Pedaling Power: CARE and Zambikes Go the Last Kilometer for Input Supply in Rural Zambia

Learning Themes: Engaging the Private Sector | Improving Market Facilitation Practices |

Context

Undeveloped transportation infrastructure in Zambia is a major constraint to improved productivity for the estimated 800,000 smallholder farmers living in remote, rural areas of the country. In order to purchase agricultural inputs from input suppliers located in urban district centers, the poor have to bear high transportation costs or walk for long distances. Often, traveling 80 to 120 kilometers to the nearest input supplier is simply not an option. Smallholder farmers have no choice but to purchase their inputs from local distributors who often charge higher than market rates for poor-quality inputs.

Due to these market failures, seeds, fertilizers, herbicides, pesticides and other basic farming inputs are often unavailable or too expensive for rural smallholder farmers, despite existing demand for these products. As a result, yields are decreased and farmers are prevented from reaching their productive potential, a reality that directly contributes to the persistent poverty of over six million rural Zambians. Allowing farmers to access improved agricultural inputs at fair prices will empower them to be active players in the agricultural sector by enabling better production and marketing decisions. With support from the Alliance for a Green Revolution in Africa (AGRA), CARE Zambia is doing just that.

Through the ADAPT project, CARE is using a market-based approach to develop a sustainable network of 500 rural agro dealers, which will provide 91,000 smallholder farmers with access to a range of high-quality, affordable agricultural inputs and improved technologies. This innovation brief highlights one unique strategy CARE has used to enable agrodealers to go the last mile in input supply in Zambia – the introduction of pedaling power.

One participant in the Zambike pilots is Edward Lwabila, from Mumbwa in the Central Province. He notes, “Before the Zambike Model, I would service an average of 10 customers per month, then when I started using the Zambike model for my sales the number of farmers that I serviced shot up to 74. I later on did a mapping of where farmers where located such that as at March I had reached out to a total of 220 farmers. In terms of value of sales, this can not be over-emphasized, before using the Zambike model, my sales only stood at USD 70, but this is different, my sales are now at USD 2000.00 per month.”
The ADAPT project’s core activities include a set of interventions designed to bridge gaps in the input supply sector. CARE is recruiting, mentoring and providing business management and technical training to its network of agrodealers. To stimulate demand among smallholders and build trust between agrodealers and input suppliers, CARE is facilitating seed fairs, the establishment of demonstration plots and the organization of farmer field days. The project has successfully facilitated linkages with district based agrodealers and multi-national input suppliers.

In order to help buy down the barriers to entry for start-up agrodealers, ADAPT has provided aid in the form of matching grants through an “Innovation Fund.” The fund allows agrodealers to make initial investments that they would not be able to afford otherwise. Common expenditures include shop branding, the building of inventory, transport-capital and marketing initiatives. It is through this Innovation Fund that a pilot with Zambikes was launched with the objective of increasing agro-dealer mobility and sales and reducing the distance smallholder farmers must travel to access quality, affordable and timely inputs – a key priority for the ADAPT project.

Following an agreement with the Zambike Company, CARE’ ADAPT Project came up with a model of using the locally-manufactured bicycles and carts to enable rural agrodealers to better engage with rural smallholder communities. This improved method of transport allows agrodealers to travel to farmers in their locations. By being able to reach out to farmers, not only are agro-dealer sales improved but this also helps to strengthen the entire commercial agricultural input network with improved relationships, trust, ownership, and incentives amongst stakeholders. The Zambike model is being promoted in partnership with the Zambike Company.

**Results**

ADAPT is currently working with a total of 426 agrodealers in 9 districts of the Central, Copperbelt, and Eastern provinces of Zambia. 154 agrodealers across the three provinces have accessed Innovation Fund to upgrade their businesses. Thirty-five more have invested their grants and their own capital to purchase a Zambike. The total investment, valued at approximately USD 12,000, is already yielding substantial dividends. Equipped with Zambikes, the agrodealers have been able to better access rural markets and expand their client base, leading to an average daily sales increase of more than 50 percent. The profits from these initiatives have enabled agrodealers to increase their inventories, cover school fees for their children and to purchase food during periods of food insecurity.

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Beyond the agrodealers, smallholder farmers are also benefiting from the Zambike model as they are better able to access high-quality inputs, affecting the productivity and income. Some female smallholder farmers from Mumbwa who purchased seed and other farming inputs from agrodealers through the Zambike mobile-sales, noted, “We have more time for our families, we have more time to attend to other productive activities at our homes, before we would spend the whole day travelling to buy inputs, but with the Zambike Model, that is story of the past.”
The Zambike model has significantly ignited business growth among the participating agrodealers and led to strong multiplier effects, attracting other agrodealers to follow suit. CARE sees opportunities to further develop and draw from this experience for even greater impact.

- Under ADAPT, as agrodealers become more visible in local communities CARE anticipates the Zambikes will not only facilitate input sales, but will also enable agrodealers to support the consolidation of supply during the harvest season and provide farmers with other services such as spraying and pest management.

- The model seems particularly well suited to vegetable input supply give the continuous nature of vegetable farming and relatively small-scale of inputs required. CARE is analyzing the impact of the Zambike to understand how and when it can most effectively support agrodealer performance.

- More broadly, one of CARE Zambia’ strategic directions is to work with a wider range of external partners in order to maximize organizational impact. The Zambike pilot provides one illustration of the role that partnerships with private sector actors like Zambike can play in achieving this.

Although the Zambike model can be highly beneficial, one key gap CARE sees in the innovation is that it is not inherently appropriate for women agrodealers. Some women agrodealers have raised concerns regarding the risks involved with mobile sales or with entrusting someone else to conduct mobile sales on their behalf. To address this, CARE is exploring alternative “last-kilometer” initiatives more appropriate for women agrodealers such as mobile kiosks that can be set up closer to farmers.

**Road Ahead**

CARE is already working to scale up the use of Zambike mobile sales model among agrodealers both under ADAPT and through other CARE Zambia agricultural market development projects such as the Southern province equivalent Zambia Agro-dealer Support Project. The pilot, however, continues to be examined by the ADAPT team, which aims to better understand the innovation’s impacts, both positive and negative, intended or unintended. Key questions as CARE Zambia looks to expand this work include whether other agro-related services can be combined with the mobile sales model and how results and perceptions of the Zambike model differ by gender.

While the Zambike pilot remains relatively small, CARE sees great potential in this and other simple technological innovations to support market expansion, productivity and livelihoods among Zambia’s rural poor.
About the Market Engagement Innovation Briefs Series

In 2008, CARE launched its Market Engagement Strategy with a goal of empowering 10 million women and girls to lift themselves out of poverty by 2015 by promoting dignified employment and sustainable incomes. As CARE works towards this goal, it seeks to promote changes in agricultural and other high-potential value chains that enhance industry competitiveness as well as the opportunities for and benefits to the poor from market participation.

Innovation Briefs are one tool CARE is using to build internal and external awareness of CARE’s successes and lessons learned through market engagement. We hope these brief summaries of our work foster further innovation and success as we continue to work toward equitable, sustainable and productive solutions to alleviate global poverty.

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