



Case Study

Boosting Yields and Income

The Business Case for Supporting Female Cocoa Farmers in Liberia

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About GROW

GROW Liberia is a business and investment advisory agency that collaborates with businesses, investors, associations and government agencies in Liberia to accelerate systemic solutions that transform high-potential industries and drive inclusive growth. GROW currently invests in the cocoa, vegetables, and rubber sectors.

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Authors

Sabine Garbarino, Mardoe Gizea, Lucinda Rouse, Mark Wallace, Kim Beevers

Introduction

Our work in the cocoa sector focuses on orienting Liberian cocoa producers and traders towards the premium cocoa market. As well as promoting high quality cocoa production and increased yields, GROW also seeks to ensure that Liberian cocoa is traded under better selling and financing terms in order to raise farmers' incomes and improve sustainability. To this end, we are collaborating with buyers to improve their support to farmer cooperatives through new financing models and quality differentiated pricing, among other initiatives.

In 2019, GROW also partnered with 16 cooperatives in Lofa, Nimba and Bong counties to improve their overall planning and management as well as farmer engagement and training. A large component of GROW's engagement with cooperatives involves promoting uptake of Good Agricultural Practices (GAP) among farmers. As part of this effort, GROW encouraged cooperatives to select "village coordinators" (VCs) within farming communities who would receive GAP training from expert agronomists and in turn train other farmers. VCs were also expected to play a role in aggregating cocoa for sale to the cooperatives. Over 25,000 farmers were trained through this model in 2019.

Modifying Our Approach to Better Include Women

GROW's approach to supporting female cocoa farmers was informed and refined through several rounds of operational research, starting with a gendered value chain analysis in 2018. This was followed by further research in 2019 to investigate why only one in five participants in the GAP training was female. One frequently cited reason was that it was not considered necessary for the wives of men who participated in training sessions to attend too (conversely, the research also revealed that few men passed on the information gleaned from the training to their wives). Moreover, economic necessity meant that women prioritised short-term earning potential – such as selling at markets – over long-term investment into acquiring new skills.

Consistent with the low number of female trainees was the low number of female VCs; by April 2019, only one cooperative had selected a single female VC. Female farmers voiced a preference to be trained by women in an all-female group, suggesting a scaled GAP model with mainly male VCs would increase the exclusion of female farmers.

Informed by these two rounds of research, GROW adapted the recommended GAP model and training approach promoted in collaboration with its cooperative partners in an effort to increase female participation:

- **Female village coordinators:** GROW believed having female VCs as trainers and leaders would increase female inclusion and participation in GAP activities. In collaboration with cooperative leadership, GROW assumed a more hands-on role in the active recruitment of female VCs in each farming community,

including through women's groups. GROW also communicated the importance of female participation and presented female role models.

- **Competition:** A competition was undertaken which rewarded VCs who trained over a certain threshold of farmers. Different thresholds were put in place for male and female VCs, taking into account some of the structural barriers women face, including unpaid care responsibilities/time poverty.
- **Gender-responsive training:** In addition to female VCs as trainers, separate trainings were organised with male and female farmers, with careful attention to logistics and timing that could unintentionally exclude women (e.g. market days). Trainings were also designed with consideration for male and female roles within the value chain.
- **Ensuring no harm:** Careful communication with cooperatives, male VCs and male community members (including the potential female VCs' husbands) was intended to ensure community support for female VCs and actively prevent risk of intra-household tensions including the risk of increased gender-based violence.
- **Messaging:** Underlying all communications was a concise message that female farmers play an essential role in ensuring the quality of cocoa which translates into increased income and greater well-being in communities. Women's role as educators was stressed throughout—a message that was tested and had resonated well with men during the 2019 research.



Study Objectives

This case study seeks to test GROW's theory of change that "upgrading" women's roles from cocoa farmers to VCs and actively including female farmers in GAP training translates into higher yields and better quality cocoa. This is expected to lead to increased incomes for farming families and cooperatives, providing a commercial incentive for cooperatives to continue practicing the business model while making progress towards gender equity in agriculture. We also analyse the implications of the business model for female VCs and farmers in terms of changes in income and agency.¹

The study is informed by quantitative data on training outcomes and yields collected during an impact assessment in March 2020, along with qualitative research undertaken in February. For the latter, a GROW research team visited three cooperatives and conducted interviews with cooperative leaders and VCs, as well as focus group discussions with male and female farmers.

Findings

1. Female participation in GAP training boosted yields for farmers

Our impact assessment revealed that average yields per acre increased by 41% for the farming households that received GAP training in the 2019/20 cocoa season, compared to a mere 7% increase for families used as a comparison group that did not receive training. During focus group discussions, male and female farmer participants mainly attributed this improvement to the GAP training, suggesting the VC model was an effective way of educating large numbers of farmers.

The impact assessment also proved a link between female participation in training and increased cocoa yields: households where male and female family members received training reported a 36% higher yield per acre following the 2019/20 harvest than households where only men were trained.

Although traditionally "female" roles in cocoa production lie mainly in post-harvest activities, such as fermentation and drying, women do also participate in pre-harvest activities such as under-brushing and pruning and can therefore benefit from

all aspects of the GAP training. Additionally, older women who lack the physical strength to undertake these more labour-intensive activities sometimes supervise male labourers. This is noticeably the case for widows, who tend to assume a greater oversight role on the farm than married women. Several widows reported that their supervisory abilities increased following the GAP training, suggesting a direct correlation between women's access to training and higher yields.



Including women farmers in GAP training translated into 36% higher cocoa yields.

2. Female farmers' participation in GAP training increased between 2018 and 2019, as did the number of female VCs

For the reasons outlined at the beginning of this study, fewer female farmers were trained than men in both 2018 and 2019. However, the proportion of female farmers trained in 2019 (36%) was markedly higher than in 2018, when only 21% of the farmers trained were female. The increase was likely a direct result of GROW's communications to cooperative leaders and the subsequent recruitment of female VCs and in many cases separate trainings for women, in line with the preference of female farmers as voiced during the previous round of research. Indeed, the number of female VCs increased exponentially from one single VC in April 2019 to 303 by September 2019, representing 47% of VCs across the participating cooperatives. The corresponding outreach to male and female farmers around the importance of including women in the training is also likely to have played a role.

3. VC drop-out rate was higher among women than men...or was it?



With GROW's support, the number of female village coordinators increased from 1 to 303, which translates into 47% of VCs being female.

Out of the 644 VCs trained by cooperatives (of which 343 were male and 301 female), 42% of female VCs did not record training farmers, compared to 4% of their male counterparts. This raised questions about what had driven female VC drop-out. However, during a follow-on study of 96 supposedly inactive female VCs conducted in February 2020, over 90% reported that they had in fact trained farmers despite the records suggesting otherwise. Due to issues of illiteracy (in rural Liberia, 74% of adult women are illiterate compared to 42% of men²), these women reported providing the names of the farmers they had trained to their male VC counterparts, some of whom appear to have recorded them under their own names and were consequently rewarded by their cooperative for high performance.

While low drop-out is great news, this example highlights how underlying structural inequalities—expressed in this instance by a large gender gap in literacy—manifest themselves during programming designed to be gender-responsive and inclusive. It also serves to highlight how power imbalances between men and women are not easily shifted through relatively short-term interventions. Cooperatives managed to successfully recruit and retain female VCs and put out a clear message that they are not the males' deputies. However, the apparent tendency of some men to claim "female numbers" under their name and benefit, and the inability of the female VCs to do anything about it, highlights gender inequality underpinned by powerful social norms that are difficult to change.

The limited ability of many female VCs to track and keep records of the farmers they trained also challenges a vital component of the VC role: enabling information flows between farmers and their cooperatives. The gender gap in literacy can also affect the fair distribution of incentives by

cooperatives if these rely on recordkeeping. There were also several instances where the female VC did not have access to a phone, so communications between the VCs and the cooperative were channelled through the male VC.

4. Gender-specific challenges for female VCs

Women were widely accepted as being worthy educators in communities, with the majority of male and female farmers stating that they viewed the male and female VCs as equals (and some husbands speaking with pride of their wives as "teachers"). However, while some female VCs were happy to work independently, others reported that they were not comfortable training male farmers in the absence of their male counterpart, at times when the male VCs were unavailable to accompany them. This represents a challenge that male VCs did not encounter. Reasons cited included a sense that male farmers did not respect or listen to them ("some men can't understand a woman speaking to them"), while one young female VC stated that her age was a factor affecting her ability to form a constructive working relationship with male farmers.

The study specifically tested two aspects that frequently limit women's meaningful economic participation: physical mobility and unpaid care responsibilities. Out of the eight female VCs interviewed, only one, who had recently given birth, reported her childcare responsibilities, in particular nursing, affected her work. Similarly, few mentioned mobility as a problem; although one female VC was situated over 20km from some of her farmers, making it difficult to visit them on a regular basis particularly in the absence of a transportation allowance, the majority had their own farms in the same area and hence were not required to make special journeys to inspect farms.

Carefully probing into intra-household tensions linked to the new role, one male and two female VCs reported that their wife and husbands respectively had expressed dissatisfaction that they did not receive any compensation for their work. Their response that "this is just the beginning" and something might come of it in the future, including hopes of the cooperative sponsoring one of their children to go to school as a result of their VC work, appeared to satisfy them and none of the female VCs interviewed were inhibited from performing their duties as a result of male family members' disapproval (or vice versa).

5. Benefits for VCs: social elevation and prestige more significant for women than men

None of the VCs interviewed reported receiving any monetary benefits from their role. VCs were predominantly motivated by the value of the learnings from the training to their own farming activities. Some VCs counted the farming tools and materials received as prizes through a GROW-instigated competition, which aimed to incentivise VCs to train as many farmers as possible and record their details, as a tangible benefit.

However, the high overall number of VCs continuing to train and monitor other farmers suggests the incentives go beyond the skills they acquire for their own personal gain. Many VCs – particularly women – reported that their VC status earned them respect within the community and improved their self-esteem. VCs also reported an underlying sense of obligation to impart the knowledge from the training after being selected to participate on behalf of their community. Others were hopeful that their VC status would bring future benefits, such as nominations to represent the cooperative in NGO programs or assistance with school fees for their children.

Interestingly, the role and status of the VC is viewed more highly by female VCs and farmers than their male counterparts. Some female farmers reported that they approached their female VC for advice on disputes within the community, given her elevated social status granted by her VC title. In contrast, male farmers said the advice they received from their VC was restricted purely to agriculture.

6. Cooperatives' perceptions varied around the function of the VC model

The VC model is still new and largely untested by the cooperatives. Two out of the three cooperatives interviewed expressed their conviction in the importance of the model. The lowest performer in terms of proportion of female farmers trained, which paradoxically has a predominantly female leadership, described the importance of VCs to the cooperative's cocoa-buying operations through the introduction of a critical – but previously missing – link with cocoa farming communities. VCs working for this

cooperative aggregate the cocoa within farming communities and encourage sales to the cooperative. Conversely, the leadership of the highest performing cooperative in terms of women trained was actively engaged with its members before GROW launched the VC intervention, meaning there was a strong pre-existing relationship with farmers. In contrast, the medium-performing cooperative gave more merit to existing connections with farming communities through its tree crop officers and noted that the impact of the VC model was low, with more follow-up required between VCs and their farmers in future years.

During interviews in 2019, some cooperatives expressed concerns about introducing female VCs due to (perceived) challenges around women's ability to travel to communities. However, none of the cooperatives interviewed for this case study expressed concerns about integrating female VCs into the model. The business manager of one cooperative noted that the VC model was particularly well suited to training female farmers given the tendency of women to work collectively to a greater extent than men. Another cooperative, despite its relatively low performance in training women, similarly stated the importance of women as VCs since they can better relate to female farmers than their male counterparts, also noting the care that most women take in fermentation and farm maintenance.

7. Inconsistent and limited financing poses a risk to the sustainability of the model

The absence of a reliable market for higher quality cocoa as well as buyers' financing constraints are major issues for cooperatives and farmers alike. The lack of pre-financing during the 2019 cocoa season often undermined the VC business model and indeed cooperatives' overall commercial relationship with their farmers. In one case, VCs were not involved in the aggregation or sale of cocoa to their cooperative, which lacked purchasing power due to an absence of the customary pre-financing from its buyer. However, the high level of farmer engagement and buy-in to the VC model meant that the relationship remained strong and all farmers in the focus group discussions reported selling some cocoa to the cooperative.

Of the three cooperatives interviewed, the cooperative located closest to the border with Sierra Leone appeared to suffer the most. Buyers from Sierra Leone offer higher prices to farmers directly and do not have the same demands around quality, meaning farmers lack the incentive to undertake good post-harvest practices such as fermenting and drying which require additional time and effort. The cooperative reported selling two tonnes of cocoa to its Monrovia-based buyer in the

2019/20 season, down from 15 tonnes in 2017, and blamed an absence of pre-financing from its buyer. In theory, this issue disproportionately affects female roles in cocoa production and value addition, given that fermentation and drying of harvested cocoa, which is directly linked to cocoa quality, is a predominantly female-led activity. Therefore, without a well-functioning market that rewards quality cocoa, the full potential for women's impact on income generation is undermined.



Conclusion

GROW's impact assessment confirmed that training women has a positive impact on yields and thus on farming families' incomes. While this research could not isolate the impact of training women on cocoa quality, the proven link between greater female participation in GAP and cocoa yields confirmed the intuition some cocoa cooperatives have voiced previously: strengthening women's knowledge on farming will ultimately benefit families and communities.

VCs provide a critical link between cooperatives and farming communities, and despite an absence of direct monetary benefit both male and female VCs said they profited from the role due to factors including the knowledge acquired which helped them to increase yields on their own farms and – especially in the case of women – increased social prestige. It is also encouraging that childcare and mobility issues did not on the whole prevent female VCs from fulfilling their duties, although low literacy levels did affect their ability to participate in the competition, and future rounds should be adapted to accommodate this limitation.

Financing and cash flow difficulties encountered by many of the cooperatives – compounded by the fact that middlemen for foreign buyers offer farmers a better price for their cocoa regardless of the quality, or material assistance during the pre-harvest “hungry season” – mean that quality considerations, particularly when it comes to post-harvest practices, are invariably undercut or not perceived to be worth the farmers' while.

This was particularly strongly felt in parts of Lofa County where Sierra Leonean cocoa buyers offer a higher price to farmers regardless of the quality of the cocoa purchased. Until this constraint has been adequately addressed, it will remain a challenge for cooperatives to incentivise farmers to consistently produce high grade cocoa and in turn enable women to fulfil their full potential in value addition.

While all of the cooperatives interviewed were keen to stress that the VC model is in its early stages, all recognised the importance of the VC function, and stated their intention to continue with its roll-out, with or without the support of GROW, while maintaining a 50:50 split between male and female VCs. Women were seen as effective outreach mechanisms to female farmers. The challenge going forward will remain the deeply engrained structural inequalities, such as low levels of literacy among female farmers, which hinder the flow of information and data to the cooperatives while continuing to put female farmers at a disadvantage. This is a stark reminder that there is no fast track to gender equity; taking on new roles has positive effects on many women's agency but does not automatically shift the social norms that determine gendered roles at work and beyond.

References

1. In their [2014 Voice and Agency report](#), the World Bank defined agency as “the capacity to make decisions about one's own life and act on them to achieve a desired outcome, free of violence, retribution, or fear.”
2. Liberia Demographic and Health Survey 2013, available [here](#).