

# R4 Rural Resilience Initiative

QUARTERLY REPORT | APRIL – JUNE 2012



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**Cover:** In Senegal's Koussanar arrondissement, erosion control has been in place for a while. Here, rocks help prevent the deepening of a gully.

*Fabio Bedini / World Food Programme*



## EXECUTIVE SUMMARY

For the 1.3 billion people living on less than a dollar a day who depend on agriculture for their livelihoods, vulnerability to climate-related shocks is a constant threat to food security and well-being. As climate change drives an increase in the frequency and intensity of natural hazards, the challenges faced by food-insecure communities struggling to improve their lives and livelihoods will also increase. The question of how to build rural resilience against climate-related risk is critical for addressing global poverty.

In response to this challenge, Oxfam America and the UN World Food Programme have launched the R4 Rural Resilience Initiative, known as R4, referring to the four risk management strategies that the initiative integrates. R4 builds on the initial success of the Horn of Africa Risk Transfer for Adaptation (HARITA) project, an integrated risk management framework developed in Ethiopia by Oxfam America, the Relief Society of Tigray (REST), and their partners to enable poor farmers to strengthen their food and income security through a combination of improved resource management (risk reduction), insurance (risk transfer), micro-credit (prudent risk taking), and savings (risk reserves).

In addition to Oxfam American and REST, the HARITA project's network of partners include Ethiopian farmers, Nyala Insurance Share Company, Africa Insurance Company, Dedebit Credit and Savings Institution (DECSI), Mekelle University, the government

of Ethiopia, the International Research Institute for Climate and Society (IRI), and Swiss Re. The project is funded by the Rockefeller Foundation and Swiss Re.

HARITA has broken new ground in the field of rural risk management by enabling Ethiopia's poorest farmers to pay for crop insurance with their own labor. In its three years of delivery in Ethiopia, HARITA has shown promising results for replication. The project has scaled from 200 households in one village in 2009 enrolled in the financial package to more than 13,000 enrolled households in 43 villages in 2011—directly affecting approximately 75,000 people.

R4 represents a new kind of partnership, bringing public- and private-sector actors together in a strategic, large-scale initiative to innovate and develop better tools to help the most vulnerable people build resilient livelihoods. R4 promises to leverage the respective strengths of its partners: Oxfam America's capacity to build innovative partnerships and the World Food Programme's global reach and extensive capacity to support government-led safety nets for the most vulnerable people. This partnership will enable thousands more poor

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Firewood tied to long poles leans next to a wall in a town in Tigray, Ethiopia.  
*Eva-Lotta Jansson / Oxfam America*

farmers and other food-insecure households to manage weather vulnerability through an affordable, comprehensive risk management program that builds long-term resilience.

The R4 partnership will test and develop a new set of integrated tools that extend the risk management benefits of financial services, such as insurance and credit, to the most vulnerable populations. R4 focuses on mechanisms that can be integrated into social protection systems, including productive safety nets, so that the results can be applied at a much larger scale by governments and international organizations, if successful. For example, insurance for work—a key part of the R4 approach and an innovative food assistance tool— not only can be used to expand access to insurance but can be added to labor-based safety nets to protect beneficiaries and reduce costs for governments and donors from the disruptions caused by climate disasters.

By combining HARITA's successful model for participatory design and capacity building with the World Food Programme's global capacity, R4 will help accelerate the scale-up and testing of this innovative approach in Ethiopia, Senegal,<sup>1</sup> and two other countries in the next five years. R4 also constitutes a first step toward developing a sustainable insurance market for poor people, an essential factor in ensuring farmers' livelihoods and food security, and in improving farmers' resilience over the long term.

In this report we share key accomplishments during the April–June 2012 quarter, present the national-level analysis conducted in Senegal in preparation of the pilot rollout in 2013, and share information on project expansion in Ethiopia for the 2012 agricultural season.

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1 For more details on R4 expansion to Senegal, see Appendix II: Scaling up in Senegal—press release—May 2012.

# STATUS SUMMARY

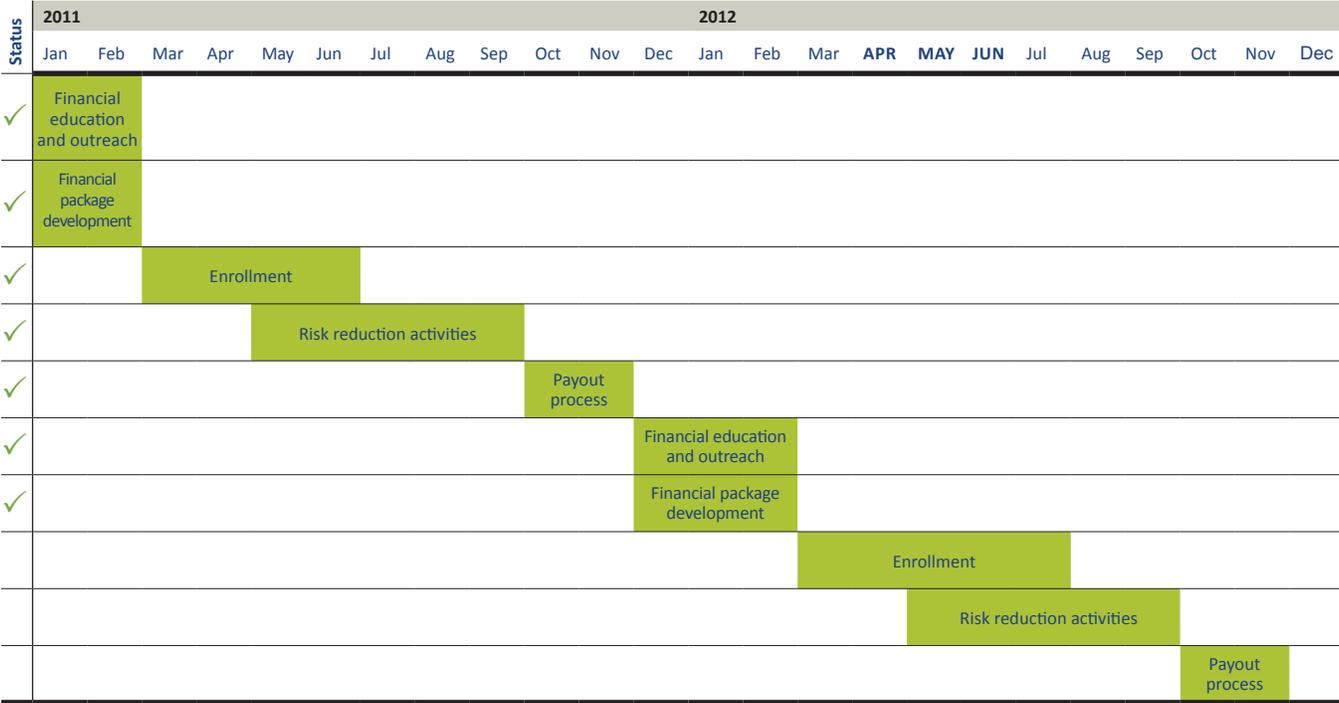
## ETHIOPIA

The HARITA project, initiated by Oxfam America, REST, and other partners in 2009, expanded from 200 farmers in the pilot village,<sup>2</sup> Adi Ha, to more than 13,000 farmers in 43 villages in 2011, in nine districts<sup>3</sup> in the Tigray region of Ethiopia. From 2012 onwards, the project continues to operate in Ethiopia as part of the R4 Rural Resilience Initiative.

In the 2012 agricultural season, R4 plans to expand to more than 70 villages in Tigray region including the 43 villages covered last year in the 2011 agricultural season. Insurance enrollment has begun in the target villages. The enrollment process will continue up to July 2012, which is the beginning of the planting season. The farmers will continue to have access to credit for prudent risk-taking. Details on the 2012 enrollment results will be shared in the next quarterly report.

One of the successes the project has had this year is that farmers are purchasing insurance either with partial or full cash instead of purchasing it entirely with labor. More details on this important achievement are available in the section “Scaling up from HARITA to R4 in Ethiopia: Rollout 2012” of this report.

Figure 1. R4 Ethiopia timeline for 2012 season



2 This report uses the word “village” to refer to the Ethiopian term *tabia*, or subdistrict. *Tabia* is the Tigrigna language name for *kebele*, that is, the smallest administrative unit of the Ethiopian federal government (UN Emergency Unit for Ethiopia, 2003). Ethiopia’s administrative unit structure hierarchy follows region (e.g., Tigray) > zone (e.g., Eastern Tigray) > *woreda*/district (e.g., Kola Tamben) > *tabia*/subdistrict (e.g., Adi Ha) > *kushet*.

3 The word “district” here refers to the Ethiopian term *woreda*. It is approximately equivalent to a district in other countries (Food and Agriculture Organization, 2010).

## SENEGAL

The R4 Senegal team, composed of staff from the World Food Programme and Oxfam America, has begun the planning process for the R4 2013 pilot rollout in Senegal. A national-level analysis and preliminary selection of potential R4 pilot areas within Senegal have been completed. As part of the analysis, the R4 Senegal team studied the Senegal context, including the risks to food security, regional demographics and major developmental concerns, existing policies, and strategies as well as regulatory frameworks on different sectors linked to R4, to guide the project implementation and coordination. The team also carried out a comprehensive climate and food security risk analysis to support geographic targeting.

More details on the outputs of the national-level analysis appear in the “Senegal National-Level Analysis” section of this report.

**Figure 2. R4 Senegal timeline for 2013 season**



# ACCOMPLISHMENTS THIS QUARTER

## Metrics from the field

### ETHIOPIA

- A total of 14,688 farmers from 30 villages participated in awareness and education programs on community risk management and insurance through the viewing of videos.
- Insurance enrollment is ongoing in the same 43 villages where insurance was offered last year as well as in approximately 30 more villages.
- Local community members formed design teams in each of the expansion villages. The design teams consist of six to seven community members, including two women representatives, all elected by their peers.
- Capacity-building trainings were conducted to train development agents and district officials on insurance concepts.
- A total of 360 farmers were trained in “train the trainer” workshops on insurance concepts, regulations, and consumer protection.
- Participatory vulnerability and capacity assessments were conducted in seven villages to identify risk reduction activities.
- Risk reduction activities that have been initiated include cactus plantation, construction of trenches, manufacture of compost, and construction of percolation ponds.
- A total of 194 female-headed households and extension agents participated in training on transplanting.
- An exposure visit on agroforestry was conducted for 150 participants including farmers and development agents.
- A stakeholders’ workshop was held to discuss HARITA program evaluation methodology and to share ideas for improvement in measuring the impact of the different program components. The program partners, including the Relief Society of Tigray, DeDebit Credit and Savings

Institution, Nyala Insurance Share Company, Tigray Bureau of Agriculture, and Tigray National Meteorology agency, were in attendance.

### SENEGAL

- R4 Senegal country teams have been established for both the World Food Programme and Oxfam America, for joint field operations.
- As part of the national assessment and planning phase, the R4 Senegal team carried out:
  - Climate and food security risk analysis
  - Mapping of national policies/strategies and existing institutional frameworks on climate change, food security, agriculture development, environment, disaster risk reduction, and microfinance and microinsurance
  - Mapping of existing programs and projects to guide project implementation and coordination
- Two explanatory visits to Tambacounda and Koumpentoum departments in the Tambacounda region were conducted by the R4 Senegal team to identify pilot areas of implementation.
- Koussanar arrondissement of Tambacounda region in the southeast of Senegal was selected as the target area for piloting R4 based on the prevalent food insecurity conditions and the area’s vulnerability to climate change.
- Market analysis and land-use analysis of Koussanar, in the Tambacounda department, is in progress.

R4 was presented at several high-profile global events including:

- “Building Disaster Resilience: Gaps and Innovations in Disaster Risk Modeling and Financing,” a workshop organized by the Department for International Development (DFID)
- Swiss Re Agricultural Insurance Client and Expert Roundtable in Nairobi
- I4 Technical Meeting 2012, organized by I4 Index Insurance Innovation Initiative, in Rome
- Technical workshop on the challenges of index-based insurance for food security in developing countries organized by the Joint Research Centre of the European Commission (JRC/EC) and the International Research Institute for Climate and Society in Italy

- Academy of International Business panel on “Trading Places: The Evolving Role of Government, Business and Civil Society in the Global Business Environment”

The Forum for Agricultural Risk Management in Development (FARM), an online platform led by the agricultural risk management team housed at the World Bank to promote knowledge exchange on agriculture risk management, highlighted the R4 program in its recent [newsletter](#).

R4 was highlighted in an article by Victoria Eastwood of CNN titled “[Insurance Helps Kenya’s Herders Protect Against Drought](#).”

# SCALING UP FROM HARITA TO R4 IN ETHIOPIA: ROLLOUT 2012

## BACKGROUND

In Ethiopia’s crop-dependent northern highlands, including the Tigray region, a significant proportion of the population is chronically food insecure. Farmers are highly reliant on seasonal rains for agriculture, their main source of income and food. The main *meher* growing season corresponds with the June-through-September rainy season. Farmers plant long-cycle crops, such as maize (corn), sorghum, and millet in April and May, and harvest in late September through November. Short-cycle crops, such as teff (a staple grain used to make the daily bread, called *injera*) and barley, are planted in June or July and harvested in October and November.

Traditionally, farmers’ primary risk management strategy has been to invest any extra income in livestock such as cattle and goats. When the main rains appear good, farmers plant long-cycle crops like maize in early April and May. If those rains fail, farmers may plant teff in June and July as backup against expected losses of long-cycle crops. If those rains fail, farmers cope by selling livestock. Although selling livestock ensures immediate survival, the loss of savings and productive assets undermines farmers’ future ability to build sustainable livelihoods.

## MOVING FROM PILOT TO REPLICATION

The project that was initiated in 2009, the HARITA pilot by Oxfam America, REST, and [a host of partners](#) in the Adi Ha village in Ethiopia’s northern Tigray region with an aim to strengthen farmers’ long-term food and income security, is planned to expand to more than 70 villages this year as part of the R4 Rural Resilience Initiative. The project offers a robust risk management package that integrates disaster risk reduction and affordable insurance by allowing farmers to pay insurance premiums with their labor through risk reduction projects in their communities.

The charts below show the growth of the program from the HARITA pilot (2009-2011) to R4 expansion (2012). The program aims to reach approximately 70 villages and 15,000 households in the 2012 agricultural season. The project will continue its implementation in the 43 villages where insurance was offered in 2011, and it will expand to approximately 30 additional villages. During the reporting period, exploratory visits were made to new sites besides continued visits to the 43 villages.

The enrollment began in March and will continue until July. Preliminary information from the field suggests promising results for the 2012 enrollment.

Figure 3. HARITA to R4 scale-up: Goals vs. actual households

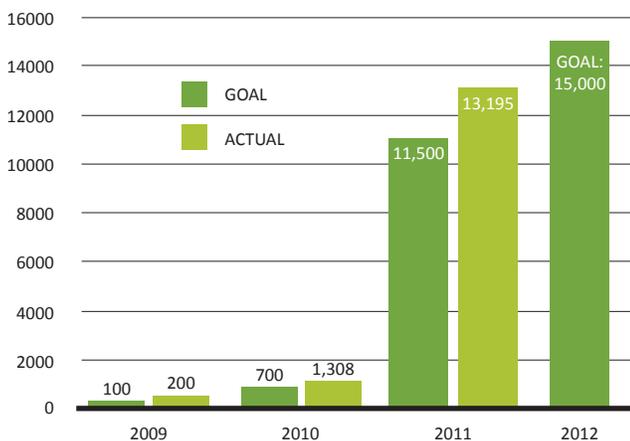
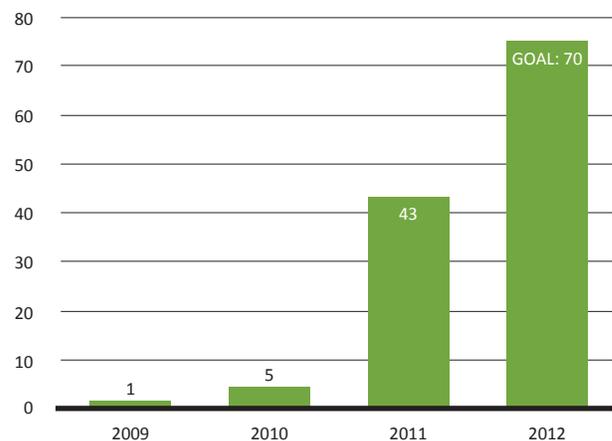


Figure 4. HARITA to R4 scale-up: Goals



## ROLLOUT 2012

This year, one of the successes of the project has been that enrolled farmers are purchasing insurance partially or fully with cash instead of purchasing it fully with labor.

In the 43 villages where insurance is being offered for the second year, farmers are purchasing insurance with 10 percent payment in cash and the remaining in labor. In the expansion villages, farmers are purchasing insurance with 100 percent cash payment. This is an important milestone that reflects progress toward building a commercial insurance market in rural Ethiopia and toward sustainability of the program.

Farmer design teams are formed in each of the expansion villages, and the members of the design teams, together with the Relief Society of Tigray (REST), have been working closely with the International Research Institute for Climate and Society (IRI) to develop the 2012 indices that meet the community's needs. The design teams are also responsible for designing, implementing, monitoring, and evaluating risk reduction activities. Each design team consists of six to seven community members, including two women representatives, all elected by their peers. The participatory vulnerability and capacity assessments were conducted in seven villages to identify risk reduction activities. Farmers who have already enrolled for the 2012 season have begun risk reduction activities including cactus plantation, manufacture of compost, and construction of trenches among other projects on community sites. Various capacity-building trainings were conducted for farmers, design teams, development agents, and district officials on insurance concepts, regulations, consumer protection, and risk reduction activities.

This year, insurance products will cover both short-cycle crops (teff) and long-cycle crops (maize, wheat, barley, and sorghum). Based on farmers' demand, the project continues to offer two different index options: dry<sup>4</sup> and very dry.<sup>5</sup> These indices are designed to insure against the two dominant drought perils of late onset and early end of rainfall. The Early Index targets weak or late onset of rainfall, which affects sowing and the establishment of long-cycle crops, like sorghum and maize. The Late Index targets weak or early end of rainfall, which affects flowering and grain filling of all crops. For each village, both indices are calibrated to the local crop calendar and rainfall amounts in the village. The start and end of each index is set by local experts through discussions with the design teams in each village.

The option to purchase both the Early Index and Late Index is available for farmers growing a crop that is vulnerable to both late onset and early end of rainfall (e.g., long-cycle sorghum, maize, or wheat/barley), whereas the option to purchase only the Late Index is available to farmers growing crops that are vulnerable only to early end of rainfall (teff).

Insurance will be offered by Ethiopian insurance companies, namely, Nyala Insurance Share Company and Africa Insurance Company. A series of ongoing festive events have been designed to make it possible for farmers to learn about and register for risk management programs. The results of the 2012 enrollment will be shared in the next quarterly report.

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<sup>4</sup> The dry (and more expensive) option would have had payouts about once in four years.

<sup>5</sup> The very dry option (based on the index established in 2009) would have had payouts about once in seven years.



## SENEGAL NATIONAL-LEVEL ANALYSIS

The R4 Senegal country teams have been established by the World Food Programme and Oxfam America; they are fully functional for field operations in Senegal. The team is undergoing the Assessment and National Planning phase, which will lead to program implementation in 2013.

This section provides a summary of the key outputs of the national-level analysis, which has provided insights on program strategy and design, pilot area selection, and partner selection.

Village elders gathered for a meeting with the R4 program team in Koussanar arrondissement in Senegal.

*Fabio Bedini / World Food Programme*

Figure 5. Timeline for R4 Senegal Assessment and National Planning phase

Status	2012						2013				
	APR	MAY	JUN	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
✓	National-level analysis and preliminary selection										
		Detailed regional/local analysis and mapping									
				Community assessment and community selection							
						R4 program and Monitoring and Evaluation design					

## SUMMARY OF THE KEY OUTPUTS OF THE NATIONAL-LEVEL ANALYSIS

The R4 Senegal team conducted the following assessments and studies as part of the national-level analysis in order to inform decisions on pilot area selection, R4 strategy and design, partner selection, and coordination with government and other key national actors:

- Climate and food-security risk analysis
- Review of national policies, strategies, and existing institutional frameworks on climate change, food security, agriculture, environment, disaster risk reduction, microfinance, and microinsurance
- Review of existing programs and projects related to food security, environment, and agriculture as well as review of existing public-private sector
- Insurance market review with specific focus on agriculture-based products
- Microfinance sector review including existing market and microfinance institutions

In addition, the team carried out two exploratory visits to Tambacounda and Koumpentoum departments in the southeast of Senegal. The team conducted focus group discussions and preliminary meetings with potential local partners. The discussions with the community, governmental, and nongovernmental actors indicated favorable conditions for R4 in Senegal and guided preliminary selection of a pilot area for implementation of R4.

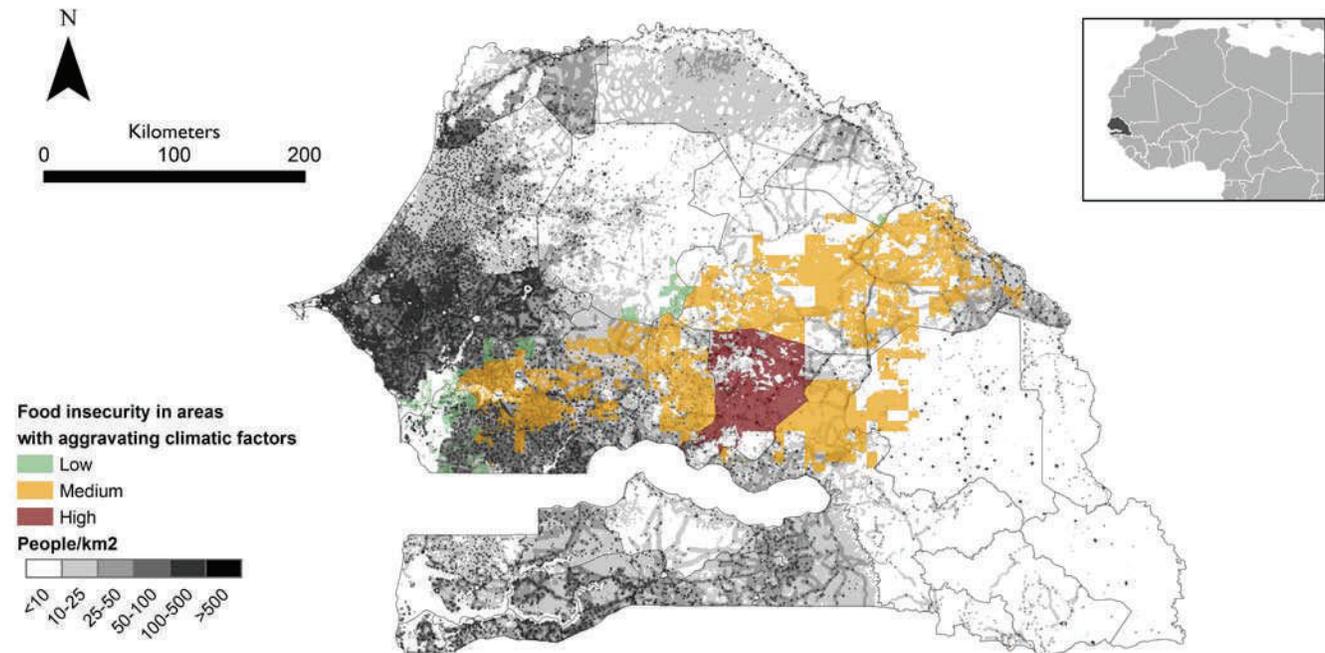
## RATIONALE FOR R4 PILOT IN SENEGAL

In Senegal, poverty is a predominantly rural phenomenon that affects households that are heavily dependent on agriculture and livestock for their livelihoods. Although the population in southern areas is particularly food-insecure due to conflict and economic isolation, in most of the country periodic weather-related shocks act as a strong disincentive to farmers investing in their land. This regularly sets back government's efforts aimed at increasing agriculture production to improve rural incomes and food security. Shocks related to climate include flooding, insufficient rainfall, delays in the start of the rains, and long dry spells during the growing season. The map below indicates the central region of Senegal to be most sensitive to climatic shocks.

Demographic pressures push farmers to cultivate on poorer soils and reduce their ability to rotate crops, thereby creating conditions for continuous land degradation. A strong focus on high inputs–high outputs agriculture has intensified the use of single cropping rather than intercropping and the use of chemical fertilizers rather than a more integrated approach to managing soil fertility.

The assessment further suggests that although development of irrigated agriculture around main rivers has in the past provided a way to achieve quick productivity growth, management of run-off water can provide the opportunity for communities to reduce risks linked to rainfall uncertainty and increase income opportunities in areas with no permanent water resources.

**Figure 6. Food insecurity and aggravating climatic factors**



Food insecurity is shown in this map through three proxies: prevalence of food insecurity, poverty incidence, and global chronic malnutrition (GCM) as measured by the Comprehensive Food Security and Vulnerability Analysis (CFSVA) (2009/2010). A department is considered to have high food insecurity when prevalence of food insecurity is >20 percent, poverty incidence is >60 percent, and GCM is >30 percent. A department is considered to have medium food insecurity when prevalence of food insecurity is 15–20 percent, poverty incidence is 40–60 percent, and GCM rates are 20–30 percent. A department is considered to have low food insecurity when prevalence of food insecurity is <15 percent, poverty incidence is <40 percent, and GCM rates are <20 percent.

Seasonality of agriculture implies seasonal labor requirements and incomes that do not always match spending needs, thus giving formal or informal credit and savings mechanisms an important role to smoothen income and expenditure peaks.

In the microfinance sector, Senegal comes with a strong mutualistic approach to microfinance. However, microfinance services are not always accessible to the poorest populations. Although Senegal has some of the strongest and most dynamic producers' associations in the region, membership to these associations is also not always open to the most food-insecure households that have very limited asset bases.

With limited resources available, government has focused resilience-building investments in areas where the effects are more visible, for example, on the tourism industry or on large-scale irrigation where immediate returns are expected to be higher. As a result, there is substantial scope for supporting rural communities' efforts to improve their resilience to weather-related shocks.

The Government has created a specialized body to provide agriculture insurance. Given the costs of delivering traditional loss adjustment insurance and the challenges of area-yield insurance, weather index insurance (WII) currently provides the most promising option for providing large-scale access to microinsurance to food-insecure smallholders. Two ongoing pilot projects to test weather index insurance in Senegal will provide valuable lessons on the potential and the pitfalls of developing this kind of product in Senegal.

In Senegal, R4 will build on established Oxfam America and the World Food Programme's (WFP's) programs, including Oxfam America's Saving for Change and WFP's Food for Assets pro-

grams. These programs provide solid foundations to integrate insurance and the other elements of R4 as well as for reaching scale as implementation progresses.

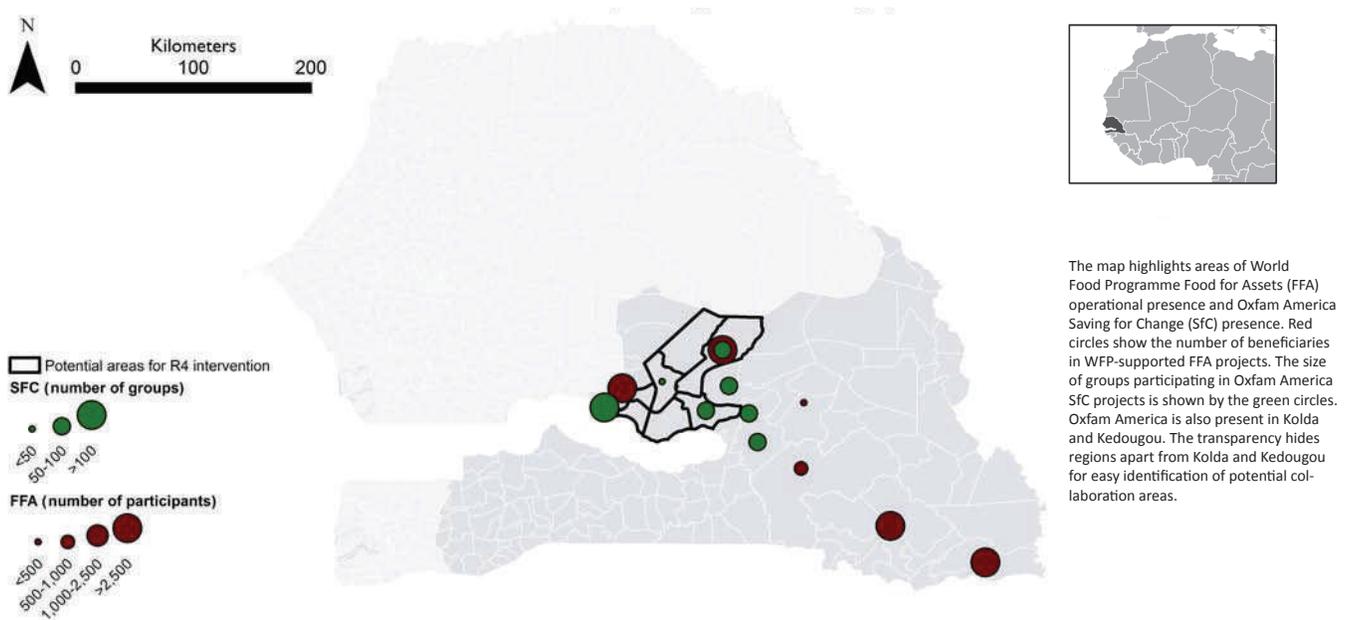
Oxfam America's community finance program, [Saving for Change \(SfC\)](#), provides savings and lending services to those who are often left behind. SfC started in Senegal in 2007 and covers nearly 49,000 members in more than 2,000 groups. Results of an ongoing evaluation of SfC, which will assess the economic and social impact on households and communities, will feed into the design of R4.

WFP's [Food for Assets \(FFA\)](#) program provides food-insecure households with short-term food or cash transfers to help them meet their food needs while supporting the creation of community assets that reduce their vulnerability to future shocks. In Senegal, the Food for Assets program is implemented as part of both the Country Programme (CP) and the latest Protracted Relief and Recovery Operation (PRRO), which aims to help drought-affected people recover and build resilience.

In addition, R4 will benefit from cutting-edge research in weather index insurance being conducted by the Weather Risk Management Facility (WRMF), a joint initiative of WFP and the International Fund for Agricultural Development (IFAD). The WRMF is implementing a research project named "Improving Weather Risk Management in West Africa: Evaluation of Remote Sensing for Index Insurance." This project is designed to test the feasibility of index insurance implementation for poor rural smallholders using innovative remote sensing and satellite technology.

The results of this project will provide valuable tools and lessons to support the scale up of R4 in Senegal.

**Figure 7. Operational presence of World Food Programme and Oxfam America**



The map highlights areas of World Food Programme Food for Assets (FFA) operational presence and Oxfam America Saving for Change (SfC) presence. Red circles show the number of beneficiaries in WFP-supported FFA projects. The size of groups participating in Oxfam America SfC projects is shown by the green circles. Oxfam America is also present in Kolda and Kedougou. The transparency hides regions apart from Kolda and Kedougou for easy identification of potential collaboration areas.

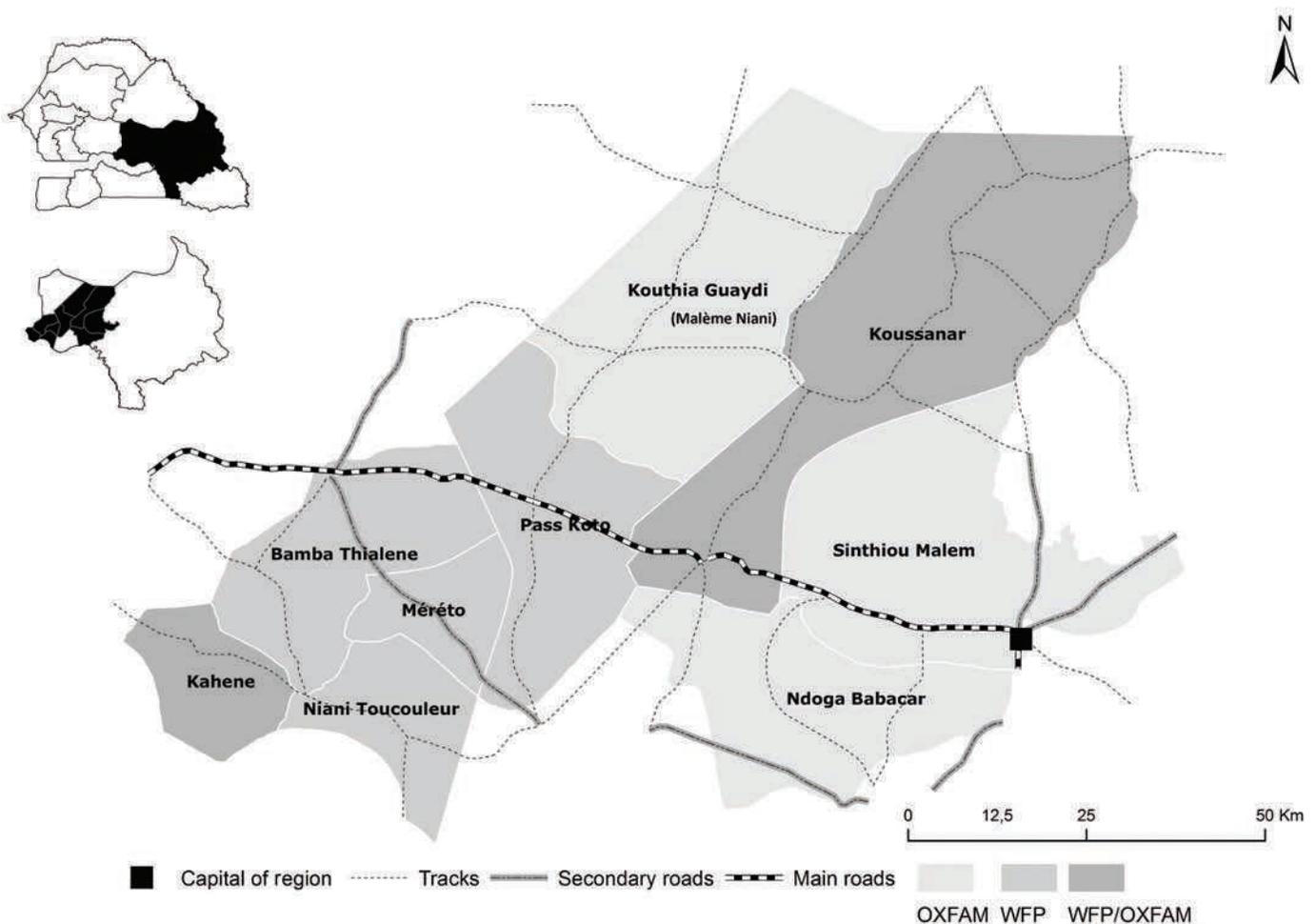
## POTENTIAL GEOGRAPHIC AREA FOR PILOTING R4

An overall national analysis of food security, livelihoods, average rainfall and rainfall variability, and other relevant factors has been conducted by a multisectoral team led by WFP to inform the geographical selection of possible R4 areas. Based on the prevalent food security conditions, presence of weather-related risks, and potential operational opportunities (i.e., presence of Oxfam America and WFP's operations), the Tambacounda region in the southeast of Senegal was identified as the target area for piloting R4. The pilot area has been further narrowed down to nine rural communities (communautés rurales; CR) in the Koussanar arrondissement of the Tambacounda department.

The national-level analysis provided an overview of the context in Senegal and guided the selection of the R4 pilot area. This analysis will also guide the selection of partners and provide key elements

for the design of R4 strategy and instruments. This national-level analysis will be followed by a regional and local analysis that will include a more detailed investigation of existing livelihood systems and how these are affected by climate-related shocks, an appraisal of markets and value chains, and mapping of the local institutional framework and capacities. This analysis will use an in-depth participatory process which brings communities, local governments, and other local stakeholders together in a process which will use seasonal livelihoods analysis to drive a locally owned and context-specific planning process for R4 implementation. This process will help fine-tune the pilot area selection, inform selection of local partners, and feed into the planning of the next phases. The results of the regional and local analysis and the successive processes in the National Assessment and Planning phase will be provided in subsequent R4 quarterly reports.

Figure 8. Potential R4 implementation in rural communities in Tambacounda (Senegal)





## CONCLUSION

Building on HARITA's successful model for participatory design and capacity building, R4, in its first year, has begun its operations towards scale-up in Ethiopia and in Senegal. The program provides a new framework for building resilience, using existing government-owned and -led productive safety nets to reduce disaster risk. With safety nets as a delivery mechanism to expand insurance and other financial services, the program aims to create an enabling environment for pro-poor market growth.

In Ethiopia, the program is set to reach more than 70 villages and approximately 15,000 households in 2010. The enrollment is ongoing, and farmers are purchasing insurance with partial or full cash instead of purchasing it entirely with labor. This interest in buying insurance with cash is a promising sign in the program's scale-up and in successfully building a market for small-scale agricultural insurance at the commercial scale in rural Ethiopia.

In Senegal, the detailed national assessment has informed the planning and pilot area identification. Koussanar arrondissement of Tambacounda region in the southeast of Senegal is selected for piloting R4 based on the prevalent food-insecurity conditions and the area's vulnerability to climate change. The project implementation will begin in the 2013 agricultural season.

With its successful initiation on the ground, the R4 partnership is set to enable many more vulnerable people to graduate from food insecurity through a community-oriented, risk management-focused, and market-based approach to achieve rural resiliency.

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Cows and goats head home as the rain approaches in Tigray, Ethiopia.

*Eva-Lotta Jansson / Oxfam America*

# APPENDIX I: R4 PARTNERS AND INSTITUTIONAL ROLES

## OUR LOCAL PARTNERS

- **Local communities:** Central participants in the design of the pilot.
- **Local farmers' cooperative:** Primary organizing body for farmers in the community.

## OUR NATIONAL AND REGIONAL PARTNERS IN ETHIOPIA<sup>6</sup>

- **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 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 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.
- **Relief Society of Tigray (REST):** Local project manager for HARITA, responsible for operating the Productive Safety Net Programme (PSNP) in six districts of Tigray and overseeing all regional coordination; established in 1978; has worked 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 GLOBAL PARTNERS

- **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 and 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 in the field of insurance and reinsurance.
- **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.
- **The Rockefeller Foundation:** Foundation that funds strategies that help communities build resilience to the impacts of current and imminent climate change.
- **World Food Programme:** World's largest humanitarian agency fighting hunger worldwide with global safety net infrastructure and experience in implementing large-scale community-based disaster risk reduction programs with governments and Oxfam America.

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<sup>6</sup> R4 national and regional partners in Senegal will be identified in 2012 for pilot enrollment in the 2013 season.

# APPENDIX II: SCALING UP IN SENEGAL— PRESS RELEASE—MAY 2012

Published May 3, 2012

Boston, MA – In the wake of a growing food crisis in West Africa, Oxfam America announces renewed support from the Rockefeller Foundation for its current rural resilience initiative in Ethiopia and its expansion into Senegal.

Rockefeller's \$450,000 commitment for this calendar year will help start the initiative in Senegal to enable poor farmers to strengthen their food and income security by managing risks through a four-part approach—improving natural resource management (community risk reduction), accessing microcredit (“prudent” risk taking), gaining insurance coverage (risk transfer), and increasing savings (risk reserves).

Since the first warnings of drought and poor harvests in Africa's Sahel region emerged in late 2011, vulnerable communities in many areas of the region have been threatened by a looming food crisis. That crisis is now real, and 15 million people across seven countries are vulnerable to its impact.

“Breaking the cycle of hunger and malnutrition and building resilience of the most vulnerable through long-term investments in agriculture is critical,” said David Satterthwaite, Manager, R4 Rural Resilience Initiative at Oxfam America.

“The Rockefeller Foundation is proud to support Oxfam America in helping smallholder farmers build resilience, one of the core pillars of the Rockefeller Foundation's work,” said Cristina Rumbaitis del Rio, Associate Director, The Rockefeller Foundation. “Poor farmers are often the most vulnerable, especially in a time of crisis, and it is critical to help them manage the risks they disproportionately face to both their food and income security.”

This particular grant is intended to improve rural resilience for farmers by implementing a holistic risk management package of improved natural resource management, microcredit, microinsurance and savings in farming households in Ethiopia and Senegal. This grant specifically relates to investments that the Foundation is making to build New Partnerships and Financing Approaches for Implementation.

For the 1.3 billion people living on less than a dollar a day who depend on agriculture for their livelihoods, vulnerability to climate-related shocks is a constant threat to food security and well-being. In response to this challenge, the United Nations World Food Programme and Oxfam America have launched the R4 Rural Resilience Initiative, known as R4, referring to the four risk management strategies that the initiative integrates. R4 builds on the initial success of a holistic risk management framework developed by Oxfam America to enable poor farmers to strengthen their food and income security through a combination of improved resource management (risk reduction), microcredit (prudent risk taking), insurance (risk transfer), and savings (risk reserves).

The original framework, called Horn of Africa Risk Transfer for Adaptation (HARITA) project, involved a network of global and local partners including Oxfam America, Swiss Re, the Rockefeller Foundation, the Relief Society of Tigray, Dedebit Credit and Savings Institution, Nyala Insurance Company, Africa Insurance Company and the International Research Institute for Climate and Society at Columbia University. In its three years of delivery this pilot has scaled up from 200 enrolled households in one village in 2009 to over 13,000 enrolled households in 43 villages in 2011.

Through R4, farmers will be able to pay for their insurance premiums through labor in food-and-cash-for work programs. Their labor will contribute to community projects such as irrigation or forestry to reduce the impacts of climate change on their villages. More prosperous farmers will pay their insurance premiums in cash. Over time, as the poorest farmers become more prosperous, they can graduate from the need to pay through labor, and begin paying in cash, helping to ensure the project's commercial viability and long-term success.

Over a period of five years, Oxfam America and WFP plan to scale up and evaluate the R4 approach in 4 countries. In addition to continuing efforts in Ethiopia and the new work in Senegal, this will include two additional countries as the initiative progresses.

## APPENDIX III: RURAL RESILIENCE EVENT SERIES (SPRING–SUMMER 2012)

Event name	Oxfam America participation and role	Organizer	Focus	Expert panel/ speakers/attendees	Event date and location
Skoll World Forum 2012	Pablo Suarez, consultant to Oxfam America, facilitator	Skoll Foundation	To bring together 900 distinguished delegates from the social, finance, private, and public sectors in Oxford (UK) for three days and nights of critical debates, discussions, and work sessions aimed at innovating, accelerating, and scaling solutions to social challenges.	Speakers drawn from the world's most impactful and influential social entrepreneurs and thought leaders, and from those creating large-scale social change.	Oxford, March 28–30. By invitation only. <a href="http://skollworldforum.org/">http://skollworldforum.org/</a>
Building Disaster Resilience: Gaps and Innovations in Disaster Risk Modeling and Financing	Niels Balzer, presenter	Department for International Development	To assess the opportunities and constraints for the expanded use and application of risk modeling and finance tools within disaster risk management frameworks, with a particular focus on low-income countries.	Senior-level experts in the field of disaster risk management from the public and private sectors and science community.	London, 2–3 April. By invitation only.
Technical workshop: The Challenges of Index-Based Insurance for Food Security in Developing Countries	Niels Balzer, World Food Programme, presenter	Joint Research Centre of the European Commission (JRC/EC) and the International Research Institute for Climate and Society	To arrive at insurance packages with the greatest potential for reducing poverty, strengthening resilience, and improving rural food security.	Technical experts from various fields, including crop yield modelling, development economics, food security, crop and livestock extension, climate science, remote sensing, and finance.	Italy, May 2–3. By invitation only.
Stakeholders' workshop on lessons learned from HARITA impact evaluation processes	Organizer	Oxfam America	To discuss HARITA evaluation methodology and share ideas for improvement in measuring impact of the three components of HARITA: risk reduction, credit, and insurance.	HARITA/R4 partners including the Relief Society of Tigray, Dedebit Credit and Savings Institution, Nyala Insurance Share Company, Africa Insurance Company, Tigray Bureau of Agriculture, and Tigray National Meteorology Agency.	Addis Ababa, May 29. By invitation only.
Swiss Re Agricultural Insurance Client and Expert Roundtable on Agricultural Insurance as Part of a Solution to Risk Management Challenges in Africa	Niels Balzer, World Food Programme, presenter	Swiss Re	To discuss global perspectives on agricultural insurance and public sector involvement in risk management, and to share experiences from the field on agricultural insurance.	About 75 participants representing 53 organizations from 15 countries including speakers from Swiss Re, the World Food Programme, USAID, African government agencies, and insurance companies.	Nairobi, June 7–8. By invitation only.
I4 Technical Meeting 2012	Richard Choularton, World Food Programme, presenter	I4 Index Insurance Innovation Initiative	To discuss various aspects of index insurance, including contract design, indices, insurance demand, subsidies, interlinkage with credit, etc., through presentation of various initiatives and challenges.	Researchers, academicians, and practitioners in the field of index insurance representing organizations/institutions such as the University of California–Davis, the University of California–Berkeley, Swiss Re, International Labour Organization, and the World Food Programme.	Rome, June 13–14. By invitation only.
Panel: "Trading Places: The Evolving Role of Government, Business and Civil Society in the Global Business Environment"	Stephane de Messieres, Oxfam America, presenter	Academy of International Business	To discuss roles and partnerships between business, government, and NGOs in the global economy.	Researchers, academicians, and practitioners.	Washington, DC, July 2.
R4 Learning Event	Organizer	Oxfam America and the World Food Programme	To foster learning and sharing across R4 country teams through a field visit and training workshop hosted by the HARITA/R4 Ethiopia team.	Team members from the R4 Senegal team and R4 global team, and from the WFP Kenya team.	Addis, Aug. 7–9. By invitation only.

# APPENDIX IV: MEDIA CITATIONS AND RESOURCES

## IN THE NEWS

- Victoria Eastwood, "[Insurance Helps Kenya's Herders Protect Against Drought](#)," CNN (June 18, 2012).
- Forum for Agricultural Risk Management in Development (FARMD), "[Oxfam & WPF's R4 initiative Begins Expansion into Senegal, Fueled by Success in Ethiopia](#)," (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" (Sept. 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) (Sept. 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).

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- 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 and World Food Programme (March 2010).
- Marjorie Victor Brans, Million Tadesse, and Takeshi Takama, “Community-Based Solutions to Climate Crisis in Ethiopia,” *Climate Change Adaptation and International Development: Making Development Cooperation More Effective*, JICA Research Institute (December 2010).

## STORIES

[“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

[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 in the enclosed quarterly reports.

## PARTNER REPORTS

- [HARITA IRI Report to Oxfam America March 2012](#): This report is a deliverable by the International Research Institute for Climate and Society (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 indexes, 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 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 United Nations Capital Development Fund.
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- 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, on average, WFP feeds more than 90 million people in more than 70 countries.

[www.wfp.org/disaster-risk-reduction](http://www.wfp.org/disaster-risk-reduction)

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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 American does not receive funding from the US government.

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