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WOMEN'S EMPOWERMENT & NUTRITION TRANSFORMATION LED THROUGH MARKET-DRIVEN EXTENSION

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WOMEN'S EMPOWERMENT & NUTRITION TRANSFORMATION LED THROUGH MARKET-DRIVEN EXTENSION

FINDINGS FROM 25 FOCUS GROUP INTERVIEWS OF COMMUNITY
AGRODEALERS IN THE ACDI/VOCA PROFIT+ PROGRAM, ZAMBIA

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EXECUTIVE SUMMARY

PROFIT+ was launched in 2012 as a USAID Feed the Future program in Zambia. This \$24-million project was designed to improve smallholder productivity, provide greater access to markets and trade, and increase private sector investment in agriculture. The program targeted market system solutions to create opportunities for farmers and agribusinesses to increase agricultural productivity and access to high-value markets, while facilitating private sector investment in target value chains (maize, groundnuts, sunflower, soy beans, onions, and tomatoes).

PROFIT+ was also designed to ensure that women and vulnerable groups fully benefit from value chain development and strengthening. One critical element of the project was the formation and training of male and female community agrodealers (CA) who established links between service providers and smallholder farmers (both men and women) in rural communities.

Through this assessment, PROFIT+ sought to identify if, and to what extent, CAs perceived changes in empowerment as a result of CA participation (and if this differed for male and female CAs); and to identify if, and to what extent, CAs were delivering nutrition and/or health-based messaging and providing nutrition and/or health services to communities.

The assessment team found that CAs reported increases in yields and production in addition to increases in on- and off-farm income. CAs reported increases in food security and food diversity as a result of the intervention, and noted that they were sharing information, messages, and services on health and nutrition routinely with community members.

Ultimately, CAs felt empowered as a result of the project's interventions, which enabled them to play key roles in their communities and CA's felt their activities resulted in increased production and income as well as better health among farmers in their community.

I. INTRODUCTION

Background on the CA Model

In Zambia, smallholder farmers in rural settings are often not able to easily access farm inputs and equipment as they must travel long distances and have limited access to financial resources and information on products. To address this void, PROFIT+, a USAID Zambia Feed the Future program implemented by ACDI/VOCA, suggested to the communities that the best demo host farmers should consider setting up shops to sell farm inputs and equipment; this would strengthen linkages between smallholder farmers and agricultural and financial services. Communities selected 339 demo host farmers to become CAs. Demo host farmers were selected based on their willingness to adopt new farming technologies, their willingness to train both male and female farmers, and their ability to serve as role models to other farmers. CAs set up self-funded shops, and training was provided to CAs on business development, savings and credit, and farming technologies. The project also introduced CAs to private-sector companies wishing to sell or purchase agricultural inputs and commodities, and to microfinance institutions and banks wishing to provide credit services. The project also encouraged linkages to Ministry of Agriculture staff in the districts. The model was purely market driven in that no donor funds were used to establish or stock the shops, or support the market. Rather, this occurred through linkages the CAs made with private-sector companies willing to capture market opportunities.

Using annual surveys and other data collection methodologies, the project tracked changes in the farmers supported by CAs, and found that, on average, each CA was able to reach about 540 farmers. In total, CAs reached 184,000 smallholder farmers. Furthermore, over a period of four years, production rose (on average) 24 percent, and annual income increased by more than 40 percent (using household assets as a proxy for income) (*2016 Annual Outcome Survey*). CAs typically demonstrated agricultural technologies; sold agricultural inputs and equipment; provided agricultural and nutrition information and training (what to plant, how to plant, harvest, store, and cook); provided smallholders with access to credit; bought farm produce in bulk; and sold bulk produce to traders. While the project's main goals were to improve smallholder productivity, increase access to markets and trade, and increase private sector investment in agriculture, the project was also interested in working to increase women's economic empowerment through gender equality while supporting improved nutrition among smallholders using the CA model.

Purpose of the Study

This study sought to 1) identify if, and to what extent, CAs perceived changes in empowerment as a result of CA participation (and if this differed for male and female CAs); and 2) to identify if, and to what extent, CAs were delivering nutrition- and health-based messaging and/or providing nutrition and health services to communities.

The report is divided into two major sections: a detailed description of the methodology, and an explanation of key findings along with excerpts from focus group interviews that reflect and elucidate these findings. The Methodology section describes the rationale and design of the focus group project as well as a more detailed explanation of participants and the questions asked of participants during focus groups. The Key Findings section summarizes and synthesizes data gleaned from the focus groups and recommends a way forward.

II. METHODOLOGY

This section explains the methods used to elicit experiences and perceptions from CAs on the topics of empowerment and nutrition. A focus group data collection approach was taken to provide the project with a descriptive account of the salient topics being investigated and to uncover people's subjective attitudes and experiences, which are typically not included in the project's more quantitative annual survey. Focus groups also tap into subjective experiences and are considered an efficient way to collect large amounts of data that describe, compare, or explain a social phenomenon (Fink 2006) because they allow participants to interact with one another and build on one another's comments. Focus group also allow facilitators to probe for details.

Participants and Procedures

Focus groups were held in October 2016 and November 2016. A total of 25 focus groups were conducted. Groups ranged in size from eight to 13 participants each, with an average of 11 respondents, and lasted from 90–120 minutes. An open call for CAs to participate was sent out to the communities, and from the pool of 339 CAs, a total of 252 participated (147 men, 97 women, and eight unknown) in the localized focus groups from Lundazi, Chipata, Katete, and Petauke districts in Zambia as well as peri-urban Lusaka. In peri-urban Lusaka, the CAs focus on vegetable production while the CAs in Lundazi, Chipata, Katete, and Petauke districts focus on maize (white and orange), soybeans, groundnut, sunflower, onions, and tomatoes. Respondents in focus groups included female CAs, including those who are from female-headed households, and male CAs. The CAs ranged in age from 18–60 years old. The majority of focus groups mixed male and female CAs, though several focus group discussions were organized as male only and female only to examine if there were substantive differences in responses.

Using an open-ended interview protocol to guide discussion, Field Agent Supervisors Ivy Mwayuka and Renton Kashimbaya facilitated the focus groups with the assistance of Mary Thole, Ivy Mwankotami, Wilson Daka, Memory Mtambo, Cynthia Banda, Dalisto Banda, and Mabvuto Kaunda Banda who took notes. The focus groups were conducted in Nyanja, Chewa, Nsenga, or Tumbuka languages, and then carefully translated into English.

Instrument/Tool

A question route of seven questions (see Appendix A) was developed with direction and input from the regional gender specialist, the vice president of M&E, and the project team. It was designed to cover a range of empowerment and nutrition issues and to follow up on specific questions and issues raised in the annual survey results.

Confidentiality

Informed-consent procedures were explained at the beginning of each focus group, and verbal consent was obtained from the respondents. All focus group discussions were documented with the permission of the participants. The anonymity of participants in the focus groups is protected in this report, and in some instances, the use of “they” or “their” as the first person singular pronoun has been chosen to further protect the identity of participants and to illustrate how their statements are representative of many focus group participants.

Data Analysis

Focus group interviews were transcribed during the session by notetakers and went through several phases of analysis. A preliminary analysis was conducted in Microsoft Excel, in order to get a general sense of the data and reflect on its meaning and key themes. Next, a more detailed analysis was performed using Dedoose (a qualitative software package), where each response was coded into units that reflected the specific thoughts, attitudes, and experiences of participants. At the conclusion of this process of analysis, a list of topics was generated, and the topics were compiled into categories as key findings. These key findings were analyzed to determine the interconnectedness of issues and conditions, and ultimately, a picture of the empowerment and nutrition experiences of CAs emerged.

It is important to note that the major findings identified in this document and discussed below emerged as areas with high levels of agreement among all focus groups members or among male or female CAs. Additionally, there was significant consistency in how the issues were talked about among groups. In instances where an issue was addressed by all groups but talked about differently by different groups, these differences are identified and explained.

Limitations

Although turnout for participation in focus group discussions was greater than expected (252 of 339 CAs participated), the study was neither a random sample nor a census so it does not produce generalizable findings; it provides only anecdotal evidence and represents CA perceptions of fact. Facilitators were newly trained in the methodology, and probing techniques were not used deeply, so discussions were not as complex as expected. Responses were translated from local languages into

English. Additionally, although age data was collected, facilitators did not chart this descriptor to the actual shared responses, so differences in responses among age groups could not be analyzed. Groups were homogenous in terms of location and were solely comprised of CAs, but they were mixed in terms of gender: while some groups were all male and some were all female, the majority of groups were mixed. Responses were tracked by gender allowing for comparison between men and women, and analyzed to see if all-female or all-male groups responded substantively differently than mixed groups (they did not).

III. KEY FINDINGS

Empowerment

Prior to the survey, the research team worked with the PROFIT+ team to clarify what they meant when they said they wanted to *improve empowerment for female smallholder farmers*. The project defined an empowered woman in the following ways:

- Learned new skills/adopted new technologies and practices
- Increased crop yields/production
- Had access to additional revenue streams or resources and increased her on- and/or off-farm revenues
- Decreased her overall workload
- Has increased decision-making power/control over how to spend revenue and/or reinvest profits
- Is working to improve her own and her family's health and education
- Is perceived as a role model and active leader in her community, and engages in improving the cultural, economic, or administrative environment for women in her community

The project team believed the CA model was an empowerment approach for both male and female smallholders, but wanted to know if female CAs reported any changes in workload and decision-making authority within their own households. They also wanted to see if women were taking on more leadership roles and were interested in learning more about what CAs (both male and female) had to say about their experiences.

I. SKILLS GAINED AND TECHNOLOGIES ADOPTED

Acquisition of skills and access to technologies is an integral aspect of empowerment, as this enables both men and women to make informed decisions that ultimately result in increased income for households. From the PROFIT+ annual surveys, the project had quantitative evidence that adoption rates averaged 49 percent for men and 51 percent for women, but were interested in learning more about what CAs had to say about what skills they had learned and which skills were important to them.

CAs were asked to discuss if they had learned any new skills as a result of being a CA, and the groups had no problems actively sharing the many skills they had picked up as CAs. Interestingly, almost all male and female CAs stated they had learned **new agricultural practices**:

“I learned ripping and basin making and how to maximize production on a small piece of land.”

“I learned how to use inoculants and the benefits of inoculants when growing soya beans.”

Participants almost all shared that they had learned **new business skills**:

“I learned how to build an agro-shop, the requirements needed in agro-shops to mitigate accidents such as fire—having a bucket of sand in the shop, legal documents such as PACRA certificate or seed sellers license in order to operate an agro-shop.”

“How to write a business plan.”

“Stock management (first in, first out). How to handle clients in the shop.”

To a lesser degree, many participants shared that they had learned things about **health and safety**; specifically, they discussed that they had learned how to handle and disposal of chemicals safely:

"I learnt about how to properly pack chemicals in the agro-shops and to avoid mixing of agro-chemicals."

"I learned how to use chemicals and disposal of used containers."

"I learned how to protect ourselves when handling chemicals."

"I learned record keeping when doing business, because this helps to know how much money comes in and goes out, and the benefit of linkages to input companies. I am now familiar with other different companies."

Participants also regularly noted they learned about **savings and credit**:

"I learned the benefits of saving in a group than in the house."

"I learned savings and how to be an agent in the community."

"The agri-business savings and credit groups model, which has liberated many rural people from abnormal debts."

A wide range of other skills were also shared, though less commonly, including skills relating to environmental management, reducing aflatoxin, preserving vegetables, installing drip irrigation, marketing, how to negotiate forward contracts, and market identification and linkages, etc.

II. CHANGES IN YIELDS/PRODUCTION

According to the Food and Agriculture Organization (2011), if women had the same access to agricultural productive resources as men, yields could increase by up to 30 percent. While quantitative evidence from PROFIT+ annual surveys indicated that production rates averaged 24 percent across the value chain for farmers, the project was interested in learning more about what CAs had to say about their harvests.

Many men and women shared stories on how being a CA had increased their yields and production, and discussed how having access to improved technologies, better seed, new knowledge, and markets led to improved yields.

"My harvest used to be so little, I would use a bicycle to transport it, now I use a car!"

"I am a single mother, but I managed to produce and sold 200 50-kg bags of maize."

"The use of certified seed has pushed our yield in nuts from 10 50-kg bags shelled to 25 50-kg bags at the same portion."

"I used to get four oxcarts to transport [my yield], but now I get 19 carts and I am able to sell because of what I have learned."

III. CHANGES INCOME

Most men and women were eager to share how being a CA has impacted their lives. Consistently, participants shared that being a CA had led to increased income. Although not specifically asked about the amount of income raised, about 10 percent of participants volunteered this information, and though it cannot be taken as representative, the information in itself is interesting.

The range of income they said they made ranged from \$370–\$6,120 (10 kwacha to \$1 at the time of writing), with the median amount at \$1,300 (ZMK 13,000) and the average at \$1,512.

"I have increased my income by 90 percent due to not depending on maize as my only source of income."

"I used to have ZMK 900 every year before I became a CA, but now I am able to generate ZMK 15,000."

"I aggregated maize and made ZMK 61,200."

“I sold agro chemicals (stellar star) and made a profit of ZMK 5,000 in the last farming season alone.”

Men and women had similar ideas to share when it came to explaining how being a CA impacted their lives and how they spent the extra income, but there were some nuances in how they responded and the frequency of responses.

Women most often talked about how important the business opportunity was for them, and routinely mentioned the importance of being able to operate *legally*. They shared that having a shop and a growing business and having access to inputs and markets had a great impact on their lives.

“I can do business legally especially as a woman. I am now used to entering government offices.” (Female CA)

Men, on the other hand, talked equally about being able to improve their farms and the importance of having increased yields as well as the importance of having increased business opportunities. They noted that being a businessman was important to them, and they shared that having a shop and a growing business and having access to inputs and markets had a great impact on their lives. Men talked less frequently about the impact of being legally registered business owners (although it was still mentioned), and talked more often about opening multiple shops or investments (rental houses, land, etc.).

“Yes, I managed to build a shop which I never thought I would own. Besides, I now use a ripper, causing yields to increase.” (Male CA)

“I managed to buy another building besides the shop I had at the cost of ZMK 11, 000. I have since renovated it and have rented it out to Cargill who are paying me ZMK 1,000 per month.” (Male CA)

Men and women both commonly shared that a key impact was simply having more money and additional purchasing power as a result of being a CA.

Women also spoke about farming yields and being able to reinvest in their farms. Women spent a lot of time sharing their appreciation of the new knowledge they had gained on farming practices, while men spent more time sharing how important the leadership role they had acquired as a result of being a CA was for them. Both men and women spoke to the power of being recognized by their community and the impact that had on their lives: they felt that people listened to them more and that they were seen as teachers.

“I have learned to take farming as a business. Recordkeeping. Financial management. I am now able to save money. Before, we had low yields, but now we have increased production.” (Female CA)

Men talked more about having gained financial management skills like being able to keep records, manage a bank account, and understand profit and loss. Women also spoke about this but less often; more women spoke to the power of having savings and/or a savings account.

“I have formed relationships with banks where I can access credit as a CA and as a farmer. I have learned how to behave with banks.” (Male CA)

“We use the extra income on saving in the bank and keeping some at home, in case of problems, e.g., sickness, funerals, etc.” (Female CA)

“Before [becoming a CA], tea was only taken at Christmas, but now it's every day. I now buy school uniforms and pay school fees. I have three meals per day. I am able to produce more and sell some and still leave enough for food.” (Female CA)

Both men and women talked about how being a CA had improved food security for their families.

“Yes [being a CA had an impact] to be able to manage three decent meals, something we never managed to do way back.” (Male CA)

Interestingly, when asked what impact they felt being a CA had on their lives, women talked about how being a CA had reduced their workloads through having family help out or by being able to pay wage laborers. This was mentioned less often by men; men talked more about the changes they saw in their families with everyone working together as a team.

“My wife and I make a budget, and I often involve the children to see what can be bought and what’s missing.” (Male CA)

Men talked about how the CA model had brought the community together, which was mentioned by women but less often. Both men and women occasionally talked about their increased ability to support the community or their church.

A few men and women mentioned that being a CA had an impact for them because they no longer had to obtain money from loan sharks.

What Kind of Impact Did Being a CA Have in Your Life?	
Most Common Themes among Men	Most Common Themes among Women
Improvement in farming (increased yields, knowledge of new technologies, able to buy inputs, reinvestment in farm)	Business opportunity (I am now a legal business, I have a shop, I can grow my business, I have access to inputs and markets)
Business opportunity (I am now a businessman, I have a shop, I can grow my business, I have access to inputs and markets)	
I have more income/purchasing power for things I need	I have more income/purchasing power for things I need
Leadership (I am seen as a leader/recognized in my community)	Improvement in farming (increased yields, knowledge of new technologies, able to buy inputs, reinvestment in farm)
I have financial management skills (I know how to keep records, keep a bank account, plan for my business, understand profit loss)	Leadership I am seen as a leader/recognized in my community
My family has increased food security	My family has increased food security
My family works together/supports one another	My workload has reduced (as my family is helping more/I can now pay wage laborers)
Service (I can help train/teach/support my community/give to church)	I have financial management skills (I know how to keep records, keep a bank account, plan for my business, understand profit loss)
The community works together more	I have savings
I don't have to use loan sharks	Service (I can help train/teach/support my community/give to church/orphanages)
	The community works together more
	I don't have to use loan sharks

IV. HOW CAS SPENT ADDITIONAL INCOME

From the PROFIT+ annual surveys, the project had quantitative evidence that income has increased by more than 40 percent (using household assets as a proxy for income) (2016 *Annual Outcome Survey*). However, the project is interested in learning more about how CAs say they spent that income.

In terms of how they spent their additional income, women most commonly responded that they spent income on school fees for children, while men were as likely to discuss business reinvestment and school fees.

Men talked about making farm reinvestments (land, fertilizer, seed, water pumps, etc.) while women talked about reinvestment in their shops and purchasing products to sell in the shops. There was, however, a nuance in how men and women talked about business reinvestment: men were more likely to talk about expanding into additional businesses (other shops, building houses to rent out, etc.) while women were more likely to talk about expanding and building the agro shop they had.

“I have managed to take my child to college, I pay wages for piece workers. Am able to lend money to the community such as teachers, retirees, with my excess income.”

(Female CA)

What Did They Spend Their Extra Money On?	
Most Common Themes among Men	Most Common Themes among Women
Business reinvestment (built shop/purchased stock, expanded into other business opportunities)	School fees for children
School fees for children	
Farming reinvestment (land, fertilizer, seeds, water pumps, etc.)	Business reinvestment (built shop/purchased stock)
Food	Farming reinvestment (land, fertilizer, seeds, water pumps, etc.)
Health (doctor visits, medicine, health emergencies)	Food
	Kept money in savings
Purchasing cattle/livestock	Health (doctor visits, medicine, health emergencies)
Building a house	
Funerals, weddings, other event	Building a house
Kept in savings	Funerals, weddings, other event
Transport (oxcarts, bicycles, motorbikes, cars)	
Charity/church	Wages/workers
Clothes	Clothes
Funerals, weddings, other	Charity/church/lending to others
Household goods (furniture, utensils)	Transport
	Purchasing cattle/livestock
	Household goods (furniture, utensils)

Both men and women talked about spending money on food for increased food security, but women talked equally about the importance of having savings, which was mentioned by men but less often. Men talked more about being able to now pay for health care (doctors, medicine, and emergency hospital trips), which was also discussed by women though less often.

Men talked about purchasing cattle or livestock and building a house, which was also mentioned by women though less often.

Both men and women talked about spending the money on funerals, weddings, or other occasions, but men also talked about spending their additional income on transport purchases (oxcarts, bicycles, motorbikes, cars), which was rarely mentioned by women. A few men and women talked about being able to spend their money on charity/church expenditures, clothes, and household goods, while a few women talked about spending money on wages for paid laborers.

V. CHANGES IN WORKLOAD

Generally, the labor burden for rural women exceeds that of men, and Zambia is no exception. PROFIT+ has implemented specific interventions to address this labor burden in farming with a focus on specific value chains such as rice, maize, soy beans, sunflower, groundnuts, tomatoes, and onions. The team wanted to find out whether being a CA adds to or reduces their workload, particularly for women who are already overburdened. About half of people in the focus groups shared that they felt being a CA had caused a *change* in their workload. Interestingly, among those who shared feedback, respondents were as likely to list reasons for *increased* workload as *decreased* workload; this was true for both men and women.

Respondents were as likely to list reasons for increased workload as decreased workload, this was true for both men and women.

Women who stated their workloads had increased noted that they were now busy with a shop, extension work, and farming. However, they also indicated that their family members were providing more support to ease the workload, and in some cases, they would hire extra help.

“My workload has increased because I only used to go to the field only, but now I have to be at the shop, the fields, and sort out the benefits of the community.”

“My workload has increased, I have to get and order products, go for meetings, and report at PROFIT+. I am now occupied with work more than before.”

Women who reported their workload had decreased said (about equally) that even though more was going on in their lives, there was an improved family division of labor (more family members stepping up and either helping with the farm or the shop) or they were able to hire farm workers. Women also shared that learning new farming technologies—most commonly, the use of herbicides—had reduced the time they spent weeding.

“Reduced, my family runs the agro shop while I do other things.”

“My workload has reduced, as I hire people now to rip about 4 acres for sale, and 3 1/2 acres for consumption, and I use herbicides. I have been paying wages to farm workers, and my family assist in the shop.”

“Before [being a CA], women thought gardening was only for men, but now both husband and wife work together in gardening.”

Men, like women, were also equally divided on whether being a CA had increased or reduced their workload. For men who stated their workloads had increased, they were equally split as to why, with about a third sharing they were just busier in general with a shop, extension work, and farming. Another third spoke more about how reinvestment and growth through opening additional shops or hiring more farm workers was making them busier; and another third shared that they were busier because of their increased responsibilities in the community.

“My workload has increased. Each and every day I am busy. I have opened five shop outlets and have employed five workers.”

“My workload has increased with farmer field schools, farming activities, ABSC groups, attending workshops, selling in the shops, working with input companies.”

Among men who reported decreases in workload, the most commonly reported reason was that there was an improved family division of labor, with members of the family sharing the chores depending on who is available at the time.

“Each family member now has a specific job to do. This has allowed us to reduce the workload on me.”

“Reduced, the family is left to run the agro shop while I do [other] things.

Secondarily, they reported reductions due to improvements in farming practices:

“Workload is reduced due to use of new farming technologies such as the use of chemicals in fields.”

Of interest is the repeated idea that the economic incentive of shop-keeping has increased interest among family members in helping CAs. This suggests that the model might provide better incentives for decreasing workload among women in a traditional family model rather than for women in female-headed households, meriting further study by the project. The responses also suggest a more active role for youth in helping out, which might be positive or negative, and warrants deeper analyses to better understand the benefits to youth.

It is also of interest to note that conspicuously absent from the discussion was any referral to reduction in time due to less travel to access agricultural resources, which was a major project strategy to improve opportunities for women. While this may be the case for female farmers, it was not mentioned among female CAs.

VI. REPORTED CHANGES IN DECISION MAKING

Changes in decision making, particularly in empowering women to increase decision making in terms of making economic decisions, is an important concept of improving female empowerment for PROFIT+, and nearly half of CAs reported that they had personally changed how they make decisions in their own households.

“Decisions [on planting] are now jointly made and responsibilities shared, and we celebrate the success together.”

Nearly half of all men and women shared that decision making on planting had changed and was now being done with their spouse or with the entire family (older children, husband, and wife).

“The whole household now agrees on the crops to be grown each season. No single individual dictates. This is the only way that each family member develops the sense of belonging.” (Male CA)

“I was not allowing my wife to decide on how we are going to plant, but now I do.” (Male CA)

“Through trainings from PROFIT+, our minds are opened and every member of the household is involved.” (Male CA)

“There is change because we were not making decisions together, we used to use hoes and not ripping, but through PROFIT+ we do everything together, me with my husband.” (Female CA)

“Now they are able to make decisions on the crops to plant together as a family unlike in the past.” (Female CA)

To a lesser degree, both men and women (about a fourth of men and women) shared feedback that decision making on what to do with increased income had changed and was being shared with their spouse or family members.

“The budget is made by both husband and wife. We then prioritize: first we buy fertilizer, the rest goes to the children's school. We give cash credit to farmers and in return farmers share the produce, which is then shared and sold later at a higher price.” (Female CA)

"We sit and plan together as a family, anyone of our children can go to the bank to withdraw using my ATM. We prioritize how we should spend our money. My wife is now in charge when it comes to keeping, she is more disciplined than me." (Male CA)

"We do it together with the whole family. In my case, if I get sick my wife can withdraw since we now have a joint savings account, my wife keeps the card." (Male CA)

"I decide what to do, my husband can now do other things while I go and sell crops, which never used to happen." (Female CA)

"There is now unity, as every member of the family is involved in decision making of using extra income." (Female CA)

"Before I became a CA, all the money decisions (generated from all sources) were made by my husband, but now this has changed. We make decisions together as a family, and this has resulted to saving up to 60 percent of the money that was spent on unnecessary things."

(Female CA) (Male CA)

A few male CAs, however, shared that they had changed a bit but were still holding on to decision-making authority.

"Now I consult my wife, but extra money stays with me." (Male CA)

VII. ABILITY TO WORK WITH BOTH MALE AND FEMALE CLIENTELE

Nearly universally CAs (either male or female) shared that they targeted both male and female farmers as customers. This is a critical component as the project strategy intended that CAs provide extension services to both men and women, as globally women only access 15 percent of extension services (FAO 2011). CAs reported both male and female farmers were reached. However, men often noted that to reach women they needed specific strategies to do so (like talking to the husbands first or working through women's groups), while some women reported that they felt men didn't listen to them as well as women did.

"My approach is to go through the husbands. I speak to the husbands on how they are working with the wives." (Male CA)

"The household approach is always the best. I talk to both the husband and the wife." (Male CA)

"I use my wife to follow some of these women." (Male CA)

"It's easier to work with women because they understand compared to men who may underrate me because I am a woman." (Female CA)

Both male and female CAs commonly reported that they viewed women as "early adopters because they were more likely to attend trainings, listen, and readily adopt the practice."

"Women are good learners and understand fast and practice more often." (Female CA)

"It's easy to work with women because they are good listeners and they practice." (Male CA)

VIII. LEADERSHIP

PROFIT+ was very interested to see if CAs felt they were perceived as role models and active leaders in their community, and if men or women had the same feeling about how community members perceived them.

Both male and female CAs were asked, "What do community members think about CAs?" Most often, they shared that they felt community members saw them as teachers, advisors, or extension agents; they overwhelmingly shared that they felt community members listened to them.

"Advisor to the farmers concerning agriculture." (Female CA)

“They see me as a teacher as we teach them about certified seed, recommended chemicals, community consults from the agrodealer.” (Male CA)

“The CA helps the Ministry of Agriculture and is considered as an extension officer since I am near to the community.” (Male CA)

The community thinks CAs are...

1. Teachers/advisors/ agricultural extension agents
2. Business people, providing inputs and linking the community to input suppliers
3. Role models and leaders

Men and women also shared commonly, though mentioned less often, that community members saw them as business people able to provide inputs and link the community to input suppliers.

“[They see me as the] linkage between farmers and input suppliers...” (Female CA)

“They think about CAs as a business person who is knowledgeable.” (Male CA)

Some men and women reported that they were seen as role models and leaders (though men talked about this more frequently than women). Early on, all participants shared that they felt that being a CA had increased their standing in the community.

“CAs are perceived as role models in the community.” (Male CA)

“I am treated as a very important individual due to technologies I showcase on my demo plot.” (Male CA)

“The CA is respected in the community as a helper. They bring inputs closer to the community members. CAs lead by example in the community when it comes to growing seeds in their field.” (Female CA)

Men, more often than women, mentioned that the community saw them as community helpers, while women were likelier to say that communities described them as facilitators of savings groups and/or credit providers.

“[They see me as] being able to link to many opportunities for the community.” (Male CA)

“They see me as a teacher of savings.” (Female CA)

A few men and women also shared that they felt community members saw the CAs as rich and educated, and a few women spoke to how this created jealousy.

“[They see us as] rich and educated.” (Female CA)

Nutrition and Health

I. INCREASED FOOD SECURITY, FOOD DIVERSITY, AND PLANTING NUTRITIOUS CROPS

In addition to learning more about the empowerment aspects of the CA model, this study also sought to identify if, and to what extent, CAs were growing nutritious crops (and if they understood which those were/why to plant them); delivering nutrition- and health-based messaging; and/or providing nutrition and health services to communities. The study also sought to identify what impact CAs felt these activities were having on communities.

Increased Production of Nutritious Crops

CAs reported increased production of nutritious crops. More than two-thirds of CAs had planted some type of nutritious crop (beyond soy and groundnuts), and 50 percent of CAs reported they had planted orange maize and/or orange-fleshed sweet potatoes. When asked what they planted on their own farms, CAs mentioned 35 separate crops, though the majority listed maize, groundnuts, soybeans, and sunflower, followed by sweet potatoes, orange maize, tomatoes, and onions. Most

respondents listed four or more crops. Male and female responses were not significantly different. CAs shared that income and health were main drivers for planting these crops, and CAs were able to routinely identify which crops are good for nutrition, and reported that they used that information to promote sales.

A little more than one-third of focus group participants shared that they had **planted orange maize**. When asked why they planted this variety, participants gave nearly two dozen differing types of responses, the majority of which were based on nutrition and/or health considerations.

Most commonly, participants stated that they planted it because it contained vitamin A, was good for eyesight, and/or had a benefit for children's health (reducing malnutrition, helping make them more intelligent, giving them more energy, and providing an immunity booster).

"[I planted it because...] it contains vitamin A, promotes good eyesight, it is sweet and delicious, and has a good market."

"Orange maize helps kids in terms of nutrition; once eaten, the kids will not be attacked by malnutrition during the first 1,000 critical days."

Other common responses were that it was good for pregnant women and the unborn child's development; that it had benefits for the skin; and it was good for men's reproductive health/stamina.

"It has vitamin A: children become intelligent, adults with good memory, injuries also cured early; for men, it also [boosts] the reproduction system."

While nutrition-related responses were the most common reason cited for planting orange maize, participants also noted that it was good in terms of sales and that they saw it as a hearty crop—drought and pest resistant, requiring little fertilizer, and easily stored. They also noted that there was little or no waste.

"I make more profit when it is sold than selling [regular] maize."

"I grow orange maize for nutritional purposes for children; it is easy to store, it doesn't easily attract weevils. Growing orange maize does not require a lot of fertilizer."

Some participants also noted that they liked the taste of it and found that a little could go a long way.

"It's a magic variety because we only use a little at a time to feed the entire family."

CAs were also asked if they had planted **orange-fleshed sweet potatoes**, and if so, why. A little less than one-third of focus group participants shared that they had planted orange maize, although several respondents reported that they had wanted to plant them but could not get hold of any vines.

When asked why they planted this variety, participants responded similarly as they did for orange maize, reporting that they planted it because it contained vitamin A and was good for eyesight; helped children get smarter; and there was a ready market that provided income. Interestingly, many participants spent time discussing how they used it: as a breakfast food, as a replacement for sugar, as a drink, or in fritters or cakes, and several noted that they used the leaves as vegetable relish.

"I just started growing sweet potato vines for two things: one, it is a good source of income, and it is a good source of vitamin A."

"It can be prepared for breakfast, is good for sight, good for business, and its leaves can also be eaten as a vegetable."

CAs were also asked if they had **planted vegetables**, and if so, why. A little more than one-third of focus group participants shared that they had planted vegetables. When asked why they planted vegetables, participants most commonly stated health reasons (for protection from disease, or for their vitamins and nutrients) as well as income and just as another food source.

“I have been planting rape, cabbage, tomatoes, and pumpkin leaves. These vegetables protect our bodies from diseases.”

“I plant onion and tomatoes both for economic and nutritional purposes.”

II. NUTRITION MESSAGING AND SERVICES

Just under half of both male and female CAs reported that they provided information on nutrition to the communities and were routinely contacted and leveraged by the Ministry of Health, the Ministry of Agriculture, nongovernmental organizations, and the private sector to deliver nutrition messages and services within their communities.

Both male and female CAs talked most about how they shared information on which nutritious plants to plant; how to cook nutritious foods, like orange maize, through cooking demonstrations; or described how to add nutritional value to meals. They also shared that they routinely talked to their farmers about nutrition, touching on a wide variety of topics. Topics and audiences did not seem to alter depending on the gender of the CA (both talked to women and men about all subjects), and both male and female CAs reported that they talked to pregnant and lactating mothers and expectant couples.

“I do cooking demonstrations of nutritional foods: orange maize, sweet potatoes, porridge with groundnuts, and vegetables with groundnuts.”

“I provide information on issues of malnutrition under the age of 0–24 months, how they get affected, and how we are supposed to take care of the children and their necessary needs.”

“I provide information on food utilization (such as making milk out of soybeans), hygiene, and cooking.”

“I share Ministry of Health information on what is recommended, good food to feed children under five years.”

“I share the importance of eating a balanced diet.”

“I share with expecting mothers feeding criteria. How to feed the baby.”

III. HEALTH MESSAGING AND SERVICES

About one-third of female CAs and about one-fourth of male CAs spoke about their work in providing information on health practices or health services to the communities, and reported they were routinely contacted and leveraged by the Ministry of Health, the Ministry of Agriculture, nongovernmental organizations, and the private sector to deliver health messages and services within their communities. It is interesting to note that in addition to saying they provided health messaging, the CAs often clarified that they worked in a more formal, titled role.

“I work as a community health-based counselor, a peer educator, a traditional birth attendant, a caregiver at a clinic, etc.”

A wide variety of topics and services were shared, but the emphasis was on taking children to clinics (immunization/illness); raising HIV awareness; HIV counseling and testing; hygiene practices/use of latrines and hand washing; and reproductive health/child spacing (the latter being discussed more by women than men).

“I provide information on how to take care of the children, taking the children to clinic for immunizations; the type of food that pregnant women should be eating; the importance of sleeping under a mosquito net.”

“I do on voluntary counselling and testing [for HIV].”

“As a community-based health counsellor, the main talk is about good health and general hygiene.”

IV. CAS OVERWHELMINGLY REPORT THAT COMMUNITIES ARE HEALTHIER

CAs were asked if the work in nutrition and health in their communities had resulted in healthier households, and if they thought so, what evidence did they have to support this idea? About one-fifth of focus group participants actively shared that they felt nutrition and health was getting better, citing reasons for why they believed this to be true.

Healthier Children

Most commonly, CAs shared that they believed that children were now healthier in their communities, stating that this was due to better feeding practices. They noted differences in their own children and families, as well as a reduction in malnutrition and mortality rates in their communities, increased care for pregnant women, and improved birthing standards.

“Last year, we had seven cases of malnutrition among the children, but this year not even one case.”

“By learning about nutrition in orange maize, children born now are healthy and grow faster.”

“Children are now healthier and there no signs of malnutrition.”

“Having three meals per day, bearing in mind the three types of food, has changed the way my children look these days.”

“Women have learnt the importance of breastfeeding their babies.”

“Breastfeeding mothers are the main target. They now know the importance of breastfeeding.”

“Reduced maternal health issues, malnutrition cases here reduced.”

“Maternal mortality rate has reduced.”

“Mothers (lactating and pregnancy) and also fathers, before there were home labor deliveries, but now they book early in the hospitals for... delivery of babies.”

“Women used to give birth in houses; if they do, they are punished.”

“Yes, we have healthier babies being born these days.”

Increased HIV Prevention

CAs also commonly shared that they felt their communities were healthier now because HIV was being better addressed, specifically counseling, testing, prevention, and care.

“HIV levels have been reduced because people get sensitized and get tested to get treatment.”

“People are able to listen now after hearing through counselling they get.”

“People are now using condoms and testing for HIV starting with my household; some even come for male condoms.”

“Many people are now appreciating the use of condoms, which will consequently reduce the prevalence of the pandemic.”

“We have low prevalence of HIV/AIDS among youth.”

“Most [youth] now know the need to know their HIV status so they can live positively and productive.”

“Adherence to drugs by those who are on [anti-retroviral therapy].”

“Improvement on adherence to drugs for those who are on [anti-retroviral therapy].”

“We have reduced HIV/AIDS cases.”

“AIDS cases have reduced in the area.”

“The prevalence of HIV/AIDS has reduced because of continued sensitization meetings.”

General Family Health/Healthy Eating/Better Hygiene

CAs also routinely shared that they felt there was better family health in their communities, attributing this to improved healthy eating habits as well as a reduction in disease due to improved hygiene practices as well as a reduction in malaria.

"[Health has improved] because people are now eating healthy foods, and levels of malnutrition [have] reduced, [which were] high."

"Nutritious food is now being grown."

"Consumption of orange maize products has really changed us. The reproductive ability from both my wife and I is good evidence that there is improvement."

"Malaria has reduced because people have learnt to sleep under mosquito nets, slashing of grass, and keeping the environment clean, etc."

"More members of the community have toilets."

"Some now wash their hands and use toilets. We are almost down to zero open defecation."

"There has been a change, reduction in diseases such as cholera. Many people have built toilets and bathrooms; this improves hygiene."

"Before, there were no toilets in the villages, but now they are there."

"We had only one toilet against 10 households, but now we have 79 toilets in the community."

IV. CONCLUSIONS AND WAY FORWARD

This study identified if, and to what extent, CAs perceived changes in empowerment as a result of CA participation. Clearly, CAs felt the role to be very valuable in that it elevated their knowledge, skills, yields, role in the community, and, ultimately, income.

Nearly half of all men and women shared that decision making on planting had changed: it was now being done in collaboration with spouses or with the entire family. However, only about one-fourth of men and women shared feedback that decision making on how to use income had changed and was being shared with spouses or family members; this suggests that more time or effort is needed in this area.

The study also showed that CAs were heavily involved in nutrition messaging and services and, to a lesser degree, health services. More than two-thirds of CAs planted some type of nutritious crop beyond soy and groundnuts, and 50 percent of CAs reported that they planted orange maize and/or orange-fleshed sweet potatoes. Just under half of both male and female CAs reported that they provided information on nutrition to communities; they also reported being routinely contacted and leveraged by the Ministry of Health, the Ministry of Agriculture, nongovernmental organizations, and the private sector to deliver nutrition messages and services within their communities.

Both male and female CAs talked most about how they shared information on which nutritious plants to plant; how to cook nutritious foods, like orange maize, through cooking demonstrations; or described how to add nutritional value to meals. Topics and audiences did not seem to alter depending on the gender of the CA (both talked to women and men about all subjects), and both male and female CAs reported that they talked to pregnant and lactating mothers and expectant couples.

About one-third of female CAs and about one-fourth of male CAs spoke about their work in providing information on health practices or services to the communities; they also reported being routinely contacted and leveraged by the Ministry of Health, the Ministry of Agriculture, nongovernmental organizations, and the private sector to deliver health messages and services within their communities on a wide variety of topics, including when to take children to clinics (immunization/illness); raising awareness about HIV; HIV counseling and testing; hygiene practices/use of latrines and handwashing; and reproductive health/child spacing (the latter being discussed more by women than men).

CAs were asked if the work in nutrition and health in their communities had resulted in healthier households. About one-fifth of focus group participants shared that they felt nutrition and health was getting better and cited reasons for why they believed this to be true. Most commonly, CAs shared that they believed that children were now healthier in their communities due to better feeding practices, noting that they saw differences in their own children and families. They also noted a reduction in malnutrition and mortality rates in their communities, as well as better care of pregnant women, and improved birthing standards. CAs also commonly shared that they felt their communities were healthier now because HIV was being better addressed, specifically counseling, testing, prevention, and care; they noted seeing an uptick in prevention practices. CAs also routinely shared that they felt there was better family health in their communities, attributing this to improved healthy eating habits as well as a reduction in disease due to improved hygiene practices and malaria prevention.

Further study is called for in terms of quantitative representative analyses on the outcomes of being a CA and differences between results for men and women. However, this qualitative study is encouraging as it suggests that the CA model is empowering both men and women while supporting nutrition and health improvements within communities.

APPENDIX A: FOCUS GROUP DISCUSSION GUIDE

Focus Group Questions for Community Agrodealers – PROFIT+

Instructions for Interviewer:

- ✓ Clearly explain the purpose of the focus group (included in the introduction below) to the participants/group. Make sure to introduce the facilitators following the introductory statement.
- ✓ Follow the questions included below and use probing questions when appropriate. Use local terms to ensure participant understanding.
- ✓ At the end of the interview, ask the participant/groups if they have any questions. Thank them for their time.
- ✓ Please record all relevant information from the discussion, and review notes for completion immediately following the interview.

Facilitator/Note-taker Information:

Date:		Province:	
Facilitator Name:		District:	
Note-taker Name:		Village:	
FGD #:			

Introduction:

We are working with the PROFIT+ project. My name is _____. We have chosen this group because you have been working with the PROFIT+ program as a Community Agro Dealer. We are collecting information on how the CAD model has resulted in your empowerment particularly gender equality, as well as you're the delivery of nutrition messages to the community.

_____, the note-taker, will be recording information from our discussion so that we do not miss any points. ____ and _____ will also be participating in our conversation, taking notes and translating. They will be helping draft the report, which will be based on the information that we gather during our assessment. Your statements will be kept confidential and will not be shared with anyone else. Our notes will help ACIDI/VOCA prepare a report on how PROFIT+ has impacted men and women's lives in your community. This information will be used to create better programs in the future, both in Zambia and in other countries.

We anticipate that this conversation will last 90 minutes (1 ½ hours). Your opinions are very valuable to us. We value everyone's opinions in the group; this is an open discussion, and we encourage you to share your views openly with us. If you are not willing to take part in this discussion, please let us know now. If you do not wish to take part in the discussion, it will not reflect on any of your relationships with PROFIT+, and you are free to not participate. Are you willing to participate in the focus group discussion?

(Facilitator asks if there is anyone who does not want to take part in the discussion. If there are people who do not want to take part, the facilitator should thank the participants and excuse them from the session. If everyone is willing to participate, the facilitator should continue. The facilitator should ask participants to signal their consent to participate verbally and ask them to make a "check" mark or thumb print on the list of participants and the consent form.)

Consent Details:

I, the facilitator, have read the above statement of consent to the focus group participants. All participants have verbally consented to continue.		Facilitator Initials:	
# Consented:		# Refused:	
Sex of Participants:		# F	# M

Ask the participants to introduce themselves and state their age and record as follows.

18-25	26-30	31-35
35-40	41-45	46-50
51-55	56-60	60 and above

Ask the participants to indicate if they have children under five, then indicate how many respond 'yes':

Have children under five years: _____

- What if any new skills have you learned as a result of being a CAD? (10 min)
- In the past three years what have you planted on your own farm? (15 min)
 - 2.1 Has anyone planted orange maize, why and with what result?
 - 2.2 Has anyone planted Sweet potato vines, why and with what result?
 - 2.3 Has anyone planted Vegetables why and with what result
- Has being a CAD impacted who makes decision on planting in your household? If so how? (PROBE: Adoption of new technologies) (10 min)
- Has being a CAD had an impact on your life? If so how? (20-30 min)
 - 4.1 Do you think being a CAD has had an impact on your yield how so?
 - 4.2 Has being a CAD improved your household income?
 - 4.3 In your family how do you decide how to spend the extra money? Has this changed at all since you have become a CAD?
 - 4.4 What have you spent the additional income on?
 - 4.4.1 Did you spend it on education?
 - 4.4.2 Did you spend it on doctors/medicine?
 - 4.4.3 Did you spend it on food?
 - 4.4.4 Did you spend it on the farm investments?
 - 4.4.5 Did you spend it on the shop (buying stock)?
 - 4.4.6 Did you spend it on events (weddings, funerals)?
 - 4.5 Has your workload changed since you have become a CAD? Has it increased or reduced?
- 5. What do community members think about CADS? (15 min)
 - 5.1 Do they listen to CADS?
 - 5.2 Do you think people listen more to you because you are a CAD?
 - 5.2.1 Has being a CAD improved your standing in the community?
 - 5.2.2 How does being a female/male CAD affect your services to women? Probe
 - 5.2.2.1 Do you target other women as customers?

- 5.2.2.2 Are you able to follow them up to ensure that they are adopting some of the new technologies?
 - 5.2.2.3 Are you able to talk to their husbands about how they are working with their wives to adopt some of these technologies? Please give examples
6. CADS sell many things seeds, fertilizer, plants etc. but besides *selling things*, what else do you offer your clients? (20-30 min)
- 6.1 Do you provide information on technologies and practices?
 - 6.1.1 Where did you obtain the information?
 - 6.1.2 Who do you provide the information to?
 - 6.2 Do you provide any information on nutrition?
 - 6.2.1 Where did you obtain the information? (PROBE: for MoH)
 - 6.2.2 Who do you talk to about nutrition?
 - 6.3 Do you provide any information on health? (PROBE: for health volunteers)
 - 6.3.1 Where do you obtain the information?
 - 6.3.2 Who do you talk to about health?
 - 6.3.3 Do you think this has resulted in healthier households? Do you have any examples of before and after?
7. As a CAD do you sell orange maize, sweet potato vines, vegetables? Why (10 min)
- 7.1 Do any of these have health benefits?

Thank you for your time.