



CATALYTIC INNOVATIONS IN AFRICAN AGRICULTURE CENTENNIAL SERIES

CLIMATE SAFETY NET

R4 RURAL RESILIENCE INITIATIVE ■ SENEGAL

The Catalytic Innovations in African Agriculture Centennial Series was developed as part of the Rockefeller Foundation's Centennial publications. The Rockefeller Foundation, as an institution with a long history in agricultural innovation, commissioned this series to highlight promising developments in African agriculture, agricultural markets, and value chains on the continent. The projects and programs featured were selected from a review of nearly 150 such initiatives based on criteria that included a focus on smallholder farmers.

THE ISSUE 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 their food security and well-being. As climate change increases the frequency and intensity of natural hazards, farmers face an increasing risk that these weather-related shocks will destroy their assets. Understanding how to help communities confront and manage risk, so that they can be resilient to climate-related shocks, is critical for addressing global poverty.

THE INNOVATIVE RESPONSE In response to this challenge, Oxfam and the UN World Food Programme launched the R4 Rural Resilience Initiative, known as R4. R4 is an innovative approach to helping communities better manage risk, one that involves a set of integrated tools: insurance, credit, savings, and disaster risk reduction.



ABOVE: A herder tends livestock near the village of Kalbiron, Senegal. Farming families in eastern Senegal face a difficult environment of farming crops and grazing livestock due to dry conditions in winter and unpredictable rains in the growing season.

CLIMATE SAFETY NET

R4 RURAL RESILIENCE INITIATIVE • SENEGAL

PROJECT BACKGROUND

THE STAKEHOLDERS

The R4 project is jointly managed by Oxfam America and the World Food Programme. Local decisions, however, are made by the R4 Technical Committee, which includes leaders from local government and NGOs evenly balanced between men and women. Numerous partnerships with various public and private actors are also involved in the risk management strategies. The project is funded by USAID, the Rockefeller Foundation, and Swiss Re. The government of Senegal is also assisting in funding R4's insurance component.

OVERVIEW

R4 builds on the initial success of an integrated risk management framework developed in Ethiopia by Oxfam America, the Relief Society of Tigray, Ethiopian farmers, and several other national and global partners. The framework was designed to enable poor farmers to strengthen their food and income security through a combination of improved resource management (risk reduction), insurance (risk transfer), microcredit (prudent risk taking), and savings (risk reserves).

R4 WILL HELP COMMUNITIES VULNERABLE TO CLIMATE CHANGE ACCESS CREDIT, SECURE SAVINGS, AND DROUGHT INSURANCE.

The Senegalese R4 pilot was launched in 2013 in the Koussanar community of eastern Senegal. The work is implemented by a range of stakeholders who provide trainings (e.g., financial literacy, disaster risk reduction), organize activities (e.g., insurance, food for assets) and offer services (e.g., credit insurance).

GOALS

When fully operational in Senegal, R4 will help communities vulnerable to climate change access credit, reliable savings, and drought insurance. Financial services will in turn improve access to agricultural inputs. Implementing activities that reduce risk will improve agricultural yields and lead to improved food security.

1. Helping farmers to reduce risk

R4 links labor-based safety nets that provide cash or food in exchange for work on community projects with community risk reduction activities that protect assets against disasters and improve productivity. Farmers in R4 will have access to tools to build physical resilience to weather-related shocks, and they will exchange work for enrollment in the insurance program.

2. Transferring risk through insurance

R4 will work through Senegal's only agricultural insurance provider to offer risk protection to farmers through agricultural micro-insurance.

3. Integrating savings

R4 will leverage Oxfam's experience with women's savings groups to help households create stronger financial bases. Members of savings groups will have access to reliable savings mechanisms which can be used as collateral for loans and insurance.

4. Unlocking credit

R4 will help to address larger financial needs through access to microcredit.

WHAT IS INNOVATIVE ABOUT THIS PROJECT?

DEVELOPING AN INSURANCE-FOR-WORK PROGRAM

Using agricultural insurance as one means to alleviate poverty is not altogether new. The idea of having farmers work for insurance instead of



paying for it, however, is. R4 has found a creative way to ensure that everyone has access to insurance, even those who cannot afford to pay for it. And the idea arose from farmers themselves, through a participatory process. Typically expensive, insurance is inaccessible to many smallholder farmers. R4's insurance-for-work program offers these farmers a means to "pay" their insurance premiums by contributing to their communities through risk reduction activities, such as composting, irrigation channel digging, and planting vegetable gardens. Over time, by reducing their financial vulnerability, farmers will be more able to pay for insurance premiums with cash instead of labor. Farmers will also have the ability to access insurance (and credit) by using savings from their participation in savings groups as collateral, another innovative component of R4.

CREATING AN INTEGRATED SET OF RISK MANAGEMENT TOOLS

Many past approaches to risk management have not been holistic in nature; instead, they focused only on one or two areas of risk. R4, however, combines insurance, credit, savings, and risk reduction to create a comprehensive risk management structure. Reducing farmers' risk through improved resource management, when coupled with risk transfer through insurance, offsets challenges faced by food-insecure families. Training and the insurance-for-work program allow even

the poorest families to afford insurance. Having protection against losses allows farmers to generate more income, which they can save, invest in their farms, or use as collateral for loans. Together, the R4 components build a self-reinforcing cycle for economic progress and market development.

PILOTING PUBLIC-PRIVATE PARTNERSHIPS

R4 represents a new kind of partnership, bringing public and private sector actors together in a strategic, large-scale initiative, leveraging the strengths of each. These collaborations represent a shift from traditional corporate social responsibility approaches toward shared value relationships where actors in both sectors are critical to R4's success and are also growing their organizations and businesses because of their involvement in the project. By bringing together the public and private sectors, R4 creates an enabling environment for the resilience of rural households.

ABOVE: A young boy sits in the shade at his home in Kalbiron, near Tambacounda in eastern Senegal, one of the hotter and drier areas of the country.



CLIMATE SAFETY NET

R4 RURAL RESILIENCE INITIATIVE ■ SENEGAL

THE FUTURE: OPPORTUNITIES AND CHALLENGES

OPPORTUNITIES

SCALE R4 focuses on mechanisms that can be integrated into existing social protection systems, allowing the program to be applied at a much larger scale and lower cost.

REPLICATION Although still in its pilot stage in Senegal, as of December 2012 R4 in Ethiopia was already reaching almost 20,000 farmers and extending insurance services to more than 70 villages. R4 in Senegal builds on the program in Ethiopia and is slated to expand into two additional countries, scaling up in each location over a period of three to four years.

SUSTAINABILITY Because R4 builds on government safety net programs, it is eventually intended to become government owned and operated. It has the potential to be run by national governments as opposed to being directed by NGOs and other outside entities. In addition, R4 constitutes a first step toward fostering a sustainable insurance market for the poor, a relatively new market in many developing countries. R4 will help to increase understanding among both insurers and farmers about appropriate insurance products, and ensure sustainability by institutionalizing insurance through private sector financial entities.

CHALLENGES

BUILDING PARTNERSHIPS One key challenge to the R4 model arises directly out of its innovation in bringing together a large number of public and private sector partners. Building and sustaining the large number of partnerships that are central to the success of R4 is critical. The requisite coordination, monitoring, and capacity building depends on the success of partnerships among research partners, governmental partners, civil society partners, communities, associations, and private sector partners. These partnerships add to the complexity of the project and, given its decentralized structure, have the potential to result in misaligned goals or ineffective programming.

CHANGING ATTITUDES TOWARD FINANCIAL PRODUCTS Another challenge for R4 lies in how to change the attitudes of people in rural areas toward financial products. In a context where the only insurance available is a mandatory auto insurance, people are unfamiliar with insurance products and find it difficult to accept them. Thus, to create a viable insurance market, it is critical to first focus on sharing information and creating awareness about insurance and available insurance products.

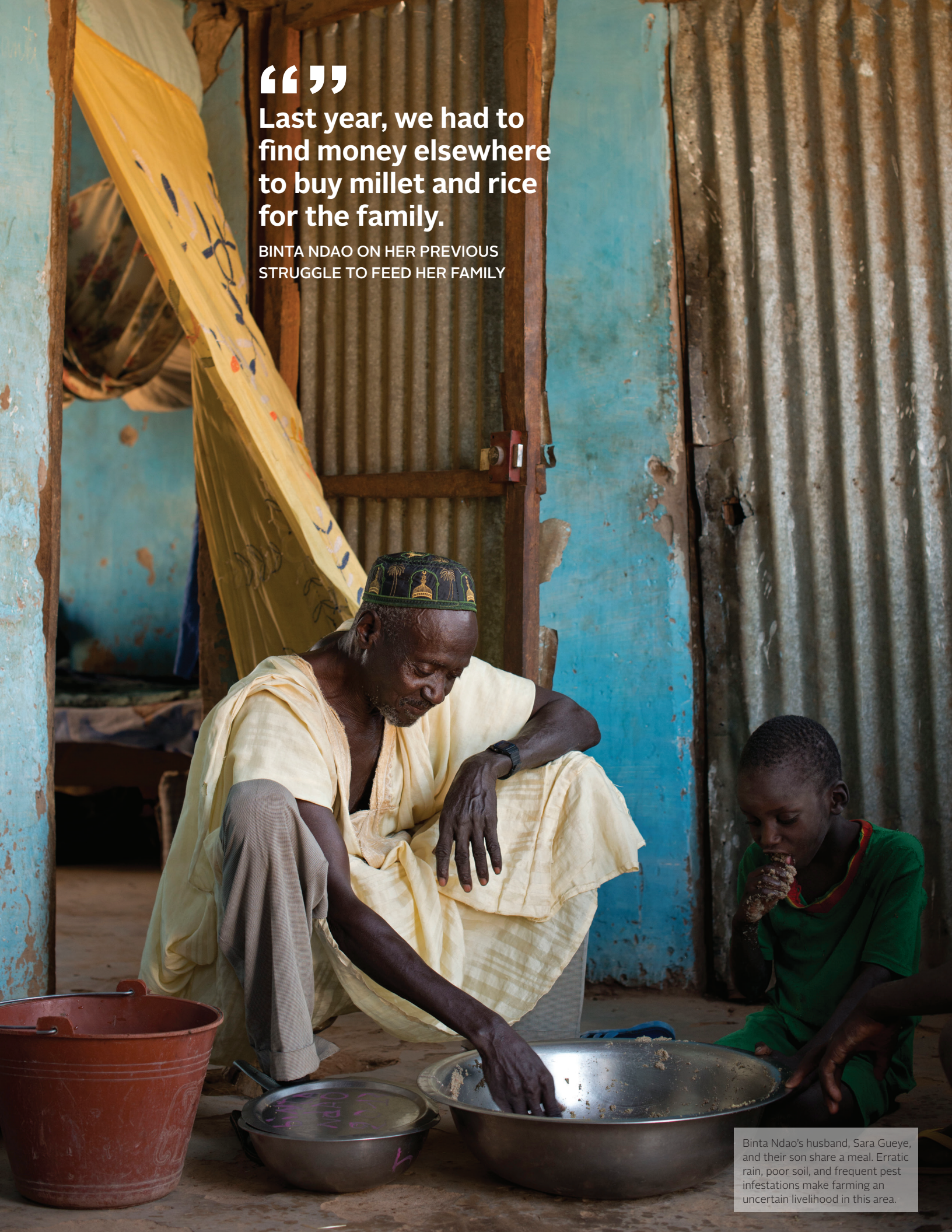


CLOCKWISE FROM TOP LEFT: To reduce vulnerability to flash floods in the rainy season and improve soil quality, participants in the R4 program build stone walls to control erosion. • Women members of Saving for Change groups have proven to be valuable organizers of community projects in Kalbiron. • Grain stored in a cereal bank built by the Canadian government and the World Food Program in Kalbiron. Participants in the R4 program are building their own grain bank where they can deposit some of their agricultural yield as a form of collateral for loans.

“ ”

Last year, we had to find money elsewhere to buy millet and rice for the family.

BINTA NDAO ON HER PREVIOUS STRUGGLE TO FEED HER FAMILY



Binta Ndao's husband, Sara Gueye, and their son share a meal. Erratic rain, poor soil, and frequent pest infestations make farming an uncertain livelihood in this area.

PROFILE: BINTA NDAO

As a part of a broader initiative to create climate safety nets, farmers in eastern Senegal pay crop insurance premiums through labor, while controlling erosion and improving soil quality in their communities.

On a Sunday morning at Binta Ndao's house, the family is relaxing and taking care of a few chores. A young woman pounds millet, another grinds groundnuts into a paste for cooking. The village, Kalbiron, is quiet, with most families doing the washing and taking a day off from preparations for the next growing season as they await the late May and June rains.

Ndao is a middle-aged married mother of seven children between the ages of 2 and 25. She says she and her husband grow millet, ground nuts, cow peas, and sesame on about four different plots of land totaling two hectares scattered around the village. They struggle to produce enough food to feed the family, even after they sell their one cash crop, sesame seeds. Last year she says that her production was not very good, despite growing a decent amount of sesame. "We had to find money elsewhere to buy millet and rice for the family," she says, sitting in the shade next to her home.

“ ”

It was hard, hot work moving all those stones, but it will help limit floods in the valleys where we grow rice.

Farmers here face serious challenges, and Ndao lists them: "We lack good quality seed," she says. The second problem: "Termites eat our plants." After that she says the soil quality in the area is poor, and rain-fed agriculture is risky because "sometimes there is rain, but it is not well distributed."

It's a tough environment for a farmer, so women in Kalbiron started working with a local organization called La Lumière to establish village savings groups to help them save money, access small loans to make extra money, or take care of

emergency needs like medication for sick children. They can also borrow money to buy food. It's part of Oxfam's Saving for Change community savings group program.

Ndao is in a savings group with 25 other women who meet weekly and make a small deposit into a group fund. "I borrow 2,000 CFA francs (about US\$4) to buy onions to resell," she says. "I make about 1,500 CFA (about US\$3) profit which I reinvest in more onions." Ndao says she also uses the profit to buy food. "I really appreciate this group," she says. "Before I could get these loans, if someone was sick or you have a problem, you did not have any resources."

Reducing erosion, improving soil quality

Oxfam and La Lumière are building on the four savings groups in Kalbiron to implement the R4 program that has proven so promising in Ethiopia. Community members participating in the Initiative are working on projects to further reduce risks, like building 34 erosion control walls and dams out of stone and concrete to protect low-lying areas prone to flooding in rainy conditions, and to help improve soil quality.

Community members identified the riskiest areas, and the Institute National de Pédologie (National Institute of Soil Science) advised them on the types of barriers to build in each case. The labor in these projects is like a form of insurance premium—in the event of a significant crop loss later in the growing season, participants will receive a settlement in the form of a voucher redeemable for cash or food (community meetings will determine which later in the year in Kalbiron).

The high level of organization among the women in Kalbiron has helped mobilize people for the community

projects. "There needs to be solidarity," says Fatimata Dicko, Oxfam's program officer in Senegal. "Saving for Change groups already feel like they are making positive changes in the village, and they want to do more to help the village." She says the next community projects will be the digging of new wells, and rehabilitation of existing wells near areas recently established for dry-season vegetable gardening.

Binta Ndao says the risk reduction measures they are taking with the community projects should help the farmers in Kalbiron. "It was hard, hot work moving all those stones, but it will help limit floods in the valleys where we grow rice," she says. "And we need to stop the sand from coming."



RIGHT: Binta Ndao, a middle-age mother of seven, says she usually needs to find money for food during the growing season because she runs out of millet, groundnuts, and cow peas.