



STRIVE *Learning Series*

Activity Brief No. 2

STRIVE (Supporting Transformation by Reducing Insecurity and Vulnerability with Economic Strengthening) is a 6.5-year, \$16 million cooperative agreement, funded by the USAID Displaced Children and Orphans Fund, in close collaboration with the USAID Micro-enterprise Development Office. STRIVE uses market-led economic strengthening initiatives to benefit vulnerable children while aiming to fill current knowledge gaps on effective approaches to reducing the vulnerability of children and youth. STRIVE is implemented through four country-based programs in the Philippines, Afghanistan, Mozambique, and Liberia. The lessons learned from the program in each of the host countries will be evaluated with the aim of establishing best practices for similar interventions promoting sustainable, market-based approaches to poverty in developing countries. Find out more about STRIVE and the FIELD-Support LWA at www.microlinks.org/strive



Liberian Marketing Association (LMA) buyer Tina Jackson negotiates with farmer Martha Togba of Kpaytuo over the purchase of dried vegetables. (Photo credit: ACDI/VOCA)

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The Agriculture for Children’s Empowerment (ACE) Project

Background

In Liberia, many international aid efforts are reaching the critical stage of transitioning from relief-focused interventions addressing immediate humanitarian needs to more sustainable models that can promote growth and improve the livelihoods of vulnerable households, even as donor support decreases. After 14 years of war (1989-2003), the population, particularly children, remains very vulnerable. Over 50 percent of the population is under age 25 and have known nothing but war for most of their lives. Infrastructure, education, health systems, and social services have not yet fully recovered. Meanwhile, dependency on international donors continues to distort the economy, even as external funding decreases. Poverty rates are high, and 84%

of the population lives on \$1.25 or less a day.¹ An estimated 50 percent of the population now lives in the capital, where they do not have land to grow their own food, and instead use scarce resources to buy food on the market.

Nevertheless, Liberia shows a number of promising signs. The government appears to be committed to a serious reform process and is supported by most of its citizens. Liberia also has a great deal of untapped economic potential, particularly in the agricultural sector. Although it currently imports most of the food it consumes, its rich soil, generous rains and large areas of unused land indicate that increased agricultural investment could not only meet

¹World Bank, 2007. World Development Indicators. <http://databank.worldbank.org/data/views/reports/tableview.aspx>

the country's food needs, but enable it to become a net exporter. However, the sector's growth has been constrained by obstacles such as market fragmentation, limited access to inputs, a destroyed road system and lack of clear government directives. As a result, horticultural activities are mostly limited to rural smallholder farmers who rely on traditional subsistence methods and lack the ability to engage profitably with the local market.²

Description of Activity

The STRIVE project, funded by USAID's Displaced Children and Orphans Fund (DCOF) and managed by FHI 360, uses market-led economic strengthening initiatives to improve the well-being of vulnerable children. Through STRIVE, ACDI/VOCA is implementing the Agriculture for Children's Empowerment (ACE) Project in Liberia, which is founded on the premise that increased household economic security will stimulate more consistent investments in children's wellbeing via longer term social investments in education and nutrition. ACE's primary focus is on the horticulture value chain (VC) — the production and marketing of vegetables by smallholder farmers in Montserrado, Bong, and Nimba counties of Liberia. ACE also strengthens smallholder rice farming to increase household food security using a market-sensitive approach to rice seed lending and cultivation. Throughout the project, ACE has adapted to a challenging environment to meet the needs of smallholders to enhance their livelihoods.

Facilitating Smallholder Participation in the Horticulture Value Chain

ACE originally focused on high-value vegetables, facilitating farmers' integration into the value chain through networks of input service providers. During implementation, however, ACE found that market linkages were too weak and the infrastructure was too poor in Bong and Nimba counties (Liberia's breadbasket) to focus on high-value crops, which are mostly in demand in the capital, Monrovia. Smallholder farmers also proved wary of the risk associated with adopting new and unfamiliar crops. Therefore, in Bong and Nimba counties, ACE shift-

ed its focus to enhancing smallholders' output of traditional crops through modern farming methods, strengthening the profitability of their farms through the Farming as a Business (FAAB) training, and linking smallholders to potential local buyers.



Tina Jackson inspects dried peppers at the solar dryer in Kpaytuo, Nimba County.

However, Montserrado County, where the capital is located, proved to be a promising location for value-chain upgrading with high-value vegetables. To facilitate this process, ACE works with input providers (IPs) to increase their efficiency, links smallholders to markets, and provides technical assistance to farmers to improve crop yield and marketing. ACE's horticulture activities are similar across the three counties, varying according to the needs of the traditional vegetable market in Bong and Nimba counties or the high-value vegetable market in Montserrado county.

A major barrier for smallholders in Liberia has been access to inputs, such as seeds, fertilizer and insecticides. Due to war and the distortionary market effects resulting from aid, the market for inputs and linkages between input providers and smallholders, especially in the remote counties of Liberia, is weak. To address this, ACE works directly with IPs to strengthen these linkages. ACE initially subsidized input providers' outreach to smallholder farmers to reduce the risk associated with entering a new market segment, as IPs were accustomed to working with NGO partners rather than smallholders. To buy down the risk for IPs, ACE has sponsored community-knowledge based promotional events, placed interns in IP firms, and subsidized input purchases through sub-grants.

²Food and Agriculture Organization, 2013. "Liberia." <http://www.fao.org/isfp/country-information/liberia/en/>

ACE also provides critical links between farmers and markets for their products. ACE facilitates contractual relationships between farmers and buyers, including small traders, crop brokers and supermarkets, encouraging the development of forward-contracting arrangements. A forward contract is an agreement where a buyer agrees in advance to purchase a product from a seller at a certain price at a future date. There may be agreements as to the quality and quantity of product to be purchased, as well. There are a number of advantages to this type of agreement. It increases the predictability of supply for the buyer, and increases the farmer's ability to predict the return on their agricultural investments. It reduces the risk that farmers' produce will go unsold, or that the buyer might not be able to source a sufficient quantity of high-quality produce for on-sale to their clients. It may also be a significant time savings for a farming household that would otherwise dedicate time to transporting goods to market and spending part or all of a day selling their produce in smaller quantities. For both parties, these agreements mitigate the risk of market fluctuations.

These sorts of relationships can also be risky. A buyer needs to trust that the farmer will produce, and the farmer needs to trust that the seller will pay. Again, relationship-building has required concerted effort to build trust between farmers and crop brokers, who have had to overcome a history of adversarial relations. ACE has helped foster this trust by arranging safe spaces where farmers and brokers could meet, as well as initiating a community educational campaign about the benefits of forward contracting.

ACE assistance has also helped vegetable farmers increase their production through a variety of activities. Low-cost means of soil improvement, such as using compost to fertilize crops and wood or charcoal ash to reduce soil acidity, were shared with project farmers. Farmers were also taught how to use soap and water as a basic but effective pesticide. Crop trials were used to test different varieties of vegetables, leading to the adoption of new varieties of carrot, sweet pepper, and tomato. In addition, the project has educated the public on agricultural topics through a weekly radio program in Bong and Nimba counties, promoting improved vegetable production techniques and encouraging input suppliers to advertise their products and services.

A Woman Entrepreneur Increases Income for Her Household



Nyepue Bondo started a dry goods business with money generated from pepper sales.

Nyepue Bondo – who turned 51 this year – is a level one student of the Gbenequelleh adult literacy school program, a widow, and a mother of 5 children. She was recruited as one of the ACE farmers in October 2010 and has participated in a series of ACE trainings and technical support in crop production and farming as a business.

Nyepue explained that she had been involved in vegetable production activities on a small scale 5 years earlier, when she grew pepper on a termite mound in the rice farm.

She said, “I did not know anything about vegetable production and record keeping. They trained me how to do nursery preparation, planting in line, weeding on time and how to keep my farm records, and they gave me a book to record my farm expenses”.

From the income earned from pepper sales, Nyepue was able to settle her children's school expenses and to start a small dry goods business.

ACE has also helped farmers to sell produce during the dry season, when vegetables prices can rise almost threefold due to the scarcity of produce available in local markets. Farmers were offered trainings in crop preservation (predominantly through the use of solar dryers), allowing some of the harvest to be stored for sale to capture higher prices during the dry season ACE also helped groups of farmers acquire and use irrigation pumps to produce fresh vegetables in the dry season. While the project started off promoting the use of treadle pumps, which are higher effort but lower cost, in the final years of the project, farmer groups

were sufficiently well organized and generating enough income that it became feasible to explore the use of more productive motorized irrigation pumps through an asset loan financing scheme with a national microfinance organization.

Increasing Rice Production for Improved Food Security

Rice is a staple crop in Liberia, and no meal there is considered complete without it. It can also cost a poor family a large portion of their income if they are unable to grow it for themselves. Recognizing the importance of rice production to food security, and the poor quality of traditional rice compared with new high yield varieties, ACE supported upland rice production in Bong and Nimba counties. Rice farmers were supplied with high-yield rice varieties (NERICA 14 and LAC 23) and received technical assistance to support the use of best practices in rice production. These activities were intended to not only enhance the livelihoods of farmers, but to increase the availability of quality and high yielding rice seed in the country.

ACE worked through a local private firm, as the rice seed broker, and recruited smallholders in Bong and Nimba counties to participate in an in-kind lending scheme that provided the farmers with the improved varieties of rice, with expected repayment in rice seed after first harvest. Where a traditional harvest would take 180 days, farmers using the improved NERICA 14 rice were able to harvest twice as much rice in only 75 days. The 975 ACE farmers growing the LAC 23 variety of improved rice were able to produce sufficient rice to repay their loans, set aside seed for next season's planting, and meet their households' consumption needs until the next harvest season³. Households that are rice sufficient are now able to afford education, health, and other costs since they will not need to buy rice for consumption.

³ ACE has been able to double the amount of rice available for household consumption reaching its target of 550Kg, the amount of rice required for a family of six over the hunger season, contributing significantly to sustaining food security of ACE farmers and their children.

Farmer Financial Diaries: A Win-win Tool for Financial Education and M&E

In addition to technical training in agriculture, farmers receive training in financial management. Farmer financial diaries help both farmers and researchers keep track of farmers' inputs and outputs and finances. The diaries were used in addition to ACDI-VOCA's Farming as a Business Training, which helped the farmers understand the importance of recording and tracking the information captured by the diaries.



ACE field staff reviews a farmer's financial diary at a cluster meeting in Guawin, Nimba County.

Evaluation and Learning Agenda

FHI 360 is leading the impact assessment of the ACE project using a mixed method evaluation approach with a quasi-experimental design. Two rounds of quantitative data collection will investigate differences in household and child impact. In addition, qualitative methods will be employed to understand the perspective of smallholders on the effectiveness of particular components of the ACE intervention, how the intervention is affecting their households, and other factors that may influence household and child outcomes. Additional qualitative methods, along with complementary monitoring information collected by the ACE project, will probe the role of other actors in the value chain.

The major learning questions posed by STRIVE are the following:

- What is the impact of the ACE project on participating smallholder households?
- What is the impact of the ACE project on children within the participant households?

Findings

While project results are not yet available, ACE has determined that over 4,000 children have been affected by ACE through their care givers' involvement in the program's work. Additionally, focus group discussions held in November 2012 reveal some of the emerging effects of STRIVE's work in Liberia.

First, marked differences between comparison and treatment group (ACE farmers) responses suggest that the "modern" farming practices being taught by ACE are being adopted by ACE farmers. ACE farmers report increased income that they attribute to ACE activities, including increased rice yields due to improved rice cultivation and more profitable vegetable sales practices, such as drying vegetables for sale in the dry season and growing vegetables in the dry season. In contrast to other farmers, for whom farming is mostly a subsistence activity, ACE farmers have come to see farming as a business. ACE farmers using farmer financial diaries find record-keeping very valuable, as it allows them to track input costs and profits. Tracking also gives farmers insight into which practices work and which do not, timing of activities (such as putting seeds in a nursery, moving seedlings to the farm, etc.), thus allowing them to make informed decisions for the next season.

The focus groups suggest that not only do ACE interventions appear to be enhancing farmer income, but benefits are flowing down to their children. Participants expressed that children's education is strongly valued and indicated that school fees are one of the first things to be paid with increased income. Finally, focus groups suggested overall improved food security for ACE farmer households.

Looking Forward

These promising focus group findings attest to the ability of STRIVE Liberia to adapt to a difficult context and adjust programming to reach the project objective of enhancing children's wellbeing. Where market linkages were insufficient for value-chain upgrading, ACE shifted its focus to enhancing the capacity of farmers and building the trust between different market actors necessary to create those linkages. ACE also integrated various educational efforts into its program to ensure sustainability. Impact evaluation findings will be available in late 2013 with final reports completed in early 2014.

"I never knew that the new rice (LAC 23) could be a benefit to me and my family to this extent" - Farmer John K. Bando.



John Bando with LAC 23 in Talk Camp, Nimba County

Lack of access to quality and high yielding rice variety has been a barrier for rural Liberian farmers, especially after Liberia's civil war. This changed for farmers who benefitted from ACE's rice activity, beginning in 2010.

John Bando seized the opportunity to be recruited as one of the beneficiaries of the activity. He lives in Talk Camp of Saclepea Mahn District in Nimba County with his wife Mataye Bando with five dependents.

Mr. Bando, in a joyous mood after harvest, reported, "In the first year, I planted the new rice (LAC 23) and my country rice (local variety) side-by-side because I was not sure of the new rice. It was during the growing and harvest time that I was convinced that the new rice (LAC 23) can produce plenty (high yielding). From the yield, I was able to pay my seeds loan, kept some seeds for the 2012 production and we eat the balance. For this year (2012) I increase my farm size which made me to harvest enough rice."

"So what will you do with all the rice you have harvested?" Mr. Bando was asked.

"Oh! You don't know that farming is a business, I sold some of the rice to the WFP school feeding program for USD \$175.00 and paid my children national examination and second semester school fees in Monrovia. Some of my farmer friends have already contacted me to give them some seeds for credit for them to grow and pay back with interest. That what we call business."

Mr. Bando increased his rice farm size to 1.5 acres in 2012 from 1 acre in 2011, harvesting about 650kg and selling 350kg to WFP school feeding program. He has so far diversified his production to include cassava, plantain and pineapple.