THE ADAPT PROJECT IN ZAMBIA: SUCCESSES AND LESSONS IN BUILDING A SCALABLE NETWORK OF RURAL AGRO-DEALERS TO SERVE SMALLHOLDERS

A MARKET ENGAGEMENT INNOVATIONS AND IMPACTS CASE STUDY
“In 2008 CARE developed a plan to provide 91,000 smallholder households in remote, rural Zambia with access to an increased range of affordable, high-quality agricultural inputs and technologies by developing a sustainable network of local input suppliers, the agro-dealers.”
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This CARE Market Engagement Innovations and Impacts Case Study features the experiences of CARE Zambia under three-year, $3,000,000 Agro-Dealer Project (ADAPT), funded by the Alliance for a Green Revolution in Africa (AGRA). ADAPT was designed to provide 91,000 households in rural Zambia with access to an increased range of affordable, high-quality agricultural inputs by developing a network of rural agrodealers.

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“Sometimes the dealers in Petauke don’t have the seed you want, then you must travel another 150 kilometers to Chipata [the provincial center].” On meeting Rosemary Sakala and her husband Besam, smallholder farmers from Makina Village in rural Zambia, this is a consistent refrain when talking about the challenge of accessing quality maize seeds and other inputs for their small plot1. Like many of Zambia’s more than 800,000 smallholder farmers, maize represents the cornerstone of the Sakala’s livelihoods — it is their primary crop and supplies their young family with both food and income. Despite knowing that planting hybrid seeds rather than traditional, recycled seeds can triple their yields, there are many planting seasons when the Sakalas struggle to procure quality inputs. The closest place to purchase hybrid seeds is 45 kilometers away in the regional center, Petauke, a full-day trip that Besam makes several times each season. When the seeds, fertilizer or veterinary medicines he needs are not available there, Besam heads to Chipata. The trips are time-consuming and costly, making it difficult for the Sakalas and their neighbors to afford or access the inputs they need.
INTRODUCTION

The problems that Rosemary and Besam Sakala face are not new to Zambian smallholders. Agriculture employs 60 percent of the population but represents less than one fifth of national GDP. Smallholders, who account for 85 percent of households employed in agriculture typically cultivate fewer than five hectares of land and earn an average of $92 per person annually. While the challenges to reducing this persistent poverty are complex, a universally acknowledged driver is the under-performance of the nation’s dominant crop — maize. Constraints to improving the situation are also well known: low-quality, inaccessible or expensive inputs restrict productivity for all but the wealthiest farmers and a lack of knowledge about effective farming techniques among smallholders reduces yields, deters private sector interest in working with them, negatively impacts food security and constrains smallholder bargaining power. Credit markets are universally tight, particularly for micro, small and medium-sized entrepreneurs, and market channels are limited and often inefficient or opaque. Additionally, government efforts to improve national food security include policies and programs that distort the overall market and cumulatively crowd out or create disincentives for private sector participation. Though the policies affect all actors, they have a disproportionate impact on the poor who have few alternatives. In 2007, CARE began considering ways to improve the situation.

CARE Zambia has substantial experience working in the maize sector, successfully implementing the Livingstone Food Security and Livelihood Project and the Community Markets for Conservation (COMACO) project. More recently, CARE has joined other NGOs in implementing the Consortium for Food Security, Agriculture and Nutrition, AIDS, Resiliency and Markets (C-FAARM) project, which concentrates on conservation farming as a way of increasing maize production among small scale farmers.

Despite these efforts, CARE’s work had yet to yield the sustainable, scalable solutions needed to significantly impact smallholder livelihoods. Reflecting on this in 2007, CARE Zambia focused on bringing new thinking to their work, applying a market-based approach that would allow their interventions to live well beyond the end of any given project. The country office commissioned a holistic analysis of the maize sector to help identify solutions and, using criteria that included sustainability, scalability, CARE’s capacity to implement and the likelihood of rapid impact, ultimately prioritized two areas for intervention.

CARE ZIMBABWE’S AGENT MODEL

Since 1998, CARE Zimbabwe has been developing and improving the Agribusiness Entrepreneur and Training (AGENT) model in order to establish sustainable linkages between village-based agro-dealers, smallholder farmers and other market actors. The approach, which grew out of CARE’s past experience working with lead farmers to increase access to inputs, incorporated three components:

1. Developing the capacity of existing rural retailers to market agricultural inputs by linking them to wholesalers and facilitating access to credit;
2. Supporting producer group formation and facilitating their access to credit;
3. Establishing agro-dealer associations capable of facilitating access to credit from formal financial institutions and, ideally, reducing costs for inputs and enabling joint savings.

CARE Zambia relied on the AGENT experience and lessons learned in developing the ADAPT Project.
1) INCREASING SMALLHOLDER ACCESS TO AND USE OF HIGH-QUALITY INPUTS

CARE calculated that enabling smallholders to consistently access high-performing hybrid seeds had the potential to triple productivity from an average of 1.4 tons per hectare to nearly 5 tons per hectare. The sector review illustrated clearly that there was already a vibrant seed supply network operating in Zambia but that this network was focused on meeting the needs of larger-scale producers. Promisingly, CARE also identified some emerging business models that enabled suppliers to get closer to smallholders. This reflected CARE’s experience pioneering a model of market-based smallholder-oriented input supply in neighboring Zimbabwe — agro-dealer development. The preliminary sector assessment demonstrated that an agro-dealer network in Zambia could sustainably help smallholders to increase their productivity and, ideally, impact food security and household income as well.

2) IMPROVING SMALLHOLDER ACCESS TO MARKETS

Once they harvest their crops, Zambia’s smallholders typically retain a portion of the harvest for household consumption. Any remaining grain is directed toward one of three output marketing options: a) a reliable but slow-to-pay government scheme that purchased maize at artificially inflated prices, b) farm gate traders offering below market rates but convenience and immediate payments or c) mills offering middling prices for relatively small volumes.

Ultimately, though output marketing options required substantial investment in order to improve both benefits to smallholders and incentives for private sector engagement, CARE opted to work to improve access to and use of affordable, high-quality inputs among smallholders, seeing this as an initial step toward broader improvements in the sector. This case study presents CARE’s experience in bringing this vision to life. The case includes a summary of CARE’s early intervention strategy, an overview of the maize sector in Zambia, some of the key challenges and CARE has faced and reacted to over the life of the project, a number of innovations and the results to date. The case concludes with a look toward the future of CARE’s work to improve access to input and output markets in rural Zambia and beyond.
CARE’s Agro-Dealer Project

Building on the initial maize sector analysis, in 2008 CARE developed a plan to provide 91,000 smallholder households in remote, rural Zambia with access to an increased range of agricultural inputs and technologies at reduced end prices. The strategy was to partner with existing agro-dealers — small input suppliers operating along main roads or in rural bomas (town centers) — to develop a network of rural sales agents. Each agent would collect orders from rural smallholders and facilitate trade between them and their associated agro-dealer. The project was funded by the Alliance for a Green Revolution in Africa (AGRA) and, in 2008 CARE Zambia launched the three-year, three million dollar Agro-Dealer Project (ADAPT).

INITIAL ADAPT PROJECT MODEL

ZAMBIA’S MAIZE SECTOR

Each spring (late-October to late-December), the planting season takes place immediately after the first rains. Once seeds are procured and planted, smallholders spend the ensuing months tending to the maize crop before harvesting at the end of the wet season between April and June. Throughout this time, demand is high for agricultural inputs such as fertilizers, pesticides and herbicides. Zambia then enters a dry, cold season between June and September in which farmers dry their maize until the moisture content is low enough (12.5%) to permit long-term storage. Some smallholders also use this dry season to grow vegetables like rape, onions, tomatoes and cabbage on small, hand-irrigated gardens. In addition to helping rural Zambians diversify their diets, in some cases they sell the produce into local or regional markets. However, this is profitable only in areas around Lusaka and Livingstone and maize remains the dominant, often only source of agricultural income for most smallholders. Toward the end of the cold season, maize is either packed and stored for home consumption or sold to one of three dominant buyers. Given the impact these actors have on the overall sector, it is important to understand how each one affects smallholders.
• **The Government Food Reserve Agency (FRA).** Every year the Zambian government buys grain at set prices to stock national emergency reserves. The price the FRA sets is significantly higher than the market-based price and is the preferred outlet for most smallholders. Once purchased, the FRA periodically releases grain onto the national market to maintain low prices. While smallholders prefer the high purchase price offered by the FRA, payments are persistently delayed for months, leaving smallholders without capital or assets.

• **Large milling facilities in Lusaka.** There are 10 main milling operators who frequently buy smallholder grain. As these are private enterprises, the mills purchase grain at market prices, which are below those of the FRA and they typically buy smaller volumes. In an effort to ensure food security, government regulations control the volume of processed and raw grain that can be sold internationally, limiting growth in the milling sector. From a smallholder perspective, mills represent a ‘next best option’ if they are unable to cope with FRA payment delays.

• **Local and farm gate traders.** These market intermediaries aggregate supply by purchasing grain at lower prices but they provide immediate payment. The grain that local traders purchase is typically sold to mills for a significant profit or stored independently for sale later in the year when market prices increase.

While the demand side of the maize market had great room for improvement, an advantage for Zambia’s smallholders was that regardless of who they sold their maize to, the market was ready to absorb any increase in production. This was a critical factor in CARE’s decision to focus initially on improving smallholder access to and use of inputs. Looking at the value chain, the input supply sector for maize in Zambia comprises a number of seed supply companies, seed banks and research institutes clustered near Lusaka, the national capital and heart of industry. The focus of most supply companies is on serving medium- to large-scale producers and they rely on an integrated network of distribution centers in small district hubs with populations between 100,000 and 300,000. From there, companies depend on a network of independent retail outlets called “stockists” who are generally located in small towns of less than 100,000 people or along well-travelled, paved highways. By contrast, the rural areas in which the most vulnerable farmers live have a population density of less than 12 people per square kilometer and are accessible only by rugged dirt roads. This results in seed supply companies having limited to no contact with smallholder farmers in rural areas and the need for smallholders to travel long distances to access inputs from official stockists.

• **Input Supply Companies.** A number of small, medium and multi-national seed and fertilizer suppliers serve the Zambian market including local Zambian companies such as Zamseed and Kamano, African companies such as SeedCo and international supply companies such as Pioneer Seeds and MRI. The majority of the seed companies specialize in hybrids, which are more costly than local varieties but offer greater yields and resistance to disease. With the exception of Kamano Seeds, which supplies seeds for a range of traditional staple crops in Zambia, the seed suppliers focus almost exclusively on producing and selling maize seed. Fertilizers common in Zambia include Compound D (10:20:10) as basal dressing and Urea (46 percent N) as a top dressing, both of which are supplied mainly by Omnia Fertilisers and Nyiombo Investments. CARE’s initial assessment found that this group of input suppliers was becoming increasingly competitive. Production capacity and rural stockist recruitment were increasing and Pioneer Seed Company, a former market leader, had recently re-entered the market after a long hiatus. All of these findings indicated a positive growth trend in the seed and fertilizer supply sector.
• **Stockists.** Stockists are certified input retailers who meet specific conditions set forth by suppliers and the Zambian government, such as owning their own store equipped with a concrete floor. Stockists are formally associated with one or multiple inputs suppliers, frequently signing exclusivity contracts and agreeing to sell only one company’s products. Stockist shops are clustered in peri-urban and urban areas and branded with the logos of their supporting company. In exchange for exclusivity, stockists gain access to supplier credit that enables them to purchase inputs on credit and sell them at pre-arranged commissions ranging from 10–15 percent.

• **Agro-dealers.** Agro-dealers are entrepreneurs who run small, often single-room shops that supply a combination of maize seed, vegetable seed, fertilizer, chemical pesticides or herbicides, animal medicines and farm implements. All agro-dealers in the areas in which CARE implements ADAPT are focused largely on the smallholder market and 60–95 percent of their sales come from smallholders. These enterprises fall into two categories: boma agro-dealers and rural agro-dealers.

Boma agro-dealers are located in local commercial centers along highways. They are larger, well supplied and capitalized and rely on their business for the majority of their income. By contrast, rural agro-dealers are located in smaller farming communities. They typically farm several hectares themselves in addition to running their agro-dealership, rarely rely on the business to supply their full annual income and experience substantial constraints when it comes to accessing the capital necessary to purchase stock and grow their business.

Though there are many rural agro-dealers operating in Zambia, the bulk are informal enterprises with limited business capacity. Pricing is often set blindly, based primarily on agro-dealer’s own purchase price and the occasional inclusion of transportation costs. Similarly, record keeping is rarely practiced. A lack of sufficient capital means rural agro-dealers — and potential rural agro-dealers such as local grocers — struggle to deal with cyclical demand that frequently leaves them unable to satisfy the spike during the planting season and suffering a lack of income during off-season.
The ADAPT Project in Zambia: Case Study

8

• **Smallholder Farmers.** As noted above, most of Zambia’s rural population engages in small-scale agriculture and relies on the income and food this activity generates to sustain their families. Smallholder farmers typically work fewer than five hectares of land and grow primarily maize. Following the harvest, farmers receive their maize income as a lump sum that must last them a full year. These farmers live in villages that may be as far as 90 kilometers from boma agro-dealers and are often located on dirt roads that become difficult or impossible to pass during the rainy season.

• **The Zambian Ministry of Agriculture and Cooperatives (MACO).** Zambia’s Ministry of Agriculture and Cooperatives (MACO) works closely with farmers, providing them extension services. Since 2002 MACO has administered the national Farmer Input Support Program (FISP) to promote fertilizer and hybrid maize seed among smallholders. FISP, which acts in parallel with the FRA purchase program, buys bulk quantities of seed and fertilizer and distributes them to smallholders at a significant discount (approximately 50% of market price). Though well-intentioned, the program is notorious for failing to provide a sufficient quantity of inputs in a timely manner leading to improper fertilizer application, late planting and decreased productivity. Aside from the challenges this presents for smallholders, FISP also directly competes with private sector efforts to serve the smallholder market — undermining existing agro-dealers and creating disincentives for others to enter the market. For the 2010/2011 planting season, the FISP intended to distribute seed and fertilizer to nearly every smallholder.

With this understanding of the maize sector, CARE initiated ADAPT in August 2008.

**ADAPT’s First Year of Operation**

CARE focused ADAPT on nine districts in three regions of the country: the northern Copperbelt region, the Central region and the Eastern region. The project team comprised six staff recruited from existing CARE projects including a project manager, a business officer, a monitoring and evaluation officer and one field officer in each of the three regions. CARE’s approach was for this small team to recruit and train agents to work in partnership with established rural agro-dealers, a strategy CARE chose based on two perceived advantages.

1. The approach would avoid competing with existing agro-dealers who had emerged organically and through other development efforts. CARE was keen to support, not supplant, existing private sector actors who were genuinely interested in serving smallholders and supporting CARE’s long-term goal. This approach was based on a long history, in Zambia and elsewhere, of unsuccessful development efforts to either become an intermediary themselves or to circumvent middlemen.

2. In addition, CARE and AGRA reasoned that by partnering with agro-dealers who already knew how to work in the input supply sector, ADAPT would be able to reach scale more quickly. Farouk Jiwa, a Technical Advisor with CARE USA explained the rationale for picking that model. “CARE and AGRA felt the network was missing ‘the final mile’ in getting inputs to rural farmers. We theorized that the architecture of existing, stable dealers had been established through previous interventions and recruiting agents to work with them would bridge that last gap and deliver inputs to the rural smallholders.”
In line with this vision, CARE laid out three core objectives for ADAPT:

1. Develop the input supply industry by enabling supply chain actors to actively pursue the smallholder market.

2. Enhance smallholder livelihoods by improving the affordability, timeliness and volume of inputs and services available in targeted rural areas.

3. Strengthen the enabling environment for expansion of agro-input networks into the smallholder market by working in partnership with MACO.

Though seemingly straightforward, the ADAPT agenda was very ambitious, particularly given initial staffing levels and the time available to reach CARE’s goals. Jiwa describes the original project design as attempting to “weave together into one project the many different ambitions and desires of both AGRA and CARE. Ultimately, this meant we had a complicated and unwieldy project design and it was one of the early lessons we learned when we tried to get ADAPT off the ground.”

As CARE transitioned from design to implementation, progress was slow but gains were made. In the first year of operations, CARE recruited 170 of the three-year target of 500 agro-dealers and estimated its outreach to smallholders at 18,000. Year one for ADAPT also yielded an innovation with the potential to greatly change the dynamics of input supply and demand creation in rural Zambia.

INNOVATION IN ACTION: INVESTING IN AN E-VOUCHER SYSTEM

A key constraint to growing a network of private sector input suppliers servicing rural smallholders were the government and development agency subsidy programs that reduced incentives for private sector actors to enter this market. CARE saw an opportunity to use the emerging ADAPT agro-dealers to provide an alternative approach to targeted subsidies while promoting, rather than undermining, private sector players. In partnership with a local mobile transactions company, MTZL, and a number of partner NGOs, CARE invested in the development of an e-voucher system that would
establish agro-dealers as key intermediaries between development or government agencies and smallholder recipients of targeted subsidies. The process MTZL and CARE developed included five steps:

1. Agro-dealers establish formal savings accounts and register with the MTZL system.

2. Development or government agencies distribute paper vouchers to targeted smallholders for redemption at participating agro-dealers.

3. Smallholders select an agro-dealer and go to the shop to redeem their voucher.

4. Agro-dealers process the transaction and send an SMS using multiple verification codes to alert MTZL of the transaction.

5. MTZL completes an electronic transfer of funds for the goods into the agro-dealer’s account.

The system saved agro-dealers time and money in comparison to traditional voucher schemes (which required the agro-dealer to travel to the nearest town for reimbursement), increased smallholder choice (they could redeem vouchers at multiple agro-dealers) and improved efficiency and transparency (previously, transactions were costly and open to corruption). It also provided agro-dealers an opportunity to build customer relationships with smallholders who might otherwise not have patronized their store. To date, the system has been used by Zambia’s Conservation Agriculture Unit and World Vision, in partnership with the World Food Program. Cumulatively, they have provided over 35,000 smallholders with vouchers worth more than $30, each of which has been redeemed by one of 60 participating agro-dealers.

Despite this success and CARE’s overall outreach figures, as ADAPT approached the one-year mark it was becoming increasingly clear that the intervention was not working as anticipated. Of the 18 activities listed in the proposal, many were behind schedule and several others had not even been initiated. An innovation fund intended to promote new business models among agro-dealers had not been set up and demand creation activities to increase smallholder awareness of different seed varieties had not yet been implemented. This meant that the project was missing an entire agricultural cycle. Aside from the workload on a relatively small team, CARE and AGRA also saw some fundamental miscalculations in their initial strategy.

CARE Zambia Assistant Country Director Steve Powers noted that, “beyond our own resource gaps, we also found that many existing rural agro-dealers actually did not have strong enough managerial capacity or business acumen to really engage with agents. If we were going to make ADAPT work, we needed to work not only on bridging ‘the last mile’ but more fundamentally at other points in the input supply chain as well.”

CARE and AGRA were both worried about the project’s ability to achieve its objectives and the partners identified two core issues that were hindering the success of ADAPT:

1. A broad program scope that seemed too ambitious given the available time and resources.

2. A set of underlying assumptions about the current capacity and functioning of agro-dealers that were proving to be false.

The stakeholders agreed that something had to change and worked together to review and revise the program.
Revising ADAPT

In August 2009, the ADAPT team and representatives from CARE Zambia, CARE USA and AGRA met in Lusaka to examine the ADAPT project and assess options for improving it. The partners began by identifying challenges in the original project strategy and collaborated on designing revisions to address the issues.

One key area of agreement was that the agent model ADAPT was pursuing did not sufficiently address critical deficiencies in the input supply sector. In response to the collective acknowledgement that agro-dealers lacked the capacity to manage a network of agents, CARE dropped the focus on agents and instead opted to support rural entrepreneurs to become agro-dealers themselves, opening or expanding their shops in rural villages. Under this new model, ADAPT staff would spend considerably more time building the capacity of new rural agro-dealers as opposed to supporting existing businesses and trying to link them with agents. The new model was, in many ways less complex but would also be more intense as it would require CARE staff to provide ongoing mentoring to new agro-dealers. This also meant that CARE needed more staff, particularly staff with enhanced business capacity, which resulted in the second key adjustment to ADAPT.

Seeing that the targets for the initial project would not be achieved without more staff to support the new model, the partners committed to hiring three business officers — one per operational district. These officers would provide agro-dealer business skills trainings and mentoring. Importantly, CARE recruited the new staff members from outside the organization, seeking professionals with deeper business experience than many existing CARE staff members had at that time. Finally, recognizing the need to change the project’s management structure, a new manager with extensive experience in guiding private sector development projects was brought on board to ensure success.

**REVISED ADAPT PROJECT MODEL**

[Diagram showing revised ADAPT project model with seed companies, fertilizer companies, other agro-input suppliers, CARE's rural agro-dealer network, 550 independents agro-dealers, urban peri-urban bomas, rural producers, Zambikes, mobile kiosks, agro-dealer shops]
Reviewing ADAPT’s initial vision and activities, CARE and AGRA also agreed to reduce the core project activities and focus on those most critical to making the new model work. By the end of August, CARE and AGRA signed a new project document for a streamlined effort that retained the original project objectives but focused exclusively on six core activities:

1. Recruit agro-dealers and train them in business practices and the technical aspects of chemicals and other agro-products.

2. Conduct demand creation events including seed fairs and farmer field days.

3. Facilitate vertical linkages between agro-dealers and input suppliers.

4. Facilitate the creation of agro-dealer associations to support the needs of individual agro-dealers and to advocate on their behalf.

5. Use innovation funds to buy down the agro-dealers’ risk of expanding and starting-up their businesses.

6. Monitor and evaluate project impact.

Peter Manda, the new project manager was confident that, with this newfound clarity, the team would be able to succeed. “For a business project you have to streamline it and you need to be sure people can understand it,” he noted. “We reduced a 120-page document to one page.”

**Moving Ahead: Focusing on Building a Model in Year Two**

As ADAPT entered its second year, staff members had substantial flexibility to tailor their support based on opportunities in the areas in which they were working. With new energy and an expanded staff, ADAPT focused on making progress across the six core functions:

**1. AGRO-DEALER RECRUITMENT**

To recruit and support rural agro-dealer shops, CARE’s regional staff advertised the project and sought out rural entrepreneurs who they thought would make successful agro-dealers. Typical recruitment methods included personally approaching existing businessmen and women operating small shops in rural villages, consulting with MACO field officers to identify and invite successful farmers to information sessions and talking about the project at agricultural events such as farmer field days and seed fairs. Those who expressed interest in participating were invited to come to an informational meeting and if they met the key criteria were invited to formally sign up for business and technical trainings. These different recruitment approaches yielded agro-dealers with a range of backgrounds including leading farmers known for high yields and good management practices, illiterate farmers and widows who were looking to diversify their incomes and experienced business people already operating small groceries or informal agro-dealer shops in their villages. Recruitment decisions were based on entrepreneurial drive and location. Esau Mwale of Mngona Village in the Petauke District is a good example of the type of entrepreneur ADAPT officers were seeking.
Esau caught the attention of an ADAPT regional coordinator at a farmer field day. Formerly a teacher and now a farmer, he possessed a strong knowledge of farming techniques, more formal schooling than most and an intensity and energy notable to all who met him. Mwale was one of the first farmers in his region to garden vegetables in the off season and, by marketing to a local government hospital, “profited” from a practice that many considered to be solely a subsistence agriculture activity. In Mwale and other rural agro-dealer recruits CARE saw burgeoning entrepreneurs who could take full advantage of business training, mentoring and market linkages and grow vibrant rural agro-dealerships.

2. BUSINESS TRAINING, TECHNICAL TRAINING AND MENTORING

Following the recruitment of rural agro-dealers, CARE focused on providing a series of capacity-building interventions beginning with business skills and technical training in proper agronomic practices. When CARE and AGRA reviewed progress in year one, a general lack of business acumen and technical knowledge were seen as key constraints to rural agro-dealer expansion. Not only did these barriers limit the willingness of potential entrepreneurs to enter the market but they also undermined the success of existing or new agro-dealers who struggled with business management and were unable to garner the confidence of their potential clients. CARE found that many smallholders valued an agro-dealer’s knowledge as much if not more than their convenience. So, ensuring agro-dealer shops were well-managed and agro-dealers understood their products was a critical aspect of the revised ADAPT project.

Following recruitment of new agro-dealers, CARE provided each with an introductory, three-day training focused on basic business skills including record keeping, stock taking and establishing profitable prices. This was followed by a separate training on agriculture inputs. Initial lessons included proper storage and planting techniques for hybrid seeds, safe storage and change to “proper application of agro-chemicals and fertilizer. The trainings established a common base of understanding among all agro-dealers on which CARE then set out to build.
Wary of the shortcomings of past efforts that focused narrowly on a few trainings, CARE incorporated an intense mentoring component into the revised project. With additional staff in each region, ADAPT regularly visited agro-dealers, reviewing their progress with them, providing tailored follow-up trainings and setting goals for the coming month and quarter. The visits have become a way for CARE to ensure that project support matches agro-dealer needs and capacity. And, while it means high transaction costs for CARE staff who spend many days travelling from agro-dealer to agro-dealer as they organize seed fairs and other work, it has reduced agro-dealer transaction costs and enabled them to focus on learning while also growing their businesses.

Nachili Kaira, Business Officer in the Central Region notes, “The combined training and mentoring has been most successful. Some have started shops without any [financial] support [from ADAPT] just because we have trained them. They understand there are opportunities.” Mukonde Siafunda Mwemba agrees with her Central Region partner, noting, “The first thing is that the interaction is very high. After training, we mentor them. Then we follow up with them on their progress. Apart from that they come to the office when they are in town. They phone. Even in the middle of the night they call,” she says. “Our lines are open and that means we are there to support them when they need us, not only when we have scheduled a training.”

3. DEMAND CREATION

The regular use of hybrid seeds and appropriate application of fertilizers were not common practice in the areas in which CARE was operating. For the ADAPT model to truly work, CARE needed to help the private sector not only develop a distribution channel that could reach smallholders profitably but also ensure that smallholders would use the system. To do this, ADAPT focused on building smallholder awareness of the available products and providing them with opportunities to see the potential for themselves. CARE relied on three activities to achieve this:

• Farmer field days that used demonstration plots to show producers how different types of inputs would perform in local conditions.

• Seed fairs, at which input supply companies, farmers and rural agro-dealers come together to learn about different inputs and farming techniques while also getting to know one another and buying and selling inputs.

• Direct marketing strategies, which were integrated into agro-dealer training and mentoring sessions and focused on ensuring that agro-dealers proactively built relationships with their clients and promoted their businesses locally.

Combined, these activities were designed to stimulate demand for agro-dealer services by providing avenues through which they could advertize their new shops while also raising awareness among farmers of the available inputs and how they would work in their particular environment. To ensure ADAPT was empowering smallholders to make well-informed purchasing decisions rather than supporting a narrow set of inputs, CARE took a number of key steps.

First, CARE facilitated relationships between rural agro-dealers and a range of input supply companies, bucking the traditional model followed by boma agro-dealers who were typically beholden to a single company. Remaining ‘supplier agnostic’, as Manda put it, presented ADAPT with multiple benefits. It ensured smallholders would have access to a wide-range of goods and agro-dealers had supplier options by increasing their bargaining power. It also allowed CARE to generate interest in recruited agro-dealers amongst a broad range of input supply companies rather than requiring them to partner with just one or two.
Second, in supporting demonstration plots, rather than focusing on one or two seed varieties or a single supplier as was frequently practiced, CARE worked with lead farmers to establish plots that planted each company’s maize varieties — 17 in all — side-by-side. Though this frustrated some seed companies, the approach created a level playing field on which farmers and agro-dealers could see the seeds growing in the same conditions, compare the results and make their own decisions about what to stock or buy. As Karia noted, “Demonstration plots are not a new thing to Zambia. What is new is that with ADAPT we got way off the main highways and we planted each company’s seed side-by-side with those of others. All previous demonstration plots were planted with just one company’s seed and they were always along the highway.” The tactics CARE applied to making demonstration plots accessible and the focused on building broad producer knowledge of seed company products have resulted in highly successful field day events that often attract more than 200 farmers.

Seed fairs have played a somewhat different role in ADAPT’s approach to demand creation. These events serve as an opportunity to clearly demonstrate the potential value of the smallholder market to seed companies and agro-dealers. CARE invites smallholders, rural agro-dealers and seed company representatives to these events at which seeds and other products are displayed, promotions and learning sessions are held and the actors have a chance to meet one another directly. Sales are also a key aspect of the events and, participating seed companies consistently sell out of the stock they bring to the fairs. While some challenges emerge from this dynamic — participating agro-dealers are concerned that seed companies cut them out of the supply chain during fairs by selling directly to smallholders — the events successfully illustrate the potential of the smallholder market to suppliers while also building smallholder demand for higher-value inputs. A leading indicator that CARE’s intervention is working is the focus of newly-established agro-dealer associations on taking over responsibility from CARE for organizing seed fairs in the future.

4. VERTICAL LINKAGES

Facilitating linkages and relationships between emerging agro-dealers and the input supply companies represents a lynchpin for ADAPT’s eventual success. Business in Zambia relies heavily on personal relationships and if CARE’s network of agro-dealers was to succeed, it would need to increase trust between agro-dealers and seed supply companies. To this end, beyond organizing demand creation events that promoted high-levels of agro-dealer / supplier interaction, ADAPT’s senior staff spent significant time discussing the project with seed company representatives, seeking their input into ADAPT activities and addressing concerns they had about engaging directly with rural agro-dealers. Over time, CARE also initiated reviews following each seed fair that encouraged both suppliers and agro-dealers to comment on the event’s success and ways to improve future fairs. Beyond this, CARE’s approach to linking agro-dealers with seed suppliers has applied a deliberately light touch. All agro-dealers are provided with contact information for the primary input suppliers and encouraged to reach out to them directly or, as discussed below, through emerging agro-dealer associations. The approach draws on learning from past interventions that frequently failed due to the intense facilitation or brokering of business deals undertaken by CARE and other NGOs. The linkages strategy appeared to be yielding benefits when, in August 2010, SeedCo asked CARE staff in the Copperbelt region to convene the 50 highest-performing agro-dealers in a meeting at which the company would commit to providing this subset of CARE-supported agro-dealers with 100 metric tons of seed worth $300,000 on credit for the coming maize season — a huge step in a market as capital constrained as rural Zambia.
5. AGRO-DEALER ASSOCIATIONS

In addition to creating sustainable vertical linkages between smallholders, agro-dealers and input suppliers, CARE prioritized the emergence of stronger horizontal linkages among agro-dealers through regional associations. Comprising member agro-dealers, the associations are intended to ensure that practices introduced by ADAPT, such as seed fairs and demonstration plots, will continue after the project concludes. In addition, the associations empower agro-dealers to build an institution through which they can take on other persistent challenges, including the lack of access to formal credit and value chain finance. ADAPT field staff included discussions on the value of forming associations into the initial agro-dealer training sessions. In order not to over-facilitate the process, CARE allowed the associations to form organically with ADAPT staff members available to provide guidance but not to drive the process. At initial association meetings, ADAPT staff provided advice and consultation services and assisted members in drafting bylaws, electing a secretariat, registering their association with the government and developing action plans. Within a year of the project revamp, all nine project districts were home to an officially registered agro-dealer association.

6. INNOVATION FUND

All ADAPT stakeholders agreed on one key ingredient that would need to be in place if the envisioned network was to take off — support for innovation and incentives to enter the smallholder market. Creating an innovation fund was one of the initial ADAPT activities but CARE struggled to launch it due to limited staffing and a need to focus on agro-dealer recruitment. Under the revamped project, CARE successfully set up a $160,000 fund to which any agro-dealer could submit a proposal requesting a matching grant. Submissions were judged on the needs of the agro-dealer, the potential for the investment to catalyze their expansion and the degree to which the idea would test an innovation that could be replicated by other agro-dealers. The fund offered CARE a relatively inexpensive but powerful means of encouraging entrepreneurs to invest in an agro-dealer shop and ultimately led to 165 small grants to agro-dealers. Many of these grants were used to cover typical start-up or upgrading costs including constructing or refurbishing shops, installing new shelves and counters, adding concrete floors and ventilation to comply with safety regulations or on branding. Some of the more innovative awards, had the potential to greatly reduce barriers to entry for new agro-dealers and to increase the outreach of existing ones. Mobile seed kiosks and Zambikes, were two innovations supported by the fund, that warrant particular attention.

Seed Kiosks: enabling new entrants, increasing smallholder access, following the market

Due to the intense spike in demand for seed following the first rains, cheap mobile seed sales strategies could allow agro-dealers to significantly expand their presence into rural areas. Seeing an opportunity, ADAPT promoted the concept of prefabricated mobile kiosks among a small number of recruited agro-dealers who were striving to set up their first shop. CARE theorized that mobile kiosks, as opposed to brick-and-mortar shops, would carry a smaller up-front investment and could be set up and dismantled as needed. Beyond making it easy for a newcomer
to enter the market, the concept also worked well with the seasonal nature of agro-dealer start-ups — it was not expected that new agro-dealers could derive their full annual income from the enterprise without building additional services and products into their business model over time. In the first season, fifteen agro-dealers procured mobile kiosks with support from the innovation fund and were soon earning approximately $500 in sales per month.

**Zambikes: expanding access, building relationships and increasing agro-dealer sales**

Zambikes is a local Zambian company that has engineered a bicycle with a small wagon affixed to the back. The bikes are designed to support improved transport in Zambia’s rural areas and CARE considered them to be an ideal vehicle for established agro-dealers to use in expanding outreach to rural clients. Thirty-five agro-dealers opted to procure a Zambike with support from ADAPT’s innovation fund in the first year and began using them to ride circuits through rural areas. The entrepreneurs typically load the wagon with supplies to enhance marketing, make some sales and collect orders. At the end of the second year of the project, most agro-dealers had used Zambikes to market vegetable seeds, livestock products and fertilizers but, as the maize season approached, CARE was eagerly waiting to see how the bikes would affect sales for Zambike-equipped agro-dealers. To support this, CARE worked with the seed companies to develop smaller seed packages that were both better aligned with the needs of smallholders and the capacity of the Zambike carts.

Following the revision of ADAPT and the focus on these six core activities, results began materializing almost immediately. For Farouk Jiwa, the outcome was not surprising. “The meetings to revise the project in August [2009] brought all the issues and stakeholders to the table. As a result there was focus, consensus and clarity of purpose based on the reality on the ground. Everything you need to have a well-designed project and good donor coordination.”
Achieving Results

The impact of ADAPT and the Sakala’s agro-dealership on Makina Village is clear. Local farmers now save 20,000 Kwacha (US $4) and a full day journey by purchasing vegetable seed and fertilizers at the Sakala’s local agro-dealer shop. Some farmers also have begun growing vegetables during the low season for the first time to help diversify their diets. For the Sakalas, the effort has transformed the way they view the potential of the agro-dealership to enhance their lives. Rosemary, a small quiet woman, wears an amused smile as she speaks in an animated manner and proudly takes visitors around the shop to show off her accomplishments. During the tour, Rosemary displays meticulous records of her daily sales, customers and cash flow that show the Sakalas have doubled their investment in the year since they opened the shop. And they are both grateful for CARE’s assistance. Besam notes, that they “have had lots of interaction with ADAPT through the trainings and the [Innovation Fund] grant to build the shop higher.” Here Rosemary breaks in and says “Trainings are the first. It is the trainings that have helped us make use of the grant in a wise way.”

The Sakalas have an entrepreneurial quality that is difficult to teach. For instance, they anticipated that the Government FRA would soon purchase maize grain and all local farmers would need empty maize grain bags to pack their crop for sale. So the Sakalas ordered empty grain bags from Lusaka. “We can’t keep enough of them!” Besam, exclaims, adding that their order of 5,000 bags sells in three days and earns them a profit of 3,900,000 Kwacha (US $780). As he speaks a truck pulls up and deposits another 500 grain bags at their door. Because the low season is coming to an end, the Sakalas’ shop is slowly starting to empty of vegetable seed and grain bags in preparation for storing large quantities of hybrid maize seed for the planting season. Constraints remain, of course — as a new agro-dealer, the Sakalas are unable to acquire seed on credit and they lack cash to purchase enough seed to satisfy their market. In general, though, the Sakala’s are well on their way to running a sustainable, effective local enterprise that meets the needs of rural smallholders. The same is true of an increasing number of the 560 agro-dealers with whom CARE is now working and the smallholders they are serving.
CARE and AGRA met again in August 2010 to review ADAPT’s progress. It was clear the revision had led to dramatic changes in the project’s performance. By the end of the second year, CARE had successfully recruited 560 agro-dealers, exceeding the target of 500, and one year after the revamp nearly 350 had been fully trained and certified as formal businesses. The project worked with lead farmers to establish 137 demonstration plots, over half of the project target — putting it on track to meet the goal in the final year. ADAPT also had organized 76 field days engaging over 80,000 farmers and the innovation fund was fully dispersed and supporting 165 agro-dealers. Most importantly, however, nearly 70,000 farmers purchased improved seed and other inputs from ADAPT-assisted agro-dealers.

As CARE prepared for the final project maize season, ADAPT seemed well-positioned to achieve or exceed most targets and, more importantly, to reach the goal of developing a sustainable system capable of providing large numbers of Zambian smallholders with access to inputs. To ensure this end, CARE is reviewing each aspect of ADAPT to isolate the most effective elements of the agro-dealer model and identify areas for improvement.
Lessons Learned

As Manda and the ADAPT team reflected on their achievements and considered plans to scale the model in the years ahead, the team clearly articulated some of the central lessons to their success from the time they revamped the project.

FACILITATE CHANGE, DON'T TRY TO OWN IT

For Steve Powers, ADAPT shows that CARE needs to change the mentality it brings to enterprise development projects. “Enterprise development projects are distinct from business as usual,” he notes. “To succeed in market development, we need to take a facilitation role and avoid the urge to provide services directly. CARE should be... invisible.” While total invisibility is not possible, Powers’ idea is shared by other ADAPT staff who see CARE’s role as facilitating the creation of well-connected agro-dealer shops and the demand for their products and services. Ultimately, though, the agro-dealers, suppliers and smallholders themselves will dictate whether ADAPT succeeds or fails. This is a shift from some past efforts in which CARE or other development actors provided services directly, for instance acting as a trader themselves. For ADAPT staff, it is key to project success.

EXPECT FAILURES

While not something CARE strives for, the ADAPT team expects that a percentage of the participating agro-dealers will not succeed. This seemingly minor change actually represents a substantial shift for many staff members who were accustomed to working more directly with poor participants and thus held themselves responsible for ensuring that they all succeeded. While accepting that some participating entrepreneurs would fail was not a license to ignore quality — this acknowledgement freed staff to focus on achieving the overall project goal of learning from struggling agro-dealers and adapting their strategies to hone in on the most successful methods for training, mentoring and facilitating successful linkages. As Powers notes, the shift really was transformational for many. “Traditionally, we have been much more involved in the direct provision of service to smallholders. For instance, 20 years ago it would have been a CARE demonstration plot. Now it is run by the agro-dealers themselves. While the old approach ensured farmers got access to the services CARE’s projects provided, it also undermined our ability to scale or achieve sustainability.” Under ADAPT, CARE made some concessions by focusing on the agro-dealers — some of whom will fail — to ensure that all smallholder participants benefit from ADAPT’s activities. The team believes, however, that the overall gains in sustainability and the potential scale of impact are worth it.

IDENTIFY AND FOCUS ON MARKET OPPORTUNITIES WITH THE POTENTIAL TO CHANGE THE GAME

A key factor in ADAPT’s success was the early identification and prioritization of constraints to improving smallholder livelihoods. CARE’s focus on the input supply chain emerged only once it became clear that this aspect of the maize sector was the one on which CARE could have the greatest impact in the short term through market-based programming. CARE knew, for instance, that rural entrepreneurs were already interested in opening agro-supply shops, but lacked the skills to run a profitable business. Similarly, the private sector was increasingly looking for new markets but had no clear way of generating or tapping into smallholder demand profitably. Smallholders, for their part, were demonstrating their interest with their feet — consistently traveling great distances to access even the most basic agricultural inputs. While other areas of the maize sector were also in clear need of change, from CARE’s perspective
the input supply chain presented an opportunity for substantial short-term gains for smallholders as well as a means of establishing a foothold and momentum for change in other areas. As an example of how this lesson is playing out in practice, with the productivity gains from producers’ newfound access to quality inputs CARE is now working with agro-dealers to pilot models for them to support improved smallholder market access.

RECRUIT STAFF WITH BUSINESS EXPERIENCE AND SKILLS

Powers, Jiwa and Manda all attribute the success of ADAPT to the staff. For Jiwa, recruiting staff with experience in business projects was the single most important step taken to turn ADAPT around. “The success of ADAPT shows how important it is to recruit staff who have experience with business, even if they come from outside the organization. The role CARE plays in a value chain project is not the same as that in a social project. Staff members need to understand the requirements and expectations of a business and how to take on a facilitative role.”

INSTITUTIONALIZE FLEXIBILITY IN IMPLEMENTATION

While Manda agrees hiring staff with appropriate experience is important, he emphasizes the need to also provide project staff with space to learn, make mistakes, take responsibility and innovate. “ADAPT is a successful project only because the staff has the confidence and the initiative to make decisions,” he declares. Manda draws a sharp contrast between process-driven social projects and projects driven by market opportunities. In his mind, the ADAPT project itself is analogous to a business that must act quickly to take advantage of the ever-changing dynamics of the marketplace. To do this successfully, the staff must be flexible and able to analyze the situation and they must have the responsibility to act. Manda has enabled this by providing staff with considerable autonomy to tailor their activities to the needs of the agro-dealers and other stakeholders with whom they interact. Manda does not hesitate when asked what personal lessons he has drawn from his experience at ADAPT. “For me the biggest success has been to create a box with clear boundaries — our activities and our targets — and to put staff in the middle and let them roam. Have faith in them. Let them have the courage to do the work.” Manda’s management approach institutionalized flexibility while also ensuring that ADAPT remained focused on CARE’s end goals.
SET REALISTIC TARGETS AND EXPECTATIONS

All of the ADAPT leaders admit that the sheer number of demands placed on field staff at project outset led to an incredible diffusion of effort that yielded few gains and threatened to paralyze staff overwhelmed by their mandate. Powers highlighted the impact of adding core activities to the project document during the initial drafting process: “Each draft we went through added an idea, a new bell or whistle. It is not that those activities were not important. But they were misaligned with our capacity and the time it would take to really gain ground on some of these issues.” A clear lesson from ADAPT’s first year was to focus on a core set of activities tailored to take advantage of very specific and clearly understood opportunities. The revised ADAPT strategy has allowed CARE not only to better achieve short-term priorities but also to better set the stage for further gains by building credibility and momentum among the key stakeholders.

MAXIMIZE PROJECT TIMING AND TIME AVAILABLE

ADAPT reflects one of the many lessons CARE has learned about the importance of timing project activities to align with agricultural cycles and ensuring they have adequate time to fully realize their goals. In reflecting on ADAPT’s progress, most staff agree that while the project has achieved much, three years is an insufficient amount of time to develop a sustainable network of over 500 agro-dealers. The challenge results from the rolling nature of agro-dealer recruitment and is closely linked to the importance of timing projects to concur with agricultural cycles. Noah Simpasa, the Eastern Region Coordinator illustrates the challenge, noting that the two-man regional team has just finished recruiting and training agro-dealers in the last district they will cover during ADAPT. With just one year left, however, they will have limited opportunities to mentor these new recruits in the lead up to the primary agricultural season and no chance to work with them beyond year one. Having worked with the ADAPT model for two years now, most staff feel that working with agro-dealers for at least two seasons is critical to their success as it enables them to establish and test foundational knowledge and then plan and execute improvements in the second year. While projects are always constrained by the realities of funding availability, the issue is a recurrent challenge not only in Zambia but across the board. Jiwa and others working with ADAPT are now focused on building strong evidence to support funding requests that respond to the realities they have seen over the past two years.

CARE’S REPUTATION CAN OPEN DOORS BUT IT ALSO CAN CLOSE THEM

CARE in Zambia and many other places has strong brand recognition among smallholders, the government and the private sector. While this can serve as an asset in many instances, traditional efforts under which CARE provided direct services to the poor — often seen as charity by the private sector — actually complicated ADAPT’s success. A prime example emerged during implementation of the innovation grant scheme, which matched a contribution from CARE with a direct investment on the part of the agro-dealer. As the effort got underway, CARE had difficulty convincing applicants that the fund was an investment, not charity and that the ADAPT team would actively track whether, when and how agro-dealers spent the money. Several agro-dealers who were denied grants refused to participate in the project without a handout and others were slow to invest the funds. Even within CARE, the concept of using the grants to create incentives for innovation was difficult to get complete agreement on. ADAPT has established a project culture in which facilitation and market-based approaches are the focus but the project will continue to be challenged by broader perceptions of the organizational focus and approach.
The Road Ahead

In just two years, the Sakalas have gone beyond selling inputs and have begun to collect maize from local smallholders and for selling into output markets in Lusaka. The practice has increased the Sakalas’ profits while also enabling farmers to get better prices and prompt payment. With this expansion, the Sakalas have greatly diversified their income and now plan to increase operations, investing their profits in expanding their current store and opening two local outlet shops. Their detailed plan to achieve this vision includes renovating and stocking their shops and hiring and training staff, using the approach introduced to them by CARE.

The Sakalas represent an ideal outcome for ADAPT and a growing opportunity to further enhance the agro-dealer model. As CARE looks ahead, ADAPT is just the first phase of agro-dealer development in Zambia. Project results have caught the attention of market actors and donors alike. MACO, for example, is interested in using the network to distribute Agriculture Support Program supplies to smallholders, potentially a major business gain for rural agro-dealers. “The [Zambian] Government has already asked for a list of agro-dealers that we have trained,” Manda explains. “They are hoping to pilot a voucher system in the 2011 planting season. When the project started, if you took this idea to government, they would not have been interested. Now after just two years they want to pilot something. It goes to show the power of demonstration — if it works, they will get interested.” Jiwa also believes that CARE
should utilize the growing rural agro-dealer network for further programming. “This first phase was about establishing a platform. We began by focusing on increasing access to hybrid seeds because that is where the opportunities were. The network will hopefully now do that but we can and should look beyond inputs.” With the gains of the past year, CARE is in a strong position to do exactly that and, as they do, some ideas have become priorities:

- **Expanding the Agro-Dealer Service and Product Mix.** CARE always intended to tackle challenges beyond access to inputs that smallholders face, including soil health, access to output markets and information. In the years ahead CARE sees great potential for ADAPT and other projects to partner with private sector actors — providers of low-cost soil health test kits or buyers, for instance — to further expand smallholder access to services. The strategy also would support the full profitability of rural agro-dealers, who currently rely on other income streams to augment sales during peak demand seasons. As Jiwa notes, “in addition to selling inputs there is so much more agro-dealers could do for smallholders that it seems to me CARE has an obligation to look at what more we might do to increase the services, profits and sustainability of the network while at the same time improving the lives of smallholders.”

- **Strengthening a Focus on Women’s Empowerment.** At its inception, ADAPT was not designed to explicitly empower women. However, CARE has increasingly recognized the importance of tailoring interventions to overcome constraints to women’s full participation in and ability to benefit from markets. CARE’s 2008 — 2015 Market Engagement Strategy outlines three areas of focus for supporting this goal — improving women’s skills, knowledge and capacity to manage risk; increasing opportunities for women to actively contribute to and benefit from markets; and supporting the emergence of a positive enabling environment that reduces institutional and cultural barriers to women’s empowerment. According to Powers, “we haven’t done as good a job on the gender aspect as we would want to. [In the future] I would definitely try and, without it becoming a gender project, I would try to better integrate a focus on women.” The arguments for doing so go well beyond achieving gender equity.

Women are responsible for more than 80 percent of agricultural production in Africa and evidence demonstrates that women can be as productive as men, if not more so, when provided with equal access to inputs. In Zambia, over half of smallholders are women. Ensuring they have equal access to inputs by developing strategies such as increasing women’s participation in farmer field days and seed fairs has the potential to dramatically improve overall productivity. It seems the value of ensuring that women’s needs are met is a lesson that has already been shown by the 30 percent of ADAPT agro-dealers who are women. Anecdotal evidence suggests their sales and performance are consistently higher than those of their male colleagues. CARE recently commissioned gender-focused research to better understand this phenomenon and is developing strategies to ensure agro-dealer development is ‘gender smart’.

- **Increasing Access to Credit.** No matter how well run the current agro-dealer shops in the network are, the overriding barriers to credit access remain powerful nationwide, leaving all but a few agro-dealers unable to meet demand. While some gains can come from suppliers, as illustrated by promising moves among a few companies to extend inputs on credit to high-performing ADAPT agro-dealers, this source has limitations and typically constraints an agro-dealer’s ability to stock products from multiple suppliers. To ensure that rural agro-dealers can remain independent and that the model CARE is developing has the potential to reach scale, new products need to be developed in partnership with formal financial institutions.
1 CARE’s ADAPT Project defines smallholders as those cultivating less than 5 hectares of land and/or raising three or fewer head of cattle. In contrast to many settings, access to land is not a major constraint to Zambia’s rural farmers. Rather, low soil quality, lack of access to inputs and irrigation are the primary limits to productivity.

2 ADAPT Proposal - Narrative, Page 1.

3 The Government of Zambia, concerned about national food security, is interested in cheap domestic food supplies and therefore regulates the milling industry. Specifically, the government controls whether the millers may sell milled grain into the more profitable international market or must limit their supply to the less lucrative domestic market.
