

2.0 Introduction

This final evaluation of the ADAPT project had been commissioned by CARE Zambia as an impact evaluation directed at assessing the Project's achievements towards its goal and objectives and provide a basis for measuring and judging its support to enhance project accountability, informed decision-making for programmatic improvements, organisational learning and change functions, and possible replication.

Its main purpose was to evaluate the effectiveness of the business model that sought to establish commercially viable last-mile agro-dealer outlets, through facilitating vertical linkages between input suppliers and agro-dealers, catalysing demand through seed fairs, field days and demonstration plots, in order to demonstrate the existence of a lucrative and steady market for agro-inputs to key seed suppliers.

Specifically, the team focused on assessing the performance of the project at three key levels, namely, agro-dealer, farmer, and the seed supplier or private sector levels.

At the agro-dealer level focus was on evaluating the impact of the project three key aspects, i.e., sales growth and business viability; benefits derived from relations with input suppliers; and the impact of the innovation fund on the agro-dealer viability as well as visibility.

At the farmer level, the evaluation focused on the following aspects:

- establishing the extent to which the project contributed to raising awareness of hybrid seeds;
- identification and uptake of optimal hybrid seed for their location;
- farmer perspective on which demand creating activities provided them with the best knowledge and exposure;
- assessing the extent to which the project contributed to improving their accessibility, affordability and timeliness to improved seed and other agro-inputs; and
- The implications of these aspects on farmer production and productivity gains.

With respect to the supplier level, the key focus was to demonstrate changes in the private sector perceptions of opportunities for reaching the smallholder markets via agro-dealerships in order to provide for the unmet demand for seed and agro-inputs amongst rural farmers.

3.0 Project Profile and Background

CARE Zambia recognized that smallholder farmers in the rural areas of Zambia generally lack access to a wide range of high-yielding seed varieties and other agricultural inputs and chemicals at affordable prices, on time and in adequate amounts to support agricultural expansion. To a large extent, this poor access is exhibited by lack of physical availability of agricultural inputs in the remote areas, worsened by the high cost of acquiring these inputs due to the distance that farmers have to cover in order to reach the nearest



distribution points. CARE Zambia estimates suggest that most small-scale farmers also lacked access to reliable, all weather and affordable transport and had to travel for up to 35 kilometres to nearest agro-dealer to access seed and other inputs, primarily due to a poor network of viable rural input agro-dealers and distributors.

In order to enhance the contribution of small-holder farmers to national food security and household well-being, CARE Zambia initiated and implemented a three (3) year ADAPT Project, covering nine districts in three Provinces, namely, Copperbelt, Central and Eastern.

The Project sought to achieve the following three specific objectives:

- To enable supply chain actors to pursue the smallholder market;
- To improve the affordability, timeliness, range, and volume of inputs and services reaching smallholder farmers in the target geographic areas; and
- To strengthen the enabling environment for expansion of agro input networks into the smallholder market;

The Project strategy was to create a scalable network of 500 agro input retailers through the identification, training and mentoring of agro-dealers, conducting demand-creation activities, in the form of seed fairs, demonstration plots and field days with the ultimate aim of providing 91,000 smallholder farming households with improved knowledge of, and access to improved seed varieties and other agro-inputs. The Project assumption was to reach approximately 592,000 direct and indirect beneficiaries.

The theory of change for the ADAPT Project was that if it succeeded, farmer productivity would go up, which in turn, would improve their general household food security and incomes.

4.0 Evaluation Methodology

After the initial meeting and discussion with the ADAPT project team, there was agreement to focus the methodology more towards desk review of the available project documents in order to consolidate previous records and findings of its achievements, learning and change, and opportunities for project replication. A limited field visit component was to be undertaken. The Project team also emphasized the need to focus more on the effectiveness of the ADAPT business model rather than the tradition criteria for project evaluations.

The team conducted a critical review of the project documents in order to gain some insights on its performance and identify gains and gaps. Key documents reviewed included the ADAPT project document, the M & E plan, the Baseline Survey Report, the monthly and quarterly progress reports, the project Mid-term Review Report, the Care Business Assessment Interim Report, the Copy of ADAPT Monitoring Sheet for January to March 2011, Categorization of Results, and innovation briefs amongst other important documents.

In order to capture the stakeholder perspectives and triangulate the findings, the team conducted limited key informant interviews of 2 input suppliers, 1 agro-dealer association executive, 5 agro-dealers, and 1 Block Extension Officer (Ministry of Agriculture and Cooperatives). The team also held focus group discussion with 2 groups of farmers, each comprising of 5 males or females, all in Chibombo District. The interviews and discussions were recognized to have been drawn from an insufficient population sample, but used to provide qualitative anecdotal perceptions of change and achievements across the spectrum of project stakeholders attributable to the project. This data was meant to augment the quantitative M & E data collected by the project.

5.0 Evaluation Findings

5.1 Measuring Effectiveness:

Project effectiveness is defined as the extent to which its component activities or interventions achieved its intended targets and objectives. In this respect, the effectiveness of the ADAPT project is made by measuring the percentage success rate achieved under each component activity when the project target is used as the base value. Effectiveness is also evaluated on the basis to which each project component contributed to the overall project goal and objectives.

In measuring project effectiveness, the focus was on the following six key component activities of the ADAPT project:

- Recruitment training and certification;
- Demand creation;
- Input volumes and sales;
- Policy and advocacy;
- Financial support; and
- Input marketing

The following sub-sections are dedicated to evaluating and establishing the effectiveness of the ADAPT project based on the above parameters.

5.1.1 Recruitment, Training and Certification of Agro- Dealers:

According to the ADAPT project Indicator Monitoring Sheet (January – March, 2011), the project targeted to recruit 650 agro-dealers for its various sub-activities under this sub-component. By March, 2011, the Project had recruited a project-wide total of 626 agro-dealers in the 3 regions, namely, Eastern, Central and Copperbelt Regions as shown in table 1. When the project-wide total of 626 agro-dealers is compared to its target, it is evident that the overall project effectiveness for this component stood at 96.3 per cent, with Central Region accounting for 99.5 per cent, Eastern for 94.4 per cent and Copperbelt for 94.8 per cent, respectively.



Table 1: Recruitment Drive Effort and Results

<i>Region</i>	<i>Project Target</i>	<i>Actual Recruitment</i>	<i>Proportion of Target (%)</i>
<i>Central Region</i>	220	219	99.5
<i>Eastern Region</i>	215	203	94.4
<i>Copperbelt Region</i>	215	204	94.8
<i>Project-Wide</i>	650	626	96.3

Source: Authors' analysis based on data in the ADAPT Indicator Monitoring Sheet

A further analysis indicates that the project started with a baseline value of 135 agro-dealers in all the 9 districts of the 3 regions under study as given in table 2 below¹. With a total of 626 agro-dealers recruited, it is evident that the project's recruitment exercise contributed a total of 491 new agro-dealers between the period September 2009 and March 2011. This figure represents an increase of 363 per cent over the base value. The Copperbelt Region contributed the highest proportion to the overall growth rate of agro-dealer recruited, with 39 per cent of the growth rate occurring over an 8 month period starting July, 2010. This also proves that the recruitment effort was very effective at raising the total number of agro-dealers.

Table 2 below, presents a breakdown of the regional growth rates in the agro-dealer recruitments over the project's baseline values.

Table 2: Percentage Growth of Agro-Dealer Recruitment

<i>Region</i>	<i>Baseline Value</i>	<i>Actual Recruitment</i>	<i>Achievement Rate %</i>
<i>Central Region</i>	69	219	217
<i>Eastern Region</i>	41	203	395
<i>Copperbelt</i>	25	204	716
<i>Project -Wide</i>	135	626	363

Source: Authors' Computation based on data from the ADAPT Baseline Survey Report 2009

A comparison of the actual number of recruited agro-dealers and the respective baseline values shows that the project succeeded in reaching or establishing an additional 150 agro-dealers in Central Region, 162 in Eastern Region and 179 in the Copperbelt region, bringing the total to 491 newly recruited or agro-dealer start-ups.

The overall project-wide success rate as well as the percentage achievement rate of at least 200 per cent in each region, is clear indication of the ADAPT project's effectiveness in the recruitment of agro-dealers in all the regions, which is was a first step towards realising the first project objective of "establishing a viable network of rural agro-dealer in order to effectively serve rural smallholder farmers."

¹ Kindly note that there is a difference of 3 agro-dealers between this computed baseline value of total agro-dealers and the figure used in the ADAPT project Monitoring and Evaluation Plan

This achievement is further illustrated when the total number of agro-dealers recruited in each region is disaggregated by regional or administrative location as shown in table 3 below. An analysis of the distribution of the recruited agro-dealers by geographical location indicates that, as at September 2010, 85 per cent of the total agro-dealers recruited were located in rural areas.

Table 3: Distribution of Agro-dealers By Geographical Location

Region	Rural Area		Urban Area		Total
	Number	Proportion (%)	Number	Proportion (%)	
Central	173	80.8	41	19.2	214
Eastern	152	84.9	27	15.1	179
Copperbelt	160	91.4	15	8.6	175
Project-wide	485	85.4	83	14.6	568

Source: Authors' computation based on analysis of ADAPT's Agro-Dealer Registers

In Central Region, rural agro-dealers accounted for about 81 per cent of the total regional number, while in Eastern and Copperbelt Regions, the rural populations stood at about 85 and 91 per cent, respectively.

It is, therefore, evident from the comparatively higher numbers of rural agro-dealers in each region that the project focused on achieving its objective of establishing viable last-mile agro-dealer outlets through a network of rural agro-dealers in order to reduce the distance travelled by small holder farmers to access improved maize seed and other agro-inputs thereby also arguably contributing to reducing the costs associated with access to these inputs as well as affordability.

With respect to training of agro-dealers, evidence based on a comparative analysis of the trained versus recruited agro-dealers shows that the overall effective rate of the business management skills training was at 82 per cent of the recruited agro-dealers, whereas that of technical skills training stood at 69 per cent as shown in table 4.

Table 4: Distribution of Trained Agro-Dealers by Type of Training

Region	Number of Agro-Dealers	Type of training skills	
		Business Management Skills	Technical Skills Training
Central	219	179 (82%)	159 (73%)
Eastern	203	180 (89%)	146 (72%)
Copperbelt	204	154 (76%)	126 (62%)
Project Wide	626	513 (82%)	431 (69%)

Source: Based on analysis of ADAPT Indicator Monitoring Sheet

With respect to business management training, statistics show that the Eastern Region had the largest proportion of the agro-dealers trained in business management skills at 89 per cent followed by Central Region at 82 per cent. Copperbelt Region had the lowest achievement rate of 76 per cent. Based on the above data, it is evident that the ADAPT project succeeded in providing training to a much larger proportion of the recruited number of agro-dealers, with the majority of those trained being rural based.

On the other hand, an analysis of the overall success rate of the delivery of the technical skills training shows that the project was effective in training about 69 per cent of the recruited number of agro-dealers. In Central



Region, the project was able to train 73 per cent of the recruited agro-dealers; in Eastern Region it trained 72 per cent; while in the Copperbelt Region 62 per cent of the recruited agro-dealers were trained.

A comparative performance of training delivery by category of skills training suggests that the project performed better in business management skills training as compared to technical skills training in reaching the number of recruited agro-dealers. A further analysis of the project's effectiveness in training delivery as given in table 5 below shows that overall the project succeeded in providing training to the majority of its target agro-dealers. This finding is reflected by the narrow variance in the success rates of business management and technical skills trainings against project targets as well as the numbers actually recruited in each region.

Table 5: Composition of Trained Agro- Dealers By Category of Training

Region	Project Targets	Type of training skills	
		Business Management Skills	Technical Skills Training
Central	220	179 (81%)	159 (72%)
Eastern	215	180 (84%)	146 (68%)
Copperbelt	215	154 (72%)	126 (59%)
Total	650	513 (79%)	431 (66%)

Source: Author's computation based on data from ADAPT Indicator Monitoring Sheet

The project's higher effective rate and the low variance in reaching the recruited number of agro-dealers in both business management and technical skills training may be an indication that the ADAPT project was much more realistic in setting its targets for this component. It may also be an indication of the project's efficiency in the planning and implementation of its recruitment and training activities.

However, when the analysis of the trained versus the certified agro-dealers is made, overall results show that only 54 per cent of the project target was achieved. This finding shows an average achievement indicating that the ADAPT project was fairly effective in reaching the numbers of trained agro-dealers with certification as shown in table 6. However, the regional comparison shows that the Eastern Region had a much remarkable achievement of 84 per cent, followed by Central Region with an above average performance of 60 per cent while Copperbelt Region was the least successful at 19 per cent of the target number of agro-dealers certified. Thus, although the Copperbelt Region had the largest growth rate in the number of recruited agro-dealers over an 8 month period (since July 2010), the project achieved the lowest success rate with respect to the number of certified agro-dealers.

Table 6: Certification Drive Effort and Results

Region	Certification Target	Actual Certification	Achievement of Target (%)
Central Region	220	132	60
Eastern Region	215	180	84
Copperbelt Region	215	41	19
All Regions	650	353	54

Source: Authors' computation based on data in the ADAPT Indicator Monitoring Sheet



The low success rate in the certification of agro-dealers for the Copperbelt Region in the midst of its high rates of agro-dealer recruitment is perhaps an indication of the need for gradual and phased roll-out project strategy as well as more rigorous screening and targeting mechanisms. It may also imply that the ADAPT project screening and targeting of agro-dealer start-up was driven by CARE International’s traditional social orientation rather than business or commercial approach to project delivery. This is because to be able to establish viable last-mile distribution centres of agro-inputs, the project should have focused on targeting fewer agro-dealers or agents with comparatively much higher survival prospects and potential for growth and graduation. This would also have led to a higher number of the trained agro-dealers being certified. Hence the divergence in pattern for the Copperbelt region, along with lower achieved training values may be reason for more critical evaluation of agro-dealer needs and interests versus project input on a region-by-region basis.

5.1.2 Demand Creation Activities:

The demand creation activities, which comprised seed fairs/exhibitions, demonstration plots and field days (table 7), were aimed at expanding the frontiers of demand at farmer level by getting as many farmers as possible to be exposed to the knowledge on performance and management of improved maize seed varieties. The ultimate project objective of this exposure was to:

- (a) help small scale farmers identify optimal hybrid seed varieties for their respective locations; and
- (b) enhance the uptake of improved maize seed varieties and other agro-inputs;

Table 7: Demand Creation Activities: Achievements Versus Targets

Region	Number of Seed Fairs Conducted			Number of Demonstration Plots Conducted			Number of Field Days Held		
	Target	Actual	Proportion (%)	Target	Actual	Proportion (%)	Target	Actual	Proportion (%)
Central	12	38	317	90	87	97	37	39	108
Eastern	12	18	150	90	88	98	37	50	135
Copperbelt	12	15	125	90	90	100	37	28	104
Total	36	71	197	270	265	98	112	117	104

Source: Based on analysis of ADAPT Indicator Monitoring Sheet

The analysis of the overall project performance with respect to demand creation activities shows that the ADAPT project was very effective in conducting seed fairs followed by field days and demonstration plots as illustrated in table 7 above. A regional comparison of the performance of seed fairs or exhibitions indicate that the project achieved an effective success rate of 316 per cent in the Central Region, 150 per cent in the Eastern Region, and 125 per cent in the Copperbelt Region. The success rate of seed fairs at 197 per cent may also imply that seed fairs were the most popular demand creation activity to both farmers as well as seed suppliers but maybe also a proxy indicator of the increased awareness by smallholder farmers of improved maize seed varieties, and their willingness to increase the uptake of these seeds in order to enhance their productivity. What also becomes evident by the comparison of actual seed fairs conducted and project targets, particularly in the case of Central Region, is that the project targets were much lower than its potential, indicating a need for more realistic target setting based on varying regional potentials and baseline findings.

A further evaluation of the project performance with respect to field days suggests that the project achieved beyond its targeted figure of 112 field days with an overall project wide performance of 105 per cent. A comparison of performance by region shows that the Eastern Region was the best performer at 135 per cent,



followed by the Central Region at 108 per cent, while Copperbelt achieved an overall success rate of 104 per cent.

In the case of demonstration plots, the overall project wide result stood at 98 per cent with the Central Region achieving 97 per cent of the target number of demonstration plots, Eastern Region 98 per cent, while Copperbelt emerged as the best performing region with the project achieving 100 per cent of the target total of 90 demonstration plots. A comparison of project targets and the actual number of demonstration plots established, suggests that the project was much more realistic in setting regional targets or that equal effort was made in each of the regions to meet the set targets. It may also be an indication of the enhanced project implementation capacity resulting from the team's learning - by - doing and change processes.

However, the variations in the regional performance may also suggest that the project planning phase should have based its target setting on an identified regional need and potential, meaning that lower targets should have been set for lower potential regions like the Copperbelt and higher targets for higher potential regions like Central and Eastern rather than opting for uniform project targets across the regions. This could have enhanced its success rate even in low potential regions like the Copperbelt, which, based on the findings, had continually lagged behind in achieving set targets. Perhaps based upon a weaker culture of agriculture in the Copperbelt region, agro-dealers were less inclined to appreciate the value of attending peer exchange field visits. Therefore the project needs to work on this weakness.

Data based on ADAPT Monitoring Sheet show that the demand creation activities attracted a total of 27,211 farmers, which was only 18 per cent of the target as shown in table 8. On regional basis, the number of farmers attending demand creation activities was less than 20 per cent in Central and Copperbelt Regions and slightly above 20 per cent in the Eastern Region. Thus, although it was noted earlier that the project achieved above target rates for demand creation activities, it is evident, based on the number of farmers attending, that these activities may have been effective only in the planning and conducting of exhibitions rather than in attracting higher attendance of both farmers and input suppliers. According to findings based on key informant interviews with select agro-dealers and seed companies, the low response rate for farmers was a result of some of the demand creation activities like the seed fairs being conducted in the rural and difficult to reach fringes. It was further noted that sometimes, several demand creation activities would be conducted at the same time, thus eroding the capacity of both farmers and input suppliers to attend all.

However, the overall number of farmers accessing improved seed from agro-dealers was substantially high since it went above the target by 7 per cent. In the Copperbelt Region it was 73 per cent of target, Central Region 83 per cent, and Eastern Region 164 per cent. Thus, although the demand creation activities did not attract a lot of farmers during their implementation, they were able to raise the number of farmers accessing seed from agro-dealers. The number of farmers accessing improved seed was 2.6 times higher than the number of farmers attending demand creation activities in the Central Region, 4.2 times higher in the Eastern Region, 3.8 times higher in the Copperbelt Region, and 3.6 times for the overall exercise. Moreover, the actual figure of 96,990 farmers accessing improved seeds and input as at March 2011 represents a percentage growth rate of 38 per cent from 70,059 farmers as at July 2010. This growth occurred over an 8 month period which could be attributed to increased awareness of demand creation activities by farmers as well as more sources for improved maize seed.



Table 8: Results of Demand Creation Activities

Region	(1) Farmers Attending Demand Creation Activities			(2) Farmers Accessing Improved Seed			Ratio 2/1
	Target	Actual	Proportion (%)	Target	Actual	Proportion (%)	
Central	50,000	9,566	19	30,300	25,128	83	2.6 to 1
Eastern	50,000	11,872	24	30,300	49,862	165	4.2 to 1
Copperbelt	50,000	5,773	12	30,300	22,000	73	3.8 to 1
Total	150,000	27,211	18	91,000	96,990	107	3.6 to 1

Source: Based on analysis of data in the ADAPT Indicator Monitoring Sheet

Although the number of farmers attending demand creation activities was much lower, the number of farmers accessing improved seed at the agro-dealer outlets had increased significantly in all the three regions. The higher ratio of farmers accessing improved seed over the number of those participating in the demand creation activities suggests that the project had succeeded in improving the awareness of hybrid seed and other improved seed varieties, which in turn led to opportunities for increasing uptake of these seeds. The variance among the regions in proportion of farmers accessing improved seeds and inputs in part suggests that success rates were higher where terrain and topography are more difficult, and access to line of rail farther. For this reason, farmers in the Eastern region seemed to appreciate the presence of local agro-dealers the more.

Although the project had not set any targets for the volumes or quantity of improved seed sold at the agro-dealer levels, evidence based on the analysis of data on improved seed sold by agro-dealers show that the ADAPT project achieved impressive results in assisting agro-dealers to increase inventory or improved seed and improve their sales turnover. For example, at June 2009, a total of 0.0046 metric tonnes of improved seed was sold through various agro-dealer outlets in the three regions. This quantity rose exponentially reaching 402.62 metric tonnes in July 2010 and by the end of the project in March, 2011, quantity of improved seed sold at agro-dealer outlets had reached 148,967 metric tonnes, representing a percentage growth rate of 36,899 per cent.

Table 9 below presents a visual summary of the effectiveness of the ADAPT project with respect to improving the volumes of improved seed sold by agro-dealers.

Table 9: Quantity of Improved Seed Sold at Agro-Dealer Outlets (Metric Tonnes)

	July 2009	July 2010		March 2011	
Region	Volume (MT)	Volume (MT)	Growth %	Volume (MT)	Growth %
<i>Central Region</i>	0.039	402.62	687,079.0	148,107.0	99.8
<i>Eastern Region</i>	0.007	268.0	1,377,328.0	180.4	46.5
<i>Copperbelt Region</i>	-	38.2	1680.0	680.0	94.4
Project Total	0.0046	402.62	875,160.0	148,967.0	36,899

Source: Authors' computation based on sales trends in the ADAPT Indicator Monitoring Sheet

Irrespective of the absence of baseline values for this variable, and the absence of targets in the M& E plan, the higher number of newly recruited agro-dealers within the three regions noted earlier, is a proxy indicator



of the project's contribution to improving the availability of improved seed at agro-dealer outlets and the resulting growth in sales volumes. However, clear baseline values for improved seed at agro-dealer level and documentation of the key drivers for this growth would have greatly assisted in controlling for other influencing factors thereby validating attribution of this growth to the project's interventions.

A further analysis of the sales of improved seed at the agro-dealer level shows that as at July 2010, a total of US \$967,024.71 seed sales were made in all the three project regions. Of these, Central region accounted for \$581, 857.00, Eastern US \$373,707.71 while Copperbelt contributed a total of US \$11,460. By March 2011, project-wide sales of improved seed jumped from less than US \$1 million in 2010 to US\$ 3,020,125.19, representing an overall growth rate of 212 per cent in all the three regions. Of this total, Central region represented US \$812,335, Eastern Region, \$612, 302.40 and Copperbelt contributing a total of US \$1, 593, 487.79. A comparison of regional growth rates in sales of improved seed over the July 2010 figures shows that sales in Central Region grew by around 40 per cent, in Eastern Region by 39 per cent while the sales in the Copperbelt Region grew by 99 per cent.

Table 10 below presents a summary of the growth trends in improved seed sales at agro-dealer outlets.

Table 10: Value of Improved Seed Sold (US \$)

<i>Region</i>	<i>July 09</i>	<i>July 10</i>	<i>March 11</i>
<i>Central</i>	\$314.0	\$581,857.0	\$812,335
<i>Eastern</i>	\$1,203.2	\$373,707.71	\$614, 302.4
<i>Copperbelt</i>	0	\$11,460.0	\$1,593, 487.79
<i>Total</i>	\$1,517.2	\$ 967, 024.71	\$3, 020, 25.19

Source: ADAPT Indicator Monitoring Sheet, 2011

In the absence of optimal project indicators and baseline value for monitoring the project's effectiveness and its contribution to the seed industry in Zambia, this upward trend can practically serve as a proxy indicator. It shows the extent to which the ADAPT project contributed to the increase in volumes and sales of improved seed at the agro-dealer levels but also to the growth of the improved seed sector in general. This is because, from a business sense, a firm's total sales revenue is an important element of its profit potential and viability. This evidence is further corroborated by the findings based on key informant interviews with Pioneer and Kamano Seed Companies. According to Pioneer Seed, the last three years had been very good. Although a new entrant on the seed market in Zambia, the ADAPT project helped the company's product to be known in a unique way to smallholder farmers. The demonstration plots and field days provided an opportunity for participating seed companies to demonstrate crop care, management practices, resistance to disease and pests and optimal yields under farmers' own conditions. The project was particularly valuable to Pioneer and Kamano Seed companies, which through project interventions, quickly positioned their products on the market. This resulted in sales growth rates of over 500 per cent for Pioneer Seed Company while sales for Kamano Seed Company are said to have doubled within the project period. Kamano Seed also seemed to have positive growth outlook for the coming year with its sales value expected to triple in the 2011/ 2012 season.²

The high number of agro-dealer recruitment and starts-ups noted earlier, and the remarkable growth in seed volumes and value passing through them, is an indicator of the remarkable contribution of the ADAPT project

²This data is based on key informant interviews conducted in August, 2011 with senior management for Pioneer Seed and marketing executive for Kamano Seed.



to the seed industry in Zambia in general. It is also an indicator of the extent to which it had eased access by smallholder farmers, particularly those in the rural areas, to improved seed and other agro- inputs and chemicals. At the agro-dealer level, this is an indication of its effectiveness in increasing sales turnover or revenue.

The above findings are further corroborated by smallholder farmers' perception of change attributable to the ADAPT project. When asked about what had significantly changed in the way they conducted their farming over the last 3 years, which in their view, was directly attributable to the ADAPT project, 5 female and 6 male farmers of between 30 – 75 years old, stated that the ADAPT project contributed to reducing farmer costs of transportation associated with accessing improved seed. Before, farmers had to travel to Lusaka to ZAMSEED, SeedCo, MRI, Pannar and Pioneer. In Lusaka, these outlets are generally located in the industrial areas, which are not very easy to access by public transportation. This usually increased farmers' costs of accessing certified seed. Generally, farmers noted that more money was spent on transportation than on actual procurement of seed and other inputs. This limited the level of uptake of improved seed.

It was also evident from the farmers' perceptions that the ADAPT project, by facilitating interaction between key seed companies, agro-dealers and farmers, through demand-creating activities, had improved their information and knowledge on care, management and yields of various improved seed varieties, which in turn, had improved farmers' productivity. During a FGD in Chibombo, one farmer described the effectiveness of ADAPT project as follows:

“The training and certification of agro-dealers by CARE has boosted our confidence in our local agro-dealers, which has also helped them to position themselves on the market. We now know that we are buying genuinely certified seed. Before, it was difficult to identify the agro-dealers that stocked genuine seed. Consequently, we were often susceptible to buying wrong or fake branded seed from shady or unscrupulous middlemen or agents.

Apart from making certified seeds available locally, thus improving our access and lowering transport costs, making inputs more affordable, we, farmers now have information and knowledge on the care, management, resistance to diseases and pests and optimal yields of various improved seed varieties both in the field and after harvest. This has greatly contributed to improving our yields per unit of land cultivated. Also, we have been able to select optimal maize seeds for our locations, such as Pioneer, MRI 624, 634 and 734, SeedCo, 627, 633 and 634, Pannar 67 and, Zamseed MM 603 and 604. We usually identify and select these seeds on the basis of their optimal yields, resistance to diseases and pests, weight and performance during low or poor rainfall seasons. During the 2009/2010 growing season, MRI was very popular in Chibombo but Pioneer emerged as the best performer. Therefore, farmers now have greater awareness of hybrid seed and they have seen value. We now know that with better care and management of our crops, yields can go up easily.

Agro-dealers are also able to extend, at the point of sale, extension services related to the use, storage and management of specific seed varieties and other agro-inputs and chemicals. As a result, we are able to feed ourselves and our children throughout the year. But the cost of fertilisers is so high, which generally erodes our incomes levels and profitability of agriculture. Although we are able to feed ourselves, we have no additional income to meet the cost of educating our children. “Wana wanthu wazankhala chabe wakaboyi,” which literary means, “Without proper education, our children will end up as houseboys and domestic workers and garden boys. Which will reinforce our cycle of poverty.”

Another problem is that while improved seed is now readily available and on time, veterinary chemicals are largely unavailable. Generally, farmers also lack technical knowledge and skills on how to effectively use and handle these chemicals. This adversely affects their capacity to treat



animals on time and prevent unnecessary death. The cost associated with transportation to access veterinary drugs and chemical far exceeds their cost price. So CARE should also look into measures of promoting animal husbandry. At the same time, there is need to seriously address post-harvest marketing constraints faced by farmers in order to ensure the viability and sustainability of rural agro-dealers.” (75 year old male farmer, Chibombo)

Most farmers interviewed indicated that they had not attended any demand creation activities planned and conducted by CARE with agro-dealers. However, they did indicate that they were buying input supplies from local dealers without knowing that CARE had recruited and trained them. They did appreciate the benefits of genuine seed, high quality seed, chemicals, and implements supplied by the agro-dealers in their local areas, including the knowledge transfer and customer care that the agro-dealers were able to provide to them.

At the same time they noted that from the business model perspective, the weakness of the ADAPT approach was to only focus on supply-side constraints without adequately considering to address the post-harvest marketing constraints farmers face, which erode their capacity to access inputs on time, at affordable prices and increase the levels of uptake of improved seed. This was noted as one of the key gaps in the ADAPT business model that CARE needs to effectively address in future programmatic and analytical work.

Although the lack of baseline value on these variables would not facilitate easy and systematic tracking of volumes and sales growth at agro-dealer levels, it would be prudent to assume that most of the agro-dealer start-ups under the ADAPT project had started from practically zero sales.

The lack of systematic and long-term record keeping among agro-dealers may also have made project monitoring based on optimal indicators very difficult. To validate the attribution of the growth of improved seed volumes and sales to project interventions, several observations can be made here. The first is that the project should have found a way of mentoring agro-dealers through block extension officers under Ministry of Agriculture and Co-operatives to enable them keep sales and costing records on a long-term basis. This would have facilitated easy monitoring and tracking of growth trends. Secondly, the project should have prioritised the documentation of few but innovative case studies of success stories at agro-dealer level through wide use of innovations briefs. These should have been used as evident representations of the effectiveness and success of the project. Where possible, the project should also have worked with local farmer associations or cooperatives in order to monitor local trends in the level of awareness of improved seed, resulting uptake of these seeds and the extent to which this contributed to improving their productivity.

5.1.3 Agro-Dealer Association Formation:

From the business model perspective, the formation of agro-dealers associations was justified on the basis of their ability to promote experiential learning and collective efficiency amongst members, such as bulk procurement of seed and other agro-inputs; negotiating agency relationships or supplier trade credit and exclusive discounts with key seed in order to enhance their viability. In addition, supporting the formation of agro-dealer associations was seen as a conduit for fostering project sustainability, mainly through policy analysis, lobbying and advocacy to strengthen an enabling environment for the expansion of agro-input networks into the smallholder market.

According to the ADAPT project documents, the project had intended to establish 9 agro-dealer associations, 3 in each region. Based on the data in the monitoring sheets, the project achieved these targets within the first 11 months of its implementation. For example, by July 2009, only 2 agro-dealer associations had been established with the support from the project, with one in Central region and the other in Eastern region. No agro-dealer association had been established in the Copperbelt region for the review period. However, this target was achieved by June 2010, with the project being able to facilitate and support the formation of all 9 agro-dealer associations in all the 3 regions. This represents a project effective rate of 100 per cent.



However, findings based on Key Informant Interviews with select members of the executive committee of Chibombo Agro-Dealer Association revealed a number of challenges, which in turn erode prospects for project sustainability, mainly as they relate to:

- agro-dealer recruitment, training and certification;
- Policy analysis, lobbying and supporting the improvement in the regulatory framework; and
- Capacity to plan and implement demand creation activities such as field days, seed fairs and demonstration plots on a cost recovery basis or without continued support from donors.

For example, it was noted that although the association had a total membership of 65 agro-dealers, attendance in meetings was most often very poor. Many members have to travel long distances to the venue, which means they incur high transport expenses. The association also does not have an office block for its secretariat, which according to its chairperson, tends to erode its visibility and public standing. It was also noted that some people who has been assisted by the ADAPT project had virtually disappeared. Of the remaining number, only a few have capacity to support the association to carry over the ADAPT skills training and demand creation activities and also facilitate the formation of formal relationships with key input suppliers.

According to the association's chairperson, a good number of them would need some refresher courses to carry these activities forward. However, a bigger concern expressed was that 25 of the 65 members faced the threat of dropping out of business. This number may point to problems with project targeting and potential failure rate of around 38 per cent of agro-dealer start-ups in Chibombo district. This threat is due to reason that range from limited working capital, limited entrepreneurial acumen and opportunities for innovation, to their being geographically located in the fringes, where they can serve only a limited number of customers in both the peak and off seasons. "Customers like buying where there are many and well stocked outlets. To improve the effectiveness of its business model, the ADAPT project needs to apply more rigorous screening and targeting approaches. Its primary focus should have been on those agro-dealers that had shown higher prospects for survival and graduation. The 20 - 80 targeting approach should have also been the basis for recruitment, training and disbursement of innovation funds. This means that with better screening of agro-dealers, 80 per cent of its overall success rate should have come from supporting 20 per cent of agro-dealers to increase their product range, sales volumes and turnover as well as survival rates of agro-dealer start-up.

As a result of the above challenges, it would be difficult for the 9 associations to sustain ADAPT project interventions and forge strong, formal and on-going (as opposed to once-off) relationships with major input suppliers without continued financial and technical support from donors or other well-wishers. The project also planned to support the formation of an umbrella agro-dealer association but there is very little evidence to suggest that this was successfully achieved. Thus, targets were achieved as set in this regard. However, challenges have arisen in the number of active membership as well as in the association's financial and technical capacities to support further implementation of ADAPT initiated project activities.

A comparative analysis of active subscription by region suggests that the most active members were found in the Central Region where active members accounted for 52 per cent, followed by Eastern Region with 45 per cent, while Copperbelt Region came last, at 5 per cent. The project-wide member participation rate in agro-dealer association was 39 per cent or 119 members of the total recruited agro-dealers.



5.1.4 Innovation Fund & Credit Guarantee Scheme:

The innovation fund and the proposed credit guarantee scheme were aimed at absorbing part of the risk agro-dealers faced when expanding into areas away from main business districts. It was intended for improving stocks, absorbing costs of unsold seed and other inputs and to cover costs of refurbishing shops in order to improve agro-dealer visibility and branding of shops.

By providing funds to boost agro-dealer working capital the innovation fund was meant to facilitate the agro-dealer expansion of the product range, as well as expansion in the rural areas, in order to better serve rural farmers. At the same time, shop branding, improving storage, product layout and labelling of products often makes customers think they are getting special guarantee that the products from a particular outlet meet their needs better than similar products from other unbranded outlets. The project's anticipation was that visible agro-dealers would get additional sales and profits because farmers/consumers believe these outlets offer superior product.

Data based on the ADAPT monitoring sheet indicates that the project had planned to provide innovation fund to 100 agro-dealer across the 3 regions with 33³ agro-dealers benefiting in each region. Plans were also under-way for the project to guarantee credit of those agro-dealers that would access finance from commercial channels in order to boost working capital and finance new investments. However, there is no evidence to show that the credit guarantee scheme was actually implemented.

With respect to the project's effectiveness of this variable, evidence suggests that as at July 2010, 162 agro-dealers had benefited from the innovation fund. Of this total, Central region accounted for 74 agro-dealers, Eastern, 31 agro-dealers while in the Copperbelt region the project had reached 57 beneficiaries. By March, 2011, the total number of all beneficiary agro-dealers had grown to 211, which represents a growth rate of 30 per cent over an 8 month period. The highest proportion of this growth was accounted for by Eastern region, which achieved a growth rate of 119 per cent in the number of agro-dealers reached with innovation fund over the same 8 months period. Central region came second at 16 per cent while the Copperbelt represented 0 growth rate over the same period.

However, when the overall project performance is evaluated on the basis of its set target for this variable, evidence indicates that the project achieved an overall effective rate of 111 per cent by March 2011. A total of \$345,213.91 has been disbursed as March 2010, which represents an increase of \$38,880.6 over the July 2010 value of \$306, 333.31. Of the total amount disbursed, Copperbelt accounted for US \$194, 040, followed by Central region at US \$90,900 and lastly Eastern region with a total of \$60,273 disbursed.⁴

Table 11 below present a summary of the statistics based on project target and actual numbers reached by July 2010 and 2011.

³ This figure maybe based on old targets for innovation fund as the monitoring sheet on this aspect, contains come comments that required cross-checking the validity of these targets.

⁴The ADAPT project exchange rate was K5,000 for US \$1

Table 11: Number of Agro- Dealers Accessing Innovation Fund

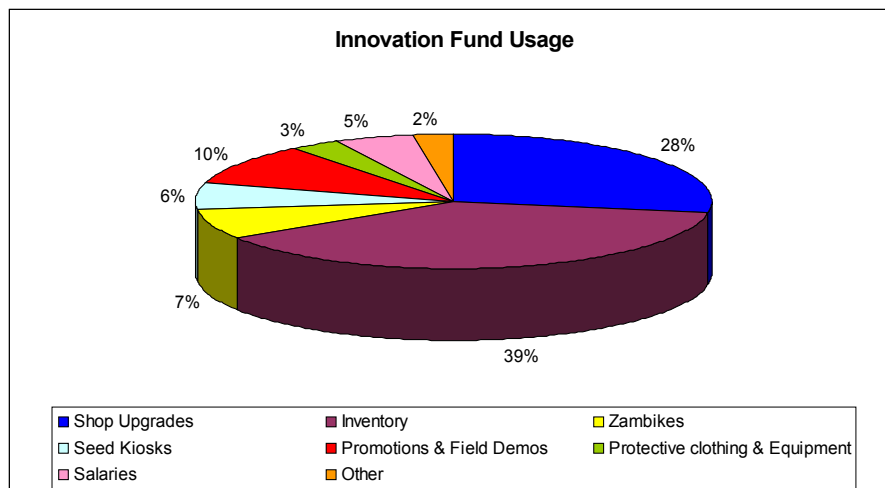
Region	Project Target	Total Beneficiaries (July 2010)	Total Beneficiaries (March, 2011)	Growth % 8 months Period
Central	33	74	86	16
Eastern	33	31	68	119
Copperbelt	33	57	57	0
Total	100	162	211	30

The above findings indicate that the project was very effective in reaching its target numbers with innovation fund. Perhaps what seems to be interesting is the higher number of benefiting female agro-dealers. An analysis of the district summary sheet of agro-dealers categorisation for Chibombo indicates that generally, of the total number of agro-dealers rated as good, female agro-dealers attained comparatively higher percentage scores than their male counterparts. Evidence further shows that out of a total 20 agro-dealers in the good performance category, 8 were women representing 40 per cent. However, female agro-dealers' overall performance ranged from 70 -100 per cent with nearly 35 per cent scoring between 80 and 100 per cent. The female agro-dealer performance was evidently much higher than their male counterparts despite their proportionally lower rate of participation in the project. Similarly, the proportion of females was much lower in the average, poor and very poor categories compared to males.

Pie chart 1 below shows the overall utilisation of the innovation fund by expense category.

The pie chart below show the overall utilisation of the innovation fund

Chart 1: Utilisation of Innovation Fund by Beneficiary Agro-dealers



Source: Innovation Fund Brief Draft ADAPT Project

It is evident from the chart above that the larger proportion of the innovation fund was used by agro-dealers to boost working capital and improve their business branding and visibility. This finding is evident when data on the use of innovation fund is disaggregated data by the category of application. Statistics show that 39 per cent of the grant was used expand inventory, 28 per cent was used on shop upgrades, 10 per cent on business

promotion and filed days, while the remaining balance was used on various activities ranging from Zambikes, seed kiosks, salaries, to protecting clothing.

However, in order to assess the impact of the innovation fund, one has to look at the total number of the certified agro-dealers in each region and compare with the number of agro-dealer that benefited from the innovation fund. This ratio or percentage should then be compared to the overall performance of agro-dealers based on the categorisation results. This ratio then has to be compared to overall performance of the innovation fund in each region. This result should be able to present a much more realistic picture of the effectiveness of the innovation fund on beneficiary agro-dealers than the current results of the categorisation exercise which also assesses performance of non-benefiting agro-dealers. Based on this approach, Findings show that 333 of the total agro-dealers received training and were certified, with Central region having 132, Eastern 180 and Copperbelt accounting for 41 of the certified agro-dealers. Overall, the innovation fund benefited 63 per cent of all certified agro-dealers, and 34 per cent of the total number of agro-dealers recruited. One would therefore expect that if the innovation fund had achieved its objective, then the number of good to average performing agro-dealers should be at least 63 per cent of all certified agro-dealers and at least 34 per cent for all trained agro-dealers.

Findings based on the above computation indicate that the innovation fund achieved an effective rate of around 38 per cent of all the trained agro-dealers. A regional comparison shows that Central region was the most effective with 51 per cent of its agro-dealers being rated as good to average. Of this total stood at 69 per cent, Chibombo at 55 per cent while Kapiri Mposhi was at 44 per cent. Central region was followed by Eastern region which had 22 per cent of all trained agro-dealer ranked in the good to average categories. Based on this indicator, Copperbelt region was the least effective with only 11 per cent of the expected 34 per cent of all recruited agro-dealer belonging to the good to average categories.

When the number of certified agro-dealer is used as a benchmark for the effectiveness of the innovation fund, findings indicate that in Central region the project achieved an effective rate of 65 per cent, while in Eastern and Copperbelt regions its performance stood at 72 and 38 per cent respectively. What this finding illustrates is that the innovation fund was successful in supporting innovation in the Copperbelt and Central regions as their effective rates are above 63 per cent based on the above computation. However, it appears this fund was less successful in Eastern region going by the performance of 38 per cent of all certified agro-dealers.

It is, therefore evident that overall the innovation fund did realise its objective as a spur of innovation among the beneficiary agro-dealers. As seen earlier, there is evidence of growth in sales values and volumes of improved seed and other agro-inputs sold through local agro-dealers.

But as noted earlier, the fact that women scored generally better than their male counterparts, despite their overall low participation, is an indicator of the need for CARE Zambia to mainstream gender equity in its programmatic and analytical work. The M & E plans and monitoring sheets should also strive to reflect indicators clearly disaggregated by gender unlike the current scenario.

5.1.5 Facilitating Viable and Sustainable Business relationships Between Agro-Dealers and Input Suppliers

With respect to facilitating viable and sustainable relationships between supply chain actors, the project targeted to achieve the following objectives:

- to support 100 agro-dealers with matching grant fund by the end of 3 year project life;
- through the implementation of the credit guarantee scheme, to guarantee credit or loans of 200 agro-dealers in order to finance working capital and new investments; and



- to introduce a total of 250 agro-dealers to financial institutions in order to open bank accounts and pursue opportunities;

The analysis of project performance on this variable shows very little conclusive evidence that the project succeeded in providing matching grants or guaranteeing credit for its agro-dealers. Similarly, data base on the project indicator monitoring sheet also shows no evidence that the project was effective in linking any agro-dealers to any formal financing institutions. Although there are indications that the project was into negotiations with the National Savings and Credit Bank (NATSAVE), there is no evidence indicate that these efforts realised any tangible results. However, findings based on the project's innovation briefs and key informant interviews with agro-dealers in Central region shows that there is growing trust between key seed suppliers and select agro-dealers.

In describing the contribution of the ADAPT project to building viable relationships with input suppliers, the chair person for Chibombo Agro-Dealer Association put it as follows:

The ADAPT project facilitated interactions between inputs suppliers, agro-dealers and farmers in the rural areas. This interaction provided an opportunity for creating vertical formal vertical linkages, backwards with agro-input suppliers and forward with smallholder farmers. The training and certification resulted in the input suppliers having more confidence in us and the resulting growth in input sales volume and value have clearly demonstrated the existence of a viable market for improved seed and other agro-inputs and chemicals. Consequently, a good number of agro-dealers established under this project are vigorously pursuing this market.

The response from seed suppliers has also been positive. We are now able to negotiate bulk purchases of inputs from suppliers at exclusive discounts of around 8 -10 per cent. There are also signs that suppliers are more willing to enter into agency relationships or to sale inputs on consignment basis through select agro-dealer outlets. In the past, seed companies were rigid because of poor credit record and credibility. But now this is changing as seed and other input companies seek to position themselves in this smallholder market. There is increasing goodwill from input suppliers to provide supplier finance and guarantee loans for some agro-dealers. A number of our members are now getting into formal relationships with supplier, even those in the average category. Pioneer, SeedCo, Kamano, Zamseed and Deklab are entering into contracts and consignment relationships with some agro-dealers in all regions. Kamano intends to pursue demand creation activities through partnerships with farmer co-operatives to increase outreach in southern province **(Key informant Interview with Rubbia Maimba, Agro-dealer and Chairperson for Chibombo Agro-Dealer Association).**

The above perceptions of change attributable to the ADAPT project are further illustrated by evidence based on the project's brief on the above variable.

“We now have a directory of Agro-dealers trained in Business and Technical trainings during the trainings facilitated by CARE' ADAPT project, we know which agro-dealers are high performers. We are confident that we are in business with genuine Agro entrepreneurs. Together, we can meet the needs of the rural smallholder farmers by providing improved and genuine inputs on the market”⁵

⁵ Key informant Interview with Senior Management of Pioneer Seed, and Marketing Executive of Kamano Seed collaborated by findings of the Innovation Brief on Business Linkages.

Resulting from these interactions are functional business agreements between Input companies and Agro-dealers across the three regions ADAPT is being implemented in. In the Eastern Region, Zamseed gave inputs on consignment to Agro-dealers supported by ADAPT and who have since paid back. The table below shows quantity and value of inputs sold on consignment resulting from CARE ADAPT bridging the lack of “confidence gap” between input suppliers and agro-dealers.

Table 12 below provides some indication of the growing trust and formalization of relationships between input suppliers and agro-dealers. These values are only indications as it was difficult to verify with either Zamseed marketing department, Pioneer or Kamano.

Table 12: Indicator of Growing Trust (Agro-Dealer and Input Suppliers)

Region	Qty of Seed on Consignment (MT)	Value of seed on Consignment in USD	# of Agro-Dealers Involved
Eastern	109.5	262,800.00	49
Copper belt	75	262,811.09	9
Central	195	629,000.00	61
Total	379.5	1,154,611.09	119

Source: CARE Zambia: ADAPT Innovation Brief

Against a baseline value of 0% Agro-dealers formally linked to input supply companies, the project can now crow of 20% of the recruited Agro-dealers accessing inputs on consignment. However, it is evident that these relationships are still in their infancy and further support may be needed to consolidate and sustain these business relationships.

5.2 Measuring Project Outcomes

Project outcomes are changes, benefits, learning and change and other effects that take place in the target group or beneficiaries as a result of the project interventions. These are medium and long -term achievements of the Project or programme consistent with its set out goals and objectives.

From the business model perspective, the strategic focus of the ADAPT project was to develop commercially viable last-mile distribution centres for agro-inputs and other chemicals through capacity building, mentoring and facilitating horizontal linkages across the spectrum of input suppliers, agro-dealers and smallholder farmers. In addition, it sought to increase awareness and uptake of hybrid seed varieties and other agro-chemical among the smallholder farmers through demand- creating activities, such as seed fairs, demonstration plots and field days.

This section, therefore, evaluates the benefits and learning and change on the primary and secondary project beneficiaries and gauges the extent to which the desired changes were realised consistent with the three strategic objectives outlined in the project document. The discussion of outcomes is at three levels, namely, agro-dealer level, major seed or agro-inputs suppliers and farmer level.

5.2.1 Agro-dealer Level Outcomes

5.2.1.1 Improvements in Entrepreneurial Acumen

The analysis of field findings and the review of project reports suggest that the ADAPT project brought about considerable changes on the business knowledge, attitude and practice of agro-dealers. These changes relate to ability to keep business records, assess risk and business profitability and evaluate prospects for survival and growth, especially, among new business start-ups as well as levels of formalisation.

Similarly, training in agronomy has had the effect of enhancing the agro-dealer knowledge of seed and agro-input shelf life, storage conditions and chemical handling. As a result, the agro-dealers are able to extend agricultural advisory services to smallholder farmers, which in turn, have enhanced the credibility of these agro-dealers in the eyes of farmers.

From the field discussions with agro-dealers and farmers, it was evident that the training that the agro-dealers received through the ADAPT, especially on record keeping, had made them to adopt a much higher business acumen in running their affairs. The agro-dealer talked to were able to track sales records on daily basis, monitor expenditure and also track the category of customers buying from them. These agro-dealers were also able to conduct market research through procurement of stocks based on customer demand. At the same time, the agro-dealers are able to extend the knowledge to farmers on the use of agro-chemicals and seed, storage conditions etc. which has the effect on optimising the shelf life.

However, this positive outlook is obscured by the small number of agro-dealers that has assimilated and were using the business knowledge gained from ADAPT training. For example, project-wide results show that of the 626 agro-dealers that were targeted under the project, only 16 per cent are ranked as good, 22 per cent as average, while 28 percent and 34 percent were ranked as poor and very poor respectively. Even when the good and average categories are combined the project-wide performance stands at 38 per cent which is far below the mid-way of 50 per cent. Even when the performance of Central Province, a relatively much better performer, is taken into account, the category of good agro-dealers comprised 28 per cent, while that of average performers comprised 25 per cent of the total of 217 agro-dealers. What is also a concern is the high number of agro-dealers that are categorised as inactive, or at the time of categorisation of performance, were not involved in any trading activities.

The above findings suggest that the ADAPT project had a much high opportunity to instil commercial acumen in the agro-dealers. However, the business model and opportunity was largely missed due to ineffective screening and targeting of agro-dealers at the problem analysis and project design stages. The large proportion in the poor to very poor categories in all target regions is an indication of the need for more rigorous and better screening of agro-dealers. From the enterprise development point of view, it would have been more prudent to target fewer agro-dealers, with much higher potential for viability and growth. These would then have been encouraged to become one - stop shops for the target rural areas, in turn making the project much more successful in meeting the objective of creating commercially viable last mile agro-input outlets.

The conclusion that can be drawn from the lower number of good to average performers and the higher number of poor to very poor categories is an indicator that the project recruited some agro-dealers who were in their pre-entrepreneurial stages, that is, had very little potential to grow and graduate into commercially viable agro-dealers even with serious training and mentoring.



5.2.1.2 Sales Growth and Viability

As seen earlier, the implementation of the ADAPT agro-dealer have been associated with increases in the quantities and values of improved seed, fertilisers and other for-puts and chemicals. Although the number of good to average performing agro-dealers is comparatively lower than that of the poor to very poor categories, it is prudent to assume that generally the target agro-dealers achieved growth in the volumes of inventory, sales turnover and viability. Since most of the agro-dealers were new start-ups, they may have practically started from nearly zero sales at their time of recruitment.

The relevance and contribution of the ADAPT project to the success of the agro-dealers, with better targeting, is illustrated by the case study of Rubbia Maimba of Malambanyama, 70 kms from the Great North Road.

Text Box 1 below illustrates the achievements and constraints of category A agro-dealers under the ADAPT project.

TEXT BOX 1: Rubbia Maimba's Story

In sharing her success story attributable to the interventions of CARE ADAPT project, Rubbia recalls that she became an agro-dealer in 2008. "I used to run a very small grocery store before CARE ADAPT came to my aid. I had no knowledge of record keeping, on how to carry out market research based on customer demand, on how to assess trends in my sales, risk elements and levels of profitability. As time went on, farmers from the surrounding communities started asking me why I was not stocking veterinary drugs and agro-chemicals. At that time, I had very limited or no knowledge on how to store and handle drugs and chemicals and thus it was very difficult to adequately advise the farmers on appropriate handling and usage."

"In November, 2009 through the CARE ADAPT project, all the agro-dealers that were identified were trained in agronomics, business management skills and record keeping. From my experience, record keeping has had the biggest impact on my business. I am able to track daily sales and expenditure, monitor my customer base through repeat sales and assess the radius of the community that my business is able to serve."

"In January, 2010, CARE gave me a grant of K4, 200,000 of which K2, 700,000 was used to boost my working capital while the balance was used to improve the visibility of my shop and products, i.e., lay-out, branding, display and improvements of storage."

"Although my main business line is veterinary drugs and other chemicals," Rubbia noted, "I have increased my product range into agro-chemicals, vegetable and maize seeds and fertilisers. As a result, I am able to serve around 200 farmers within a 25 - 40 km radius. The high number of repeat sales is also evidence that the project increased the credibility of my business and that smallholder farmers are satisfied with my service."

"In addition, I have also diversified my business into buying maize from smallholder farmers who are unable to sell in bulk to Food Reserve Agency. Apart from improving my working capital, this activity has contributed to easing the post-harvest marketing constraints of smallholder farmers, although to a very limited degree."

"The impact on my business, Rubbia notes, has been remarkable. In 2010, for example, sales grew from K810, 000 in January, to K 144, 054,900 in December, with maize seed contributing the largest proportion followed by veterinary drugs and other chemicals and agro-chemicals. Out of the annual sales figure, the sales of maize seed accounted for K92.5 million, veterinary drugs and other chemicals, K 39. 5 million,



while agro-chemicals contributed K8.2 million. The balance is accounted for by fertilisers and vegetable seeds.”

With a smile on her face, Rubbia recounts, “My business decisions are now guided by my daily sales, stock and customer tracking records. I now know where my key customers are and I had been able to conduct 2 seed fairs in order to get closer to them. The response was overwhelming. As agro-dealers, we now know that there is a very huge unmet demand amongst smallholder farmers out there. I also have seen that customers prefer to buy from a shop that is very well stocked.”

“The Ministry of Agriculture and Co-operatives has now recognised us, our businesses are formalised. There are also prospects of strengthening horizontal linkages with seed companies and other agro-chemical suppliers. A number of agro-dealers are entering into agency contracts with seed companies in order to better serve a largely unserved market in the far flung areas. This means that the ADAPT project facilitated the growth of trust between seed companies and agro-dealers although this relationship is still in its infancy stage.”

“At the moment, inadequate working capital is still my biggest constraint which has affected the timeliness of inventory. The relationship with seed companies is still largely cash-based, where we are only given discounts of between 10 -15 per cent. If only we could enjoy come credit lines of between 30 to 90 days repayment period, or enter into consignment arrangement with the seed companies, our working capital would greatly improve, our stocks would be timely, and we would drastically reduce the distance that farmers travel to access inputs. Because of huge costs associated with transportation and time constraints, the costs of inputs would also become very affordable to farmers.”

“I wish that the project could be extended for another 1-2 years, so that CARE could oversee the maturity of these emerging relationships. This could also give the project an opportunity to mentor the average performers and link the good performers to commercial banks by guaranteeing their loans in order to boost working capital. As you can see, farmers now have money as they are selling maize to Food Reserve Agency and have started asking for seed and fertilisers. But because of limited capital, I have resorted to buying maize to resell to FRA in order to improve my working capital. This has affected the timelines of inventory and affordability of seed and agro-chemicals as farmers still have to go to Kapiri or Lusaka to buy these inputs. In this way, the project has addressed the timeliness and affordability of seed and agro-inputs to a limited extent.”

The story of Rubbia is not very different from other good performers. During the field visits to Central Province, the evaluation team found out that nearly every agro-dealer visited was busy buying maize from smallholder farmers for resell to FRA. This is consistent with the findings of the mid-term review which noted that nearly 80 per cent of agro-dealers were dependent on maize sales to FRA to boost their working capital. One agro-dealer in Kembe seemed to have invested most of his working capital in maize stocks as there were very little agro-inputs in his shop to last even a week.

An analysis of the performance of agro-dealers by sales volumes, in select districts, shows that in Chibombo for example, only 11 per cent are viable and good performers, 16 per cent average performers, while 23 per cent and 10 percent respectively, fall into the poor and very poor categories facing a threat of extinction.

Based on the regional analysis of the results of categorisation, evidence shows that in Katete, for example, the good performers, and thus viable agro-dealers comprised only 8 per cent of the district total while those in the average, poor and very poor categories, accounted for 2, 20 and 70 per cent respectively. A comparison of viability for Katete district suggests that 92 per cent of the target agro-dealer are unable to survive beyond the interventions of the ADAPT project. Similarly, in Lufwanyama, only 1 per cent of the agro-dealers can be said to be viable on sales volume terms, while 5 per cent can only survive with continued support and



mentoring. The remaining 94 per cent, are either inactive or are likely to fall off within the next one or two years. It is difficult to assess the survival prospects for Kapiri Agro-dealers as the evaluation of performance did not have a sales volume component making comparison of performance across districts impossible.

If the overall ranking of agro-dealer performance is taken as an indicator of their viability, it could be said that nearly 38 per cent of the total recruited agro-dealer show signs of business viability leading to the conclusion that the project succeeded in establishing rural agro-dealers. However, it is difficult to use this as an optimal indicator of business survival and sustainability as the project did not set performance targets on this variable. At the same time, there is also evidence that the project contributed to reducing the distance covered by smallholder farmers to access inputs. However, it would appear that urban based rural agro-dealers have higher prospects for growth and viability than those in the hinterlands. This means that the project may not have been very successful in reducing the distance covered by farmers to the target 5 km from the baseline value of 35 kms.

Based on the above discussion, two key observations can be made about the achievement of key outcomes of the ADAPT Project. The first one, is that the ADAPT project demonstrated beyond doubt that smallholder farmers are a viable and lucrative market for seed companies and other agro-dealers. The second is that with more rigorous screening and targeting, there are enormous opportunities that seed and other agro-input-suppliers can exploit in rural areas in order to improve the availability and affordability of agro-inputs to farmers through agro-dealerships.

5.2.1.3 Relationships With Input Suppliers

Strong relationships between input suppliers and agro-dealers are a sign of growing trust within the seed and agro-input industry, but are also a pointer to the sustainability of the impact of the project. To a larger extent, strong vertical business relationships and trust between agro-dealers and seed and agro-input suppliers, can compensate for inadequate working capital and investment finance of the former. With strong trust, agro-dealers can negotiate for special discounts on bulk purchases, enter into consignment supply agreements, enter into some credit facility of between 30-90 days repayment period or utmost, can have their loans from commercial banks guaranteed by a supplier to boost working capital and finance new investments.

It is in this context that the ADAPT project found it invaluable to catalyse upstream linkages and relationships particularly between suppliers and agro-dealers consistent with its industry development strategy but also to ensure sustainability of the project impact.

Field findings based on select key informant interviews with agro-dealers in Chibomba District, and Pioneer and Kamano Seed Companies, suggest that there are emerging relationships between key agro-suppliers and agro-dealers, although these relationships are still in their infancy and fragile. However, seed and agro-input suppliers are showing higher willingness to work with credible and viable agro-dealers in order to provide for the unmet need for seed and other agro-inputs amongst the smallholder farmers.

A quick assessment of these relationships revealed that Pioneer Seed, Kamano Seed, Dekalb, Seedco, and MRI are involved in some dealership agreements with rural agro-dealers as market penetration and business development strategies. For example, Pioneer Seed Company has signed a dealer agreement with Growers World, Minelands and Agri-belt of Mumbwa in order to serve the difficult to reach rural farmers.

Similarly, based on the ADAPT experience; Kamano Seed Company has embarked on an expansion plan to reach out to other provinces like Eastern and Southern provinces. Its strategy is to give out seed and other inputs to viable and credible agro-dealers on an agency or consignment basis. The company has already signed seed supplier agreements with agro-dealers in Chibwe Village, Kapiri, Mkonchi area and Mumbwa.



SEEDCO has also signed dealership contracts with Mr. Songe, Ms. Loveness Mubita of Chiyuni while Agri-chem has entered into contract with SEEDCO, Pioneer and MRI.

However, an analysis of project-wide performance across the 8 districts suggests that it will take considerable time before these relationships can mature into long-term, consignment based ones. In the words of one key informant, “the ADAPT project demonstrated in a unique way the opportunities that exist between seed supplier and agro-dealers to exploit the smallholder farmer market. However, these relationships take long to mature and the project was too short lived.” If only the projects life could have been extended for another 1-2 years, so that CARE could help with the credit rating of some of the agro-dealers and where necessary, provide credit guarantee schemes as a way of boosting the agro-dealer working capital and opportunities for investments. As a result, most agro-dealers procured their stock on cash basis, while those with capacity to procure in bulk and enjoy supplier goodwill, are able to enter and enjoy discount agreements of between 10-15 percent.

Despite this positive outlook, big input suppliers are hesitant to enter into consignment relationship with agro-dealers mainly as a result of low trust. CARE would therefore need to further support these emerging relationships either through provision of credit rating services or guaranteeing the credit of good performing agro-dealers in order to consolidate and sustain these emerging relationships.

Findings based on key informants interviews with Kamano and Pioneer Seed Companies suggest that the ADAPT project was very instrumental in facilitating horizontal linkages between seed suppliers and local agro-dealers. However, 3 years was too short a time to oversee the maturity of these relationships and ensure the sustainability of the project impact.

5.2.1.4 Impact of Innovation Fund on Agro-Dealer Visibility

The innovation fund was given as a grant to select agro-dealers in order to lower the risk of their expansion and improve inventory, business visibility and storage improvements of inputs. Discussion with some key informants in Chibombo district suggested that the innovation fund was very valuable in improving the visibility and size of shops of some agro-dealers. For example, Salunjinga General Dealers in Kembe, started his business in a very small room but has with the assistance from ADAPT moved into a bigger shop. Mr. Salunjinga started his business in 2005 after working for Cheetah as an extension officer for Napuka. A category B agro-dealer, Mr. Salunjinga went into agro-inputs and chemicals after Cheetah got liquidated.

Text box 2 below provides a narration of his story:

TEXT BOX 2: SALUNJINGA GENERAL DEALERS

“When I started my business, I used to sale chemicals with no knowledge and had no business management idea. My stock was very small and was unable to adequately meet the demand for seed and agro-chemicals from the surrounding community. With time, CARE ADAPT came to my rescue. They gave me a grant of K4, 850,000, which I used to build a better and bigger structure as you can see. About a quarter of this amount was ploughed into my working capital to improve inventory. This has earned me recognition by MACO, farmers within the surrounding communities, seed and other input suppliers, thereby improving my profile as an agro-dealer. It is not surprising that input suppliers like Dekalb have shown greater willingness to enter into a dealership agreement with me. However, during the peak season, demand is higher than my business can meet mainly due to limited working capital. This still forces farmers to cover long distances in search of inputs. In this respect, I can say that we have, through the ADAPT project improved access and affordability of inputs to farmers only partially.”



“If only the bigger percentage of the innovation fund could have been used to finance working capital, I am sure you would have found a well-stocked shop right now.”

The story of Salunjinga General Dealer is representative of the many agro-dealers that benefitted from the innovation fund. An analysis across the spectrum of agro-dealers indicates that the biggest impact of the fund on the agro-dealers was in enhancing the branding and general visibility of the agro-dealer outlets. A number of dealers were able to increase the size of their shops, rehabilitate some old buildings, and improve the shelving and product outlay.

This finding is consistent with the findings of the Mid Term Review Report which reported that the innovative fund should be seen as an accelerant of business acumen amongst agro-dealers. Those with strong entrepreneurial acumen and practice were able to apply the fund to expand productive activities and improve customer services. However, for pre-entrepreneurial and less capacity agro-dealers, there is less tangible evidence to suggest major impact on their business performance besides reducing the cost of ADAPT Project activities. It is not therefore surprising that most agro-dealers cited in the MTR mentioned improved customer recognition as the biggest impact of the innovation fund although 50 per cent would have opted to invest the funds differently had they been given leverage.

5.2.2 Farmer Level Impact

In terms of farmer level capacity, the evaluation team focused on evaluating the ADAPT Project performance from the following short-to medium term outcomes, namely:

- the levels of farmer awareness of hybrid maize seed varieties attributable to ADAPT interventions;
- The degree to which the farmers have identified and selected optimal hybrid seed varieties for their locations;
- Identifying the interventions that had the greatest impact on the farmers from a menu of demonstration plots, field days and seed fairs; and lastly
- Improving accessibility, availability, affordability, timeliness and range of products available to farmers.

The project assumption was that if they were successful in establishing high-functioning agro-dealers in close proximity to smallholders, and with effectively establishing demonstration plots and other opportunities for those producers to learn about the use of high-quality inputs, then farmers will buy the inputs and their productivity will increase (indirectly contributing to income increases and/or hunger declines).

Given that the project did not attempt to regularly track these outcomes at farmer level and that the interviews were conducted with a very small group of agro-dealers in one district, these outcomes are more of indications rather than evidence of project-wide performance.

5.2.2.1 Farmer Awareness of Hybrid Seeds.

Findings based on key informants interviews and focus group discussion with farmers in Central Province, suggest that the biggest achievement of the ADAPT project at the farmer level was to enhance the level of awareness and credibility of hybrid seeds and other agro-chemicals. In the past, farmers used to buy fake seed from briefcase businessmen. It was very difficult to know who was a genuine agro-dealer or not. Generally, farmers did not have any information on the yields, productivity and management of the different seed



varieties. The demand creating activities undertaken by CARE, mainly through seed fairs, demonstrations plots and field days have improved farmers levels of knowledge and awareness of high yielding seed varieties and that they have generally seen the net worth of the project.

In Chibombo, for example, MRI was very popular during the 2009/2010 crop season but Pioneer Seed seemed to have been the best performer. The Pioneer seed was rated as the best performer based on its best yield, resistance to drought and pest in the field and after harvest.

Other popular hybrid seeds include: Seedco 627/ 633/609/619/ 634, ZAMSEED MM603/604, MRI 624/634/734, PANNAR 67, Obatampa (OPVs), ZM 521, KAM 601, KAM605. The Obatampa OPVs appear to be popular among the farmers because, they are heavy, have big cobs with good management, the grain is hard and white and generally does not open up after drying making it very resistant to water /rain damage in the field.

5.2.2.2 Indications of Farmer Level Outcomes

The following text box based on the transcription of focus Group discussions with farmers in Chibombo indicates some achievement on this variable:

Text Box 3: Indications of Achievement of Project Outcomes: Smallholder Farmers' Perspective

We have been in farming for a long time. Generally, our production has been very poor because farmers usually grow recycle (local seed varieties which despite their resistance to diseases and pests have comparatively lower yields than hybrid seeds. We used to travel to Lusaka in the industrial areas where seed companies are located to buy improved seed covering a distance of more than 200 kilometres. The cost of transportation was high which actually reduced the amount spend on inputs. However, with the training and certification of local agro-dealers by ADAPT, our confidence in these agro-dealers has been improved. We now know that we are buying genuine seed and that with much care and better management of our fields, yields will go up.

Generally, farmers have information and knowledge on the care, management, resistance to diseases and pests, and weight and optimal yields of various improved seed varieties.

We also have been able to identify and select optimal maize seed varieties for our locations based on attributes such as cob sizes, weight of the grain, resistance to drought and pests and overall yields. Unlike Farmer Input Support Programme that usually brings inputs late around January and March and often in inadequate quantities, ADAPT has improved the quantities and timeliness of locally available inputs. This has significantly reduced the distance that farmers travel to access inputs. Generally, now farmers in this area are able to access most inputs within a radius of 25 - 30 Kms from the initial 200 Kms when inputs were not readily available locally.

However, the ADAPT project largely concentrated on the supply-side of the input market, without adequately addressing the demand side. This may have limited the viability and potential for growth of the agro-dealers. This is because the income of consumers/ farmers determines agro-dealer viability. The higher the capacity of rural farmers to offer effective demand, the higher would be the prospects for agro-dealer viability in the rural areas.

This is why CARE needed to also look into addressing constraints facing livestock farmers as well as addressing post-harvest marketing constraints through training, farmer market days, cost-benefit analysis and provision of market information and support. This would greatly contribute to the



growth of the seed industry in the rural areas and also enhance farmer productivity and incomes. Farmers also need to look at farming as business and should therefore be given the necessary support to attain household food security.)

5.3 Measuring Project's Efficiency

Based on table 11 the trend in budget and expenditure shows that about 30 per cent of budget went to personnel costs, 10 per cent to consultants, 25 per cent to other organisations for ADAPT activities, 20 per cent to supplies and equipment. These proportions are acceptable for effective project execution. The burn rates of the individual project lines approached the maximum except for consultants and supplies where it exceeded the maximum. When the budget disbursement and burn rates are analysed, one would conclude that the ADAPT project was efficient in its utilisation of funds. When this is analysed within the overall performance of the project component activities, it is prudent to say that the project was efficient in utilising its resources or inputs in form of funds, expenses and staff time towards its outcomes.

Table 1 1 - Approved Budget Amounts (USD)

Approved budget Line Items	Amount Received	Cumulative Expenditure (June 2010)	Burn Rate %
Personnel costs	\$522,571.00	\$499,083.00	95.5
Fringe Benefits	\$149,218.00	\$140,904.00	94.4
Travel	\$191,210.00	\$126,362.00	66.0
Consultants	\$108,270.00	\$202,797.00	187.3
Supplies	\$149,958.00	\$243,657.00	162.4
Contracted Services	\$0.00	\$0.00	0.00
Sub-grants to Other Organizations	\$625,280.00	\$449,055.00	71.8
Equipment Purchase	\$117,000.00	\$128,427.00	109.7
TOTAL DIRECT COSTS	\$1,863,507.00	\$1,790,285.00	96.
Indirect Costs	\$184,298.00	\$178,365.00	96.7
Grand Total	\$2,047,805.00	\$1,968,650.00	n/a

Source: ADAPT Project Mid -Term Review Report

5.4 Monitoring and Evaluation

The analysis of M & E plan and documentation shows that there was a prudent attempt by the project to gather detailed data to support adequate analysis of progress and achievement of results. The causal model approach to the results chain based on the implied theory of change was a step in the right direction. However, there was lack of clarity in the M & E plan on how the causation or attribution of results to project interventions was to be evaluated. There also seemed to be an assumption that there exists a linear relationship between project interventions and the results outcomes and impact at both agro-dealer and farmer levels. The M&E plan needed to clearly indicate its epitaph of theory of change, including clear assumptions for the success of the project.

The M&E plan also paid more focus on measuring and tracking output indicators. Although these indicators are important in tracking efficiency of achievement of targets, they are not an adequate measure of project success. The ADAPT M&E plan would have paid equal attention to optimal outcome indicators. Further, the plan did not have a clear differentiation of intermediate and final outcomes, and impact indicators. More time



should have invested in identifying more optimal outcome and impact indicators to ensure effective attribution of results to the project's interventions. The project collected very useful information but this seemed to be in several places, making instance retrieval and access difficult. The project Indicator Monitoring Sheet was an impressive effort at consolidating project performance data. However, its design was mainly to capture output data. Since the project clearly identified farmers as indirect beneficiaries its M&E plan should have sought to also collect data on farmer level input and outputs trends and outcomes which are clearly disaggregated by gender. Attempts were made to correct these gaps through the internal mid-term reviews, documenting of stories of innovation and through other studies. However, there is little evidence of consolidation of these findings and lessons to provide readily accessible management information. What is a key gap in the M&E approach is the lack of clearly mapped M&E stakeholders in the project results chain. The plan did not clearly show what data already exists, which institution collects this data and when it is collected in order to provide adequate management information and adequately support the M&E function.

In this respect it was very difficult to apply the cause model approach to establish attribution of project outcomes to its interventions.

6.0 Concluding Findings

From an impact evaluation point of view, it is evident that the project succeeded in achieving its project goal of reaching at least 91,000 farmers with improved seed and other inputs through establishing a network of viable rural agro-dealers.

With respect to agro-dealer level impact, the project managed to recruit and train a further 491 agro-dealers over its baseline value of 135 which represents an effective rate of 353 per cent. Although the number of agro-dealers ranked as good to average performers is comparatively lower than those in the poor to very poor categories, there is evidence to show that a good number of them, up to 38 per cent of the total, is commercially viable. This assessment of viability is, based on their levels of entrepreneurial acumen, sales volume and value and capacity to sustain demand through demand creation activities. This means that the project was successful in establishing a network of rural agro-dealer as a mechanism for better serving rural farmers. There is also evidence of improved productivity amongst smallholder farmers and growth in sale turnover of input suppliers, although this would need further validation through further research.

As a result of the project interventions, there is higher motivation amongst agro-dealers and key input suppliers to vigorously pursue the smallholder farmer input market in order to reposition their product, increase their sales and profitability

As a result, of the presence of rural agro-dealers, smallholder farmers are able to access improved seed and other inputs within a radius of 20 -30 kilometres, unlike in the pre-ADAPT era where farmers used to travel a distance of over 200 km to Lusaka to access these inputs. However, it is difficult to conclusively establish the reduction in the distance travelled by farmers in line with the 5 km target set in the ADAPT M&E plan as this finding was not monitored and documented by the project. By providing knowledge to agro-dealers, on agronomics, CARE was also successful in creating embedded extension agents who are able to transfer knowledge to farmers on various aspects to chemical handling and storage.

At the farmer level, there has been improved knowledge and awareness of hybrid seeds and selection of optimal varieties most suitable to their localities. If increased sales volumes are used as an indicator of the level of awareness and uptake of hybrid seed among farmers in the rural areas, then it is also evident that the project contributed significantly to increasing smallholder farmers' access to improved seed on time, at affordable prices and in demanded quantities. Data suggests that by March 2011, project-wide sales of improved seed increased drastically from less than US \$1 million in 2010 to US\$ 3,020,125.19, representing



an overall growth rate of 212 per cent in all the three regions. Of this total, Central region represented US \$812,335, Eastern Region, \$612, 302.40 and Copperbelt contributing a total of US \$1, 593, 487.79

There are indications that this has contributed to increases in production and productivity gains amongst farmers. For example, Kembe Block Extension Officer indicated that farmers yields in the area has become much higher in the post-ADAPT era hitting 3.5 tons of maize per hectare with good management from 1.5 tonnes in the pre-ADAPT era. However, it was difficult to solely attribute this increase to the ADAPT performance without controlling for other factors. This points to the need for further research to examine and validate ADAPT's contribution to farmer productivity and food security

Unverified evidence also shows that there is growing trust between key input suppliers and agro-dealers. This is illustrated by the growing number of input suppliers willing to enter into consignment agreements with agro-dealers, including negotiations of formalised agency relationships. According to ADAPT project innovation Brief, a total of 199 agro-dealers was able to procure seed on consignment basis from input suppliers worth a total value of \$ 1,154,611.09. This is based on a total volume of 379.5 metric tonnes. However, there are still signs of resistance by major seed suppliers to get into full-scale formal relationships and consignment arrangements due to poor trust. This shows that there is still weakness in the nature of these relationships because such relationships take long to mature. It is also an indication of the need for continuous facilitation in order to nurture and consolidate them.

There are opportunities for replicating project activities into other provinces to consolidate these gains. There are also opportunities for CARE to help strengthen these relationships through credit rating and credit guarantee schemes if only there could be much more rigorous screening and targeting of agro-dealers. However, there were gaps in the business model as focus was on addressing supply-side contracts on the input market without due focus on the demand side factors and constraints. The emerging relationships and interest amongst the input suppliers to enter into consignment arrangement with agro-dealers in positive indicator of the contribution that the ADAPT project made toward the seed industry development. Pioneers indicated that its sales growth within the last three years increased 5 fold, while Kamano's sales doubled as a result of their participation in the ADAPT project. However, it was difficult to verify whether this growth was solely attributable to ADAPT project performance.

CARE should, therefore, support the consolidation of the backward vertical relationships between agro-dealers and input suppliers, particularly focusing on supporting linkages with major input suppliers and financiers on the market. Further support should be directed at addressing the post-harvest marketing constraints that farmers face. Such activities could include supporting farmer market days within the rural areas, provision of market information, provision of market linkages with agribusiness firms and output distributors such as super markets etc. However, there are varying motivations and interest amongst agro-dealers in different regions which might be determined by the main economic mainstay and existing regional business opportunities.

Given the importance and contribution of the ADAPT project to the input and production sectors in the target regions its ultimate impact on household food security and incomes, 3 years was not sufficient time to consolidate the gains, build local ownership and ensure project viability as well as sustainability. The casual model approach to monitoring employed by the ADAPT project was a very innovative and potentially viable ones. Some of the demand creating activities may have been carried out too deep into the hinterlands thereby limiting the capacity of reach of input suppliers to effectively participate. A more gradual roll-out should have been more successful. Another gap is that there was little effort made by ADAPT to link the viable agro-dealers to commercial credit providers, nor to provide a credit rating service to help input supplier better effectively the credible agro-dealer to work with. This should have been more valuable in consolidating the presently fragile business relationships. The innovation fund, which was meant to reduce the risk for



expansion of agro-dealers, should have focused more on addressing constraints related to working capital. This also point to the fact that agro-dealers had little leverage on how to use the innovation fund.

6.0 Lessons Learnt and Recommendations

1. The ADAPT project succeeded in achieving its project goal and objectives. But better outcomes and greater impact of the ADAPT project could have been achieved with more rigorous screening and targeting of agro-dealers. It would appear that irrespective of the business model adopted by the project, its project screening and targeting approach still followed social orientations. This is illustrated by the higher number of the agro-dealers recruited compared to the good to average performers. The most viable approach to the business model would have been to recruit and train fewer but more promising agro-dealers in order to establish viable one-stop agro-dealer outlets in the target regions. This would have enhanced the overall project contribution to the viability of the agro-dealers and growth of the seed industry.

2. By adopting the business or enterprise development approach model, the project should also have anticipated some failure among the recruited and trained agro-dealers. This anticipation should have assisted in setting a target for benchmarking business viability, growth and adoption of entrepreneurial acumen. For example, an optimal indicator of viability based on a certain value of sales turnover within each category of performance would have provided incredibly useful data for attribution of business viability to project intervention. Although sales growth is an important indicator of the profitability potential of a business, the project data should have combined this indicator with actual profit analysis.

3. The comparatively higher performance of female agro-dealers in the “good performing” category or rank, is an indication of the fact that female agro-dealers possess equal or even higher capacity to assimilate entrepreneurial acumen and grow their businesses. This calls for the need for CARE Zambia to mainstream gender and gender equity issues in future programmatic and analytical work. Future projects should clearly set targets for gender participation and the M&E plan and strategy should endeavour to collect monitoring data and track project performance clearly disaggregated by gender.

4. To achieve greatest impact from the industry development point of view, even where opportunities exist, there is need for a more phased and gradual roll-out strategy, which is built on local ownership and institutions. It is evident that the project achieved most of its targets and objectives within the last 1 year of its implementation. Given the magnitude of the project activities, the project design should have implemented its core component activities in a phased manner. The first year, which was practically lost, should have been considered the inception phase to provide better mechanisms for beneficiary targeting, learning and change, which would in turn enhance project performance. The second phase should have been the actual implementation. This approach should have given the project implementation team an opportunity to effectively design the M&E plan and strategy and clearly identify optimal outcome and impact - based indicators rather than general proxies.

5. An effective and sustainable business model for supporting the growth of the improved seed industry and other agro-input sector requires a deliberate strategy to address both supply and demand-side constraints. This is because agro-dealer viability and prospects for growth are determined by farmers’ capacity to increase the uptake of improved seed and other agro - inputs. In turn, this capacity is affected by the farmers’ ability to find stable and reliable output markets. At the moment, this is only dependent on output prices, government payments and seasonality.

6. The ADAPT model has demonstrated a higher motivation for input suppliers and agro-dealers to vigorously pursue the smallholder input market. Farmers have also indicated the contribution of the project to their productivity has been positive. However, incomes have not risen much due to higher costs of fertilisers. This



makes it difficult for them to improve the quality of life at household level and be able to access quality education for their children.

7. Effective project monitoring and evaluation of performance requires a deliberate effort to instil a culture of consistent long-term record keeping amongst agro-dealers and farmers in order to provide optimal quantitative indicators for success. Focus of the M&E plan should be on tracking outputs, intermediate outcomes as well as impact attributable to project interventions. The experience of the ADAPT project should, therefore, help in streamlining and fine tuning the current proxy indicators based on outputs to more optimal and outcome and impact based measurements. The output indicators are useful in tracking achievement of project targets, but are not a very solid measure of the project effectiveness and impact. Data collection at the agro-dealer level should be done every quarter to help establish time series data both during peak and off-peak seasons. At the farmer level, it would be important to collect data every six months. This would help in identifying and examining constraints farmers face during the growing and post-harvest seasons. This should focus on establishing trends in the timeliness, affordability and volumes of improved seed accessed by farmers, as well as average area cultivated, yield per unit area and the food security situation of the target households. This approach calls for a team approach and better co-ordination between Project management, Monitoring, Evaluation and Learning and Change staff, field staff, sector associations and key project stakeholders. The current staff compliment also appears to have been too lean for such an enormous task and targets.

8. Successful achievement of project goal and objectives requires a thorough analysis of the baseline findings and much realistic target setting based on varying regional and district potentials to contribute to overall goal and impact. The interests of agro-dealers in different regions may be varied, and therefore there should be differences in consideration on how to work with them, e.g., what to emphasize, what training, etc. This is shown by the varying participation and success ratios, which in turn may be informed by the economic mainstay of each region. Where applicable, target setting should be informed by this potential and on agro-dealer and farmer motivation. Higher access to inputs by “East farmers” shows that the model delivers more benefit and perhaps interest where terrain and topography are challenging. In other places, where the central business district is near or access to line of rail short, farmers will access inputs as part of normal run into town.

The fact that more farmers than anticipated are accessing seeds and input from the agro-dealers shows that the project does not have to shoot for high numbers, rather be strategic. There will be spin-off and imitation effects as potential entrepreneurs see that agro-business is possible in the hinterland. However, overall, there is evidence that the business model was effective and opportunities exist for project scale-up and replication.

