component, of the 7,563 farmers (50 percent women) who accessed the R4 insurance product in 2016, 6,842 did so through the IFA scheme, and 721 paid in cash under the IFAD-funded program PADAER. 2016 saw a significant increase in insurance subscriptions. Indeed, between 2015 and 2016 the number of insured farmers through R4 increased from 3,526 to 7,563, a 114 percent increase compared to 2015. The sum insured has reached US\$ 1,650,000, which represents an increase of 186 percent compared to 2015. Furthermore, this year saw 100 percent renewal rate, that is, all the farmers who registered in 2015 also registered in 2016.

During the reporting period, the outcome monitoring survey for the three regions, namely Tambacounda, Kolda and Kaffrine, was completed and an end-of-season monitoring of rainfall for the R4 insurance index was conducted by IRI and the members of the index design team (ANACIM,² ISRA,³ CNAAS,⁴ PlaNet Guarantee). The assessment suggested an early end of the rainy season in September. While the first window of the index insurance did not trigger, 1,896 farmers will receive a payout as a result of the rainfall deficit at the end of the second window which did not allow plants to complete their cycle in both Tambacounda and Kolda regions.

The savings and credit components are fully operational as 765 savings groups continued their activities across the three regions. To date, the savings groups with a total of 17,749 participants (14,412 women and 3,337 men) saved US\$ 168,380. Members took loans worth US\$ 208,986. A total of 15 savings associations in Tambacounda and Kolda accessed revolving credit for income-generating activities.

Figure 3. R4 Senegal timeline for the 2016 agricultural season



2. Agence Nationale pour l'Aviation Civile et de la Météorologie
3. Institut Sénégalais de Recherches Agricoles
4. Compagnie Nationale d'Assurance Agricole du Senegal

MALAWI

In Malawi, 2,342 farmers (1,684 women) purchased insurance coverage for the 2015/2016 season through the IFA scheme. The fourth quarter was characterized by the start of the 2016/2017 farming and lean season, the end of the saving cycle for the Village Savings and Loans (VSLs) groups, and the registration of insurance participants for 2016/2017 season.

Under the risk reduction component, members participated in asset creation activities as part of the Food Assistance for Assets (FFA)⁵ programme, including construction of marker ridges, check dams, propagation of vetiver grass, water and sanitation activities.

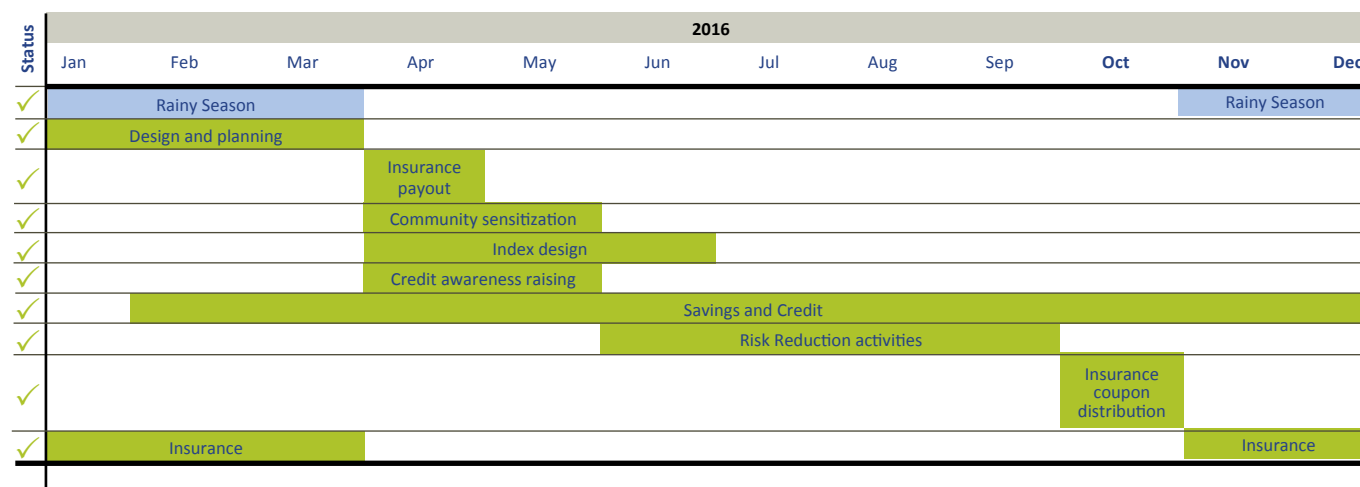
Furthermore, members also attended trainings during the October-December quarter on livestock management skills and livestock production, facilitated by the Food and Agriculture Organization of the United Nations (FAO); trainings on vegetable nursery, irrigation systems, and development of Village Forest Area Management Plans by the forestry department of the Balaka District Council; and trainings on use of rain gauges by the Department of Climate Change and Meteorological Services (DCCMS).

In December, FAO partnered with WFP in the implementation of a seed fair program. As a part of this program the 3,056 households participating in R4 received a US\$ 14 (MWK 10,500) voucher each to purchase seeds, 5kg of NPK fertilizer⁶ and 5kg of Urea fertilizer.

The Swiss Agency for Development and Cooperation (SDC) which supports R4 in Malawi and Zambia, commissioned an evaluation of the R4 project in Malawi in October. The results of the evaluation will be discussed during the R4 workshop planned in February and will lead to the implementation plan for the scale up phase of the initiative (2017 – 2022).

Going forward, a seasonal monitoring exercise will be conducted in the project areas between December 2016 and April 2017 to assess the 2016/2017 farming season. This study will include field-level data collection regarding rainfall, crop production and farming practices undertaken by R4 households to confirm the 2016/2017 index outputs and its accuracy.

Figure 4. R4 Malawi timeline for the 2016 agricultural season



5. FFA is WFP's key tool for providing food assistance to the most vulnerable. FFA provides beneficiaries with food, vouchers or cash transfers, in exchange for their participation in resilience building activities such as repairing irrigation systems, building bridges, soil conservation and setting up community granaries.

6. NPK fertilizers are three-component fertilizers providing nitrogen, phosphorus, and potassium.

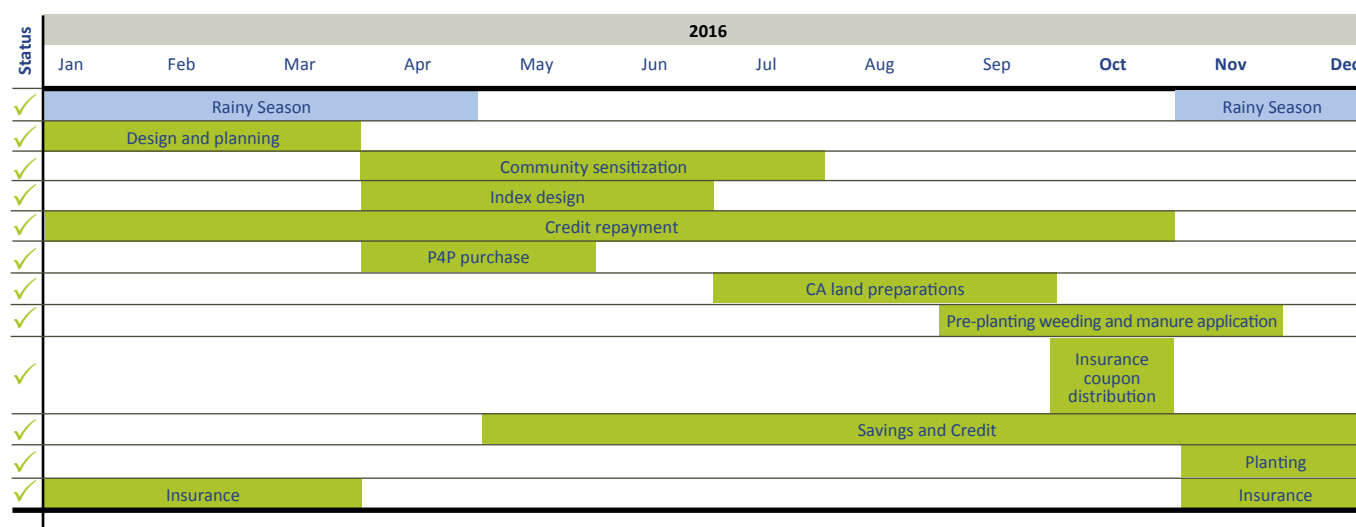
ZAMBIA

R4 in Zambia currently involves a total of 2,835 farmers, (1,402 women). During the reporting period, a climate and weather recording training workshop was)organized by the Zambia Meteorological Department between October-November 2016 bringing together R4 partners including Development Aid from People to People-DAPP, Ministry of Agriculture and 58 farmers. Farmers were trained on the importance of using climate services such as weather index insurance for better production planning and climate and weather recording. Furthermore, the training was critical for the validation and use of the early warning information for agricultural related production

activities which is an integral part of the risk reduction component.

All the 2,835 registered R4 participants successfully completed land preparation activities using conservation agriculture method of minimum tillage such as ripping and digging basins in all five camps including Kasikili (524 farmers), Kasiya (766 farmers), Muzoka (541 farmers), Ndondi (504 farmers) and Kanchomba South (500 farmers). The participants are insured through the IFA scheme by applying Conservation Agriculture (CA) techniques such as crop rotation and residue.

Figure 5. R4 Zambia timeline for the 2016 agricultural season





ASSESSING THE RISK TRANSFER COMPONENT - END OF THE SEASON ASSESSMENT IN ETHIOPIA

This section draws upon the end of season assessment in Ethiopia, led by IRI which focused on the rainfall for the 2016 agricultural season. This year's agricultural season was characterized by average to above average rainfall conditions. While the ARC2 (Africa Rainfall Climatology Version 2) index did not trigger, the EVI¹⁷ index triggered small payouts in two of the R4 villages.

THE INDEXES

The 2016 indexes focused on two drought perils, namely (i) severely late onset of rainfall or significant dry spells for long cycle crops after sowing and (ii) severely early end of rainfall or significant dry spells late in the season for all crops.⁸ A standardized index is calibrated to the rainfall patterns and cropping calendar for each village where R4 is implemented.

To address the perils mentioned above, two separate indexes have been developed, and each one covers one window.

1. Early Index: targets severely late onset of the rainfall season or significant dry spells during the vegetative growth cover stage.
2. Hybrid Late Index: targets severely early end to the rainfall season, or significant dry spells during the critical periods before the end of the season.

More specifically, the Hybrid Late Index combines the ARC2-based index for the late window, with an index that triggers based on Enhanced Vegetation Index (EVI). For the Hybrid Late Index, a payout is triggered if either the ARC2 or the EVI Index triggers, and the payout amount is the higher of the two.

For the 2016 season, as this section will illustrate, while the ARC2 index did not trigger, the EVI index triggered payouts in two of the R4 villages.

R4 participant in her cabbage field in Tigray. Thanks to R4, she increased her earnings by switching from growing cereals to cabbage.
REST / Mikiele Tamrat

THE 2016 AGRICULTURAL SEASON

The 2016 agricultural season was assessed using satellite estimates of rainfall. In addition, the performance of the 2016 index was determined by taking into account other regional expert reports and ground-based measurements of rainfall. Overall, in the areas where R4 is carried out, rainfall was reported as normal and above normal. Following the Hybrid Late Index, the ARC2 index did not trigger in any of the R4 villages as it assessed 2016 as a 'good' rainfall year, in line with other sources such as TAMSAT, CHIRPS, ENACT, farmers' experiences, rain gauges and reports from other organizations. On the other hand, the EVI index triggered payouts in two of the 81 R4 villages.

The ARC2 index estimates for the rainfall amount and distribution in June, July and August showed normal to above normal levels in comparison to the long term average with the exception of some pocket areas in central and southern zones with slightly below average rainfall. Lastly, September rainfall was average in all R4 areas. The assessment of the ARC2 index was consistent with reports on the ground and with rain gauge data. For example, reports from FEWSNET,⁹ CHIRPS, TAMSAT, ENACTS, WFP Vulnerability Analysis and Mapping (WFP VAM)'s East Africa Seasonal Analysis, and the Ethiopian National Meteorology Agency illustrate favourable rainfall conditions during the 'Meher' (the main) agricultural season.

This was reflected also among farmers and agricultural experts who considered the distribution and amount of rains to have been favourable during the rainy season. Both farmers and experts had good expectations for crop yield.

In addition to the ARC2 rainfall indexes, to assess the 2016 growing season IRI designed a vegetation index based on EVI. Although the EVI index had initially been calibrated for the eastern zone of Tigray, it was expanded to all R4 villages in Tigray during the 2016 cropping season based on the successful pilot testing. The EVI index triggered in two villages in Kola

Tembien Woreda, and it resulted in 9% payouts in Bagasheka and 7% payouts in Debre Genet villages. The EVI index agreed with other sources of information 98% of the time. The different diagnostics run on the EVI results reflect consistent findings.

In order to assess the EVI payouts, IRI analysed the data averaging the index over a 5km grid centred on each of the two villages. This led to higher payouts in Bagasheka village (from 9% to 18%) and lower payouts in DebregenK village (from 7% to 2%), which indicate some phenomenon linked to the overall amount and quality of photosynthetic material in vegetation including non-crops. Farmers in both villages witnessed heavy rainfall and waterlogging problems during the season. An explanation could be that the presence of heavy clouds can interfere with the reflected radiation from the vegetation which could have impacted the performance of the index. Moreover, delayed start of rains was reported by farmers in some pocket areas. It is possible that the late start of the season could have led to a green down¹⁰ of the vegetation in the late season due to the specific mix of the vegetation in the area. Yet, this needs to be further investigated. Moreover, each area needs to be studied separately to come up with the appropriate calibration. Whether the timing of the window could affect this particular region differently than other regions is another element that needs to be explored.

Overall, the 2016 agricultural season showed normal to above normal rainfall conditions. Farmers did not report any crop loss due to the lack or slow onset of rain, but instead the heavy rainfall (not covered by insurance) that took place caused damages to crops and created waterlogging problems. These results meant that the ARC2 index did not trigger any payouts. In addition to ARC2, vegetation indexes were implemented based on MODIS EVI. The assessment of the vegetation of the R4 villages led to the index triggering small payouts in two villages.

7. EVI provides a measure of "greenness," or chlorophyll density, which is useful in monitoring vegetation.

8. Reference crops include maize, teff, wheat, bean, and sorghum.

9. Famine Early Warning Systems Network

10. A stage in crop phenology when plant appearances can change in hue, colour, shape and size and even experience loss of leaves.



CONCLUSION

In 2016, a total of 41,867 farmers enrolled into R4 in Ethiopia, Senegal, Malawi and Zambia. The index triggered in Ethiopia and Senegal, with 2,644 households receiving a portion of US\$ 72, 512 in payouts. This year R4 Ethiopia used a new index combining rainfall estimates (ARC2) with a vegetation index.

According to the assessment, this was an improvement over the 2015 index as it more accurately mirrored the situation on the ground. In the next Quarterly Report covering the January – March 2017 period, the team will present the results of the End of the Season Assessment carried out in Senegal.

During R4 insurance games, farmers are divided in men and women groups to discuss the occurrence of 'bad years' and the consequences on their livelihoods. Kolda, Senegal.

WFP / Azzurra Massimino

APPENDIX I: METRICS FROM THE FIELD

ETHIOPIA



Risk Reduction

Tigray

- One water harvesting check dam constructed to irrigate 6 ha of bench terraced land to benefit 65 landless people at Ruba feleg kebele of Atsbi womberta woreda;
- 23 roof water harvesting structures constructed in Kiltawlaelo, Atsbiwomberta and Saesie Tsaedaemba woredas to benefit 23 households.
- 126,000 pits prepared and planted;
- 10 km of gullies rehabilitated by construction of 20,030 m³ of loose and 439 m³ gabion check dams and supported with 159,063 cuttings of elephant grass, populous and split of vetiver grasses;
- 84 micro-gardens prepared to produce vegetables on 0.2 hectares of land benefiting 84 FHHs;
- 62 compost pits dug by 57 male headed households;
- 1,190 farmers trained on soil fertility management;
- 95 IGA farmers, VESA leaders and district experts participated in a regional exposure visit focusing on IGA and DRR activities;
- 70 experts participated in a regional exposure visit to R4 villages focusing on DRR activities;
- Vegetable seeds (50 Kg Switch chard, 50 Kg Cabbage, 45 Kg lettuce and 50 kg tomato);
- construction material (4 concrete mould for Rain Water Harvesting and 108 gabion box);
- agricultural tools (1,581 watering can for micro garden, 472 oxen derived mould board, 1320 shovel, 1,439 pick axe, 127 knapsack chemical sprayers).

Amhara

- 38 development agents and experts, and 63 farmers trained on DRR activities in October and November 2016.



Risk Transfer

- EVI index triggered 5-6% payouts of US\$ 3,473 (ETB 78,413) in two villages in Kolatemben, namely Begasheka and Debregenet.



Prudent Risk Taking and Risk Reserves

- 990 (467 FHHs) households, as well as RUSACCO and VESA leaders trained by REST experts and cooperatives on credit and savings schemes;
- In Amhara, 143 farmers (67 women) accessed loans of around US\$ 91 (ETB 2,000) each for IGA activities.

Tigray

- A total of 1,683 farmers repaid loans worth US\$ 124,873 (ETB 2,752,813);
- 2,845 farmers saved US\$ 24,437 (ETB 511,660) in RUSACCOs and US\$ 1,888 (ETB 42,631) in VESAs;
- 421 vulnerable farmers in a VESA borrowed US\$ 7,034 (ETB 158,801) without interest and 98 farmers borrowed US\$ 1,218 (ETB 27,500) with interest which will be paid back within 4 to 5 months;
- 965 famers (306 women) repaid their loans to their saving groups.

Capacity building

- In Amhara, a total of 21 Agriculture Development Agents, regional experts and woreda officials received training on insurance concepts, regulations, consumer protection and over all achievements;
- 813 farmers (168 women) received capacity building training on insurance concepts, regulations and consumer protection in Amhara;
- 490 farmers (149 women) trained on savings scheme;
- WFP together with IRI provided weather-index insurance designing capacity building training for partners pooled from Insurance companies (Nyala, Africa, Oromia and Ethiopia insurance), National Meteorological Agency, Ministry of Agriculture and natural Resources, REST, ORDA, Oxfam America and WFP staff.



Risk reduction

Tambacounda

- A total of 1,240 T of rice cultivated per ha with a total production of 23,704 T.

Kolda

- A total of 2,225 T of rice cultivated per ha with a total production of 323 T.

Kaffrine

- A total of 2,78 T of rice cultivated per ha with a total production of 1,098 T.



Risk transfer

- A total of 7,563 HHs (3,929 women) participated in the IFA scheme;
- A total of 13,000 HHs enrolled in FFA activities;
- A total of 18,477 ha of land insured;
- A total sum insured this season amount to US\$ 1,656,914 (CFA 1,019,002,206).



Risk Reserves

- A total of 765 saving groups including 127 new saving groups covered a total of 17,749 members (14,412 women);
- Members saved a total of US\$ 168,380 (CFA 103,553,750) in their respective savings groups; and accessed US\$ 208,986 (CFA 128,526,450) in loans;
- The total savings of 16 Interest Economic Groups (IEG) associations amounts to US\$ 10,595 (CFA 6,516,000);
- Total loans from Interest Economic Groups amounted to US\$ 14736 (CFA 9,063,000).



Prudent Risk Taking

- A total of 10,992 farmers took out loans amounting to US\$ 166,743 (CFA 102,546,950);
- US\$ 5,740 (CFA 3,530,500) has been repaid by 180 farmers for leasing credit;
- US\$ 20,325 (CFA 12,500,000) mobilized under the revolving fund.



Risk reduction

- Two boreholes rehabilitated;
- three shallow wells dug;
- 118,523 seedlings raised;
- 13,220 fruit trees raised;
- 660.17 km of marker ridges built;
- 165.23 km of swales constructed;
- 322 gullies reclaimed;
- 4,607 check dams constructed;
- 18,398 pits of manure applied;
- 13 nurseries constructed;
- three taps maintained;
- one fishpond constructed.



Risk Transfer

- Total premium paid US\$ 41,864 (MKW 30,183,944);
- Total sum insured of US\$ 281,289 (MKW 202,809,753);
- 2,342 farmers insured (1,684 women).

IFA Assets created

Two Irrigation ponds constructed;

- 3,6580 m of swales;
- 486,449 m of marker ridges;
- 1,110 m gullies reclaimed;

- five fish ponds constructed;
- 17 shallow wells constructed;
- 7 km of community feeder roads maintained.



Risk Reserves

- There are a total of 108 Village Savings and Lending groups (VSL) from the old Group Village Heads (GVHs) (Zalengera, Pongolani, Mtumbwe, Hambahamba and Silika);
- 2,624 members participating in 108 groups (2,448 women), of which 1,618 members part of R4 (1,492 women);
- 48 VSL groups from the new GVHs (Chulu, Kachenga, Mboga and Muotcha);
- 40 out of 48 VSL Groups (New GVHs) have shared out, with 8 remaining groups expected to share out in January 2017;
- Total sum of US\$ 95,182 (MKW 68, 626,115) was shared out among 148 VSL groups.



Prudent Risk Taking

- US\$ 150 (MKW 109, 000) of US\$ 944 (MKW 685,500) loan accessed last quarter was repaid by 15 farmers;
- A group of (6 members) applied for loan of MKW195, 000;
- A group of 9 members applied for loans of US\$ 333 (MKW 240,000).

***Risk reduction***

- 2,835 farmers completed land preparation using the CA principle of minimum land tillage (ripping and basins);
- 1,791 farmers applied manure.

***Risk Transfer***

- 58 farmers trained in climatic and weather recording;
- 2,835 farmers enrolled in IFA.

***Risk Reserves***

- The cumulative value of savings for this quarter amounts to US\$ 3,991 (ZMW 39,416);
- A total of 235 loans outstanding.

***Prudent Risk Taking***

- A total amount of US\$ 32,597 (ZMW 322,302) paid on the principal loan amount;
- 241 farmers successfully obtained agricultural loan new camps of Muzoka, Ndoni, Kasikili and Kasiya;
- 425 farmers applied for 2016/2017 agricultural loan new camps;
- 1,240 farmers attended credit promotion meetings.

APPENDIX II: 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'Épargne et de Crédit (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.

APPENDIX III: MEDIA CITATIONS AND RESOURCES

IN THE NEWS

- UN Secretary-General's initiative aims to strengthen climate resilience of the world's most vulnerable countries and people: <http://www.un.org/sustainabledevelopment/blog/2015/11/un-secretary-generals-initiative-aims-to-strengthen-climate-resilience-of-the-worlds-most-vulnerable-countries-and-people/>
- R4's achievements on gender were illustrated in a case study in the World Bank, IFAD, FAO's report "[Gender in Climate Smart Agriculture](#)".
- Climate Change The New Economy (CCTNE), Green Awards, UNFCCC, "[G7 Climate Change: The New Economy](#)" (June, 2015).
- Greatrex H, Hansen JW, Garvin S, Diro R, Blakeley S, Le Guen Rao KN, Osgood, DE. 2015. [Scaling up index insurance for smallholder farmers: Recent evidence and insights](#). CCAFS Report No. 14 Copenhagen: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online at: www.ccafs.cgiar.org
- The International Research Institute for Climate and Society. [Using Satellite Data to Improve Index Insurance](#) (August 2014).
- Zambia: Innovative Climate-Risk Solution Expands to Insure Farmers in Malawi and Zambia, AllAfrica (September 23, 2014) <http://allafrica.com/stories/201409231508.html>
- Leaders at UN summit take steps to ensure food security for 9 billion people by 2050, Medi For Freedom (September 23, 2014) <http://mediaforfreedom.com/readarticle.php?AID=18583>
- Innovative Climate-Risk Solution Expands to Insure Farmers in Malawi and Zambia, Insurance NewsNet (September 23, 2014) http://insurancenewsnet.com/oarticle/2014/09/24/innovative-climate-risk-solution-expands-to-insure-farmers-in-malawi-and-zambia-a-559233.html#.VCKMC_I_uPt
- Innovative Climate-Risk Solution Expands to Insure Farmers In Malawi And Zambia, Thomson Reuters Foundation (September 23, 2014) <http://www.trust.org/item/20140923121822-aq1pc/>
- Adreinne Klasa and Adam Rober Green, "[Africa's catalytic agricultural innovations](#)", This is Africa (July 30, 2013).
- Becker-Birck, C., Crowe, J., Lee, J., & Jackson, S., "[Resilience in Action: Lessons from Public-Private Collaborations Around the World](#)", (July, 2013).
- World Bank, "[Ethiopia - Using a social safety net to deliver disaster insurance to the poor: case study](#)", (June, 2013).
- Climate Change The New Economy (CCTNE), The Guardian and United Nations Environment Programme (UNEP), "[G8 Climate Change: The New Economy](#)", (June, 2013).
- United Nations Office for Disaster Risk Reduction (UNISDR), "[From Shared Risk to Shared Value –The Business Case for Disaster Risk Reduction. Global Assessment Report on Disaster Risk Reduction](#)" (May, 2013).
- Disaster Risk Financing and Insurance Program (DRFIP), Global Facility for Disaster Reduction and Recovery (GFDRR), "[Senegal: Disaster Risk Financing and Insurance Country Note](#)" (November, 2012).
- Agence de Presse Sénégalaise, "[Sénégal: Le projet R4 veut aider les agriculteurs à faire face aux changements climatiques](#)", AllAfrica (Nov. 13, 2012).
- Sénégal – Humanitaire, "[Lancement au Sénégal d'une initiative de résilience rurale](#)", SousLeManguier (Nov. 14, 2012).
- "Sécurité alimentaire: L'assurance agricole pour réduire les risques en zone rurale", Le Soleil (Nov. 14, 2012).
- Stephan Faris, "[Seeds for Change](#)", Time (Sept. 24, 2012).
- Lisa Friedman, "[Companies Begin to See Necessity and Profits in Adapting to Climate Change](#)", ClimateWire (July 11, 2012).
- Victoria Eastwood, "[Insurance Helps Kenya's Herders Protect Against Drought](#)", CNN (June 18, 2012).
- Forum for Agricultural Risk Management in Development (FARMD), "[Oxfam & WFP's R4 Initiative Begins Expansion into Senegal, Fueled by Success in Ethiopia](#)", FARMD Member Updates (June 5, 2012).
- David Satterthwaite, "[Weather Insurance Builds Resilience for Farmers](#)", Momentum (March 2012).
- Jim French, "[Ethiopian Crop Insurance and the Secret Farm Bill](#)", Hutchnews (Dec. 22, 2011). This was also posted by: TreeHugger.com, All Voices: Local to Global News, and the World Food Programme.
- David Bornstein, "[News Flash: Progress Happens](#)", The New York Times (Dec. 15, 2011).
- Agnieszka Flak, "[Games Wake People Up to Climate Change](#)", Reuters (Dec. 2, 2011).
- Laurie Goering, "[Insurance Aims to Help Herders Avoid 'Downward Spiral' from Drought](#)", AlertNet (Nov. 30, 2011).
- Lisa Jones Christensen, "Case Study: Swiss Re and Oxfam" *Financial Times* (Nov. 1, 2011).
- DesMoinesRegister.com, "[Crop Insurance Can Pay Off for Small African Farms](#)" (Oct. 13, 2011).
- Alertnet, "Scaling Up Innovative Climate Change Adaptation and Insurance Solutions in Senegal" (September 19, 2011).

- Global Washington blog, [“Reforming Aid: Transforming the World”](#) (Sept. 8, 2011).
- Alertnet, *Index Insurance in East Africa*, a video produced by the International Research Institute for Climate and Society (Sept. 2011).
- Reuters, [“Swiss Re Joins Ethiopian Micro-Insurance Project”](#) (June 10, 2011).
- Tina Rosenberg, [“To Survive Famine, Will Work for Insurance”](#), *The New York Times* (May 12, 2011).
- IRIN Humanitarian News and Analysis, [“Ethiopia: Taking the Disaster Out of Drought”](#) (Nov. 24, 2010).
- [“Global Insurance Industry Statement on Adapting to Climate Change in Developing Countries”](#), ClimateWise, in collaboration with the United Nations Environment Programme Finance Initiative, the Geneva Association, and the Munich Climate Insurance Initiative (MCII) (September 2010).
- Evan Lehmann, “Supporters of Global Insurance Program Hope to Rebound After Dreary Copenhagen Summit,” *ClimateWire* (Aug. 4, 2010).
- *MicroRisk*, “Swiss Re Climate-Linked Crop Insurance Takes Off” (July 2010).
- Deborah Kerby, “Climate Covered,” *Green Futures* (July 2010).
- Lloyd’s News and Features, [“Microinsurance to Mitigate Climate Change Impact”](#) (June 4, 2010).
- Anne Chetaille and Damien Lagrandré, [“L’Assurance Indicielle, Une Réponse Face aux Risques Climatiques?”](#) *Inter-réseaux Développement rural* (March 31, 2010).
- Pablo Suarez and Joanne Linnerooth-Bayer, [“Micro-Insurance for Local Adaptation”](#), *Wiley Interdisciplinary Reviews: Climate Change* (March 12, 2010).
- New England Cable News, “Oxfam Provides Farm Insurance in Africa” (Nov. 6, 2009).
- James F. Smith, [“World’s Poorest Farmers Now Offered Insurance”](#), *The Boston Globe* (Oct. 13, 2009).
- Evan Lehmann, [“Africa Experiments with Climate Insurance—for \\$5 a Year”](#), *The New York Times* (Sept. 30, 2009).
- [“Swiss Re, Oxfam America, Rockefeller Foundation, and Columbia’s IRI Expand Joint Risk Initiative in Tigray, Ethiopia”](#), Swiss Re press release (Sept. 25, 2009).
- *The Guardian*, [“Climate Insurance: What Kind of Deal Can Be Made in Copenhagen?”](#) (July 24, 2009).
- Jeff Tollefson, [“Insuring Against Climate”](#), *Nature* (July 22, 2009).
- Catherine Brahic, [“An Insurance Plan for Climate Change Victims”](#), *New Scientist* (July 1, 2009).
- Omer Redi, “Insurance Firm Sows Seeds”, *Addis Fortune* (June 14, 2009).
- *Newsweek*, [“Coping with Climate”](#) (Dec. 29, 2008).

ACADEMIC JOURNALS AND PUBLICATIONS

- Pablo Suarez and Jaanne Linnerooth-Bayer, [“Insurance-Related Instruments for Disaster Risk Reduction”](#), Global Assessment Report 2011, International Strategy for Disaster Risk Reduction (October 2011).
- Joanne Linnerooth-Bayer et al., “Drought Insurance for Subsistence Farmers in Malawi,” *Natural Hazards Observer* 33, no. 5, Natural Hazards Center, University of Colorado (May 2009).
- Molly E. Hellmuth, Daniel E. Osgood, Ulrich Hess, Anne Moorhead, and Haresh Bhojwani, “Index Insurance and Climate Risk: Prospects for Development and Disaster Management,” International Research Institute for Climate and Society (IRI), Columbia University (2009).
- Peter Hazell, Jamie Anderson, Niels Balzer, Andreas Hastrup Clemmensen, Ulrich Hess, and Francesco Rispoli, “Potential for Scale and Sustainability in Weather Index Insurance for Agriculture and Rural Livelihoods,” International Fund for Agricultural Development (IFAD) and World Food Programme (March 2010).
- Marjorie Victor Brans, Million Tadesse, and Takeshi Takama, “Community-Based Solutions to the Climate Crisis in Ethiopia,” *Climate Change Adaptation and International Development: Making Development Cooperation More Effective*, Japan International Cooperation Agency (JICA) Research Institute (December 2010).

STORIES/BLOGS

- [“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”](#)
- [“Gebre Kahsay Relies on Rain But Has the Security of Insurance”](#)
- [“Selas Samson Biru Faces Uncertainty with the Seasons”](#)

VIDEOS/MULTIMEDIA

[*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.

OTHER REPORTS

- Million Tadesse and Marjorie Victor, “Estimating the Demand for Micro-Insurance in Ethiopia,” Oxfam America (2009). A report commissioned by the International Labour Organization and the United Nations Capital Development Fund.
- Woldeab Teshome, Nicole Peterson, Aster Gebrekirstos, and Karthikeyan Muniappan, “Microinsurance Demand Assessment in Adi Ha” (2008). A study commissioned by Oxfam America.
- Nicole Peterson and Conner Mullally, “Index Insurance Games in Adi Ha Village, Tigray Regional State, Ethiopia” (2009). A study commissioned by Oxfam America.
- Nicole Peterson, “Livelihoods, Coping, and Microinsurance in Adi Ha, Tigray, Ethiopia” (2009).
- Tufa Dinku et al., “Designing Index-Based Weather Insurance for Farmers in Adi Ha, Ethiopia,” IRI (2009). Report to Oxfam America.

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.

www.oxfamamerica.org/r4

With support from

