GROW Liberia

End of Programme Report

June 2013 – January 2022

Adam Smith International

SWEDEN

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Table of Contents

Executive Summary 4
Introduction 8
Liberia Context 8
About GROW Liberia Programme 9
Headline Results: GROW Logframe Results till Date 10
2021 Results 11
Market: Cocoa Sector 15
Context 15
Cocoa Sector: Summary of Progress 17
Cocoa Sector: Learning and Recommendations 40
Market: Vegetables 54
Context 54
Vegetables Sector: Summary of Progress 57
Vegetables Sector: Learning and Recommendations 77
Rubber 86
Oil Palm 90
Stakeholder Engagement 93
Gender 96
Environment 100
Market Systems Development Approach in Liberia 103

Communications & Strategic Promotion 108
MRM: Key MRM Activities and MRM Tools 114
Value for Money (VfM) 116
..... 122
GROW Closeout 123
Reflections: Management 129
Detailed Budget 127
Major Documents & Links 156

Executive Summary

GROW Liberia is an agribusiness and investment advisory program that partnered with businesses, investors, associations, and government agencies to accelerate inclusive economic returns within high-growth agricultural industries in Liberia.

GROW employed a market systems development approach to achieve durable impact at scale for Liberia's agriculture sector and households. Our headline impact results are:

- $39,200 households have positive Net Attributable Income Change
- $13.7m increase in total Net Attributable Income
- 5,630 full-time equivalent jobs created
- 52,800 farming households had access to new opportunities
- $3.7m partner investment leveraged
- 242 private, public and not-for-profit partners

Context & Approach

Liberia is a thin and crises-affected context, suggesting a number of nuances that influence behaviour and capabilities of private, public and not-for-profit actors. These include an unpredictable and shock-prone environment, a large and protracted humanitarian presence, elite capture, and a private sector limited in number, size, capital and capacity.

Accordingly, Liberia is also a challenging context in which to deliver effective, private sector-led, and inclusive economic growth. In GROW's first years, the program struggled to navigate the context – which included the Ebola epidemic and the first transfer in power between political parties in 30 years – and this is reflected in its limited early impact. However, through learning, trial and error, and continuous adaptation, GROW developed tactics, a team and organizational processes that enabled it to have a tremendous impact on development in Liberia – leading to the results noted above.

Principles of GROW's approach include:

- A broad perspective on partner selection and an accompanying lean, progressive and performance-based partner engagement process
- Strategic use of communications and stakeholder engagement to promote program objectives and ultimately influence markets and players
- A commercial approach to inclusive business promotion that compelled partners to address some gender inequalities
- A data-driven and lean management approach that supported frequent adaptation in the face of changing circumstances and information
- A diverse team that offered a blend of business, investment and technical capabilities and networks
- Flexible funding and budgeting that enabled GROW to respond to Liberia's unique context

Sectors

Five sectors were included in GROW's portfolio. The program focused on Cocoa and Vegetables; two sectors through which it was able to facilitate significant change and impact. GROW also worked within Rubber, Agro-Processing and Oil Palm sectors.

- **Cocoa**
  GROW's Cocoa Sector activity focused on positioning Liberia for the premium cocoa market – an opportunity to secure significant price premiums for higher quality cocoa that promotes social and environmental good. To this end, GROW worked with cooperatives and producer groups to improve their farmer member engagement, including significant training on good

agricultural practices and the introduction of new post-harvest drying and fermentation techniques aimed at improving the overall quality of Liberia's cocoa. GROW also collaborated with commercial farms, buyers and service providers on a pathway to organic certification, supplier engagement, and premium market positioning, such as establishing brands and securing premium market trading contracts. So-B Green, a GROW partner, produced the first fine flavor Liberian chocolate bar in 2022. GROW also led regulatory and policy reform activity with the objective of improving Liberia's enabling environment for premium market alignment such as preventing regulation to establish a single exporter, facilitating farmgate price transparency, and harmonizing good agricultural practices training.

- **Vegetables**

  GROW's Vegetables Sector work primarily focused on improving the availability, access and pricing of agro-inputs and the provision of agronomic advisory. GROW also worked on a number of new business models regarding vegetable trade. As a result of GROW's activity, a duty waiver for agro-inputs and equipment is in place for a third consecutive year. A regional distributor has established operations, continuing to increase its presence through sub-distributors and demonstration plots. New distributors are also emerging from commercial farmers and agro-dealers based in Liberia as well as from regional players, such as Ghana-based Qualiseed. Further, a professionalized network of agro-dealers with expanding rural presence through sales agents and market outlets has emerged. Finally, and perhaps most valued by farmers, is the growing provision of agronomic advisory through the ago-inputs distribution and agro-dealer networks as well as a first short course offer via a local agronomic college.

- **Rubber**

  GROW's Rubber Sector activity aimed to facilitate the emergence of a lower cost processing alternative: Ribbed Smoked Sheets (RSS). RSS is positioned to offer some price premiums via trade outside Liberia's predominant buyer, Firestone. Two factories were established in collaboration with GROW. While RSS offers a compelling business case, factory set-up – relying on imported equipment and expertise – is difficult and expensive. Without a strong source of patient capital, increasing the number of RSS factories in Liberia will be a challenge.

- **Agro-Processing**
  GROW's Agro-Processing activity focused on models and services to improve packaging, distribution, marketing and sourcing. There are few agro-processors in Liberia; nearly all are small outfits managing all elements of the business from sourcing to distribution and resale internally. The small size of the industry, its players and Liberia's market overall challenge the case for specialized services that impinge on growth potential.

- **Oil Palm**
  GROW's Oil Palm activity primarily focused on supporting the GoL and concessions to establish and negotiate outgrower models.

Final Report Purpose

After nearly nine years, GROW will conclude in June 2022. This document is GROW's final report. It includes an overview of the program's sector and cross-cutting thematic activity, learning and recommendations. The report also details GROW's impact results and technical and management approach.

Introduction

Liberia Context

Agriculture is widely seen as the key to Liberia's economic growth and self-reliance. Nearly 40% of Liberia's GDP is derived from agriculture while nearly 70% of Liberians rely on agriculture for their livelihoods. Despite the large number of people engaged in the agricultural sector, 80% of the country's staple food (mainly rice and cassava) and 73% of all food consumed is imported. The country remains a marginal player in global commodity trade, including in rubber and cocoa. There is a general dearth of formal businesses and deep hesitance among regional and international companies to invest in what is considered a high risk business environment. Liberia's forests occupy roughly 45% of its land and are major assets for the country that could be intelligently leveraged to generate wealth, preserve biodiversity, and mitigate for climate risk.

Liberia is facing a myriad of challenges in terms of adequate financial resource mobilization, weak human institutional capacity and system failures due to weak sector governance, infrastructure limitations and weak or missing value chain linkages within thin markets. The country's agriculture sector, including cocoa and vegetables sub-sectors, was hit especially hard by the civil wars and Ebola crisis, forcing families to abandon homes and farms to seek safety in urban areas. The COVID-19 pandemic further exacerbated the situation, with government will and capacity unable to gain traction to begin to meet the increasingly critical need for agriculture services, infrastructure, and effective policy.

It is within this context that the GROW programme set out to affect systemic change to achieve pro-poor outcomes.

About GROW Liberia Programme

GROW Liberia is an agribusiness and investment advisory program that partnered with businesses, investors, associations, producer groups, government agencies and donor and diplomatic partners to accelerate inclusive economic returns within high-growth agricultural industries in Liberia.

The program is implemented by Adam Smith International. Launched in 2013, GROW Liberia will conclude in June 2022, following a nine-year contract period. GROW's total contract value is SEK 206,804,700.

Throughout its lifetime, GROW worked in five sectors. GROW primarily focused on Cocoa and Vegetable Sectors in its last years. GROW also worked within Rubber, Agro-Processing and Oil Palm Sectors in the years prior.

Our work has spanned two widespread disease outbreaks (Ebola, Covid) resulting in lock downs and border closures as well as national elections, nationwide protests, and various economic shocks – as well as several short-term programming extensions. As a result of each of these challenges, a significant amount of adaptability was required from the project. The GROW team adjusted to each of these disruptions through sound and adaptive management, reshaping partnership strategies, rethinking recruitment and team management, adapting our operational and logistics platforms, and by developing strong fiduciary systems to reduce risk.

As we draw to a close, the program as undertaken the "GROW Retrospective" – a strategic information sharing and influence series designed to share learning, guidance and information gleaned through GROW's many years and engagements. With this, GROW aims to facilitate business model replication, further policy discussions, and influence future funding and projects.

GROW has established an extensive resource database that offers market information, guidance for businesses, farmers and policy makers, and reflections on market systems development in thin and fragile contexts. GROW's insights are published here and our full resource database is published here. Links to our social media can be found here.

Headline Results: GROW Logframe Results till Date

GROW Logframe Indicators				Actuals Results Till Date				Results - Mar-22			
Levels		GROW Logframe Indicators	Disaggre-gation	Actuals Mar-18	Actuals Mar-19	Actuals Mar-20	Actuals Mar-21	Actual Mar-22	Increase Mar-22	Target Mar-22	% of Target
Impact	4.3	Total Net Attributable Income Change (NAIC) (in USD)	**Total**	**1,440,000**	**4,405,000**	**7,977,000**	**11,172,000**	**13,734,000**	**2,562,000**	**15,653,000**	**88%**
			Female	688,000	2,031,000	3,965,000	5,427,000	6,454,000	1,027,000	8,396,000	77%
			Youth	546,000	1,555,000	3,323,000	4,802,000	5,860,000	1,058,000	7,088,000	83%
	4.2	Total no. households and small firms with positive Net Attributable Income Change	**Total**	**4,440**	**17,000**	**29,100**	**35,400**	**39,200**	**3,800**	**37,000**	**106%**
			Female	2,220	7,600	15,000	17,600	19,000	1,400	18,000	106%
			Youth	950	6,200	12,100	15,300	17,300	2,000	16,000	108%
	4.1	Total no. of full-time equivalent (FTE) jobs created	**Total**	**160**	**700**	**2,710**	**4,390**	**5,630**	**1,240**	**5,000**	**113%**
			Female	70	180	550	860	1,190	330	980	121%
			Youth	30	330	2,420	3,860	4,890	1,030	4,400	111%
Outcome	3.3	Value of Additional Exports		-	-	-	2,166,000	3,534,000	1,368,000	3,963,000	89%
	3.2	Value of Additional Market Transaction		-	-	268,000	1,713,000	4,957,000	3,244,000	3,134,000	158%
	3.1	Total no. of households and small firms adapting to new opportunities	**Total**	**6,110**	**23,200**	**36,500**	**42,600**	**46,300**	**3,700**	**45,000**	**103%**
			Female	2,770	10,600	19,400	21,900	23,300	1,400	23,000	101%
			Youth	1,210	8,300	15,100	18,100	20,000	1,900	19,000	105%
Output	2.3	Total no. of households and small firms with access to new opportunities	**Total**	**7,610**	**25,700**	**41,000**	**48,700**	**52,800**	**4,100**	**51,000**	**104%**
			Female	3,570	11,900	22,100	25,300	26,900	1,600	26,000	103%
			Youth	1,510	9,300	17,000	20,500	22,500	2,000	21,000	107%
	2.2	Business Innovations_Adapt		-	-	-	84	102	18	88	116%
	2.1	Market Actors_Adapt		-	-	-	54	133	79	56	238%
Activity	1.3	**Private Sector Investment Leveraged**		**922,000**	**1,723,000**	**2,984,000**	**3,563,000**	**3,772,000**	**209,000**	**4,000,000**	**94%**
	1.2	Business Innovations_Introduced		**43**	**69**	**98**	**118**	**128**	**10**	**131**	**98%**
	1.1	Market Actors_Exposed		**68**	**162**	**188**	**210**	**226**	**16**	**223**	**101%**

2021 Results

GROW has achieved the following results (cumulative) by the end of 2021:

1.0 Activity Level

1.1 Total number of market actors exposed to innovations: By the end of 2021, GROW and its private sector partners had engaged with a total of 242 market actors. A total of 14 of these market actors were part of more than one intervention area, therefore a total 226 unique market actors were engaged during the life of the program. This represents 101% of the target and includes 16 new market actors engaged in 2021. Majority of market actors engaged were in the vegetable sector (45%) followed by cocoa (27%), rubber (21%) and agro processing.

1.2 Total number of business innovations introduced: GROW, through its partnership activities with private and public sector partners has introduced a total of 128 business innovations – 13 of these innovations were introduced with multiple partners as part of scale up activities. A total of 10 new innovations were introduced in 2021.

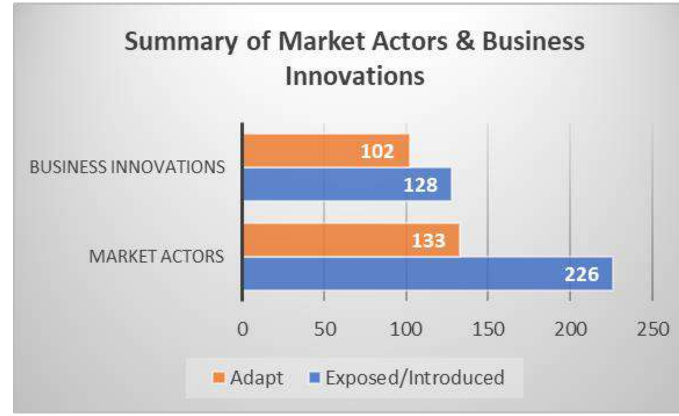
1.3 Private Sector Investment Leveraged: GROW's private and public sector partners have invested a total of USD 3.7M in the Liberian economy to date. This includes additional investment of USD 209k in 2021. The cocoa sector contributes to 54% of total investment leveraged followed by the vegetable sector (27%). The rubber and agro-processing sectors, which have now been phased out, contribute to the remaining 19%.

2.0 Output Level

2.1 Total number of market actors that adopt to innovations: From a total of 226 private sector market actors that GROW has partnered with, 133 of them have adopted to GROW facilitated innovations. This represents a 59% adoption rate.

Vegetable sector has the highest adoption rate of 68%, followed by cocoa (66%), rubber (53%) and agro processing (31%).

2.2 Total number of innovations adopted by market actors: A total of 102 innovations have been adopted by GROW's private and public sector partners from a total of 128 that were introduced through GROW support. Innovation adoption rate has increased from 72% in 2020 to 80% in 2021.



2.3 Total number of households with access to opportunities: By the end of 2021, a total of 52,800 farming households had access to new opportunities. This includes about 29,200 households in the cocoa sector (access to GAP in cocoa farming, grade differential pricing system and access to reliable markets) and 22,000 households in the vegetable sector (access to quality production inputs and information/training on GAP).

3.0 Outcome Level

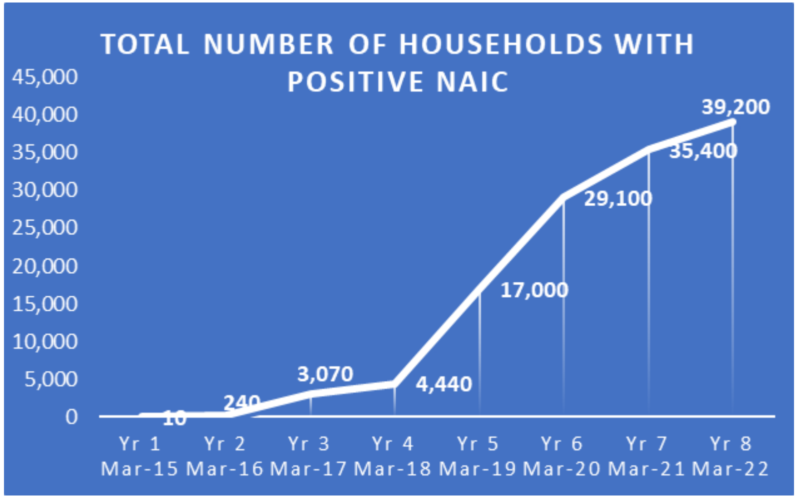
3.1 Total number of households adopting opportunities: A total of 46,300 farming households adopted new opportunities facilitated through GROW's private sector partners (103% of target). The cocoa sector contributes to 58% of this followed by the vegetables (48%) and rubber (2%) sectors. A total of 3,700 new farming households adapted to innovations in 2021

3.2 Value of additional market transaction: GROW has facilitated additional market transactions worth USD 4.9M by the end of 2021 – which includes additional market transactions of USD 3.2 million in 2021. The vegetable sector contributed to 57% of this (value of additional agro-input sales by distributors and agro-dealers; and value of additional vegetables sold as a result of increased yield) whilst the cocoa sector contributes to the remaining 43% (value of additional cocoa purchased by traders and exporters as a result of increased cocoa yield).

3.3 Value of additional exports: In 2021, GROW through its work in the cocoa sector has contributed to increased cocoa production of about 570 tonnes of cocoa. This equates to the total value of exports worth USD 1.3M (at average price of USD 2,400 per tonne). Total value of exports has increased from USD 2.1M in 2020 to USD 3.5M in 2021.

4.0 Impact Level

4.1 Total FTE Jobs created: A total of 1,240 additional FTE jobs were created in 2021 taking the cumulative total FTE jobs to 5,630 (113% of the Programme's target). A total of 760 additional jobs were created in the vegetable sector (vegetable farming is more labour intensive) whilst 480 additional jobs were created in the cocoa sector. The vast majority of these jobs were created at the farm labour level.



4.2 Total number of households with positive net attributable income change: A total of 39,200 households have benefitted through positive net attributable income change in 2021. This represents 106% of the target and an increase of 3,800 in 2021. A total of 33,570 farming households have benefitted through increased yield and NAIC from cocoa and vegetable farming and total of 5,630 people benefiting through additional FTE jobs. The cocoa sector contributed to 60% of this achievement as cocoa farming households have benefitted from increased yield and better-quality cocoa. The vegetable sector contributed to 38% and the remaining 2% comes from the rubber sector.

4.3 Total Net Attributable Income Change (NAIC): GROW has contributed to total net attributable income change of USD 13.7M to date (88% of target). The vegetables sector contributed to 51% of total NAIC whilst the cocoa sector contributed 42%, and the rubber sector contributed to the remaining 7%. Vegetable farming is found to be more profitable (average NAIC of USD 462 per HH) when compared to cocoa farming households (average NAIC of USD 248 per HH).

Cocoa

Market: Cocoa Sector

Context

Why was this sector selected? (Opportunity)

Interventions in the cocoa sector were among the foundational activities established by GROW. At the onset of programming, the cocoa sector was plagued by low volumes and low quality, which severely limited the country's international competitiveness and potential income for smallholder farmers. This was largely due to years of industry neglect as a result of civil war, instability and resultant low governmental capacity. Mistrust between market actors, lack of market information, asymmetry of available information, poorly designed and/or absent critical rules and regulations were primary characteristics of the sector at the time of selection.

The Cocoa Market Systems Analysis (MSA) conducted in March 2016 found "considerable" potential for smallholder cocoa farmers to benefit from market systems interventions despite the sector's overall poor performance. The sector was found to have strong pro-poor relevance for both smallholder farmers and workers/labourers as well as an "excellent" global economic outlook in terms of demand and price. Challenges related to low government capacity were noted, however as a universal issue faced across sectors, these were not deemed insurmountable. **Error! Reference source not found.** summarizes appraisal of Liberia's cocoa sector against the key sector selection criteria.

Selection Criteria	High	Medium	Low
Pro-Poor Relevance	■		
Growth Potential	■		
Feasibility		■	

Table 1 Summary of Sector Selection Criteria

The relevance to gender and youth was further noted for its strong impact potential. In the cocoa sector, fermentation and drying were mostly done by women; whilst harvesting and cracking of pods were done by both women and men. Youths in the cocoa sector were mostly involved as farm labourers. Gender- and youth-sensitive intervention design would have positive impacts in terms of inclusion and job creation.

Lastly, cocoa was deemed an intervention area with low risk to spark instability as cocoa lacks a history of conflict with concessionholders, unlike other sectors. Conversely, the sector could contribute to stability through its income-generating potential.

What was not working about the sector? (Challenge)

At the onset of GROW's activity, Liberia's cocoa sector faced a myriad of constraints that limited realization of the sector's potential. In summary, constraints included:

- Low levels of trust and cooperation amongst private sector actors (producer groups, agents, traders and exporters) limiting development of value chains towards higher value markets
- Uncertain regulatory environment resulting in reluctance to long term investment by existing exporters. This also led to lack of interest from international buyers to invest in Liberia
- Low production levels compared with other cocoa-producing countries (Liberia was producing around one third of what was produced in neighbouring Ghana and Cote d'Ivoire) challenging economies of scale
- Limited improvements in quality due to lack of existing incentives and hesitance/inability to make forward investments
- As a result, poor reputation of Liberian brand internationally and corresponding application of price penalties on commodity markets as well as scepticism among international buyers on Liberia's ability to deliver quality

Understanding these constraints, GROW envisioned a productive and lucrative cocoa sector that supplies international premium markets with reliable and consistently high-quality cocoa, where transparent and traceable supply chains mean significant income and employment gains to poor cocoa farming households. This well-functioning system is supported by a strong and cohesive governance structure that encourages domestic and international investment in the sector. Accordingly, GROW's vision for change for the cocoa sector is as follows:

- IF cocoa producers can produce, or maintain production of, consistent and high-quality cocoa, and
- IF quality cocoa is rewarded with higher price from meeting premium cocoa market standards along the value chain, and
- IF cocoa exporters invest in improving and strengthening their supply chains so that they meet the quality, production, sustainability, and conservation requirements of premium buyers, and
- IF there is traceability of cocoa produced along the entire value chain, and
- IF cocoa exporters, premium cocoa producers, and GoL invest in improving marketing and export promotion targeting premium market, and
- IF service providers support the production of high-quality cocoa fit for premium markets, and

- IF stakeholders in the cocoa sector align on a shared vision of quality and premium cocoa, and promote Liberian cocoa's unique selling points, and
- IF the Liberian cocoa sector regulatory policy promotes an attractive enabling environment and promotes investment from the international premium cocoa market, and
- IF Liberian cocoa sector stakeholders recognize and position Liberia's value proposition for the premium cocoa market opportunity,
- THEN Liberian cocoa farmers will invest in quality improvement and have increased income from cocoa farming (higher yields, quality, price premiums), and
- THEN cocoa exporters will be able to source better quality cocoa that meets premium market demand and link up with international premium buyers, and
- THEN cocoa exporters and commercial farms will be able to sell their cocoa to premium buyers for higher prices, leading to higher income along the supply chain, and
- THEN it will be assured that cocoa produced is of Liberian origin, assuring benefit to Liberian producers, and
- THEN buyers, exporters and cocoa producers will have an incentive to continue trading with each other in long-term due to shared-value, and
- THEN other market actors will take note of successful changes, and other exporters, cooperatives, and producers, as well as GoL, will become interested in similar models.

Cocoa Sector: Summary of Progress

Activities

GROW's cocoa sector activities began by focusing on two intervention areas: Higher Quality and Quantity of Cocoa Production, leading to improved incomes and Industry Coordination and Governance for sector stakeholder alignment. As GROW engaged more actors within the market system, Supply Chain Development was added to the intervention portfolio in 2018 and Information, Marketing, and Investment Promotion was added in 2020. Over the last two years the four intervention areas were:

1. Higher Quality and Quantity of Cocoa Production
2. Supply Chain Development
3. Information, Marketing & Investment Promotion

4. Industry Coordination & Governance

Intervention #1: Higher Quality and Quantity of Cocoa Production
Cocoa yields are significantly lower in Liberia than in neighbouring cocoa-producing countries. An average Liberian cocoa farmer produces 50-60 kg of cocoa per acre compared to 160 kg per acre in Ghana and over 200 kg per acre in Ivory Coast[1]. Many factors contribute to this differential, including aging cocoa tree stock, loss of knowledge during the civil wars, limited access to up-to-date agronomic research, lack of service provision on good agricultural practices (GAP), and inconsistent investments in implementing these practices on-farm. In addition to producing lower yields, Liberian cocoa farmers often have weak incentives to invest resources in improving cocoa quality due to poor access to markets, particularly those offering quality differentiated pricing.

GROW's initial intervention on quality and quantity of cocoa focused on piloting a training, purchase and aggregation model with a local cocoa trader's farmer network (AVL) in 2016-2017. A training of trainer (ToT) model was selected to maximize reach into rural farming communities for training on GAP for yield and quality increases, with lead farmers (village coordinators or VCs) trained in each supplying community who would in turn train other farmers in their locality. While this intervention was ultimately unsuccessful in stimulating sustainable trade with farming communities because of management failures within the trader's business, the ToT model was successful in both reach and effectiveness – 3,400 cocoa farmers had access to GAP resulting in cocoa yields increasing by 38%. This model was later adapted and replicated with cocoa farmer cooperatives.

To attain impact at scale, GROW shifted focus to work with cocoa cooperatives in 2018. Nearly all of Liberia's 30,000 cocoa farmers belong to cooperatives, even though most cooperatives had become dysfunctional after the prolonged civil wars. It was expected that cooperatives' improved delivery of services that provide value to member farmers, such as GAP training, would result in stronger and sustained membership engagement. GAP would increase the volume and quality of cocoa that farmers produce and sell through the cooperative. The result would be greater income for cocoa farmers, while also strengthening cooperatives' ability to attract cocoa buyers.

From 2018-2021 GROW engaged 25 cocoa cooperatives with a total network of about 25,000 cocoa farmers. A key component of the engagements was a GROW-designed resource: The Cooperative Planning Toolkit[2] – a practical and detailed business planning guide.

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[1] IDH Cocoa Roadmap: Liberia
[2] All referenced resources are listed below and available on GROW's Cocoa Resources webpage.

The toolkit provided an extensive range of templates and tools which can improve the day-to-day operations, profitability and sustainability of the cooperatives. This included business and financial management, cocoa grading guidelines, traceability systems, business , GAP training materials and planning tools, as well as trade agreement templates. GROW developed a comprehensive GAP planning programme, including a practical field manual focusing on farm maintenance and post-harvest practices, which are critical for yields and quality respectively. The manual has been adapted through the years, becoming more visual for use in areas with low literacy, and including topics on cocoa grading, organic production, and conservation practices.

Important adaptations to the approach and manuals were also made to integrate learnings around improving women's inclusion, in particular:

- Targeted recruitment and inclusion of female VCs, in response to women's expressed preference to receive training in all-female groups
- Design of VC training competitions to account for structural barriers faced by women (e.g. unpaid care responsibilities/time poverty)
- Gender responsive training design, taking into account the desire for gender-separate training groups and careful attention to logistics and timing to ensure women were not unintentionally excluded (e.g. trainings were never scheduled on market days, when women are largely unavailable)
- Constant and careful attention to ensure no harm, for example through careful communication with cooperative, male VCs, and male community leaders to ensure community support for female VCs and actively prevent the risk of intra-household tensions (e.g. risk of increased gender-based violence)
- Concise and consistent messaging in all communications that female farmers play an essential role in ensuring the quality of cocoa, which translates into increased income and greater well-being in communities

Though GROW was successful in boosting farmer yields from GAP with cooperatives, quality improvements were not rewarded with higher prices. Cooperatives did not have the financial capacity to sustainably deliver services to their farmers on their own when GROW support had ended. This led to GROW partnering with key downstream actors in the supply chain: cocoa exporters. Since cocoa exporters are well-resourced financially, they could invest in cooperatives to increase yields and quality, leading to a higher price for the quality of their exports, and use the extra profits to recoup their investment.

GROW's first partnership with a cocoa export partner was in Q3 2018. AYA, Liberia's largest cocoa exporter, was to invest in three cooperatives to improve yields and quality, receiving a stable supply of quality cocoa in return. Though this intervention was designed for shared value between the exporter and the cooperatives, its flaw was that it did not fully appreciate the necessary role of AYA's international buyer, Theobroma, who held a virtual monopoly on cocoa purchase in Liberia and would not pay higher prices for quality cocoa. So, although incentives for rewarding quality were aligned locally, they were not aligned through to the international portion of the value chain. GROW learned that it needed to expand its cocoa quality interventions to include international buyers for a sustainable solution.

In 2019 GROW began exploring Liberia's potential to supply premium cocoa markets. Premium international buyers would reward high cocoa quality with premium prices, as long as the cocoa producers also conformed to their stringent sustainability and trade requirements on top of quality improvements. To promote compliance with these requirements, GROW adapted the Cooperative Planning Toolkit in alignment with premium market needs and implemented it with cooperative partners. GROW also revamped GAP training design with cooperatives and the associated materials and manuals to promote cocoa production of sufficiently high quality.

At the same time that quality of cocoa supplied through cooperatives was increasing, GROW learned that a segment of premium market buyers required a higher and more consistent quality of cocoa, that could reach a much higher price. These specialty (or fine flavour) buyers pay up to triple the global market price for cocoa,[3] but require diligent practices to achieve very high and consistent quality (in terms of quality, flavour, and aroma) which can be reached only by using centralized processing.

In response to these findings, GROW expanded its partnerships to include commercial farms and service providers in 2020, implementing good agricultural and business practices that had proven successful with cooperatives. In 2021, GROW began piloting central fermentation and drying centres with three partners (So-B-Green [SBG], Liberia Cocoa Corporation [LCC], and EJ Flomo Cocoa [EJFC]) and their farmer networks, who would target the fine flavour market. Central drying facilities were built with two additional partners (GRANEX and Monleh) who needed to improve quality to reach higher-volume premium markets, though not fine flavour. GROW supported the design, construction, training, and operationalizing these facilities, and brought in an international fine flavour expert, Alexandre Bellion of Cocoa of Excellence, to ensure that quality and flavour standards are met.

All companies had increases in cocoa quality and consistency as a result. GRANEX and Monleh, who operationalized new solar drying

[3] Introduction to Premium Cocoa Markets in Europe and USA

facilities, now have contacts to supply premium cocoa buyers in Europe in 2022. SBG, a service provider in Bong County, is now supplying cocoa to fine flavour chocolate makers from their central processing facility, and two commercial farm partners, EJFC and LCC, are supplying SBG from their central facilities.

In 2021, based on increasing global demand for environmentally sustainable cocoa in premium supply chains, GROW adapted the GAP manual to explicitly include organic practices and the basics of agroforestry and anti-deforestation practices. The manual, now harmonized for use with government and other donor projects, will set up Liberia's cocoa farmers to produce cocoa using environmentally friendly practices. Although previous iterations of the manual promoted practices without the use of agrochemicals and fertilizers, organic practices are now made explicit. Consequently, the manual has been renamed the "Premium Organic Field Manual" for cocoa farmers.

Results/What Did GROW Achieve:

- GAP access for 25,000 cocoa farmers leading to increased yields and quality, including a 36% yield increase in households where both men and women were trained
- All 25 cooperatives delivered the GAP training through ToT method with 275 male and 273 female village coordinators
- 22 of 25 cooperatives applied the adapted cooperative planning toolkit
    - 21 of 25 cooperatives completed an organogram and organizational structuring leading to clarity within the cooperative management on responsibilities and deliverables, and more effective task completion.
    - 17 of 25 cooperatives trained on paper-based traceability systems
- 19 of 25 cooperatives implemented a purchase and aggregation system with village coordinators as cooperative representatives in each community, leading to more effective aggregation and communication even in rural areas with poor infrastructure
- One service provider (SBG) and two commercial farms (LCC and EJFC) established three central fermentation centres constructed for consistent and very high-quality cocoa using modern step-box fermentation systems and improved convection solar dryers
- Five central drying facilities constructed with two partners (Monleh and GRANEX) for higher

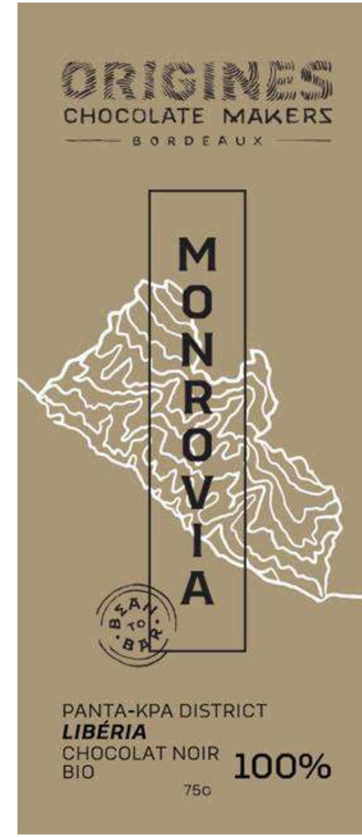


Photo: Label of first single-origin, fine flavour, and organic Liberian chocolate bar sold on international markets, produced with So-B-Green cocoa quality cocoa using improved convection solar dryers

Sustainability:

- Cooperatives, although not financially resourced to be independent cocoa traders, have shown to be knowledge hubs for GAP information for their member farmers. Female and male VCs are teachers and role models in their communities, serving as teachers of GAP information, and as representatives of local cooperatives. The relationship between cooperatives and member farmers has been strengthened.
- Farmers not associated with partner cooperatives have been given access to GAP materials by partner cooperatives (Sebehill, Vornambeh, Tarpaleseh), indicating that farmers outside their normal networks are increasingly seeing the value offered by cooperatives.
- GROW's training approach is being carried forward through several channels. The GAP manual has been accepted by government and other donor-funded projects working in the cocoa sector through the GAP manual harmonization activity (see Intervention #4 below). Further, GROW partners who continue to target premium markets are utilizing the training materials and guides designed by GROW to ensure the quality and consistency of their product. This is especially pertinent for those partners practicing central processing, who have made investments in associated infrastructure such as fermentation boxes and solar dryers.
- Improvements in cocoa quality are not sustainable unless there is a market-based incentive for the increased investment in equipment and effort required. Alignment with premium cocoa buyers who will pay high prices if their requirements are met, promotes the production of high-quality cocoa. Demonstrations of such trade and evidence of high-quality cocoa being made into high-value products, as is the case with the single origin line of premium chocolate made with SBG cocoa, will encourage more cocoa producers to engage with premium cocoa buyers.
- Non-partner cooperatives and commercial farms have begun construction on GROW-designed improved solar dryers.

Intervention #2: Supply Chain Development

Since GROW has been active in the cocoa sector, trade has been hindered by low trust and fragmented relationships along the supply chain. Asymmetries in power, information, and business and financial capabilities have led to a legacy of exploitative trade practices. GROW has established multiple interventions focused on strengthening trade, building trust, and promoting shared value for long-term relationships. In building these relationships, sector actors along the supply chain can work together to service high-value markets to further increase income.

GROW initially created a Supply Chain Development intervention with the objective of catalysing more formalized engagements between exporters and cooperatives to lead to more inclusive and transparent cocoa trade. GROW envisioned that more robust supply chain relationships could result in stabler and more mutually beneficial arrangements between cocoa exporters and farmer cooperatives, in turn creating more reliable market access for cocoa farmers. The business case for exporters to work with GROW to invest in supply chain development activities was that they could better meet their self-articulated goal of attaining higher volumes of better-quality cocoa more consistently, which would allow them to move towards selling to higher value speciality trade and premium cocoa markets. Meanwhile, cooperatives would benefit from increased access to the cash they need to purchase cocoa from their farmers on a more timely basis, to aggregate cocoa, and to invest in advising member farmers on better cocoa production practices. Ultimately, farmers would benefit from having a more consistent market that could reward their investments in improving cocoa quality with cocoa price premiums.

In 2018, GROW piloted the supply chain development intervention with AYA (a large cocoa exporter) and three cooperatives, however, as described above, incentives towards the defined goals were not adequately aligned throughout the entire value chain. The poor performance of this initial partnership nevertheless sharpened GROW's understanding of how incentives for exporters operate in practice. Building on this understanding, GROW adapted its strategy to focus on positioning Liberian cocoa sector actors to align around the premium cocoa opportunity, in which international buyers pay higher prices for high-quality cocoa that meets their production requirements. By engaging a premium buyer, an exporter would be able to sell their high-quality cocoa for a high price, justifying the provision of incentives for quality cocoa production from farmers

In 2019 GROW adapted its supply chain development activities cocoa sector partners to ensure that they would be able to meet premium market requirements. These adaptations were designed to also be compliant to certification requirements, and included:

- Guidance, information, and sensitization to companies on the premium market
- Updated Cooperative Planning Toolkits to premium market standards, including premium GAP tools and training materials
- Quality standards and improved post-harvest handling practices
- Traceability systems ensuring cocoa can be traced from farmer level to export
- Farmer registration protocols and creation of databases/lists of registered farmers
- Staffing and organizational structuring, roles and responsibilities, and organograms
- Communication, marketing, and branding

In 2020, to further strengthen local trade relationships, GROW piloted a matchmaking session between exporters, traders, farms, and cooperatives where they could present their capabilities and negotiate trade arrangements prior to the cocoa season. Cooperative and exporter staff are usually geographically separated, and this was a unique opportunity to get organizational leaders in the same geography. Both cooperatives and exporters expressed the value in these events, and it was repeated again in 2021. This fostered trust among partner cooperatives and exporters. At the same time, cooperatives' business coaching was adapted to include buyer engagement, pitching, and creating contracts with fair terms of trade.

A key result of Premium Cocoa Market research undertaken in 2020 was the recommendation to supply the growing and high-value certified organic cocoa market. In 2020, organic cocoa had a minimum price premium of USD 300 per metric tonne above the conventional market price, making investments towards organic commercially attractive. Furthermore, audits into certified companies ensure that a these higher prices do indeed reach farmers. GROW adapted tools and resources to fit with organic requirements, and structured partnerships towards attaining organic certification. These partnerships involved GROW supporting a collaboration between sector actors and cocoa producing cooperatives, further building strong relationships within the sector.

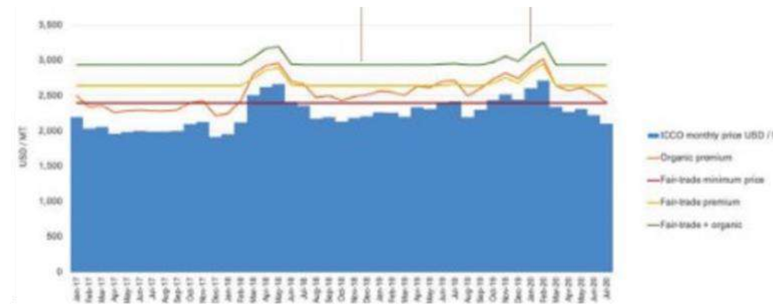


Figure: Price premiums in 2019 and 2020 for certified cocoa compared to ICCO conventional cocoa prices. Source: Premium Cocoa Market Research.

Figure: Price premiums in 2019 and 2020 for certified cocoa compared to ICCO conventional cocoa prices. Source: Premium Cocoa Market Research.

A key requirement for organic certification is the establishment of an Internal Control System (ICS). This is a business innovation that manages the organic certification activities within a company, ensuring that they demonstrably comply with organic standards. The technical expertise for setting up the systems of organic certification was not yet available in Liberia, which necessitates the engagement of international consultation for the initial setup. GROW's partnership activities involved co-investment for a consulting firm from Ghana to travel to Liberia to guide two partner companies in ICS creation and implementation in 2021. A second consulting company was hired in Q4 2021 to perform a mock-audit of all ICS and organic protocols.

Chocolate consumers are increasingly demanding that their products are derived from sustainable sources. As such, many premium buyers are requiring that companies can demonstrate the sustainability of their products. GROW worked with three of their partners in documenting their sustainability efforts – much of the work that GROW had done with these partners on environmental, trade, gender, labour, and certification practices had qualified as sustainability initiatives, but had been undocumented. Sustainability plans were written and posted publicly on their websites.

Consumers are also demanding traceable cocoa from the farmer level through to export, and cocoa buyers are willing to pay price premiums for fully traceable cocoa. GROW has been implementing traceability systems since 2018, and throughout the years they have been adapted and improved. GROW designed a paper-based receipt system, which has been simplified and modified to accommodate field agents, VCs, and farmers with low levels of literacy. In 2020, GROW began introducing digital databases at partner head offices to keep track of all of the paper receipts. Traceability is a critical requirement for premium markets and certification, and in 2021 the traceability systems were adapted to be compliant to EU and USA organic as well as fair trade certifications. GROW has developed a comprehensive traceability guide, training, and templates for the implementation of this system and has shared these broadly.

Sustainability:

- Matchmaking sessions were deemed valuable by cocoa sector actors and responsibility for these was handed over to the Cooperative Development Agency for continuation in future years.
- It can now be seen that these organizations are communicating and trading directly with exporters in the absence of GROW (e.g. Kwakerseh, Gbeleh Geh, Boe Kpa, and Sebehill cooperatives).
- Market actors are working on supplying premium cocoa markets and obtaining organic certification.
    - A previous GROW partner, Atlantic Cocoa Processing & Export Company (ACPEC) obtained organic certification in 2021 and has been supplying clients with organic cocoa during the 2021-2022 cocoa season.
    - SBG is certified organic with ACPEC and is supplying fine flavour markets in Europe, their organic cocoa is distributed to chocolate makers through the premium broker Cocoateam. EJFC and LCC, are supplying SBG premium fine flavour cocoa for chocolate production.
    - LCC is obtaining organic certification in 2022 with Kiwa BCS as the certification body.
    - GRANEX is obtaining organic certification in 2022 with Control Union as the certification body and is engaged with the

premium cocoa buyer Daarnhouwer for supply and marketing of organic Liberian cocoa to European chocolate producers.
  - Monleh Enterprises is supplying traceable and fair trade markets in 2022 through a contract with the premium buyer Altromercato. They are building towards establishing an ICS system for organic certification in 2023.
  - Three non-partners, two commercial farms (Howard Farm near Saclepea, Nimba County and Chester Siaffa Farm near Massabolahun, Lofa County) and one non-partner exporter (Liberation Cocoa), are engaging ICS consultants to set them up for organic certification.
- ICS consulting services are now available in Liberia from three different service providers who are familiar with the Liberian context (Jula Consultants, AfriSAFE Standard, and SBG)
- Manuals, trainings, and templates have been shared, promoted, and distributed with various public, private, and civil service sector stakeholders – see the full list in this section of this report.

Intervention #3: Information, Marketing & Investment Promotion

This intervention became a formal workstream for GROW in 2020. GROW had been working on promoting Liberia's cocoa sector to international investors for several years prior. Initial efforts were aimed at identifying suitable buyers for AVL, a cocoa trading company. Though some conventional buyers were willing to purchase cocoa from Liberian firms, none at that time were willing to pay a quality-differentiated price or invest in having a local presence in Liberia.

In 2019, based on our learnings from engagement with local exporters, GROW had found that incentives for cocoa quality needed to be aligned not only locally but also with international cocoa buyers. Premium buyers would pay prices that were not bound by global cocoa commodity pricing, and could thus reward efforts for high quality, uniqueness, story, and sustainability. GROW began outreach to international premium market actors to do a rapid assessment of their current requirements and discern their potential interest in sourcing from Liberia. This allowed GROW and participating Liberian cocoa sector actors to better understand where to focus efforts on meeting premium market segments.

These initial efforts led LUSH Cosmetics, an international premium cosmetics brand looking for new cocoa supply origins, to reach out to GROW to organize a scoping mission to Liberia to engage with industry stakeholders and assess suitability for investment. GROW also facilitated a trade mission from CBI, an investment promotion branch of the Dutch government, to help prepare cocoa producers and exporters to export to premium European cocoa markets.

GROW built on this initial traction with international stakeholders in Q1 2020 as GROW staff attended the Chocoa conference in the Netherlands, the world's largest premium cocoa trade fair, and Salon du Chocolat in Brussels, with a delegation of Liberian and regional cocoa suppliers. GROW would attend the Chocoa conference again in 2021. Using a package of industry marketing materials that had been developed for this purpose, Liberia was promoted as a unique source of premium cocoa.

After attending Chocoa in 2020 with the Liberian suppliers and engaging many international stakeholders two important issues surfaced: 1) Liberian companies were not sufficiently aware of premium markets, did not know what supplying these markets required, and even if aware of these markets they had no sense of how to engage them for trade, and 2) International companies had a perception of Liberian cocoa as a source of small amounts of poor-quality conventional cocoa. This perception persisted despite the fact that Liberia's cocoa quality was increasing, and the characteristics of the cocoa were similar to what premium cocoa consumers were demanding.

To educate and prepare companies for the premium cocoa market, GROW:

- Embarked on a campaign to sensitize local stakeholders on the premium cocoa market using communications tools, written articles, via the cocoa platform, and direct engagement
- Coached companies on aligning their cocoa offering with premium market actors, making sure that their cocoa would be of a compliant standard
- Developed a marketing and branding toolkit and coached companies on developing their premium cocoa value proposition, determining their positioning, targeting the appropriate premium market segment, and developing a marketing strategy
- Coached companies on pitching their offer to companies, and on how to engage with modern international companies
- Prepared companies for initial engagements and progression of trade deals
- Supported companies in preparing and sending representative cocoa samples to international premium buyers
- Supported partners in the creation and dissemination of marketing collaterals such as websites, flyers and social media posts
- Coached on negotiating terms of trade and contracting

To build awareness to international buyers of Liberia as a source of premium cocoa, GROW:

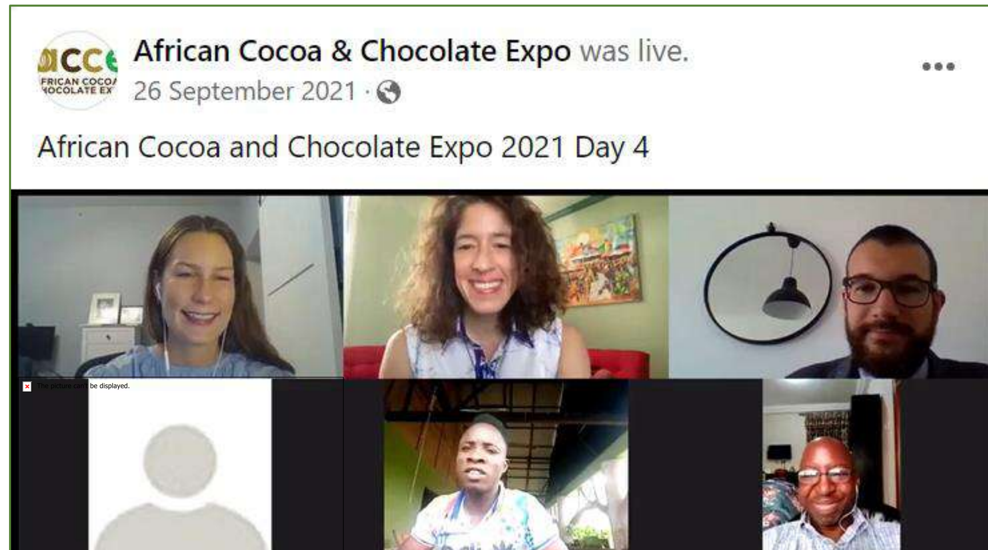
- Mapped the international premium buyer landscape, and segmented cocoa buyers based on their needs, behaviours, and firmographics
- Engaged in outreach and promotion using a promotional pitch deck and market engagement guide outlining the Liberian cocoa opportunity
- Shared Liberia cocoa industry stakeholder profiles, with details such as farmer network, cocoa volume traded, and capabilities
- Built a comprehensive pipeline of engaged international buyers and tracked leads and opportunities
- Supported the assessment of cocoa samples locally, sending cocoa samples internationally, and arranging chemical and organoleptic analyses
- Supported interested buyers' initial engagement with local companies
- Supported scoping missions to Liberia and virtual scoping missions for companies that could not travel due to COVID-19
    - Premium cocoa buyers LUSH cosmetics and Altromercato travelled to Liberia directly. GROW facilitated logistics and arranged meetings with exporters, traders, commercial farms, cooperatives, government agencies, donors, and service providers.
    - Many companies instituted international travel bans due to the pandemic. GROW offered these companies virtual scoping missions via the provision of Liberia cocoa sector information and cocoa sector stakeholder profiles, the facilitation of video conferencing with sector actors, and the physical cocoa analysis of cocoa samples according to the Federation of Cocoa Commerce standards.
- Created, promoted, and distributed a Liberia Cocoa Investment Guide outlining the Liberian cocoa opportunity and contacts of cocoa suppliers and industry stakeholders

A critical component of GROW's information, marketing, and investment promotion activity was commissioning a piece of comprehensive research on the international premium cocoa market. The purpose of the research was to inform Liberian cocoa sector stakeholders of the current premium cocoa market opportunities in the EU and USA, and to guide Liberian firms in accessing these high value markets. In addition to defining market segment sizes, trends, and requirements, the research also outlined Liberia's competitive differentiators and export process to reach these markets. The findings of the research guided GROW's strategic direction for partnership activity in 2021. Key findings of the research were Liberia's strategic fit in accessing certified organic markets and a recommendation to support companies in attaining organic certification, as well as requirements to supply lucrative specialty markets by producing cocoa from central processing facilities. Both would become foci of GROW's 2021 partnership activities.

Promotion of the Liberian cocoa sector and investment promotion activities were continuously endorsed via strategically targeted communications activities throughout the whole lifespan of the GROW program (see communications section of this report). Articles, opinion pieces, social media posts, and newsletters were published and distributed widely both locally and internationally. For instance, Hon. Jeanine M. Cooper, the Minister of Agriculture in Liberia, routinely cites GROW publications outlining the premium cocoa opportunity as material she uses to guide her thinking for cocoa sector strategy and policy, and Uncommon Cacao (a premium cocoa broker and Benefit Corporation) has reached out to GROW partners Monleh and EJ Flomo Cocoa after reading premium cocoa and gender communications releases. GROW also attended events, such as the African Cocoa and Chocolate Expo and Choco conference, promoting local sector actors and the Liberian premium cocoa opportunity.

Sustainability:

- The term 'premium cocoa' is now commonly used in Liberia and has become a norm in industry nomenclature
- Premium Cocoa Market research has been published and widely distributed
- International industry thought leaders are describing Liberia as a source for premium cocoa buyers as a new unique origin of premium cocoa (Jack Steijn, Kristy Leissle, Gustavo Ferro)
- The Liberia Premium Cocoa Investment Guide has been published and distributed widely for continued promotion of the cocoa sector and contacts of Liberian sector stakeholders for future engagement.



- Non-partner companies (ACPEC, Liberation, Arjay Farms) are building websites and conducting outreach to premium buyers
- Cocoa sample guidelines have enabled local companies to prepare and send samples to premium cocoa buyers according to international specifications

Photo: GROW hosts the Liberia panel of the ACCE. Clockwise from bottom left: Rachel Mulbah and Caroline Mensah (Monleh), Amelia Duggan (GROW), Kristy Leissle (ACCE), Charles Tellier (So-B-Green), Lu Tolbert (LCC), and Joshua Zemah (Redimere).

- Companies are engaging premium market actors, as described under Intervention #2.

Case Study: Transformation of Liberia's Leading Cocoa Trader

"We started with small purchases. Two tons, three tons, four tons," recounts Rachel Mulbah, CEO of Monleh Enterprises, as she sits in her yard in Nimba County with a group of farmers. "Then we started climbing up. In 2018, we bought a thousand metric tons."

Twenty-one years since its establishment, Monleh is one of Liberia's largest cocoa traders, buying from farmers and selling to Aya, who exports to the conventional cocoa market. Today, Monleh is positioning itself to break into new markets that favour quality over quantity. This transformation has required considerable changes to the business.

Nurturing farmer-trader relationships to guarantee a reliable, high-quality supply

In the early days of trading, Monleh had limited contact with its farmers. Rachel and her small team would travel from village to village during the harvest season to buy cocoa from farmers. She witnessed the hardship resulting from farmers' meagre revenues, with no prospect of a better price for higher quality cocoa.

This market environment undermined Monleh's ethos to improve lives in farming communities. So when Rachel learned of opportunities to supply alternative, premium markets offering higher prices for better quality cocoa, she was eager to get involved. But in order to attract premium buyers, Monleh needed to demonstrate its ability to source sufficient quantities of consistently high-quality cocoa. This meant training farmers in good agricultural practices (GAP), from farm management to fermentation and drying. "Liberian cocoa is good, but we need to ferment and dry it well to get it to grade one," Rachel explains.

With support from GROW, Monleh's field officers provided GAP training to VCs (22 female and 17 male) in each community, who in turn trained their farmers to improve their yields and cocoa quality. This farm-level investment, which also included building solar driers in villages, helped to earn farmers' loyalty in the face of competing buyers.


Photo: Caroline Mensah, Gender Officer and key member of Monleh's management team

Bringing women to the forefront

Rachel is passionate about increasing women's participation in the cocoa trade. Having successfully built up the business after taking over Monleh's day-to-day running from male relatives, she is a strong advocate of gender equality and believes in the ability of women to match and exceed the performance of men. To this end, she recruited Caroline Mensah, a recent graduate, as Monleh's Gender Officer tasked with encouraging more women to take part in the GAP training and get involved in cocoa farming.

"My work is important because it helps to mobilize female farmers," says Caroline. "They are now helping with underbrushing the farms and drying the cocoa to get the best quality. There were so many things they didn't know, but since the training they are producing grade one cocoa."

Monleh also offers interest-free loans to female farmers as a way of incentivizing them to improve their quality, and to keep selling their produce to the company. Farmer Kou Gahn, 51, whose cocoa revenues pay for the upkeep of 16 children, is among those to have benefited. "Ma Rachel is a good woman," Kou says, sitting on a bench in the shade of a tree next to her mud house as the children play nearby. "She gives us credit to spend on cleaning our farm, and when we are jammed [for money] she helps. When we sell the cocoa to Monleh she takes it back."

"They trained us how to maintain the farm, how to take care of it," Kou continues. "Grade one is the cocoa we have to produce because we get more money. I can use that money to send the children to school, buy food for them, everything."

Professionalising and marketing the business

Monleh also needed to upgrade its internal business systems to meet premium buyer requirements, including improved record-keeping to ensure cocoa beans can be traced back to the farm where they were grown, and drawing up clear areas of responsibility for each of her team members. “We used to buy without keeping any records,” Rachel recalls. “GROW trained us on that and now we keep our records on the computer. It’s important to know where the cocoa came from, know the farmer’s name.”

Previously operating out of Rachel’s home, the company’s transformation is evidenced by the office, warehouse and small fleet of pick-up trucks parked outside. With coaching from GROW, Rachel is now working on identifying and marketing her business to buyers whose values are aligned with Monleh’s mission to improve services to farmers and give them a fair price for their cocoa.

She’s optimistic that the hard work of transforming the business will pay off once she clinches her first premium market deal. “We’ve not finished yet,” she says. “It’s just a matter of being connected to the right buyer.”

Photo: Kou Gahn, a cocoa farmer in Monleh's network

Photos: Transport trucks owned by Monleh (left, middle); Premium buyer Altromercato on scoping visit to Monleh's newly constructed office in Saclepea, Nimba County (right).

Intervention #4: Industry Coordination & Governance

Regulatory environments have a strong effect – enabling or discouraging – on attracting investment from better international cocoa markets. Uncertainty in Liberia’s regulatory environment was a persistent challenge faced during GROW’s lifetime, with periodical efforts to revert to a single exporter model from pockets of government bubbling up on a near-annual basis. This cleavage is characterized by two camps. The first envisions a return to the defunct LPMC model, which mirrors that of Ghana’s COCOBOD and is supported by some public sector stakeholders . The second, which is what the current regulatory framework is based upon, supports continuing and strengthening the free market model, whereby export businesses are free to source, warehouse, and export cocoa to their respective international markets. The latter approach is nearly universally supported by cocoa sector stakeholders, including farmer groups, exporters, NGOs, donors, and the Ministry of Agriculture. Regulatory reform processes towards the single exporter model have emerged in 2019 and 2021 and could foreseeably emerge again. GROW's activities in this area are correspondingly focused on facilitating agreement on a shared vision owned by key government decision makers (including the President's Office, Minister of Agriculture, and Minister of Finance) and working with the Liberia Agriculture Commodity Regulatory Authority (LACRA) to revise and improve Liberia's regulations relative to the re-defined vision. Towards this effort, GROW engaged deeply with Liberia's National Cocoa Public-Private Partnership Platform (NC3P), sitting on the steering committee and chairing two technical committees.

As previously reported, a technical committee set up to look into the issues and advise government on a way forward with respect to the vision for Liberia's cocoa sector. The technical committee had planned regional consultations to neighbouring countries, which, at the time of reporting, are yet to take place. GROW adapted an approach to undertake critical activities to nevertheless provide guidance on the governance of the sector and support trading activities for the 2021-22 season.

Results

- Publication of the regulations white paper, Recommendations for Liberia's Cocoa Sector Governance, in September 2021. The white paper was commissioned from Equipoise, internationally recognized for their expertise and leadership in international cocoa regulation and markets. The white paper provides a detailed analysis of regulations in other cocoa-producing countries selected for their relevance to the Liberian context and accordingly contextualized. Drawing from extensive case examples touching on investment, export promotion, industry collaboration, country management revenue, quality, and diversification, the white paper provides seven key recommendations for Liberian policymakers. The white paper was dispersed to a wide range of stakeholders in the cocoa sector, including the Ministry of Agriculture, LACRA, members of the NC3P and the government technical committee. Despite the receipt of acknowledgements, no conversations or discussions were invited. However, the agitations for the return of the LPMC model have subsided down somewhat. So what?
- Completion of the GAP manual harmonization, validation, and training (master trainer and ToT) provided under the GROW-CDA MOU. A regional consultant (AfriSAFE Limited) was engaged to work closely with GROW staff to harmonize the various cocoa GAP manuals in use in Liberia in a way that integrates global best practices as well as the realities of the Liberian context. Because AfriSAFE also has expertise in organic certification as ICS consultants and auditors, GROW was able to capitalize on the opportunity to review and improve internal understanding and original resources on implementation of ICS and the path the certification.
- Liberia remains a free market for the export of cocoa, and has not reverted to a single exporter model.

- The Roadmap to a Sustainable Cocoa Sector was launched on 20 December 2021 as a result of the NC3P process, establishing a shared sector vision.

Sustainability

While the consensus on premium alignment is broadening among cocoa sector stakeholders, the sector still lacks unified support for regulatory reform in support of a shared vision. GROW has played a key convener role in this respect through participation on sector platforms and direct engagement with private sector actors, influential public figures, and the donor community. Continued engagement will be required to ensure the sector continues to move in a direction that promotes, rather than diminishes, growth and investment.

Cocoa Results

Levels		GROW Logframe Indicators	Disaggregation	Actuals Mar-18	Actuals Mar-19	Actuals Mar-20	Actuals Mar-21	Actual Mar-22	Increase Mar-22	Target Mar-22	% of Program
Impact	4.3	Total Net Attributable Income Change (NAIC) (in USD)	Total	726,000	2,060,000	3,318,000	4,764,000	5,812,000	1,048,000	5,935,000	42%
			Female	359,000	959,000	1,390,000	1,925,000	2,326,000	401,000	2,487,000	36%
			Youth	352,000	753,000	1,375,000	2,000,000	2,267,000	267,000	2,460,000	39%
	4.2	Total no. households and small firms with positive Net Attributable Income Change	Total	3,420	11,200	18,100	21,400	23,400	2,000	22,500	60%
			Female	1,720	4,700	8,000	9,100	9,800	700	9,500	52%
			Youth	610	3,600	6,300	7,900	8,800	900	8,500	51%
	4.1	Total no. of full-time equivalent (FTE) jobs created	Total	80	370	1,840	3,020	3,500	480	3,000	62%
			Female	40	60	230	370	510	140	370	43%
			Youth	10	170	1,600	2,620	3,040	420	2,910	62%
Outcome	3.3	Value of Additional Exports					2,166,000	3,534,000	1,368,000	3,963,000	100%
	3.2	Value of Additional Market Transaction					1,260,000	2,142,000	882,000	2,134,000	43%
	3.1	Total no. of households and small firms adapting to new opportunities	Total	4,810	15,100	21,400	25,100	27,000	1,900	26,000	58%
			Female	2,150	6,500	9,600	10,800	11,600	800	11,300	50%
			Youth	760	4,700	7,200	9,000	9,800	800	9,700	49%
Output	2.3	Total no. of households and small firms with access to new opportunities	Total	6,230	15,300	22,200	27,100	29,200	2,100	28,900	55%
			Female	2,900	6,600	9,900	11,800	12,600	800	12,400	47%
			Youth	1,030	4,800	7,400	9,500	10,400	900	9,000	46%
	2.2	Business Innovations_Adapt					40	50	10	53	49%
	2.1	Market Actors_Adapt					23	41	18	25	31%
Activity	1.3	Private Sector Investment Leveraged		106,000	321,000	1,411,000	1,887,000	2,042,000	155,000	2,646,000	54%
	1.2	Business Innovations_Introduced		8	16	36	49	54	5	71	42%
	1.1	Market Actors_Exposed		5	23	34	50	62	12	84	27%

Cocoa Logframe Results

1.0 Activity Level

1.1. **Total number of market actors exposed to innovations:** This has increased from 50 in 2020 to 62 in 2021. This mostly includes international premium cocoa buyers who were engaged as part of investment promotion work in the cocoa sector. Daarnhouwer, Barry Callebaut, Hauswirth, ICAM and Olam are some of the key international buyers. Two new cooperatives (Nyor and Vornambeh) were also engaged by GROW partners (GRANEX and LCC) as part of organic certification.

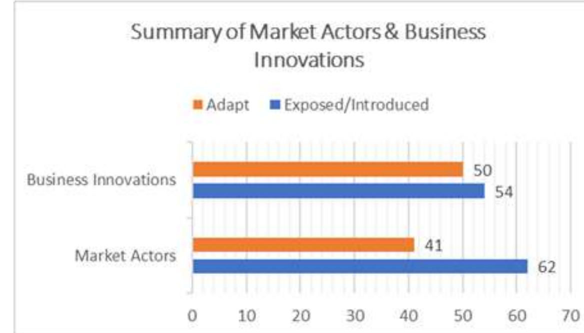
1.2. **Total number of business innovations introduced:** GROW has facilitated the introduction of an additional 5 business innovations in 2021 taking the total number of business innovations to 54 for the cocoa sector. New business innovations in 2021 includes investments targeting premium markets – which includes central processing, setting up of Internal Control System (ICS) for organic certification, going for mock audits, and investment in branding and marketing activities.

1.3. **Private Sector Investment Leveraged**: Private sector investment leverage has increased from USD 1.88M to USD 2.04M (increase of USD 155K). This includes investment by GROW's export partners in organic certification, central processing and branding and marketing activities.

2.0 Output Level

2.1 Total number of market actors that adopt to innovations (new indicator introduced in 2020): In the cocoa sector GROW has partnered with 62 private sector partners which includes cocoa producer groups, traders, exporters, service providers and international premium cocoa buyers. By the end of 2020, 41 of these market actors have already adopted to GROW-facilitated innovations. Partner adoption rate has increased from 62% in 2020 to 66% in 2021 as more of them have started to put in systems in place targeting premium markets.

2.2 Total number of innovations adopted by market actors (new indicator introduced in 2020): GROW, through its private sector partners, has facilitated a total of 54 innovations in the cocoa sector, 50 of which have already been adopted by its partners. Innovation adoption rate has increased from 82% in 2020 to 93% in 2021. New innovations adopted in 2021 include implementation of systems to align with premium market requirements.



2.4 Total number of households with access to opportunities: GROW, through its partners GRANEX, LCC, So-B-Green and Monleh, supported six new producer groups in 2020 and reached an additional 2,100 cocoa farming households. This has increased access to information, training on GAP in cocoa farming and provided linkage to reliable end markets to about 26,000 cocoa farming households and provided employment opportunities to about 3,500 farm laborers.

3.0 Outcome Level

3.1 Total number of households adopting to opportunities: A total of 23,500 cocoa farming households and 3,500 farm labourers had adopted to opportunities such as information or training on GAP in cocoa farming or being linked to a reliable end market.

3.2 Value of additional market transaction (new indicator introduced in 2020)**:** GROW supported cocoa farmers have produced an additional 570 metric tonnes of cocoa in 2021 cocoa season. These were bought by traders and exporters at an average price of USD 1.54 per kg. This has resulted in total additional market transaction of USD 882K in 2021 and total additional market transaction of USD 2.1M for the last two years.

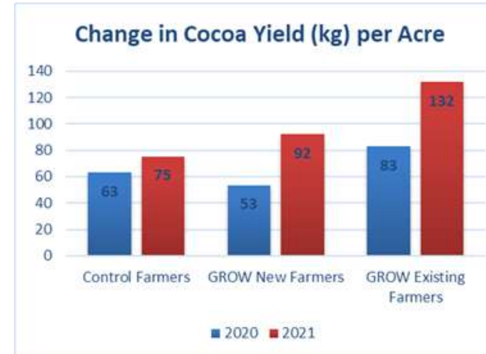
3.3 Value of additional exports (new indicator introduced in 2020): GROW, through its partnership with exporters, traders and producer groups has contributed to increased cocoa production of about 570 MT of cocoa in 2021. This equates to a total value of exports worth of USD 1.3M (at average price of USD 2,400 per MT) in 2021 and USD 3.5M for the last two years.

4.0 Impact Level

4.1 Total FTE Jobs created: An additional 480 FTE jobs were created in the cocoa sector during the 2021 season, taking the total FTE jobs for the sector to 3,500. It was found that 81% (5,220) of cocoa farming households hired additional farm labourers. On average a farming household hired an additional 17 man-days of farm labour, leading to a total of 88,730 man-days. This equates to 370 additional FTE jobs created at farm labour level. The remaining 110 FTE jobs were created at partner level (exporters, traders, service providers and producer groups).

4.2 Total number of households with positive net attributable income change: An additional 2,000 farming households (inclusive of 480 farm laborers) have benefited from positive NAIC in 2021. By the end of 2021, a total of 20,000 cocoa farming households have benefitted from additional yield, and higher price paid for better quality cocoa. A further 3,500 farm labourers have benefitted from working additional days in the cocoa farm due to adoption of GAP.

4.3 Total Net Attributable Income Change (NAIC): GROW's work in the cocoa sector has contributed towards total NAIC of USD 5.8M. Increased net profit from cocoa farming activities has resulted in 84% of increased NAIC for the cocoa sector with the remaining 16% as a result of increased income through additional FTE jobs. GROW-supported new cocoa farmers yield had increased from 53kg to 92kg per acre, existing cocoa farmers yield increased from 83kg to 132kg whilst control (not supported by GROW) cocoa farmers yield increased from 63kg to 75kg per acre. Attributed increased yield for new farmers was found to be 27kg per acre total of 91 kg per farmer (average of 3.43 acres under cocoa farming) whilst it was 37kg per acre and 91 kg per farmer (average of 2.46 acres under cocoa farming) for existing farmers. Average NAIC for new farmers was found to be USD 103.10 (with average selling price of USD 1.48 per kg and USD 0.36 additional cost per kg) and USD 114 for existing farmers (with average selling price of USD 1.56 per kg and USD 0.31 additional cost per kg). Total additional NAIC for all benefiting farmers in 2020 was found to be USD 1.4M.



Cocoa Sector: Learning and Recommendations

What worked?

Tailoring interventions according to partner capacity and willingness to take up innovations. GROW deployed this approach to better understand the feasibility, potential impact, and return on investment for working with different types of partners. In this way, the Programme is able to make informed decisions on which partners to target, with what types of interventions, and at what level of investment to most efficiently achieve success with individual partners and overall logframe targets at all levels. It also enabled the programme to work with a broad spectrum of actors at all levels of the value chain. Table 2 illustrates how a designation informs the intervention approach, while the sections below expand on the operationalization of this tool in detail.

Category (skill/will)	Recommended approach	Example partner

Low/high	• Build skill using toolkit approach • Support linkages to actors with skills and resources	Cooperatives
High/high	• Identify challenges and target for support • Deploy as role model and promote success to encourage replication	So-B-Green
High/low	• Design partnerships to reduce the incremental risk associated with change • Focus on low-hanging fruit (e.g. diversifying supply base and international contacts)	LCC GRANEX

Table 2 Illustrative Operationalization of the Skill/Will Matrix

Aligning incentives from farmer to international buyer for pro-poor impact and promoting buy-in. Accessing more lucrative markets is the critical lynchpin in aligning incentives in a way that positively and sustainably impacts cocoa farmers. A stronger focus on helping Liberian businesses to engage with international premium markets is therefore key to achieving sustainability in pro-poor impact A lack of knowledge in Liberia of international premium markets (and their segments), however, makes promotion and buy-in difficult. GROW made significant efforts in research, knowledge production, and awareness raising among public and private sectors, civil society, and donor-funded programs alike, while at the same time leveraging learnings through targeted, research- and market-driven communications to attract and engage key audiences and build support for sector alignment towards premium. It is also important to recognize the disparate expectations around communication held by Liberian and international businesses. Whereas low trust and minimal communication are the norm in Liberia's cocoa sector, international, and especially premium, buyers expect a high degree of transparency and frequency in communications. Programmes need to be aware

Case Example

Altromercato, an Italian premium cocoa buying company, first engaged with Monleh (in partnership with an exporter, Liberation Cocoa) in the interest of sourcing certified organic cocoa. Through introductory conversations it was established that while Monleh was undertaking certification, they would not be able to provide certified cocoa in the short term. Altromercato nevertheless expressed willingness to buy from Monleh/Liberation at a premium price at $250.00USD per metric tonne, above world market price, contingent on quality, sustainable trade practices and traceability. There was an explicit understanding that Monleh would continue working towards compliance with Fairtrade and Organic standards. Because Monleh had been working for several years on improving farmer records, registration, quality, traceability, and improved trade practices they were able to guarantee these conditions and sign a contract with Altromercato for cocoa supply which will be fulfilled in 2022.

of this underlying context/constraint and act intentionally to bridge the gap.

Leveraging traceability systems to unlock price premiums. Consumers are increasingly demanding traceable supply chains; they want to know the origin and first producer of their products and evidence of fair-trade practices, which is validated by traceability systems. Correspondingly, more buyers are interested in working with – and rewarding – companies with strong traceability systems already in place. Through working with local partners to implement traceability and engaging with international buyers to understand their needs, GROW has developed a traceability system that is both fit for Liberian users and compliant with buyer demands. This approach should be expanded and replicated.

Photo: Representatives from Altromercato visually assess cocoa quality at Monleh's warehouse

Leveraging traceability systems to prepare business for certification(s). Traceability is also a stepping-stone towards certification. Implementing traceability systems familiarizes businesses with better business practices, including consistent paperwork, farmer registration, and office setup and maintenance. Adopting certification requirements is complex and difficult, and implementing traceability can be a less onerous bridge for lower capacity businesses in a long-term path towards certification.

Working with downstream businesses (traders, exporters) and international buyers to improve quality. Premium markets require a baseline level of quality, necessitating a re-thinking on how to sustainably incentivize investments in quality improvement. Interventions with cooperative partners resulted in strong uptake of yield-boosting practices (farm maintenance) but reached a ceiling of improvement, with adoption of quality-improving practices (post-harvest) remaining low. GROW adapted by encouraging adoption of business innovations among exporters, traders, and commercial farms, who are in a better position to demand, fund, and reward quality improvement. These types of businesses "have skin in the game" as they must fulfil their international contracts and meet premium market requirements in order to secure price premiums and higher profits. Working at this level builds on foundational activities by GROW to build trust, communication, and engagement among local market actors e.g. through matchmaking sessions (see Cooperatives Learning Note 2020). These types of activities established the importance of clear terms, open communication, and face-to-face contact, which paved the way for the establishment of cooperative/farmer to trader/exporter to premium market trade relationships down the line. We now see these organizations continuing to communicate and trade in the absence of GROW (e.g. Kwakerseh, Gbeleh Geh, Boe Kpa, Sebehill Cooperatives).

Support for centralized processing infrastructure and associated trade models for high quality and fine flavour markets. Investments in centralized processing (fermentation and solar drying) yields tangible, immediate benefits on international markets. At the same time, as noted above, uptake of quality-improving practices has been elusive. GROW has observed that there exists a commercial justification for investments in centralized processing centres within one season. This fit is clear on premium markets, but, critically, exists as well for conventional markets as exports are not price penalized for quality defects (which is the norm for conventional cocoa from Liberia). But while the market fit exists, it is difficult to implement the associated business practices required to reliably implement. Construction of fermentation boxes and solar dryers must be coupled with coaching on delineating roles and responsibilities, usage training, record keeping at different stages of processing and trade model development. The latter is particularly critical in Liberia, where it can be difficult to aggregate (heavy) wet cocoa beans from large numbers of geographically dispersed smallholder farmers. Incentives are key, and linkages to markets ready and willing to reward for quality and consistency of cocoa is a pre-requisite. Here, there is an opportunity for service providers who also trade and find markets for high quality cocoa. This service provision model is exemplified by So-B-Green, who, after building momentum over two years of operations in Liberia, are expanding to source from more cocoa from farmers in both Bong and Nimba counties.

Working with cooperatives to improve offering and credibility among farmers and reach scale. Despite acting as the primary points of contact with cocoa farmers and farming communities, cooperatives struggle to provide critical services (agronomic advice, information, and training, aggregation of cocoa, linkages to markets, and value addition) to their members. Working with cocoa cooperatives to strengthen their offering as service providers is an important mechanism to improve farmers' access to agronomic information and markets, and consequently boost incomes. This was achieved through the VC model and building cooperatives' institutional knowledge and business management capacity. The model, designed, tested, and adapted by GROW since 2018, was found to be an effective method towards achieving these ends. It employs a Training of Trainers' (ToT) approach, integrating learnings from each successive season to ensure continued relevance and value according to farmer needs and market demands. Adaptations and refinements in subject matter, training delivery, monitoring, and gender evolved the role of the VC into that of a teacher, role model, and respected community leader.

Sustainability of the VC model requires the existence of independent financial or normative incentives. The feasibility of financial incentives sustained by cooperatives is severely limited, instead serving to reinforce donor dependence. Understanding this limitation, GROW tested alternative incentive structures and found that normative incentives can, in fact, self-sustain. GROW had supported cooperative budgets in first years of GAP, setting up VC role models and teachers. After GROW withdrew that support and the financial incentive disappeared (cooperatives were not able to step in), GAP leaders (including VCs and TCOs) still continued to operate within their respective communities. It was clear that normative incentives (i.e. the prestige enjoyed as community role models) were viable and more sustainable alternatives to financial benefits. Through the VC model, cooperatives were able to build their institutional knowledge and credentials among farmers.

Cooperatives also served as an important entry point to engage directly with downstream value chain actors (i.e. exporters, traders, and commercial farms). Initially, it was a struggle to identify export partners willing to work with GROW due to a legacy of donor projects that burdened their businesses with additional administrative work for unclear payoffs. Further, GROW was not offering large cash grants as other donor-funded programs have done, and continue to do, and the Programme had not yet proven the value of its approach to the sector. By effectively partnering with cocoa cooperatives, GROW was able to establish more credibility in the cocoa sector, allowing the Programme to successfully partner with four businesses in 2021, which were important links between Liberian cocoa producers and international markets.

Reflected and up-to-date design of GAP to maximize relevance locally and with respect to market demands. Much of GROW's legitimacy is derived from our strong understanding of the intricacies of cocoa production and the needs of smallholder farmers. GROW's approach to GAP was successful because the resources developed were intentionally highly localized and were paired with comprehensive delivery plans. Through successive years of implementation, reflection, research, learning, and iteration, GROW was able to adapt our GAP approach to maximize accessibility (especially among women) *and* meet changing market demands. Going forward, GAP trainings should explicitly focus on commercially viable and environmentally sustainable principles, including organic production and processing, agroforestry (and deforestation issues), sustainability, and inclusion.

Stories from the Farm: Boakai M. Sheriff, Village Coordinator from Polowu, Lofa County

Cocoa farming is the main occupation in my village, and I started farming in 2002. Back then, diseases like black pod were common on our cocoa farms but we didn't know what to do about them. When Sebehill Cooperative set up a training, I took part and became a Village Coordinator. I applied the GAP practices I learned on my field with success and went on to train over 500 farmers in my role as VC. I have continued to visit the farmers and follow up on how they have applied the learnings.

Being a VC is an unpaid, volunteer role, but I am motivated to do it because I have seen the impact of the training on my own farm. The increase in my yield has put more money in my pocket. I use it to pay the school fees for my three children. I keep some to settle medical bills if they arise. I also feed my family and support my elderly father. I was also able to build my own house from the proceeds of my cocoa.

When I harvest my cocoa, I sell to Sebehill Cooperative. I used to sell to anyone, but now the cooperative price is better and they lend you money for your farm when you need it. And sometimes the exporters that buy from the cooperative help farmers and our communities with equipment and financial support.

Photo: Boakai Sheriff's new house built with the proceeds of his cocoa farm, Polowu, Lofa County

What didn't work?

Pursuing premium quality in the absence of price incentives from the international premium market. GROW piloted its first 'supplier development' intervention by partnering with one of Liberia's leading exporters during the 2018 cocoa season. With the exporter's expressed interest in improving their cocoa supply and good prospects for cocoa cooperatives in terms of increased access to finance, better aggregation from farmer networks, and a better market offering grade-differentiated prices, the initiative was a promising intervention that stood to benefit all parties and affect system-wide change. However, despite high will and skill on the part of the exporter, their sole international buyer was not sufficiently interested in paying more for higher-quality conventional cocoa from Liberia. Conversely, they were primarily interested in lower/average grade bulk cocoa, some of which was moved into Liberia from neighbouring countries, purchased at base rates. Consequently, there was no incentive for the exporter to act on their ambition to improve quality and terms of trade. This situation was compounded by the 2017 global collapse in the price of cocoa and exit of several of Liberia's leading exporters, resulting in an influx of trade which overwhelmed the staff of GROW's export partner in the 2018 season. Struggling to keep up with the volume of cocoa being traded, the exporter reverted to ad hoc trade with numerous cooperatives without improved terms of trade.

The challenges experienced as part of the initiative also provided GROW with a more nuanced understanding of how incentive structures operate across Liberia's entire cocoa value chain. As a result, GROW adapted its strategy to focus on positioning Liberian cocoa sector actors for premium markets that offered price premiums and began engaging more directly with global players, which had demonstrably yielded income improvement opportunities in other cocoa-producing countries such as Sierra Leone, Ecuador, and Madagascar. From 2019 onwards, GROW honed in on the premium market opportunity and focused interventions towards achieving that goal.

GAP training alone does not necessarily result in post-training application. For sustainability, incentives (whether normative or financial) need to be put in place by value chain actors. In previous years, GROW adapted by incentivizing uptake through competitions and while financial incentives could not be independently sustained by cooperatives, we observed that relatable examples of successful uptake improved overall uptake. The business case for GAP uptake needs to be reinforced by spotlighting role models who clearly demonstrate the benefits of proper farm management in improving household income. Costs savings are possible as incentives for training/trainers does not have to be monetary – prestige, leaders, expertise, and role as knowledge hubs within one's community are reported non-monetary benefits enjoyed. This is a feasible strategy whereby businesses interested in premium trade can sustainably incentivize quality.

A one-size-fits-all training approach for producers. It is not effective to design a general training and then conduct mass trainings on business management with cooperative leadership, whose capacities differ vastly from cooperative to cooperative. GROW adapted this approach for simplicity and tiering based on a data-driven assessment of each cooperative's performance capacity. By collecting data and grouping cooperatives into tiers, GROW was able to tailor training approaches accordingly, ramping up efforts for high skill/high will partners, maintaining a baseline level of engagement with low skill/high will partners and limiting engagement with low skill/low will partners. Materials (toolkits, GAP) were designed to have standard content but to be adaptable to organizations of variable capacities (e.g. new partner cooperative Vornambeh vs veteran, high-performing Sebehill). GROW invested significantly in sending businesses advisors into rural areas for bespoke coaching and monitoring with each cooperative, in contrast to the standard approach taken by many programmes to conduct centralized, cohort-style modules that will inevitably be too basic for some cooperatives and too advanced for others.

Cooperatives play a valuable role as a conduit to large numbers of farmers, but their capability to reorient is limited by capability and incentives. Despite the benefits outlined above for (and necessity of) engagement with cocoa cooperatives, the management capacity of these organizations remains low. While some cooperatives are showing improvement in their offering to farmers, many act mainly as traders of cocoa and conduits for farmers to access development support. Further engagement is needed for cooperatives to undertake reforms to become valuable service providers for their members, though this type of intervention is resource intensive, with only limited impact. GROW has tested and ultimately adopted a more efficient approach i.e., working with larger downstream actors (traders, exporters, commercial farms) who are better positioned to finance, require, and reward quality-improving services such as VC model of GAP training in long run.

Securing reliable financing for cocoa companies. Although it was beyond the scope of GROW to address the banking sector, financing (or a lack thereof) was consistently raised as a key barrier to sector growth and GROW endeavoured to identify financing opportunities available to Liberian cocoa businesses. This proved to be a challenge, however the programme did identify viable alternative strategies to unlock working capital. First, GROW found that addressing operational inefficiencies by building business capabilities can result in boosts in working capital in the near term. Second, strengthening trade relationships and improving negotiating power can divert working capital in the supply chain to where it is needed most. For example, Monleh was able to negotiate terms of trade with their premium buyer that provided payment equal to the prevailing convention price upon export, with the balance of the premium to be paid upon receipt and quality assurance in Europe. It is important to note that these opportunities are not a complete solution, and interventions targeting capacity and trade improvements must be structured with an end goal of making businesses more attractive for external financing in the long run.

Sector Governance Reform. Despite the signing of a memorandum of understanding with LACRA for the revision of its regulations and the development of a business strategy, there seemed to be no real interest towards taking up the support. This meant the intervention could not be delivered. Other attempts to bring together key stakeholders to define the countries vision for the cocoa sector were also resisted due to divergent opinions amongst public stakeholders. This led to the decision to develop a white paper to provide insights into governance models adopted by various cocoa producing countries as a way of showcase learnings from other countries and providing recommendations on the model Liberia could adopt. GROW also recognised that a critical element of the proposed revision of regulations was the need to introduce a more robust and flexible approach to the announcement of cocoa prices at the beginning of every season. Previously under the LPMC model, the agency had fixed cocoa prices as the sole buyer. This approach seemed to spill over into the LACRA regime, even under a more market driven approach, with LACRA only acting as the regulator. Offers to support LACRA to set-up a standing pricing committee which would be trained to use a wide range of tools to arrive at indicative prices were also not taken up. For the 2021/2022 season, the prices announced by LACRA came late in the season after trading had started, were far below the trading levels at that time, led to downward reviews of trading offers by exporters and encouraged cross border trading into countries like Sierra Leone.

What would GROW recommend for future initiatives?

In order to achieve sustainable pro-poor impact through the premium market opportunity, GROW recommends that future programmes:

1. **Strategically focus interventions in ways that align incentives from farmer to international buyer.** Programmes must consider the entirety of the value chain – and incentives need to be aligned throughout to achieve impact. The sustainability of quality improvement interventions requires incentive-aligned relationships: commitment to premium GAP is dependent on a corresponding reward from the international market. Partnerships with companies whose buyers demand quality work (e.g. So-B-Green and buyer Cocoa team), and others do not (e.g. AYA and buyer Theobroma). Additionally, programmes must consider strategic fit with the market gap for targeting by, for example, segmenting buyers for each local partner's strengths and business offering (e.g. Monleh's offering is different from EJFC, and so each has its own alignment with different types of buyers). Programmes must also weigh the cost of improvements (e.g. certification) vs will/skill vs benefit.

2. **Replicate and expand GROW's approach leveraging traceability systems to simultaneously unlock price premiums and prepare business for certification(s).** It is important to ensure that all business/capacity improvement activities be designed so that they are in alignment with premium market/certification requirements (e.g., farmer lists, databases, systems). In this way, businesses can capitalize on opportunities to unlock price premiums while they are working towards attaining formal certification.

3. **Support partners through advisory and coaching to acquire organic certification and build local capacity in this area.** Despite nearly universal organic cocoa production in Liberia, there exists little knowledge on the formal certification process. Organic certification can be complex to understand, onerous to implement, and costly to achieve. For partners where certification aligns with their goals and capacity as well as being financially feasible, cost-sharing between businesses and programmes can enable partners to take on the additional risk and investment required to achieve certification and access certified markets. Presently, it is necessary to look regionally (e.g. to Sierra Leone or Ghana) for high quality advisory services with the requisite expertise and deep experience in the target certification scheme. Certification activities should be structured such that this expertise is transferred to local partners to begin to build a domestic service provision capacity.

4. **Integrate features demanded by high growth market segments into GAP.** GAP trainings should explicitly focus on practices

that are both aligned with programme values and are in demand by premium buyers (and thus awarded with price premiums). Year after year, GROW has adapted training materials to reflect our growing understanding of practices that respond to these demands, including organic production and processing, agroforestry (and addressing deforestation), social sustainability, and women's inclusion. To ensure adoption/buy-in by producers, it is important that farmers are aware and convinced of the benefits of applying quality improvement practices and social/environmental safeguards. Buyers and their customers increasingly require proof of these efforts in order to reward them with better prices, entailing significant programme efforts to effectively communicate this to local partners and ensure adaptions are applied in earnest.

5. **Implement interventions aimed at improving Liberia's reputation on international markets.** This is a next step for GROW's cocoa market activity. By and large, international markets lack information about Liberia's cocoa offer. For those that are aware, Liberia is considered an insignificant player, offering poor quality cocoa, a difficult regulatory environment plagued by high levels of corruption, and high costs of doing businesses. While Liberia does indeed struggle with many of these issues, this singularly negative perception does not take into account the full picture, with Liberia's sector capable of offering fine flavour quality, a simplified pathway to organic certification, and direct access to producers through cooperative structures. Programmes should work with partners to build private sector partners' capacities to build promotional materials and respond to inquiry as well as link to international networks through marketing initiatives, conferences (e.g. Chocoa), relationships with thought leaders and researchers, and engagement with industry associations. Given the prerequisite of premium market access for pro-poor gains domestically, this is a critical activity where partners' capacities and know-how must be improved. Future programmes should leverage the investment promotion pipeline and engagement approach developed and tested by GROW.

6. **Optimize interventions and cultivate Programme credibility by practicing broad engagement with sector actors to maintain current and historical institutional understanding of cocoa sector.** GROW's understanding of the cocoa sector evolved through extensive and sustained field operations requiring concerted effort and investment. Maintaining relationships with cooperatives, even while not directly working with them in Y8, enabled Programme staff to keep abreast of sector developments at multiple levels and piece together a more complete picture of local, regional, national and international dynamics. This positioning and intelligence was both unique and highly valued by actors throughout the local and international cocoa market, helping the programme to command respect and motivate partnership.

7. **Use and replicate GROW resources that have been tested and refined through real-world application.** Following the

evidence and learning set out above, it is recommended that the following road-tested resources continue to be utilized and refined in upcoming seasons (all housed on GROW's Cocoa Resources page):

- Premium Organic GAP for Farm Maintenance
- Premium Organic GAP for Harvest and Post-Harvest
- GAP Posters
- Cocoa Bean Requirements for Entering the European Market
- Internal Control System Guide
- Business Toolkit
- Business Practices Training Deck
- Marketing and Branding Coaching Guide
- Marketing and Branding Workbook
- Traceability Guide
- Traceability Posters
- Traceability Training Deck
- Traceability Training Workbook
- Traceability – Agent's Reference Sheet
- Investment Guide
- Introduction to Premium Cocoa Markets in Europe and the USA
- Exporter Guide: Exporting Premium Cocoa Beans to Europe and the USA
- Liberia Cocoa Opportunity Investment Promotion Deck

8. **Encourage the use of formalized purchase agreements as a means to overcome poor road network.** Liberia's (lack of) rural infrastructure is a pressing challenge to linking cocoa producers to markets. Poor road conditions make transport from cocoa-producing areas to the point of export difficult in the best of conditions, sometimes becoming impossible during the rainy season. This has the effect of dampening buyer interest, putting in jeopardy that critical link to improved markets. Future programmes should address this challenge by working with partners to formalize purchase agreements between producers and traders/exporters with clear terms on transportation, including who will cover the cost and actually move the goods. Ensure incentives are aligned – e.g. Monleh providing transport to guarantee quality until handover to exporter at warehouse. Programmes

should avoid the provision of assets (e.g. purchasing vehicles and other resources) to address this issue as this has been tried by many projects with limited success as producers are largely unable to afford maintenance costs.

9. **Approach to sector governance reform.** Liberia has a huge potential to stamp its name as a premium cocoa destination. The most critical action that could limit the realisation of this potential is the sector governance and regulation. The opinions seem to be influenced by political undertones, which makes it very difficult to navigate. Previous attempts to unilaterally revert to the LPMC model have been resisted by donor partners which has led to a hiatus with no official statement indicating the final position of government on the issue. This has implications for the drive to attract investment into the sector as it poses uncertainties for both local and foreign investors. An approach that could lead to reaching a final position on the model to adopt could be for the donor partners to go beyond just showing concern for the line being towed by some public sector actors, but to go to the extent of calling for a workshop of key sector stakeholders (including high-level public officials from the executive and the legislature) which will aim at arriving at a consensus so that the matter can be finally laid to rest.

Vegetables

Market: Vegetables

Context

Why was this sector selected? (opportunity)

The vegetables sector in Liberia is largely limited to home consumption of indigenous vegetables, with the vast majority of 'exotic' vegetables such as tomatoes, onions or lettuce sourced through imports. Liberia has strong potential to supply the domestic market with fresh exotic vegetables, but significant constraints exist in use of inputs, equipment, access to finance, buying/selling relationships, and market information. GROW viewed the vegetables sector as an excellent opportunity to improve the incomes of the poor. The sector has very high pro-poor relevance, especially for women, and can provide benefits to the poor as producers, labourers and consumers. Over 300,000 are actively involved in the vegetables sector with an estimated 100,000 ha in operation. Farming households comprise 78% of total rural households, and 54% of total urban households, and each household grows vegetables on an average of 0.5 acres each. General trends in economic outlook for Liberia suggest strong growth potential for the industry, which is closely linked to growth in general prosperity as people are increasingly able to afford more nutritious and varied foods; given the high participation of the poor, this growth is very likely to have strong pro-poor benefits. It was noted that the high degree of informality in the sector would pose a challenge, but a case for the feasibility of interventions remained.

In general and when compared to tree crops, vegetable farming is highly accessible and adapted for the poor as well as women and youth. It requires smaller amounts of land and low upfront investment costs, plus short production cycles that can produce income returns quickly. Women also make up the majority of vegetable farmers in Liberia. While environmental concerns exist mainly in the use of chemical pesticides, the sector also presents opportunities to promote organic production, limited application practices, and climate resilience with improved seeds. Profitable vegetable farming requires very little land, and stability risks are low; positive stability impacts can be expected through the generation of higher incomes and the promotion of cooperation amongst various players in the market system.

What was not working about the sector? (challenge)

At the start of GROW's activity, significant constraints existed with respect to the availability and use of inputs, equipment, access to finance, buying/selling relationships, and market information. This was underscored by a general lack of trust between actors at different levels in the value chain, creating a reticence by many to make investments in the sector. Production levels are low, inconsistent, and often of poor quality as a result, limiting the attractiveness of local supply for most institutional buyers (such as supermarkets or restaurants).

GROW's activity primarily focused in on the agro-inputs sub-sector given the importance of its underperformance to the vegetable market relative to other gaps. GROW also worked on vegetable trade.

At the start of our activity, key constraints included:

- **Farmers had limited access to quality, affordable inputs** (seeds, fertilizer, chemicals and farming tools) as well as information on safe and effective inputs application and modern agricultural techniques – all of which have a depressive effect on vegetable productivity and farmer incomes.
- **Importers typically traded, rather than stocked, inputs** – focussing on winning Government of Liberia (GoL) or donor contracts instead of serving agro-dealers and farmers.
- **Ad hoc importation of agro-inputs** by agro-dealers from neighboring countries such as Guinea and the Ivory Coast deterred formal importers and results in frequent shortages, limited product ranges, variable quality of agro-inputs, and instructions and information written in a French, a language that Liberian farmers do not understand.
- **High import duties** relative to neighboring countries significantly increased product prices for those agro-inputs imported through formal channels, ensuring that they were not competitive when compared to goods brought in via informal means – discouraging distributor investment in the market.
- **Absence of agricultural advisory services** for agro-dealers and farmers alike limits productive potential.
- **Weak, fragmented trading relationships** between farmers, agro-dealers, distributors, and institutional clients negatively affect

the efficiency of the agro-input market. Similarly, this also characterizes vegetable trading relationships between farmers, traders, sales points (markets, restaurants, supermarkets), and consumers.

- **Limited opportunity for improved quality and pricing.** The bulk of vegetables for the urban market is traded through Redlight market. At the same time, this appears to be the least conducive market channel to stimulate improvements in vegetable variety and quality. Traders are a double-edged sword; they prefinance farmers – without this most farmers would struggle to buy inputs such as seeds. Traders also literally squeeze farmers by determining the price (this is market-wide): buying produce by the bag and then squeezing too much in a single bag, deducting the resulting wastage from farmer revenues. With few exceptions, signs were not found of interest in investment in better storage and packaging to reduce wastage and improve quality among traders.

What was GROW's vision for change in the sector?

Given these constraints, GROW envisioned a productive vegetable sector that supplies the domestic market reliably with high-quality produce, displacing the need for expensive imports and providing income and employment gains to the poor. Actors in the vegetable sector working together in a fair and transparent way to reliably and consistently supply the domestic market with exotic vegetables.

Accordingly, GROW's vision for change for the sector:

- IF agro-inputs regulations and commercial farm market encourage expanded and new distribution and supply,
- IF the agro-inputs industry can profitably service smallholders with efficient last-mile distribution, and
- IF agro-inputs businesses can embed key services such as information and extension, and
- IF Liberian farmers can effectively supply the domestic market with high-quality vegetables,
- THEN the demand for domestic produce will grow, and
- THEN smallholder farmers will continuously improve the quality, quantity, and consistency of vegetables supply, and
- THEN smallholder farmers, many of whom are female, will increase their incomes and employment in vegetable farming.

Vegetables Sector: Summary of Progress

GROW's vegetable activity began with a trader growth program that leveraged vegetable traders to provide improved agro-inputs to their networked farmers. Qualifying traders were able to access a loan from a local bank for the agro-inputs. However, poor quality, limited availability and expensive agro-inputs – among other challenges – impeded the success of the intervention and motivated GROW's expansion into the agro-inputs sub-market. While GROW continued to pursue activity to address vegetable trade barriers, the program has primarily focused its efforts to the following three intervention areas within agro-inputs accordingly:

1. Establishing an agro-inputs distribution network, including attracting new market entrants
2. Professionalizing and upskilling agro-dealers
3. Improving the attractiveness of Liberia's agro-input market by addressing policy and tariff limitations

The following discusses these three interventions as well as a review of vegetable trade activity:

Intervention # 1: Establishing an agro-inputs distribution network, including attracting new market entrants

Prior to GROW's intervention, there were no formal distributors in Liberia's agro-inputs market. Rather, most agro-inputs were either sourced by importers that were concentrated in Monrovia and focused on servicing government and/or NGO contracts, or they were informally sourced from neighboring countries by agro-dealers. These dealers' piecemeal approach to sourcing inputs incurs additional transit costs that significantly raise the end price of inputs. Further, the products they imported were unregulated and of mixed quality, often improperly sized for the target market, labelled in French, and accompanied by little or no information on appropriate and safe application. This has had a cascading downstream effect: agro-dealers are challenged to upgrade to a higher professional standard without guidance, financing and inventory sourced from a distributor or a supplier. As a result, farmers have been challenged to purchase products at the high price points that they're offered and lack access to sources of agronomic advisory that necessarily underpin improved productivity.

In order to address these issues, GROW's intervention aimed to:

- Attract new distributor entrants to Liberia, through regional investment or the emergence of Liberian agribusinesses, to service agro-dealers and farmers as a main customer base;
- Improve distributor operational performance to be able to cost-effectively service agro-dealers and farmers (eg: finance management, branding, etc);
- Support distributors to develop a distribution and resale approach right-sized to the Liberian context and attractive to the businesses;
- Integrate information on products and general agronomic advisory alongside the sale of agro-inputs.

In 2018, GROW launched a scoping exercise to identify potential distributor partners from within Liberia and neighboring countries. Nine companies (three regional and six local) were identified. These distributors worked with GROW's technical expert to develop product catalogues and price lists and review finances, performance and distribution capabilities. Four companies completed these initial activities but only two companies, TJAL Enterprises and Organic Matters, chose to progress. This performance-based approach, coupling technical assistance with transparent and agreed performance benchmarks, was a hallmark of GROW's approach to partner engagement.

Over time, GROW worked with our distribution partners to establish, adapt and expand their presence in Liberia alongside their agro-inputs offerings. The program also expanded its investment promotion efforts, supporting actors within Liberia to expand into distributors as well as to attract in additional regional entrants.

Results/ What did GROW achieve?

GROW's two primary partners have been TJAL Enterprises and Organic Matters. GROW partnered with Organic Matters to expand operations in Liberia, including developing an expansion strategy, marketing material and branding targeted to small farmers, a retail sales point in Mount Barclay, and expanded organic product line production capabilities. However, Organic Matters experienced a financial shortfall from declining commercial clients – an important part of its revenue base – and was forced to pause activity to reach small farmers. Accordingly, GROW's partnership with Organic Matters did not progress as the company's priorities shifted away from serving smallholder farmers and towards secondary revenue-generating opportunities. With the growing interest in targeting premium buyers and organic certification in the cocoa industry, OM may have an opportunity to better position its products for this market. Rather than direct to small farmer sales, a route to market here would likely leverage exporters offering support to cooperatives or, more immediately, the projects that are sourcing and distributing inputs – higher value contracts with lower operational costs. GROW continued to engage Organic Matters on this opportunity into 2021, introducing the company to traders, farmers, and projects focused on improving premium market production.

TJAL Enterprises has proven the most invested and capable of GROW's distribution partners. TJAL's prior experience working with agro-dealers and servicing smallholder farmers in regional locations in Guinea and Sierra Leone has helped the company to adapt operations to Liberia. GROW established a partnership with TJAL in 2018 and has expanded engagement up to end of the programme.

TJAL is beginning its fourth year of operations in Liberia; it officially launched in December 2018. The company wholesales inputs to agro-dealers and agencies and offers some advisory. All of GROW's agro-dealer partners purchase from TJAL and agro-dealers are TJAL's primary customers. Key results from this partner include:

- Established its Liberia operations in December 2018, including a warehouse and retail shop.
- Improved its business capability (e.g. hired two staff dedicated to improving business practices, adopting QuickBooks accounting software). TJAL fully integrated QuickBooks and completed account management training, rectifying a recordkeeping and management shortfall that was limiting performance and sales.
- Accessed duty waiver on agricultural inputs, thereby increasing frequency and volume of imports.
- Imported first containers – first overland from offices in Guinea and Sierra Leone then directly to Monrovia via the seaport of Monrovia.
- TJAL launched a sub-distributor program with four agro-dealer partners. Through the model, TJAL offers agro-inputs at wholesale prices coupled with financing, product training, transportation cost-share, and marketing support to sub-distributors.

Sub-distributors were selected based on performance, geographic location, and purchase history with TJAL; they are all agro-dealers with which GROW has partnered. In turn, sub-distributors sell and promote the company's products through their shops and agents. TJAL also offer agronomic advice through jointly established "demonstration farms" alongside other education-focused marketing.

- Sub-distributor purchases from TJAL increased from USD 1,932 in 2019 to about USD 46,000 in 2021.
- Sub-distributors' overall sales also increased, growing by 11% from USD 199,731 in 2019 to USD 220,782 in 2020 and about USD 230,000 in 2021 – keeping in mind the global agro-input supply and price challenges associated with COVID restrictions followed by global supply chain issues.

- Total sales for TJAL in 2021 were about USD 160,000. TJAL's growth trajectory is positive and seems to have satisfied the CEO's concern of Liberia's viability. However, overall, the volume suggests that the company has room for growth in the market.
- Introduced new products to Liberian market (e.g. fertilizer brands – Kara and Krystaal).
- Partnered with three of its sub distributors to pilot the successful establishment of three vegetable demonstration farms in Totota, Bong County and Gbedin, Nimba County and in order to promote the availability of new, high quality products. To facilitate this activity, TJAL employed two international agronomists to work with their agro-dealer partners and trained their local agronomists to manage the demonstration plots as well as offer extension services to farmers on practices carried out on the farms. The demonstration lasted 3 to 4 months depending on the crops. In all, over 500 farmers participated along with their agro dealers and sales agents.

Interview with Amadou Tejan Jalloh, CEO of TJAL Enterprise.[1] He reflects on TJAL's entry to Liberia in 2018 and subsequent pathway to growth, along with some of the challenges encountered along the way.

Based on my agro-business experience in Guinea and Sierra Leone, GROW suggested I come to Liberia to import and distribute inputs and help develop the value chain. I was happy to act on their recommendation and together we identified a place for a store. GROW helped set up our office and shop at Red Light in Monrovia and I started to import goods, little by little, according to the farmers' needs.

Next, we identified agro-dealers in different districts. We organised meetings and started to send them products along with advice. GROW provided an international agronomist and we took care of a local one to work with the dealers' agents. The agents demonstrated our products in the field and gave technical advice to farmers.

It was a surprise to find some of my products already in Liberia, brought by cross-border traders in small quantities from Guinea. We started in the same way, but it was costly and we switched to importing directly from the manufacturers to Monrovia and distributing to dealers across the country. GROW facilitated the import process for us, and it's going smoothly.

We imported a new type of folia fertiliser called Krystal, which improves harvests whilst reducing the consumption of chemical inputs. We organised an open day and demonstrated the product, growing aubergines, peppers, carrots and other things. From that experience, GROW suggested we establish demonstration plots. So we set up three sites: one in Nimba and two in Bong. We identified nearby agro-dealers who brought their customers to see.

The thing I'm most proud of is seeing tomato production really taking off. People always said Liberia couldn't produce tomatoes. Farmers had tried, but their crops developed diseases and other problems. We put our agronomists on the case. It wasn't easy, but with the right technique we got results. We held another open day and invited all the actors from the agricultural world, from farmers to NGOs and the Ministry of Agriculture, to show them we could grow tomatoes. We presented the Minister with the first basket! Everyone was impressed that we'd succeeded.

Our entry to Liberia has come with many challenges, which we are gradually overcoming. We have to convince the farmers that they need quality products. We come with our products and they expire because people aren't willing to pay for them. They are used to handouts from NGOs, and inputs brought from Guinea and Cote d'Ivoire which are lower in price but lower quality than ours, and the farmers just want the less expensive ones. So we're working with lead farmers who believe in our products and can see the results. It's a bit complex but we are making progress.

The market is getting to know me, and I'm exploring a possible collaboration with the Ministry of Agriculture. We're not yet getting the profits we'd hoped for, and I can't support additional staff as a result, but I want to continue. And by using agents in the field and in the agro-stores, we're expanding our outreach. I accept sacrifices, and I'm putting in a lot of effort to get results.

In 2021, GROW re-launched its recruitment effort to attract new distributors/suppliers to establish operations in Liberia. An agro-inputs investment fact sheet was developed and shared with distributors/suppliers across Africa. Twenty distributors/suppliers responded to the fact sheet; nine of them expressed interest in a scoping mission to Liberia. These efforts hit a snag midway through the year when the availability and costs of fertilizers – like many goods in the COVID era – suddenly deviated from previous years, challenging distributors in their core markets.

Mr. Andrew Nii Adjetey CEO of Qualiseed Ghana, Treasurer - National Seed Traders Association of Ghana and Hon. Jeannie Cooper, Ministry of Agriculture.

However, in September 2021, Mr. Andrew Nii Adjetey CEO of Qualiseed Ghana and an executive of the National Seed Traders Association of Ghana embarked on a scoping visit to Liberia with the ambition of expanding its operations to the country. Having met a number of stakeholders including government officials, private actors and farmers and seeing the potential of the market, Qualiseed began the process of formally registering his business as well as distributing sample seeds for trials in Liberia.

In addition to Qualiseed, several local farmers and agro-dealers have begun to expand their operations, importing larger volumes of product and reselling these to agro-dealers and farmers. For example, Ma Bendu Farms, a Liberian wholesaler of Agro-inputs, has included the importation and sale of fertilizer in addition to the sale of agrochemicals to agrodealers and farmers.

Sustainability

Overall, Liberia’s market is small and distribution is costly. The piecemeal growth of the distribution and supplier network reflects this contextual challenge. This is not easily overcome, particularly given that more lucrative commercial actors are often able to import their own goods leveraging concessional rights – effectively working outside of the mainstream economy.

TJAL has demonstrated its commitment to remain in Liberia, innovating on its model continually to serve agro-dealers and farmers. The distribution problem will not be solved by TJAL alone, though. TJAL is a small, family business with the management limitations that this implies.

The group of new distributors, emerging from local and regional entrants, are a promising direction. However, these companies are also likely to be small in scope and investment given the size of the market and profitability limitations of the agro-inputs business. This may continue to characterize Liberia's agro-inputs market and growth: steady steps in the right direction.

Intervention #2: Professionalizing & Upskilling Agro-Dealers

Many of Liberia's agro-dealers existed prior to GROW's interventions, but lacked professional capabilities, an understanding of smallholder farmer clients, and the sales and marketing strategies required to reach them. There was a disconnect between rural farmers who were demanding agro-inputs and advisory and the agro-dealers who were best positioned to service them. Further, the absence of a professional network of agro-dealers also dissuaded investment from distributors and suppliers who would rely on such a network to establish a presence in the country.

In view of the above, GROW developed an 'Agro-Dealer Development Program' (ADP) designed to jumpstart agro-input industry performance by professionalizing and strengthening networks of agro-dealers. The ADP targeted improvements to agro-dealer:

- Business and financial management practices
- Agronomic advisory capabilities
- Expanded marketing and sales channels

To do so, GROW offered practical, individualized trainings and coaching coupled with support to trial new sales and marketing tactics designed to expand agro-dealers' customer outreach, support and sales. The focus of the program adapted in time, with three iterations that each expanded on the previous version and with the objective of increasing agro-dealer capabilities to reach and service smallholder farmers – while also growing their own businesses concurrently.

> "The signboards and call cards brought so many customers to our business that led to increased sales and publicity for our business. Based on that, we were able to add new products to the business and also expand, with our new outlet now in Totota, Bong County". Jackollie Forkpah – Manager, West Africa Agricultural Company.

The ADP began in 2018 when GROW profiled 48 (18F; 30M) agro-dealers across five counties and enrolled them into the ADP. In total, 28 (8F; 20M) agro-dealers successfully completed the program and were able to reform their business practices to better suit market needs that year. In 2019, GROW introduced the sales agent model with 22 agro-dealers that expressed interest in the approach to expansion. The sales agent model was piloted with the objective of increasing farmer access, uptake and use of agro-inputs and agronomic advisory. In its pilot phase, the basic premise was that agents would facilitate trainings and inputs sales to farmers on behalf of agro-dealers in exchange for a commission and other incentives.

GROW developed instructional videos and training manuals covering business development and marketing as well as basic agronomy in order to facilitate both agent and farmer trainings. Due to the low literacy rates among agro-dealers and sales agents, training materials were further refined to be less text-heavy and more visually instructive. Through these trainings, agro-dealers and agents have been able to build their capacity to provide important agronomic advisory and training to farmer clients, with topics including quality seed selection, land and nursery preparation, fertilizer application disease/insect identification and control measures, and safe and effective spraying procedures.

Why Sales Agents?

- Increased access to quality and affordable inputs by farmers
- Readily available and affordable extension services to farmers
- Increased productivity for farmers
- Alternative source of income for agents.

The sales agent model has been especially valuable toward improving access and uptake of agro-inputs amongst female farmers, a previously underserved customer segment. Female sales agents trained more female farmers than their male counterparts 40% on average. Further, female sales agents trained almost as many total farmers as male sales agents (on average, 202 vs 223 respectively) and facilitate comparable sales (with variances across counties). Across all agro-dealers that adopted the sales agent model, sales to female farmers on average grew three times faster than to male farmers.

Inclusive Business Models Close the Gender Gap

Leveraging research that explains women's roles and potential purchasing power in vegetable production and trade against agro-dealer sales and customer data, the potential is clear. While almost 60% of Liberia's vegetable farmers are female, on average, women made up less than a third of the client base of Liberian agro-input dealers - suggesting a large untapped market.

GROW delineated this missed commercial opportunity for its partners and ultimately motivated and supported 22 agro-dealers to trial alternative marketing and sales tactics that better reflected female farmers' preferences.

Many of these tactics worked. Between 2018 and 2019, participating agro-dealers increased annual sales by 77% and almost doubled their customer base to 17,000 farmers. Further, agro-dealers' female clients grew by 120%. At the end of 2019, female clients accounted for 33% of agro-dealers' total client base (up from 28% in the previous year). Agro-dealers increased customers and sales by expanding points of sale (for example, selling at weekly markets highly frequented by female farmers), recruiting male and female sales agents to strengthen rural outreach, launching new marketing initiatives, and offering agronomic training to farmers on inputs use (read the full case study here).

In 2020, with the viability and value of the sales agent model established, GROW adapted support to agro-dealers to focus on building their capability to sustain and grow the innovation in order to deepen impact.

In an effort to sustain the provision of training, extension and advice and to demonstrate the value of practical agricultural short courses and motivate replication amongst other schools and businesses, GROW in 2021 partnered with the LICC to develop agricultural short course and online advisory offerings that build practical agronomic capacity amongst agro-dealers and farmers. A GROW supported international curriculum expert revised the curriculum for the delivery of agriculture short courses based on findings from assessment of the previous curriculum and delivery. Eleven short courses were revised to make the course more participatory. Seven instructors completed a TOT on the course delivery and completed the first cycle with 23 participants, including agro-dealers, farmers and agents. A post course assessment was completed to inform further revision of the curriculum.

Results

By the end of 2021, there were 33 active sales agents, working for 11 agro-dealers, and they had trained total of 3,180 additional vegetables farmers across five counties.

- Sales agents trained an average about 100 unique farmers of which 46% of them were females.
- A total of 88% of the total households trained successfully utilized practices learned during GAP training sessions. A further 97% of farming households had benefitted through positive net attributable income change.
- Despite the Covid-19 challenges, 30% of agrodealers noted increased sales in 2021. On average they had sold close to USD 20,000 worth of agro-inputs.

Sustainability

Professionalizing agro-dealers, including recordkeeping, inventory management and sales and client tracking, has demonstrated return over time. Most agro-dealers maintain records and utilize their records to inform decisions. This factors into continued and expanded investment in marketing and sales approaches first tested in partnership with GROW and that return clients and sales – suggesting that commercial approaches to inclusive business for agro-dealers are likely to continue.

Specifically, agro-dealers consistently name sales agents as one of their most important sales channels. Because of the success of the model and the importance that the model has had to agro-dealers' business performance, many have chosen to permanently integrate the model into their business operations – a focus of GROW's support in 2020. This includes investments in recruitment, training, marketing, and sales. Fifteen (5F; 10M) agro-dealers established their own sales agent programs in 2020, including adding new agents and continuing to train and support current agents.

Improved agro-dealer performance is also recognized by distributors, like TJAL, that leverage agro-dealers and their agents to expand their own presence and sales in the country.

Intervention 3: Improving the attractiveness of Liberia's agro-input market by addressing policy and tariff limitations

High import tariffs on agro-inputs imported to Liberia dissuaded potential distributors from establishing a presence and growing available inventory in the country. As a result, agricultural inputs were sourced piecemeal from neighbouring countries by agro-dealers. These products were expensive, inconsistent, of variable quality, and typically packaged in French. Ultimately, it was the farmer who suffered most; the inability to source reliable, quality, and affordable seeds, agrochemicals, and fertilizers – coupled with agronomic advice – limits their productive potential and income. Hence, the objective of this intervention was to address the issue around high import tariffs.

GROW has worked with industry stakeholders through a Technical Committee established with the Ministry of Agriculture and consisting of public, private, and not-for-profit partners to establish, implement, review and revise a duty waiver for agricultural inputs. In 2019, the Technical Committee recommended EO #97, a duty waiver on agricultural inputs. They also recommended its renewal as EO #102 and #106 in 2020 and 2021 respectively.

In its first year, the agricultural inputs duty waiver contributed to important early returns such as increased imports from distributors and better product-market fit. In its second year, the duty waiver continued to contribute to the same returns and also saw an increase in the volume of agricultural equipment imported as well as land under cultivation. The waiver is now in its third year.

GROW played a pivotal role in first promoting the duty waiver and, over time, building the capabilities of multiple actors to themselves administer, monitor, assess and champion the waiver.

Results

Findings from a 2021 study carried out in collaboration with the Ministry of Agriculture and the Technical Committee to assess the duty waiver's effectiveness include:

> Upon their arrival in Liberia in 2018, TJAL relied on their other businesses in Guinea and Sierra Leone to supply its Liberian outpost through overland shipping. That resulted in increased cost of doing business and thus affects the price of their fertilizer, although it was lower than normal market prices. However, with Executive Order EO 97, TJAL begun importing directly to Liberia. This allowed them to ship directly from the manufacturer to their Liberian warehouse, yielding cost savings and ensuring English labelling -- further reducing the price of fertilizer they were able to offer. Upon seeing the impact, another local company Ma Bendu farms for the first time imported fertilizer and by accessing the renewed EO 102, they were able to offer competitive price against TJAL's fertilizers. Today, both companies are selling fertilizers below the market price and have a commanding advantage on the sale of the NPK 15:15:15 in the country.

- *Adaptations made to the application process improved efficiency and supported use.* Modifications to the administrative and monitoring systems associated with the waiver improved the accessibility of the waiver and the efficiency of the application process, specifically:
    - Improved application turn-around time. During the implementation of EO 97, the turn-around time for the waiver access was estimated at about 20 working days on average. Now, with the more efficient application process developed by the Technical Committee, it takes three working days on average to complete the application process at the MoA and 5 working days on average at the LRA to obtain the waiver.
    - Increased number of applicants. Improvements in the administrative process of the waiver application and the general management of the entire process by the Technical Committee resulted to an increased level of interest in the waiver among target market actors. Data obtained from the MoA and LRA show that a total of 36 businesses applied for the waiver as of July 2021, compared to 11 during the implementation of EO 97.
    - Higher levels of access amongst applicants. An impact assessment of EO 102 conducted by the Technical Committee

shows that 85% of those that applied for the waiver submitted all of the required supporting documents, completely followed-up through the process and were granted access to the waiver. A few market actors (9%) did not access the waiver mostly because they didn't follow-up with their brokers to submit the Bivac Clearance – one of the documents required by LRA. They indicated a lack of available time as the reason why. The Bivac Clearance is a quality control measure enacted by the Government of Liberia (GoL) for all imports to Liberia. A few (6%) applicants were denied access by LRA because they were not considered eligible (not directly involved in the agriculture sector) for the waiver.

- *Prices declined for a second straight year for those agro-inputs imported under the waiver and resold to farmers and agro-dealers.* For example, the wholesale price of a 50 kg bag of fertilizer, a frequently imported agro-input, was found to be reduced by 15%. Read the Policy Brief here.
- *The duty waiver was used by farmers to import agricultural machinery, resulting in more land cultivated.* High import duties associated with the importation of agro-puts, especially heavy duty agri-equipment such as tractors, trucks, and plows, discouraged investment in mechanized farming that is required to expand production capacity in Liberia. However, agri-equipment was the largest volume of imported inputs under EO 102. It was found that 82% of those that accessed the waiver also imported machinery. Of these, all (100%) are using those machines on their farms. Agricultural equipment accounts for 78% of the total approved application value, at USD $606,633. As a result of the importation and use of machinery, there was a significant increase in farmland under cultivation this year. Each of those that imported machinery using the waiver increased their farmland by an additional 64 acres in total. Further, in order to manage larger volumes of production, those farmers that imported machinery also hired additional laborers. Assessment findings indicated that 15 additional jobs were created.
- *Government revenue has not been significantly impacted by the duty waiver.* Owed simply to the 1.5% customs user fee levied on all agro-input products imported directly to Liberia (and excluding ECOWAS fees), the government actually generated more revenue than it did prior to the duty waiver. Imports are expected to continue to grow in magnitude over time with the extension of the duty waiver; government revenue would then follow similarly. Prior to the duty waiver, it was extremely rare for agro-dealers or distributors to import agro-inputs via sea (ship) for the purpose of reselling to small agro-dealers or small farmers. Rather, most agro-inputs imported directly were done so by large farms or concessions or for the purpose of fulfilling aid organization contracts, both of which were typically duty exempt. For this reason, the duty waiver for agro-input products has

not had material impact on government revenue. Simply put: prior to the waiver, no material revenue was generated via agroinput imports. Rather, the high duty discouraged this type of investment. Since the duty waiver, however, more agro-input product has been imported to Liberia and this has grown from 2019 to 2021. As a result, revenue generation has also grown over time, increasing from USD $4,264.28 under EO 97 to USD $15,043 under EO 102

Sustainability

Shared understanding of the objective of the duty waiver amongst major stakeholders (especially different government decision makers) has improved and the Technical Committee has committed itself to continue to pursue the duty waiver on agro-inputs. The assessment and review of EO #102 is promising evidence of sustainability. However, the complexities and motivations of government engagement cannot be underestimated and should be factored into any discussion on sustainability.

Vegetables Trade

Although GROW's activity within the vegetables sector primarily focused on the agro-inputs sub-market, the program did pursue activities focused on improving the terms of trade for farmers. Activities included:

- *Trader Growth Program.* The TGP was an initiative of the Liberia (formerly Monrovia) Vegetable Sellers' Association (LVSA), in partnership with GROW Liberia, Afriland First Bank, AIM Global (an inputs supply company) and the Business Start-Up Center (BSC) Monrovia, a local firm contracted to implement the program. The aim of the TGP was to enable traders to effectively manage their growing business and make them "bankable" in order to access loans from commercial institutions to finance and work with increased numbers of local farmers. Two cohorts of the program were implemented. In 2018, an evaluation survey (with traders and farmers beneficiaries) of the financing model revealed that pre-financing production inputs for farmers clearly increased farmers' access to inputs that would have been difficult for them to obtain by themselves. It also increased farmers' production and ensures increased supply of fresh vegetables to the market through traders. Over 80% of the farmers repaid the full amount they received in pre-financed inputs. However, there were serious trust issues between farmers and traders. Farmers believe that traders were not fair in terms of the price charged for inputs and the amount traders give them for the produce. Access to market was still a challenge as institutional buyers were not willing to sign a formal contract with traders for vegetables supplies. On the other hand, the existence of one inputs supplier in the model provided no alternative and some inputs provided were of low quality and provision of extension advice and training was minimum. Moreover, repayment rates amongst traders were poor. Ultimately, GROW discontinued the activity as a result of these shortcomings.

- *Buying Program.* An intervention aimed at addressing supply gaps, such as transparent pricing and quality, consistent supply. GROW initially developed and launched a pilot with LVSA Produce Buying Program in which 13 contracts were signed between LVSA and commercial farmers or farming groups. Though the activity did achieve good initial results, continued performance required a strong and transparent management structure that was lacking in LVSA, a loose association of vegetable traders with some trust and transparency issues.
- *Expanding trade networks.* GROW also aimed to facilitate trade relationships between farmers and traders, offering each contact lists and facilitating engagements. However, out of a random sample of 30 traders that were interviewed on the application of the database shared, only one trader was able to buy a total of US $290 worth of commodities from 11 farmers that contacted him.
- *Outgrower initiatives. GROW also piloted outgrower programs in partnership with several commercial farms. Commercial farms were able to establish new relationships with farmers and work with them on vegetable production. However, of the about a dozen commercial vegetable farmers that GROW aimed to collaborate with, all requested significant financial support to progress. In the end, we were not able to find a suitable and serious partner.*
- *"Green Grocer" models.* GROW explored opportunities to establish a "green grocer" model. Ultimately, the costs associated with establishing a centralized business that would require some cold storage and deep relationship building with farmers outweighed the market potential – Liberia's vegetable market is still small.
- *Supermarket and restaurant sourcing.* Supermarkets and restaurants are best positioned to offer exotic vegetables to a client base that is willing to pay for better quality. Moreover, most supermarkets and restaurants now rely on expensive, imported vegetables that are or can be grown in Liberia. While some groups expressed interest in shifting sourcing to local options, none

were willing to invest the time, effort and resources to work with their sourcing options to improve the consistency and quality of produce to meet their standard.

Vegetable trade in Liberia is fragmented, with many small traders, farmers, aggregators, and buyers operating in ad hoc ways. There is limited demand for better quality produce which is primarily focused amongst a handful of supermarkets, restaurants / hotels, and urban households. The absence of strong demand against the complexity and cost of the challenge limits the potential for change. There may be activities that can shift normative trade practices toward more invested, trusted, predictable relationships. But, because the market is small – and unlikely to grow too much given the current economic climate and overall market size – these efforts will always be somewhat piecemeal and costly.

Results

Levels		GROW Logframe Indicators	Disaggre-gation	Actuals Mar-18	Actuals Mar-19	Actuals Mar-20	Actuals Mar-21	Actual Mar-22	Increase Mar-22	Target Mar-22	% of Program
Impact	4.3	Total Net Attributable Income Change (NAIC) (in USD)	**Total**	**379,000**	**1,372,000**	**3,680,000**	**5,429,000**	**6,942,000**	**1,513,000**	**9,718,000**	**51%**
			Female	203,000	738,000	2,238,000	3,165,000	3,791,000	626,000	5,909,000	59%
			Youth	153,000	613,000	1,753,000	2,606,000	3,398,000	792,000	4,628,000	58%
	4.2	Total no. households and small firms with positive Net Attributable Income Change	**Total**	**710**	**5,000**	**10,200**	**13,200**	**15,000**	**1,800**	**14,500**	**38%**
			Female	410	2,700	6,800	8,400	9,000	600	8,500	47%
			Youth	310	2,300	5,500	7,100	8,200	1,100	7,500	47%
	4.1	Total no. of full-time equivalent (FTE) jobs created	**Total**	**50**	**250**	**770**	**1,280**	**2,040**	**760**	**2,000**	**36%**
			Female	20	110	300	470	660	190	610	55%
			Youth	20	130	770	1,190	1,800	610	1,490	37%
Outcome	3.3	Value of Additional Exports					-	-	-		0%
	3.2	Value of Additional Market Transaction				268,000	453,000	2,815,000	2,362,000	1,000,000	57%
	3.1	Total no. of households and small firms adapting to new opportunities	**Total**	**980**	**7,300**	**14,300**	**16,700**	**18,500**	**1,800**	**19,000**	**40%**
			Female	560	3,900	9,600	10,800	11,500	700	11,700	49%
			Youth	430	3,400	7,600	8,900	10,000	1,100	9,300	50%
Output	2.3	Total no. of households and small firms with access to new opportunities	**Total**	**1,040**	**8,900**	**17,300**	**20,000**	**22,000**	**2,000**	**22,100**	**42%**
			Female	590	4,800	11,700	13,100	13,800	700	13,600	51%
			Youth	460	4,100	9,100	10,500	11,700	1,200	12,000	52%
	2.2	Business Innovations_Adapt					26	34	8	35	33%
	2.1	Market Actors_Adapt					29	69	40	31	52%
Activity	1.3	Private Sector Investment Leveraged		433,000	**707,000**	**837,000**	**940,000**	**994,000**	**54,000**	1,354,000	26%
	1.2	Business Innovations_Introduced		**20**	**23**	**30**	**37**	**45**	**8**	**60**	**35%**
	1.1	Market Actors_Exposed		**48**	**75**	**85**	**94**	**101**	**7**	**139**	**45%**

1.0 Activity Level

1.1 Total number of market actors exposed to innovations: This has increased from 94 in 2020 to 101 in 2021. New market actors engaged in 2021 includes international agro-input distributors (5) interested in investing in Liberia and Liberia International Christian College (LICC), which was engaged to develop short courses in agriculture.

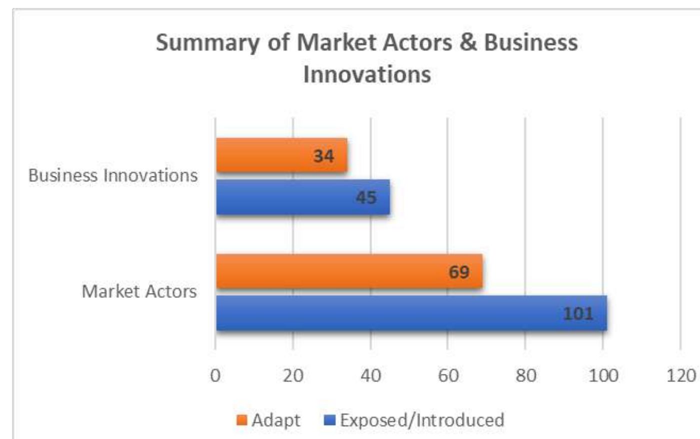
1.2 Total number of business innovations introduced: GROW has facilitated the introduction of an additional eight business innovations in 2020 taking the total to 45 business innovations. New business innovations in 2021 includes the development, introduction and marketing of short agricultural course by LICC; introduction of two new agro-inputs, setting up demo plots with distributors and engagement of two full time agronomist by T-JAL; and investment promotion work in the inputs sector leading to scoping mission by international agro-input distributors.

1.3 Private Sector Investment Leveraged: Private sector investment leveraged has increased from USD 940K to USD 994K. This includes additional investment by T-JAL in bringing in new agro-inputs, setting up demo plots and engaging two full time agronomists; additional cost incurred by international agro-input distributors incurred in conducting scoping mission; and additional cost incurred by agro-dealers in shop expansion.

2.0 Output Level

2.1 Total number of market actors that adopt to innovations (new indicator added in 2020): GROW has worked with a total of 101 private and public sector market actors in the vegetable sector. A total of 69 market actors have already adopted to GROW facilitated innovations. Partner adoption rate has increased from 58% in 2020 to 68% in 2021.

2.2 Total number of innovations adopted by market actors (new indicator added in 2020): By the end of 2021, a total of 45 business innovations were introduced in the vegetable sector by GROW. GROW's private and public sector partners have already adopted to 34 of these innovations. Innovation adoption rate for the vegetable sector has increased from 70% in 2020 to 75% in 2021.



2.3 Total number of households with access to opportunities: Impact assessment findings for the vegetable sector shows that 11 agro dealers continued on with the sales agent model in 2021. There were about 33 active sales agents in 2021. These sales agents provided training on good agricultural practices, proper input use and facilitated agro-input sales to 2,000 additional vegetable farming households in 2021. By the end of 2021, the cumulative total number of vegetable farming households that has access to opportunities have increased to 22,000.

3.0 Outcome Level

3.1 Total number of households adopting to opportunities: A total of 18,500 vegetable farming households had adopted opportunities such as proper input use and good agricultural practices in vegetable farming. Access to usage percentage has increased from 84% in 2020 to 88% in 2021.

3.2 Value of additional market transaction (new indicator added in 2020): GROW-supported agro-dealers' partners and T-JAL had made an additional agro-inputs sales worth of USD 229K. By adapting to proper input use and GAP in vegetable farming, new vegetable farmers recorded an increased revenue of USD 505 whilst the existing vegetable farmers recorded an increased revenue of USD 418. Sales of additional vegetables produced by GROW supported farmers has resulted in a total additional market transactions of USD 2.1M in 2021. This takes the cumulative total value of additional market transaction for the vegetable sector to USD 2.8M.

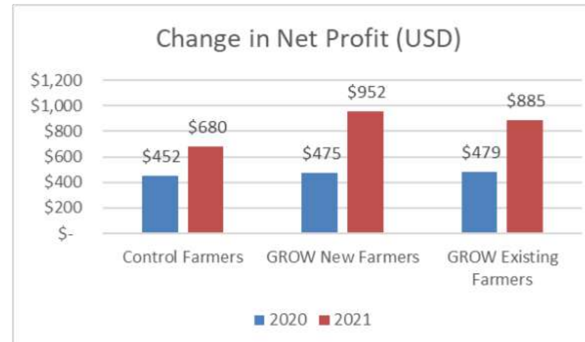
3.3 Value of additional exports: N/A. All the vegetables produced by vegetable farmers in Liberia are consumed locally.

4.0 Impact Level

4.1 Total FTE Jobs created: The total FTE jobs created for the vegetables sector has increased from 1,280 in 2020 to 2,040 in 2020 – majority of these additional jobs being created at farm labour level. It was found that 89% of new (930) and 88% of existing vegetable farmers (4,600) hired additional farm laborers. On average new vegetable farmers hired an additional of 56 man-days and existing farmers hired additional 28 man-days of farm labour, leading to total additional man-days of 180,200. This equates to 750 (190 female and 610 youth) additional FTE jobs created at the farm labour level.

4.2 **Total number of households with positive net attributable income change:** The total number of households with positive NAIC has increased from 13,200 in 2020 to 15,000 (inclusive of 2,040 FTE Jobs) in 2021. This includes an additional 1,040 vegetable farming households benefiting from additional yield and sales from vegetable farming and an additional 760 farm labourers working more days in vegetable farms in 2021.

4.3 **Total Net Attributable Income Change (NAIC):** By the end of 2021, GROW's work in the vegetable sector has contributed towards total NAIC of USD 6.9M. GROW-supported new vegetable farmers observed an increased net profit of USD 477 per acre, existing farmers had in an increase of USD 406 whilst the control farmers had in increase of USD 228 per acre. Attributed increased net profit for GROW-supported new farmers was found to be USD 249 per acre, and USD 178 per acre for existing farmers. On average GROW supported new farmers had 1.07 acres and existing farmers had 1.00 acres under vegetable farming. This translates to an average NAIC of USD 265 per new farmer and USD 178 for existing farmers and total NAIC for USD 1.1M for all benefitting vegetable farmers in 2020. Farm labourers working additional days contributed to total NAIC of USD 306K in 2021.



Vegetables Sector: Learning and Recommendations

What worked?

- **Farmers consistently rank agricultural advisory that they receive via agro-dealers or sales agents has highly valuable, contributing to their expanded production and sales.**
  - In GROW's final impact assessment of vegetable sector activity, 98% of farmers reported increased production in 2021 – with 95% attributing this to improved farming practices. Almost all farmers (96%) noted that they received guidance on application and general farming practice when they purchased their ago-inputs while 83% attended a formal agronomic training activity.
  - Farmers were not alone. Sales agents rank access to agronomic training and advisory as a key incentive for taking the job and attribute the skills they've developed in the role as an important factor in their own farm expansions.
  - Liberia's agronomic services and education are limited, with most agronomists working for commercial outfits sourced from neighbouring countries. The agronomic advisory shared with farmers through the agro-dealer and sales agent network clearly struck a cord and demonstrates the demand for these services.
  - The sales agent model, that incudes advisory in the cost of goods sold, is one strategy for creatively delivering extension to farmers on a cost basis.

- **Employing an inclusive business model approach to address gender gaps in agriculture works.**
  - A business case has proved a valuable tool to create visibility for women's roles and responsibilities in agriculture and to increase the appreciation of their value as suppliers, customers, and workers amongst partners. We've found that this tool – and the clear commercial opportunities it articulates – motivates our partners to invest in new strategies for increasing female participation.
  - One example of this is GROW's work to increase access to affordable agro-inputs and advisory services for male and female farmers – against a backdrop of persistent gender gaps in agricultural inputs. Leveraging research that explained women's roles and potential purchasing power in vegetable production and trade against agro-dealer sales and customer data, the potential was clear. While almost 60% of Liberia's vegetable farmers are female, on average,

    women made up less than a third of the client base of Liberian agro-input dealers - suggesting a large untapped market. GROW delineated this missed commercial opportunity for its partners and ultimately motivated and supported 22 agro-dealers to trial alternative marketing and sales tactics that better reflected female farmers' preferences.
    - Many of these tactics worked. Between 2018 and 2019, participating agro-dealers increased annual sales by 77% and almost doubled their customer base to 17,000 farmers. Further, agro-dealers' female clients grew by 120%. At the end of 2019, female clients accounted for 33% of agro-dealers' total client base (up from 28% in the previous year). Agro-dealers increased customers and sales by expanding points of sale (for example, selling at weekly markets highly frequented by female farmers), recruiting male and female sales agents to strengthen rural outreach, launching new marketing initiatives, and offering agronomic training to farmers on inputs use.

- **Professionalizing agro-dealers, including developing recordkeeping systems, has been a key driver of impact and performance for both our partners and the program.**
    - GROW's 'Agro-Dealer Development Program' improved agro-dealer business and financial management, agronomic advisory, and marketing and sales capabilities – better mirroring the needs of rural, smallholder farmers. In doing so, agro-dealer's businesses expanded and sales ballooned over time.
    - It takes a lot of effort and resources to diligently work with small businesses on the basics. Our work demonstrated the merit of making this investment in order to establish a sound foundation of growth. Now, our partners are using records to inform decisions such as investing in marketing activities that truly drive customers to their shops.
    - Records also informed GROW's approach. We diligently monitored sales, customers, and tactics in order to inform our own offer of support to agro-dealer partners – as well as to inform which partners were truly motivated to service farmers.

- **Improving the use of data to inform procedures and recommendations for the duty waiver through the Ministry of Agriculture and in collaboration with the Technical Committee was especially powerful.** As part of our efforts to support the administration of the duty waiver, GROW worked with the Ministry of Agriculture, Liberia Revenue Authority, and others to develop tracking systems and complete an evaluation. The analysis derived from this data informed the policy recommendation and also ensured broad support and relatively quick action from across the government, including from the Minister of Finance.

- **Efforts to position Liberia as an ideal market for investment received a warm reception, catching the interest of potential investors as well as helping to dispel the misperceptions about the business climate in the country.**
  - Surprisingly, many agribusinesses that we engaged as part of our investment promotion activity had questions around state of Liberia, with impressions of the civil war remaining top of mind. There is a lot of work to be done to rehabilitate the image of Liberia and promote investment amongst outsiders.
  - However, our efforts to inform and engage potential investors and companies was met with enthusiasm and interest.

What didn't work?

It's difficult to attract capable and capitalized agro-inputs players to Liberia's market – particularly during the post-Covid period of global supply chain and price volatility.

- The costs of doing business in Liberia are high. Poor infrastructure, costly financing, limited local talent pool (especially amongst agronomists), and inconsistent application of government regulations all challenge the predictability and significantly raise the costs of operations – particularly for an agro-inputs distributor who must engage with rural farms.
- Liberia's addressable market is also small. Limited demand from only a handful of large commercial farms or concessions for the provision of agro-inputs combined with the small nature of the smallholder market – against a backdrop of a small market overall (~5 million people) and high operational costs – challenge agribusiness growth and ROI potential in Liberia. Further, underserved and more lucrative regional markets offer a more compelling investment opportunity when compared to Liberia.
- GROW was able to attract interest in expansion to Liberia from smaller, regional agro-inputs players. And this direction shows promise. Midway through 2021, however, global fertilizer supply shortages and rising prices associated with Covid-era supply

chain issues forced those that had intended to scope Liberia to redouble efforts on their core markets rather than to expand. As supply chain issues sort themselves out in the coming years, returning to these conversations is likely to yield promise.

- However, following from the above, those players that choose to expand to Liberia are also likely to be smaller, less capable and limited in capital. The best, the biggest and the most resourced will flock to other, underserved, less risky markets where a higher return on their investment is likely. This has important implications for the type and volume of support that may be needed from a project similar to GROW. In other words, it's likely that these partners will be more similar to TJAL Enterprises than Syngenta.
- Further, entrants to Liberia are likely to require some high volume or high margin opportunities that can predictably ground their operations. This is an important reflection from GROW's work: in this context, multiple revenue streams – including government or not-for-profit contracts – are an important source of revenue that balance out the relatively unpredictable demand of medium and smallholder farmers.

Vegetable sector activity was limited by several short-term program extensions in a market that requires a longer-term outlook.

- In the last few years, GROW was carried ahead through several, short-term extensions that ultimately resulted in several years of extension. The short-term outlook offered, however, limited the tools at GROW's disposal and relegated its focus to the agro-inputs sub-market rather than a wider spectrum of sub-markets that would be needed to support holistic sector growth. Given the complexities and limitations of the vegetable market – against a more challenging market in which to facilitate change -- it would have been important to offer a longer-term timeframe of engagement (not necessarily money) to potential partners in order to encourage greater risk-taking.

Structural limitations challenge the scope of change that can be facilitated utilizing commercial models.

- Existing prejudice against professionalising female roles in agriculture is not easily eliminated through evidence in the form of a business case. Numbers matter but insufficiently change personal attitudes within a normative framework that is stacked against women. Women are left to navigate multiple and overlapping barriers, as well as unequal power relations in order to respond to business innovations.
- As a programme, GROW has seen Liberian women face difficult trade-offs between looking after their small children and earning a living as agricultural labourers. We've also learned about their struggles to access health care in remote areas and witnessed female managers challenged to navigate male reports who attempted to undermine them as leaders and managers by obstructing access to key business equipment. Limited literacy and numeracy have also proved a recurrent theme that prevented female agro-dealers from independently running their businesses, stood in the way of women becoming managers, and undermined women's ability to demonstrate their effectiveness as sales agents.
- This may require more time, resources and different types of partnerships to address structural barriers such as female literacy, access to technology, or the availability of birth control. Integrating more research regarding the influence of social norms on economic interaction in markets that, in turn, informs activities to create new norms to replace harmful ones.

The sales agent model proved highly valuable toward extending reach into rural settings and driving sales. But, it also ran up against some puzzling barriers.

- Sales agents drove client and sales growth and were widely recognized as the most important growth channel by agro-dealers. Yet, appropriate payment for services rendered proved a barrier for many agro-dealers. The most successful sales agents and satisfied agro-dealers relied on a blend of financial and non-financial incentives. Other opportunities along the value chain including value addition and aggregation are a growth area for sales agents and might offer a more rounded financial offering. Sales agents who have alternative sources of income such as these that require a network of farmer customers have been more likely to continue than those who rely solely on their farming and sales.

- Despite the high performance of female sales agents, many agro-dealers could not bring themselves to continue to recruit additional females into the role. As noted above, specific actions need to be taken to better position interventions against stereotypes against women in the sector.

Addressing vegetable trade limitations is necessary but very difficult.

- There are limited incentives to improve the terms of vegetable trade in Liberia. Yet, improvements to the terms of trade are necessary to drive sector growth. Vegetable trade in Liberia is fragmented, with many small traders, farmers, aggregators, and buyers operating in ad hoc ways. The absence of strong demand against the complexity and cost of the challenge limits the potential for change.
- Despite many pilots and creative thinking, GROW was not able to find activities or partners that could shift normative trade practices toward more invested, trusted, predictable relationships.

What would GROW recommend for future initiatives?

Leverage the network of proven partners cultivated under GROW. A small vegetables market with limited incentives for change will necessitate continued activity with GROW's core partners, including agro-dealers, distributors and government agencies. These groups have demonstrated capability and willingness to invest in inclusive business models and to shape the market in ways that support smallholders. There continue to be a number of avenues for growth building from these relationships, including integration of new products and services, exploring aggregation and trade models, and expanding advisory to farmers.

Expand activity within sub-sectors, including agronomic advisory, transportation and finance.
Agronomic advisory and education is sorely limited in Liberia and, based on impact of GROW's work and response from farmers and partners, hugely demanded. GROW's activity demonstrates the merits of leveraging the private sector to offer extension and should be continued. Other opportunities, including building on our work with LICC's short course, working in collaboration with the National Agro-Input Dealers Association of Liberia (NAIDAL) or other groups, and engaging the public extension system are important opportunities to re-examine.

Transportation, storage and packaging limitations all hamper post-harvest preservation and cut into vegetable resale potential. Given the nascent market, creative solutions that leverage quality-conscious buyers will be needed. It will be valuable to again re-examine the landscape of potential partners – potentially considering a more heavy-handed level of support to pilot initiatives.
Capital limitations stand in the way of larger import options that would lower costs. All agribusinesses need finance and, now that agro-dealers and distributors can point to several years of records and steady growth, they may be in a position to command it. They'll need support to assess and unlock options.

Expand collaboration with the Ministry of Agriculture.
GROW's activity with the MoA and Technical Committee and the duty waiver shows promise. A more attractive investment climate will take time. Rehabilitating Liberia's reputation along with a continuation of the duty waiver is part of a long-term approach to attracting more players.

GoL or not-for-profit contracts are perhaps the most enticing opportunity for distributors; they offer large volumes and more attractive margins. The terms of those contracts, then, are a compelling opportunity to shift market dynamics. In neighbouring Sierra Leone, “smart subsidies” that leveraged the private sector to deliver subsidized goods to farmers through a “buy one, get one free” approach incentivized agro-dealers to invest in local distribution infrastructure and helped them to establish relationships for farmers that did not go away with the closure of a contract. The Ministry of Agriculture influences the terms of spending for their contracts and also of those put out by donor projects.

Closed sectors

Rubber

Rubber is an important sector for Liberia, accounting for 16% of all exports as the 3rd most valuable export commodity in Liberia. Further, with 55% of all latex production derived from smallholder farmers, it is also an important cash crop.

However, Liberia's rubber industry struggled for years in light of fluctuating and low international commodity prices. Low prices make it difficult to justify expenditure or to source financing needed to invest in processing alternatives, replant aged trees that hamper productivity, or, in some cases, continue operations overall. Liberia's rubber industry is also dominated by one large, historic concession that is itself struggling due to the low world market price as well as high legacy costs associated with the terms of the concession. Lack of competitive purchasing alternatives has further disincentivized diversity and investment - limiting market options for producers.

Ribbed Smoked Sheets processing is an alternative processing method that offers a higher market price when compared to traditional Technically Specified Rubber (TSR) – though is still tied to world market price limitations. It also requires a lower cost barrier to entry when compared to TSR processing requirements. RSS could offer an alternative industry growth pathway – that will take a long time to achieve owed to the financial and technical requirements and systemic underperformance of these in Liberia.

GROW's rubber interventions centered on the processing of rubber into ribbed smoked sheets (RSS). GROW partnered with COR Corporation (known also as Bright Farms), Agro-Rubber Industries (ARI) and Mulbah Rubber Estate (MRE) to establish processing facilities for RSS (Intervention #1). The programme also linked these processors with farmer cooperatives that could supply latex. In addition, GROW engaged a finance provider, the Liberia

Bank for Development and Investment (LBDI), to facilitate access the finance required to develop RSS facilities (Intervention #2) via a loan guarantee facility. Finally, GROW developed curricula for training young people in RSS production in partnership with technical, vocational education & training (TVET) institutions (Intervention #3) in order to fill the gap of skilled workers needed by these and future RSS facilities.

GROW completed pilot phase activity in 2019. At the time, two facilities were completed and had processed RSS. RSS and factory management specialists had overseen the launch of one facility, ensuring the quality of RSS produced would meet high grade requirements on the international market. Moreover, the TVET course had been piloted and refined, with a broader teacher training completed. Finally, GROW completed an investment case, demonstrating the viability of investment in RSS in Liberia using figures from pilot use case factories.

Completing GROW's RSS pilot phase took several years. The introduction of RSS technology – which is simple, but requires unique equipment, factory build, financing and skilled factory management – took quite a bit of time to line up. Equipment, for example, was manufactured in Sri Lanka and Liberia's orders seemed to take a backseat to those from other, higher volume contexts. For another example, LBDI's own poor performance challenged timeliness of RSS facility delivery. Basic management and institutional capabilities are lacking at LBDI (and other banks) – leaving aside liquidity shortfalls or absent loan products fit for the agricultural sector.

In the end, GROW was able to establish 'proof of concept' with functional RSS facilities meeting international market standards. Further, using figures gathered during the pilots, GROW was also able to establish a compelling business case for replication in Liberia. Moreover, Firestone, the largest concession in Liberia, expressed an intent to replicate RSS itself and in collaboration with its commercial farm suppliers (a plan derailed by the Covid outbreak).

In order for GROW to continue support to RSS significant financing and a long-term horizon would be needed. With GROW's short-term outlook (it was extended several times but for short periods) and limited resources (GROW was not set up to offer significant sector financing), continued activity with respect to RSS and rubber was not possible. Instead, GROW paused sector work.

Recommendations: With the scope and resources to continue activity, the RSS model presents a compelling business case for Liberia's commercial rubber farmers.

- Firestone had expressed their intent to progress with an RSS model and GROW hoped to collaborate with them on this; the difficulties and costs associated with sourcing equipment and guidance – which is highly technical and international in nature – as well as the financial shortcomings expressed by all commercial farmers, rendered the Firestone model likely the most expedient pathway to scale RSS in Liberia in the short term.
- Activities to network actors and address financial shortcomings should be considered. For example, partnering with Development Finance Institutions (DFIs) and Development Partners to finance the actors of the rubber production chain. Further, developing RSS machinery manufacturer directory and connecting potential investors, buyers, and current processors may increase interest and opportunity.

Agro-Processing

Liberia's agro-processing industry has the potential to serve as a significant buyer of domestically produced agricultural outputs and, accordingly, offers a growth pathway for increased farmer income. The industry is small – with only 60 "branded" firms. It is also challenged by inconsistent and expensive raw materials, as well as packaging. Moreover, lack of specialization within the industry means that each agro-processor must build expertise in all areas of production, from sourcing to distribution. For actors that are limited in capacity and capital, these challenges are often too difficult to overcome – particularly as collaboration and interaction between agro-processors is also limited.

GROW's vision for this sector was to foster collaboration and information exchange between and among large, small, and new agro-processing and business service provision firms as well as aggregators and farmers that collectively lower the barriers to industry entry, enable greater specialization, and unlock growth. To this end, GROW led a number of pilot initiatives, including:

- Improved access to affordable, quality packaging for agro-processors in Liberia. These included: surveying agro-processors for their packaging needs and requirements, developing a business case for packaging importers to service agro-processors with targeted packaging, recruiting and pitching packagers, importers and agro-processors on the opportunity, holding industry events to foster dialogue and collaboration between agro-processors to solve packaging limitations.
- Improving specialization through collaboration and information exchange among agro-processors as well as influencing their application of improved business practices. These included: monthly *agro-processor networking events and fairs*, educational business series, Liberia Made branding to promote local goods, and buyer-led accelerator program for suppliers.

The Liberian agro-processing and packaging market is small – too small to warrant an investment in local packaging by a domestic packaging company and too risky for importers to focus resources to packaging products. Further, agro-processing firm capabilities and capitalization also challenged the program. Adapting, GROW facilitated industry collaboration, addressing consumer confidence issues, and bridging connectivity with regional markets and packagers (e.g. Ivory Coast and Ghana) that can more cost-effectively support Liberian agro-processors.

Ultimately, again, GROW's short time horizon (which was extended piecemeal) against the heavy time and resource requirements needed to work in the sector limited the program's capability and led to the closure of the sector. While agro-processing has some potential, Liberia's small market and the quality of firms that emerge in the sector as a result, challenge impact potential. Activities to focus on more lucrative export markets or niche local markets may prove more efficacious.

Oil Palm

GROW’s work in the oil palm sector was primarily done in the first three years of the programme. GROW’s activities were centred on developing outgrower schemes as laid out in the 2009 concession agreements by bringing together stakeholders and facilitating the Government of Liberia’s (GoL) efforts to get the schemes financed and operational. GROW’s justification for operating in the oil palm sector was based on the transformational potential of outgrower schemes for farmers and for the expansion of concession ‘nucleus’ farms. Specifically, concessions can act as a bridge to market for smallholders as they have existing relationships with large international buyers and required technical knowledge.

GROW’s activity mainly involved working with GoL officials, the National Bureau for Concessions (NBC), as well as the oil palm developers Golden Veroleum Liberia (GVL) and Sime Darby. The model that has emerged is being led by IDH (Initiatief Duurzame Handel - The Sustainable Trade Initiative) through Norway's International Climate and Forest Initiative (NICFI). GROW supported IDH to bring in development financial institution (DFI) finance to fund 4,000 hectares of outgrower schemes with GVL. IDH was to provide 35 percent first-loss guarantee to DFIs for loans up to USD 16 million. The suggested structure was that each concession should manage an off-balance sheet Special Purpose Vehicle (SPV) that houses the investment into the community outgrower schemes. GROW identified, early on, ‘capacity gaps’ among key stakeholders in the sector. In support of these stakeholders, mainly the National Bureau of Concessions (NBC), it subsequently contributed some analytical pieces of work - a Community Needs Assessment (CNA) and then a first attempt at defining the operational and financial model for outgrower schemes. However, given that IDH is focused on forested communities, there was still no clear viable model on how outgrower schemes could work for non-forested communities.

The programme also partnered with the Quintessential Business Women’s Association (QBWA) and Pasama Agriculture and Trading Corporation, with Partnership Agreements for both signed in April 2017 as a pilot. These partners sought to produce processed palm oil for resale as well as branded palm oil products, like soaps. However, the commercial case proved uncompelling and the value to smallholder farmers unclear. The pilot closed as a result.

Ultimately, like with rubber, the time and financial trajectory of support required to improve the oil palm market was beyond the capability of GROW. Moreover, environmental questions regarding oil palm globally dissuaded continued activity in the sector.

Cross-Cutting

Stakeholder Engagement

Throughout the life of the GROW programme, stakeholder engagement has been a central consideration relative to the delivery of interventions. The overarching focus of the engagement has varied at different periods of the programme depending on the specific issues at play at every point in time. In the past few years, as reported in previous annual reports, the central themes have been around the following;

- Working with stakeholders to deter negative policy thrusts: At various times, new proposed sector policies and strategies put forward by public sector actors were assessed to be inimical to some sectors (e.g. proposed cocoa sector regulations) and GROW was able to contribute towards mobilising stakeholders to present a counter opinion that deterred the agenda. Engagements around this were benchmarked against political-economy considerations to avoid any fallouts and conflicts for the programme.
- Being an industry intelligence resource to stakeholders: GROW was able to create a niche for itself as a resource for industry intelligence needed to shape policy and strategy. This was enhanced by the Programme's ability to be responsive to outcomes of discussions and engagements through the undertaking of quick research pieces to provide empirical evidence to support decision making.

In the last year of the programme, the objective has been focused on using the engagement process to drive sustainability. The engagement mechanisms used to drive this agenda were; stakeholder dialogues (speaker series), direct engagements and sector intelligence/ knowledge sharing.

Public Sector Engagement

Ministry of Agriculture (MoA): As GROW's main public stakeholder partner, the Programme continued to maintain a strong relationship with MoA, especially with the Minister. Over the course of the year, the Minister attended a number of virtual stakeholder dialogues as a key participant. These provided deep insights to the Minister regarding specific activities GROW was providing technical assistance on related to duty waivers for agricultural inputs being driven by the ministerial technical committee and value-chain activity in the cocoa sector.

The Programme also collaborated with the MoA to standardise Good Agricultural Practices (GAP) for the cocoa sector. At the launch of the harmonised GAP manual, the minister discovered GROW was supporting some stakeholders to achieve organic certification. This led to the Minister requesting GROW's support towards helping some actors in the cocoa sector to tap into a funding opportunity provided by French Development Agency (AFD).

GROW is also working with the Ministry to take ownership of some of the research pieces that were undertaken and currently being hosted on GROW's website. The idea is to transfer these documents to MoA to be hosted on MoA's website to ensure continued access even after the closure of the programme.

Based on the imminent closure of the GROW programme, in order to ensure sustainability and a smooth transition to the next phase of GROW to be implemented by UNIDO, efforts were made to link up the UNIDO team to MoA to get a sense of the priorities of the Ministry. During the transition meeting, the Minister was able to outline the Ministry's focus and the aspects of the GROW programme that were expected to be continued.

Ministry of Finance and Development Planning (MFDP): In the last year, not much engagement was required with the MFDP. Despite this, the Programme maintained periodic contact with MFDP through one of the Deputy Ministers at the Ministry. This was to ensure that communication channels remained open in the event of any urgent matter that needed to be addressed by the Ministry.

The Programme continued to explore different avenues to engage with the management. In the absence of a full intervention to review the regulations, a white paper, examining the different regulatory approaches operational in many cocoa producing countries and providing some recommendations for Liberia, was produced and shared with LACRA for consideration. With respect to the setting of reference prices for the cocoa season, GROW continued to offer the support. Finally, though the offer for capacity building support was not taken up, the Programme was asked to participate in the review of LACRA's methodology towards commodity price setting. This offered the opportunity to engage the technical team in the agency and give them insights of other approaches towards commodity pricing.

In order to ensure a smooth transition for the next phase of the GROW Programme, the UNIDO team was introduced to the leadership of LACRA with a view to helping the latter establish relationships early on.

One key learning from the engagements with LACRA is the fact that the current leadership of the agency is keen to revert back to a government led marketing model for commodity exports, away from the current private sector driven model. As a result, all support not geared towards achieving this objective is hardly taken up. This has been echoed by other programmes as well. The next phase of the GROW Programme will need to devise a strategy to overcome this bottleneck as there is still a real need to review the current regulations in the context global developments.

Cooperative Development Agency (CDA): During the year, the relationship with CDA strengthened. The support towards developing a harmonised Good Business Practice (GBP) manual for cooperatives was successfully delivered and a Training-of-Trainer (ToT) exercise for master trainers was conducted. Thereafter, CDA sought funding from other development partners to undertake a step-down training. Throughout the process, the leadership of CDA and the technical team showed real commitment towards the exercise.

In order to main the momentum and ensure sustainability, the UNIDO team handling the next phase of the GROW Programme were introduced to the management of CDA with a view to determining the best way to consolidate on the earlier gains.

Engagements with Donors and Programmes

During the year, GROW continued to engage with other development partners and programmes on issues relevant to common areas of interest. The donor stakeholders were also regularly invited to join the virtual Speaker Series events.

Meetings were also facilitated between UNIDO and some programmes operating in the same space as GROW to build UNIDO's understanding of the sectors and to promote collaboration and avoid overlaps.

A key learning relevant for future programming is the need for better coordination amongst donors to avoid overlaps and counter productivity. While a donor coordination platform exists, sectoral programme level coordination, where technical issues are discussed, also needs to be instituted by the donors. Over the years, GROW has adopted the coordination approach with some nominal successes through collaborative work with the likes of CBI, IDH and Solidaridad. Despite these efforts, it is difficult to drive this agenda more broadly at a programme-to-programme level. For programme coordination to be more successful, especially sectoral coordination, it must be a key requirement of the donors themselves.

Gender

Women play vital roles across agricultural value chains. In Liberia, they own large rubber and cocoa farms, lead cooperatives, work as agricultural labourers and contribute countless hours of unpaid labour on family farms. Too often, though, women are overlooked and undervalued. Doing so not only harms women and their families but the agribusinesses and sectors that would benefit from their enhanced participation.

As a market systems development program, GROW Liberia has worked to realign incentives and relationships to improve economic participation and increase income and employment for poor women and men at scale. GROW does not work with smallholder farmers directly but typically employs a facilitative approach, engaging with public and private partners who are motivated and capable of addressing the underlying causes of underperformance that limit farmers' participation and opportunity in our target cocoa and vegetables sectors.

This calls for an approach to gender and inclusion that puts market players at the forefront of the change. GROW has employed business incentives and commercial arguments to motivate its partners to better serve and include female farmers. And, this has made a difference – resulting in agribusinesses that are growing through their use of inclusive practices as well as farmers and households that are financially benefiting as a result of their improved participation in supply and distribution chains and the workforce.

Examples of GROW's inclusive business model approach include:

- **Increasing access to affordable agro-inputs and advisory services for male and female farmers within the Vegetables Sector.** Leveraging research that explained women's roles and potential purchasing power in vegetable production and trade against agro-dealer sales and customer data, the potential was clear. While almost 60% of Liberia's vegetable farmers are female, on average, women made up less than a third of the client base of Liberian agro-input dealers - suggesting a large untapped market. GROW delineated this missed commercial opportunity for its partners and ultimately motivated and supported 22 agro-dealers to trial alternative marketing and sales tactics that better reflected female farmers' preferences. Many of these tactics worked. Between 2018 and 2019, participating agro-dealers increased annual sales by 77% and almost doubled their customer base to 17,000 farmers. Further, agro-dealers' female clients grew by 120%. At the end of 2019, female clients accounted for 33% of agro-dealers' total client base (up from 28% in the previous year). Agro-dealers increased customers and sales by expanding points of sale (for example, selling at weekly markets highly frequented by female farmers), recruiting male and female sales agents to strengthen rural outreach, launching new marketing initiatives, and offering agronomic training to farmers on inputs use (read the full case study here).

- **Improving female inclusion in cocoa training and trade models within the Cocoa Sector activity.** GROW's monitoring data showed that the proportion of female cocoa farmers trained by our partners – largely invisible family labour in male-owned farms – was at just 21 percent at the start of our activity. Typically, male farmers attended the trainings but rarely passed the knowledge onto other family members. Far more than a question of fairness and equal access, the underrepresentation of female farmers threatened to undermine the causal link between training, cocoa quality and access to premium cocoa markets. Women in farming families are the ones primarily responsible for cracking the pods and fermenting and drying the beans – time-intensive post-harvesting activities that are essential for bean quality. Further, consistent with the low proportion of female trainees was the low number of female Village Coordinators (quasi-agents responsible for outreach and training) working with cooperatives and traders. In 2019, only one cooperative had selected a single female Village Coordinator, suggesting cooperatives had been recruiting from within their well-known and largely male networks. GROW research subsequently showed that female farmers preferred to be trained in all-female groups by female outreach workers. A scaled training model with mainly male Village Coordinators would therefore likely lead to an increase in the exclusion of female farmers which in turn would undermine efforts to boost the quality of cocoa produced by farming families and demanded by more lucrative premium markets.

  Armed with these insights, GROW worked with partners to adapt their training approach. Alterations such as change in place and time of trainings better suited to female farmers' needs as well as targeted communications achieved an increase of the proportion of female cocoa farmers trained from 21 to 36 percent between 2018 and 2019. A more hands-on role by GROW to support cooperatives to recruit female Village Coordinators equally brought results. Recruiting among women's groups, enlisting male community leaders' support and active communication of the key role female cocoa farmers play to boost cocoa quality among farming communities led to an exponential increase in the number of female Village Coordinators from one to 303 (the equivalent of 47 percent) within one farming season across the participating cooperatives. These efforts paid off: including women farmers in good agricultural practices training translated into 36% higher cocoa yields for farming families (read the full case study here).

Reflections

- **A commercial approach to inclusion is important but insufficient.** In our work in cocoa and vegetables in Liberia, inclusive business models have improved female economic participation and income benefits while growing revenue and profit for agribusinesses concurrently. We would unequivocally recommend an inclusive business model approach for future programs.

  However, in both sectors, larger normative barriers proved resistant to GROW's inclusive business approach and brought to light the limits of a merely commercial approach. For example, engaging sales agents to grow agro-dealer distribution proved highly effective in generating new customers and growing sales overall. Moreover, female sales agents proved as effective as their male counterparts – and more so at growing agro-dealers' female customer base. However, despite objective performance indicators to the contrary, female sales agents were portrayed as "weak" by some agro-dealers and "running away" as they were perceived as unable to deal with stress. In other words, existing bias against women in business roles proved stronger than the evidence on their effectiveness as agents. Though this decreased over the lifetime of GROW's activity and through positive influence from other agro-dealers, bias remains.

This example highlights how underlying structural inequalities manifest themselves during programming and challenge activity 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.

- **Thoughtful technical design backed by systems and messaging that mainstream gender within the program enabled GROW to achieve more success.** GROW's activity to address gender inequality was not limited to technical considerations – it permeated throughout the program, including recruitment and measurement. Mainstreaming gender considerations and ensuring male and female voices were heard within our own organization improved the quality and thoughtfulness of our delivery – rendering it more effective.

- **Data fuelled GROW's gender journey and is essential for program's aiming to address inequality.** GROW found that strong gender data, coupled a process that systematises its use, was key to translating its inclusion strategy and ambition into programming reality. Sex-disaggregated information and evidence on invisible (and often ignored) experiences and roles of female farmers provided the programme with a holistic picture of farming in Liberia and exposed stereotypes and bias. Moreover, gender data enabled GROW to promote actionable recommendations to support gender equality within its interventions and influence partners to pursue inclusive business models that target women as consumers, entrepreneurs and employees.

- **The use of strategic incentives helped to encourage 'gender risk-taking'.** Competitions and performance-based partnerships with gender targets encouraged partners to integrate gender considerations and take risks with respect to female workforce and marketing targeted to women that they were unlikely to otherwise.

Environment

Environmental considerations and activity were woven throughout GROW's interventions in the cocoa and vegetables sectors. These include:

Cocoa Sector

The premium cocoa market opportunity is both more financially equitable for Liberian farmers, and is aligned with GROW's environmental sustainability objectives which include a focus on zero-input ("organic by default") production and conservation. Environmental considerations were included throughout GROW's cocoa activities, including:

- The premium research finding that stories, including rainforest and biodiversity conservation, are key interest factors for premium buyers is also confirmed in GROW's experience with premium buyer engagement. Forty percent of West Africa's remaining rainforest is in Liberia, in which a significant portion of Liberia's cocoa producing areas overlap. Cocoa producers interested in attracting premium buyers can benefit by utilizing practices that align increasing productivity with safeguarding conservation.
- Certified organic is a large and growing segment of the premium cocoa market. GROW facilitated zero-input good agricultural practices training and worked to align training manuals with other stakeholders working in cocoa. Continued education on and advocacy against the introduction of chemical inputs is an important factor in maintaining Liberia's "organic-by-default" competitive advantage.
- GROW-designed GAP training on farm management enables older, rehabilitated cocoa farms to attain production and quality targets without the addition of chemical inputs or expanding/establishing new plantations. Intensive farming of high-quality cocoa minimizes the risk of deforestation in Liberia – the opposite being the case in neighbouring Côte d'Ivoire and Ghana, where a focus on producing high volumes of low-quality cocoa has led to an increase in deforestation in recent years despite conservation efforts.

Vegetables Sector

- Initial assessments of potential distributor and agro-dealer partners included a review of shop organization and inventory, requiring the safe removal of all banned and expired products, the safe storage of products, as well as cleanliness of the shop as a baseline requirement for engagement with GROW.
- GROW support to agro-dealers and sales agents to build their capacity to provide valued agronomic advisory and training to farmer clients included such topics such as soil nutrient management, safe pesticide application, personal protective equipment use, basic non-application pest control measures, compost use and application, etc. In addition to building agro-dealer and sales agent agronomic understanding, GROW also invested in their capabilities to train and support farmers.
- GROW preference for partnership with Organic Matters, a local agro-input supplier that offers locally produced, organic inputs coupled with advisory.

> The Value of Health and Safety
>
> "A better understanding of health and safety considerations was identified as the main benefit for many female farmers on receiving improved information on products from their dealers and sales agents. Some recounted how they used to "taste the chemicals" to check if they were diluted correctly but now understand the negative health impact. Many highlighted the need to wear proper protective gear and keep children away from fields which have been sprayed. One group of women reported having headaches in the past which have improved with better knowledge on how to protect themselves when using chemicals."

Reflections

GROW integrated environmental considerations within its programming. However, with partnerships established, there may be additional opportunities to further promote and incentivize environment, biodiversity, and conservation within programming.

As with gender, promoting environmental considerations within market development programming is most easily managed by leveraging financial incentives. In the case of cocoa, these are offered by the premium market. Given Liberia's unique, intact primary forest coverage, this is an opportunity on which to build.

Approach

Market Systems Development Approach in Liberia

Liberia is a thin and crises-affected market, suggesting a number of contextual nuances that influence behaviour and capabilities of private, public and not-for-profit actors. These include:

Characteristic of Liberia's Context		Actor Capabilities & Behavior
1. Unpredictable, shock-prone environment	►	No long-term planning
2. Information asymmetry and elite capture	►	Difficult to find and evaluate companies
3. Private sector is limited in capacity and capital	►	Basic business fundamentals absent. Literacy and numeracy gaps.
4. Absent supporting services, like finance or advisory	►	Companies face significant financial pressures
5. Large, protracted humanitarian presence	►	Aid lures investment and talent. It distorts markets.
6. Extractive state	►	Government contributes to instability.

Accordingly, Liberia is also a challenging context in which to deliver effective, private sector-led, and inclusive economic growth. In GROW's first years, the program struggled to navigate the context – which included the Ebola epidemic – and this is reflected in its limited early impact and high team turnover. However, through learning, trial and error, and continuous adaptation we feel we've developed a formular to deliver market development in Liberia. This is reflected in the strong impact trajectory of the program.

Important elements of GROW's approach that enabled its success include:

1. Partnership Selection & Engagement

GROW's market systems and facilitative orientation that prioritizes the durability and scale of impact necessitates work through partners. Optimally, GROW would be able to collaborate with larger, well-capitalized and highly skilled businesses in influential positions in the market to pilot and prove new innovations. However, very few businesses fit this description in Liberia. The ones that do are often oriented to donor-funding or not motivated to service smallholder farmers. In order to source partners, then, GROW took a wider view to the types of partners with which it would collaborate and adapted its due diligence and support offer to accommodate.

- *Types of partners.* GROW targeted smaller businesses, operating closer to farmers and beneficiaries at the beginning. Over time, and leveraging the information and networks that these initial relationships afforded, GROW was able to build collaborations with larger, regional and global companies.

- *Rethinking due diligence.* GROW aimed to source motivated partners positioned to change markets. Traditional due diligence processes rely on paperwork and proven track records with institutions such as banks in order to predict performance. These are largely irrelevant when working with smaller companies with limited paperwork and in settings like Liberia. The absence of these capacities, however, did not mean that these actors were dishonest or incapable.

  GROW employed a "self-selection approach" to partnership selection and engagement that coupled small offers of support with mutually-agreed performance targets in a series of progressive phases. In the beginning, activities were often focused on preparing a business for innovation; support was focused to advice and targets would consist of activities such as establishing records, developing a list of farmer suppliers, etc. Businesses that demonstrated no capability to progress on small tasks were eliminated from partnership.

  In the case of GROW's Agro-Dealer Development Program, for example, GROW began with 48 partners at the start and ended with 28 after six months of collaboration that included establishing a customer database, integrating sales tracking, and organizing inventory and shop set-up. Those 28 were highly motivated to work on a strategy to improve their business and integrate new pro-poor innovations. In response to their investment in shared activity, GROW upped our level of support.

This approach implies a comfort with failure. Importantly, in this case, failure doesn't mean money and effort wasted. Rather, the lean self-selection approach ensured that we sourced motivated partners early on. By adapting our tactics of engagement and using resources in a much different way, the program safeguarded against waste and misuse.

- *Adapting GROW's offer of support.* Smaller partners also often lack professional capabilities such as recordkeeping, organizational management structures, job descriptions, governance, etc that are fundamental to any business or organization and necessarily predate successful growth. GROW adapted our offer of support accordingly, integrating significant business development guidance and working with partners to professionalize alongside integration of new models, products, services and information.

  Per our self-selection approach, support was performance-based and blended technical and financial assistance.

2. Lean & Adaptive Management

Responding to Liberia's unpredictable and information-scarce environment and in light of our adapted approach to partner selection and support, GROW also modified our organizational management approach – employing lean and highly adaptive tactics better suited to the context and our partners.

- *Big picture direction, with detailed plans mapped incrementally.* GROW focused our planning to bigger picture theories of change rather than highly scripted workplans. We also focused our partnership agreements to big picture strategies and detailed phases mapped incrementally (in line with performance-based approach). This helped to keep our teams focused on their core tasks of supporting and engaging partners rather than on the development plans that rarely (if ever) came to fruition.

- *Lean team and task management*. In order to manage delivery with higher level strategies focused on systemic change and bigger targets as well as incremental, detailed plans, GROW teams met often (weekly sector meetings and bi-annual strategic reviews). These meetings facilitated learning, partnership reviews and regularly adapted tactics and offers. We also used lean management tools such as Asana, Teams and partner dashboards that are easy to update, support lean tracking, and foster collaboration.

- *Data-driven activity.* To support lean decision-making for our program and partners, GROW invested in the recordkeeping capabilities of our partners as well as our own data monitoring system. Multiple, real-time information sources offered the program visibility afforded few actors in Liberia and informed our weekly and bi-annual delivery tweaks.

3. Team Make-Up

GROW's most important resource was its team. Attracting, supporting and retaining a group of individuals that offered a unique blend of skills, experiences and networks was critical to GROW's success and a point of much consideration for the management team.

1. *Team members with business capabilities and strong business and investment networks as well as a diverse set of backgrounds were recruited.* Advisors with these skills and connections offered tangible value to partners, bolstering GROW's value addition and credibility. Moreover, a breadth of perspectives ensured that our work was locally-minded, internationally-connected and considered of male and female needs.

2. *Larger number of team members willing to closely collaborate with partners wherever their businesses were located.* With more and lower skilled partners, GROW played a deeper advisory role and required more team members to manage the breadth of new partners spread at all levels of the value chains. This had important budgetary implications, requiring a larger core team expenditure.

3. *Capacity building investments were critical to team performance*. Few team members had market systems experience and, while we hired individuals with business backgrounds, often the level of skill required to be able to provide sound advisory needed upgrading. We routinely invested in skill development of our own team members through trainings as well as mentoring.

4. **Funding & Budget**

The flexibility afforded GROW's strategy and management, partnership engagement, and team was possible in large part due to the flexibility of GROW's funding. Early on in the program, a high degree of rigidity and oversight had limited GROW's ability to respond to partners and the context. For example, the program was set up to disburse grants to partners directly. However, the limited capability of partners and due diligence requirements that could not be met challenged the ability and value of disbursing resources in this way – and hamstrung activity. Sida addressed this by supporting the development of a 'Flexible Facility' that was subject to agreed governance laid out in a Fund Manual and dictated by annual planning. It was largely flexible in its use. Budget flexibility enabled GROW to better respond to Liberia's unique context and lead a lean and adaptive approach.

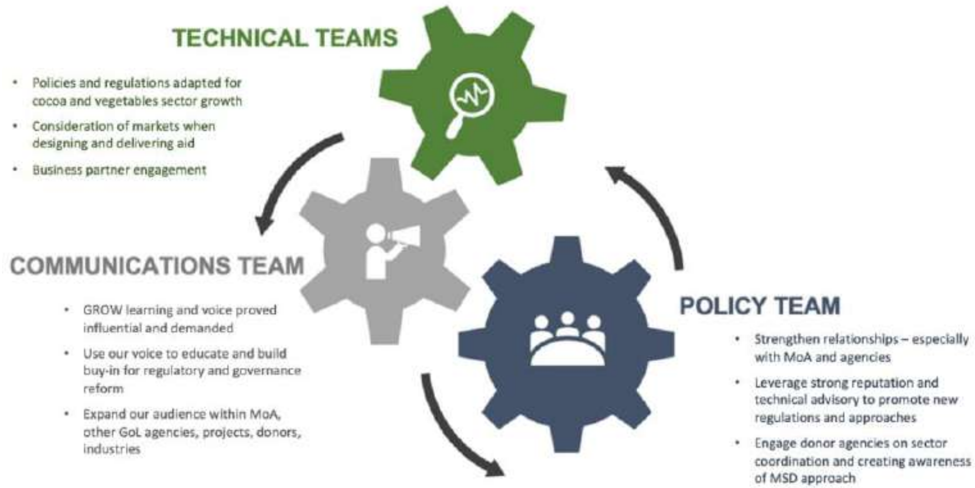
Communications & Strategic Promotion

As GROW was gearing towards its first planned closeout (end of 2019, early 2020), we ramped up efforts to document and share our learning with communities in Liberia, recognizing that a lot of the successes or exciting new ideas that we saw as a program needed to be shared more widely to gain continued traction. In doing so, we learned that GROW offered information and guidance that was not only unique and valued but motivating for officials, companies, donors and projects in Liberia.

Recognizing our opportunity for strategic influence, GROW adapted its KMC strategy in the 2020/2021 year to promote technical delivery and governance reform objectives more intentionally while also quickening and scaling the program's overall impact. Our objectives were to use our communication platform to:

1. Ease and foster replication and scale-up of those innovations that have proven successful
2. Leverage our program learning to influence and improve development in Liberia

The following diagram illustrates the interconnected approach taken by GROW's communications activity:



In accordance with the above, our communications efforts have been closely linked to our broader regulatory, governance and industry reform initiatives in addition to other technical delivery objectives. Overall, these have been focused on a few key areas:

1. Promoting Liberia's agro-inputs distribution opportunity, including the value of the duty waiver;
2. Promoting and informing Liberia's premium cocoa market positioning;
3. COVID-19 response and advocacy efforts;
4. Inclusive business models within Liberia's agricultural market.

To accomplish this, GROW's Communications Team utilized targeted "campaigns" that featured research, newsletters, articles, videos, speaker series, social media posts, personalized emails and messages directed to key officials, industry, project and donor stakeholders, one-to-one meetings, and presentations.

GROW Engagement

GROW's strategic promotion activity generated a significant network and following.

Top 5 Articles

- Liberia's Premium Cocoa Market Opportunity (798 views)
- How a Cash-Strapped Banking System is Hampering Liberian Business Activities (500 views)
- Liberia's Farmgate Cocoa Reference Price Needs Help (356 views)
- Five Actions to Take Now to Position Liberia for the Premium Market (271 views)
- The Economic Impact of Health Crises: Lessons from Ebola (222 views)

Website

- 20,165 visits
- 14,788 unique visitors
- 45,838 page views
- Visitor origins:

Country	Visits
Liberia	7,685
United States	4,819
United Kingdom	1,096
Netherlands	516
Nigeria	471
Canada	428
Ghana	400
France	337
Germany	269
China	214

Social Media

- 3,921 LinkedIn followers
- 5,331 Facebook followers
- 1,473 Instagram followers
- 315 Twitter followers

Newsletter

- 13,081 newsletters sent to subscribers
- 37.0% open rate. The average open rate for our industry is 27.6%
- 44% of our subscribers are 'highly engaged'.
- Top locations are Liberia, Netherlands, and USA

Jeanine Cooper • 2nd
Minister of Agriculture, Republic of Liberia
3d •

Excellence. Thank you GROW.

GROW Liberia
3,717 followers
3d •

Sign up to attend our upcoming Speaker series. This edition features The National Investment Commission of Liberia and J-Palm Liberia. We'll discuss how to navigate global perception for agribusinesses in Liberia.
Register here to attend - http://ow.ly/zVWo50GnMVN

Jeanine Cooper • 2nd
Minister of Agriculture, Republic of Liberia
2d •

Excellence once more. #LiberianPremiumCocos

GROW Liberia
3,717 followers
2d •

Monleh, the largest cocoa trader in Liberia have been trading conventional cocoa for the past 20 years. This year, they decided to enter the premium market. We spoke with CEO, Rachel Mulbah, about the opportunity presented by the premium market to improve farmers' livelihoods.
Click the link for our conversation - http://ow.ly/Ffqx50GoqGR

#PremiumCocoa #Cocoa #GrowLiberia

liberiagrow

liberiagrow One critical step to attracting investment from premium cocoa buyers, is for exporters and cooperatives to work towards certification.

In February, Liberian cocoa industry stakeholders attended the world's largest sustainable trade fair in Amsterdam; #Chocoa where they showcased Liberia's special cocoa bean flavor and unique production qualities.

This experience encouraged many of them to invest in farmer receipting for traceability and transparency, basic

Liked by **lord_jeremy_of_kings_landing_** and **164 others**

AUGUST 14

Response to receipt of GROW's white paper "Recommendations for Liberia's Cocoa Sector Governance"

Dear Umar,

Thanks for the information shared. I will review them and will make maximum use of the information.

Best regards,
John

Prof. John S. Flomo Jr., Ph.D.
Director General
Liberia Agriculture Commodities Regulatory Authority
Freeport of Monrovia
Monrovia, Liberia
West Africa
Tel: +231-880825097 / +231-775503952

liberiagrow

liberiagrow Seeds, fertilizers, and other agro-inputs are vital to the productivity and food security of Liberia's farmers.

Learn more about the importance of this market, including critical supply chain disruptions, alternatives to free agricultural inputs giveaways, and the need for a duty waiver to encourage vital investment in Liberia's

Liked by **redimerelib** and **760 others**

JULY 15

Markus Dietrich • 2nd

Pioneering Inclusive Business and Renewable Energy - Organic Egg Farmer - ...

3w • Edited •

Great analysis of the importance of gender in agricultural value chains and project programming by Sabine Garbarino of GROW Liberia

Liberia: GROW Retrospective: Gender Data & Adaptive Management Edition

GROW Liberia

3,943 followers

2w •

Do Inclusive Business Models Close The Gender Gap? Read reflections on GROW Liberia's commercial approach to foster more inclusive agricultural markets by Sabine Garbarino & Kim Beevers. https://lnkd.in/d9W4RCmY

Do+Inclusive+Business+Models+Close+the+Gender+Gap+(GROW+Liberia+2022).pdf

static1.squarespace.com

16 · 3 comments

Reactions

+8

Winifred Valentine and 13 others **reacted to your company's update**

An alternative to the free distribution of agricultural products is to redesign subsidy

14 Likes • 5 Comments

Reflections

- Liberia is a small market and while this challenges many aspects of market development, it also allows for significant influence. Simply put, there are fewer voices and less information in Liberia – and a strong desire for sound market intelligence and innovative development thinking. GROW stepped into this gap and was able to wield significant influence that furthered strategic change and impact objectives. We would recommend follow-on initiatives in this and similar contexts to consider the role of strategic promotion from the outset.

- GROW’s strategic promotion emerged organically. And, while we have a lot of anecdotal evidence that tells the story of program influence, we did not set up a thorough measurement system to track this influence. If we were to start again, we would create a more deliberate influence strategy and associated measurement system to better track and assess the program’s impact.

MRM: Key MRM Activities and MRM Tools

Explanatory Notes for Logframe Indicators (Aug-17): Due to challenges at the early stage of the program (Ebola, budget cuts and leadership changes) which led to delay in implementation and based on feedback from the external review, GROW (1) Updated its Logframe indicators so that the programme can focus on delivery and only measure those indicators that adds value and help the programme to achieve its target; and (2) Updated Logframe targets to present realistic targets that can be achieved with a revised programme end date of June 2019.

Updated IMT (Dec-17): The existing Intervention Management Tool (IMT) was quite heavy and had a total of 13 sheets. As such the IMT was updated to make it more user friendly and at the same time making sure all key requirements as per Donor Committee for Enterprise Development (DCED) standards were still captured. The updated IMT had only seven sheets which included a cover page, results chain, measurement strategy, M-plan, projections, activity tracker and indicator summary.

Gender and Youth Study (Apr-18): Key findings from the 'Gender and Youth' study were as follows:

- **Cocoa Sector** - In the cocoa sector, men dominated under brushing, pruning and sales; fermentation and drying were mostly done by women; whilst harvest and cracking the pods were done by both women and men. Youths in the cocoa sector are mostly involved as farm laborers.
- **Vegetable Sector** – 55% of vegetable farmers were found to be women. Apart from land preparation, which was mostly done by men, women were involved in all other activities. Vegetable farming is also one of those sectors where there is high youth involvement (46%). Vegetable farming is known to be fast cash crop farming where one is able to get returns within 3-6 months' time.

Outreach Multiplier Study (Oct-18): An Outreach Multiplier Study was undertaken in October 2018 to; (1) Find out total number of household members actively working in cocoa, rubber and vegetable farms; (2) total cost saved due to use of family labour; and (3)

Validate if household farm income was shared amongst family members. Key findings include.

- Family labour contributes to 65% of labour requirements in cocoa, 41% in rubber, and 47% in the vegetable sector.
- By utilising family labour, a cocoa farming household was able to save USD 113 per acre, a rubber farming household was able to save USD 72, whilst a vegetable farming household was able to save USD 140 per acre annually.
- Household expenses (food, water electricity and phone recharge) was the main area majority of household farming income was spent on followed by children's education (uniform, school fees and transport cost), re-investing in farming activities and then savings for future family use/investment and household care (health).

MRM Training (Nov-18): A three-day intensive Monitoring and Results Measurement (MRM) training was conducted for all GROW staff in late 2018. As MRM is everyone's responsibility, the aim of the training was to make sure that all GROW team members had a good understanding of GROW's MRM system and what was expected from them in terms of data collection and monitoring of intervention activities. Key areas of the training included; (1) Overview of GROW's MRM System and Logframe Indicators; Articulating Results Chain; Defining Indicators of Change; Projecting Results; Measurement Plan; MRM Tools and Use of Modern Data Collection Tools.

New VfM Indicators (Jun-19): GROW began to report on three VfM indicators in 2016 which included: 1) Private sector investment leveraged; 2) Cost per beneficiary; and 3) Social return on investment. Based on the feedback from the 2018 Annual Report, GROW worked with Sida to integrate four additional VfM indicators. These were (1) Examples of cost savings; (2) Overhead cost as % of total programme spend; (3) Cost per Access Outreach; and (4) Poverty Outreach Rate: (%) of beneficiaries that are poor.

MRM Manual (Jun-20): GROW's MRM manual was updated in mid-2020 to include changes in GROW's MRM system based on lessons learnt from the inception of the program. Four new Logframe indicators were also added which meant GROW would be reporting a total of 12 Logframe indicators, instead of eight reported previously. New Logframe indicators included.

- Total number of market actors adopting to new innovations
- Total number of business innovations and regulatory reforms adapted by market actors

- Value of additional market transaction
- Value of additional exports

Value for Money (VfM) Framework (Jun-20): GROW developed its VfM Framework in mid-2020 as well. GROW's VfM indicators were once again reviewed and a total of 10 new VfM indicators were added. This meant that in the 2020 annual report, GROW would be reporting a total of 18 VfM indicators as compared to only eight reported earlier.

Value for Money (VfM)

GROW began to report on VfM in 2016 with three VfM indicators. Based on the feedback from the Programme's 2018 Annual Report, GROW worked with Sida to integrate four additional VfM indicators in 2019, with program end date of March 2020 in mind. After the program was given an additional two-year extension in early 2020, GROW updated its MRM Manual, revisited the VfM indicators and added in 10 more VfM indicators. From three VfM indicators in 2016 to seven in 2019, GROW now has a total of 18 VfM indicators.

GROW's VfM monitoring links closely to its finance system. The program has made adaptations to cost categorization to support new VfM reporting. Generally, the finance system is set up with three overarching cost areas. These are:

- **Fees**: this includes core staff or full-time staff cost
- **Expanses:** this includes office running, vehicle and support staff cost; and
- **Intervention fund**: this includes cost involved in providing advisory support to partners as well as GROW's portion of cost sharing of intervention activities with private and public sector partners.

1.0 Economy

Assessing the economy component of GROW's VfM involves making judgments on the extent to which resources (funding) are converted to inputs or activities. It assess the degree to which inputs are purchased in the right quantity, at the right price, ensuring quality The economy level VfM indicators and data sources used to calculate these indicators are presented below:

Indicator	Indicator Breakdown	Yr 7 Mar-21	Yr 8 Mar-22	Till Date Mar-21	Till Date Mar-22
1.1 Average local staff cost rate ($$$)	Cocoa	$ 135	$ 152	N/A	
	Vegetables	$ 172	$ 290	N/A	
	Core	$ 557	$ 569	N/A	
	Program	**$ 284**	**$ 247**	**N/A**	
1.2 Average international staff fee rate	Cocoa	$ 1,025	$ 1,099	N/A	
	Vegetables	$ 564	$ 927	N/A	
	Core	$ 1,075	$ 1,213	N/A	
	Program	**$ 816**	**$ 1,098**	**N/A**	
1.3 Total annual local staff cost	Cocoa	$ 137,466	$ 220,255	N/A	
	Vegetables	$ 263,935	$ 290,749	N/A	
	Core	$ 97,127	$ 234,301	N/A	
	Program	**$ 498,527**	**$ 745,306**	**$ 498,527**	**$ 1,243,833**
1.4 Total annual international staff cost	Cocoa	$ 552,990	$ 736,664	N/A	
	Vegetables	$ 175,078	$ 229,382	N/A	
	Core	$ 456,482	$ 959,820	N/A	
	Program	**$ 1,184,551**	**$ 1,925,867**	**$ 1,184,551**	**$ 3,110,418**
1.5 Percent of total days per sector and program	Cocoa	46%	47%	46%	47%
	Vegetables	33%	27%	33%	30%
	Core	21%	26%	21%	23%
	Program	**3,623**	**4,214**	**3,623**	**7,836**
1.6 Overhead cost as % of total program spend	Cocoa	32%	28%	32%	
	Vegetables	21%	15%	21%	
	Core	26%	35%	26%	
	Program	**79%**	**78%**	**79%**	**65%**
1.7 Average cost per vehicle	Average	$ 12,043	$ 15,921	$ 12,043	$ 27,965
1.8 Examples of Cost Savings	Total saved	$ 61,000	$ 62,000	$ 61,000	$ 123,000

1.1 **Average Local Staff Cost:** This indicator refers to the average total amount each Liberian associate costs GROW per day. These costs are loaded, including the associates' daily pay rates and all other associated costs. Associates are categorized as Cocoa, Vegetables, or Core (which encompasses management functions).

1.2 **Average International Staff Cost:** This indicator refers to the average total amount each international associate costs GROW per day. Like local staff costs, these are also loaded, encompassing international associates daily pay and all other associated benefits.

1.3 **Total Annual local Staff Cost:** This indicator shows the total annual cost of all Liberian associates per sector. Staff are categorized as Cocoa, Vegetables, or Core. Several associates are split between these categories, with a portion of their time allocated to multiple sectors.

1.4 **Total Annual International Staff Cost:** This indicator shows the total annual cost of all International associates per sector. As above, associates' time is allocated in portions across multiple sectors as appropriate.

1.5 **Percent of Total Days per Sector and Program:**

This indicator demonstrates the percentage of total staff time as it is allocated to each sector and to overall management functions. Overall, cocoa sector contributes to 60% of GROW's total impact hence it has 47% of total staff time. Vegetable sector which contributes to 30% of overall results also had 30% of overall staff time allocation.

1.6 **Overhead Cost as a % of Total Program Spend:** This indicator shows the overhead cost of each sector, as well as overall programme management. As above, GROW allocates the highest portion of programs overhead costs to the Cocoa sector, which requires a greater amount of time spent in more remote areas, and which contributes the highest to GROW's overall impact. Overall, total overhead cost at program level has reduced from 79% in 2020 to 65% 2021, as GROW had to lay off few staff but at the same time continue on with key intervention in both cocoa and vegetable sectors.

1.7 **Average Operational Cost per Vehicle:**
GROW observed a 32% increase in the average maintenance cost per GROW vehicle in 2021. This is partly due to aging cars (high maintenance) and increase in number of field trips after relaxation of COVID-19 travel restrictions in 2021.

1.8 **Examples of Cost Savings:** GROW saved a total of USD 62K in 2021 taking the total saved in the last two years to USD 123K. Cost saving items in 2021 included saving from negotiated apartment rentals; office rental and cost savings from fuel and water since majority of staff were working from home.

2.0 Efficiency

Assessing the efficiency component of GROW's VfM involves making judgments about the extent to which inputs (activities) are converted to outputs. These indicators are presented in the table below:

2.1 % spend against forecast		93%	98%	N/A	N/A
2.2 Average direct cost per partner per sector and	Cocoa	$ 9,536	$ 41,774	N/A	
	Vegetables		$ 30,895	N/A	
	Program		$ 38,537	$ 38,921	$ 36,551
2.3 Partner adoption rate	Cocoa			52%	66%
	Vegetables			59%	68%
	Program			51%	59%
2.4 Partner leverage ratio	Cocoa	$ 0.64	$ 0.13	N/A	
	Vegetables	$ 0.23	$ 0.08	N/A	
	Program	$ 0.21	$ 0.07	$ 0.21	$ 0.19
2.5 Cost per access outreach	Cocoa	$ 153	$ 575	N/A	
	Vegetables	$ 167	$ 322	N/A	
	Program	$ 231	$ 745	$ 343	$ 362

2.2 **Average direct costs per partner:** This indicator measures the average direct cost for GROW's new partners in each sector. Average direct cost per partner is slightly higher for the cocoa sector as GROW worked closely with six partners to put in systems (traceability, certification and central processing) that meet premium market demand.

2.3 **Partner Adoption Rate:** This indicator measures the rate at which partners adopt to new innovations divided by the total number of partners exposed to new innovations. This has improved from 52% to 66% in the cocoa sector and 59% to 68% in the vegetable sector. Overall, partner adoption rate has improved from 51% to 59% at program level.

2.4 Partner Leverage Ratio: This indicator measures the extent to which GROW successfully leverages other resources and investments. The sector partner leverage ratio is measured by calculating the sector partner investment divided by the sector fees and sector intervention fund. The partner leverage ratio has reduced for both the cocoa and the vegetable sector as GROW's support in 2021 focused on depth of change rather than scale – e.g., high investments in systems that meets premium markets with a small number of partners in cocoa sector and trying to attract additional agro-input distributors for the vegetable sector.

2.5 Cost per Access Outreach: This indicator allows the program to assess how much it costs to reach new program beneficiaries. It is measured by calculating the sector fees and intervention fund divided by the total access outreach. Cost per access outreach has increased both for cocoa and vegetable sectors, leading an increase from USD 231 to USD 745 in 2021. However, overall cumulative total cost per access outreach has slightly increased from USD 343 in 2020 to USD 362 in 2021.

3.0 Effectiveness

Assessing the effectiveness component of GROW's VfM involves making judgements on the extent to which the Programme's outputs have resulted in outcomes and impacts. The indicators are shown in the table below:

3.1 Cost per beneficiary	Cocoa	$ 227	$ 604	N/A	
	Vegetables	$ 150	$ 358	N/A	
	Program	$ 278	$ 804	$ 472	$ 504
3.2 Return on Investment	Cocoa	$ 1.93	$ 0.87	N/A	
	Vegetables	$ 3.88	$ 2.35	N/A	
	Program	$ 1.82	$ 0.84	$ 0.67	$ 0.70

3.1 Cost per beneficiary: This indicator allows the program to assess how much it costs to benefit a new household with positive NAIC. It is calculated by dividing total sector fees and intervention funds by the total number of beneficiaries with positive NAIC. Just like 'cost per access outreach', 'cost per beneficiary' has also increased significantly for both the cocoa and vegetable sector for year 2021 as the program focused on depth of change – at program level. However, overall cumulative total cost per benefit has slightly increased from USD 472 in 2020 to USD 504 in 2021.

3.2 Return on Investment: This indicator allows us to assess whether return on investment is monitored on a regular basis and is used in future investment decision making processes. It is calculated by dividing the net attributable income change by the sector fees and intervention fund.
At the Programme level, GROW has seen a decrease in this category in 2021. However, overall cumulative return on investment has increased from USD 0.67 in 2020 to USD 0.70 in 2021. This is usually common in MSD programs; generally, a lower return on investment is observed in the early years of the program which increases with program life.

4.0 Equity
Assessing the equity component of GROW's VfM involves making judgments on the extent to which women and vulnerable groups are considered in, and/or benefit from, programme delivery and the programme's outcomes. These indicators are shown in the table below:

4.1 Poverty Outreach Rate: This indicator allows us to measure the extent to which poor men and women are benefitting from GROW's interventions. It is calculated by dividing the total number of poor outreach impacts by the total outreach. Any household earning net profit of less than USD 2 per day or annual net profit of less than USD 960 (USD 2 per day x 2 persons per family x 240 working days per year = USD 960) is classified as poor. It's great to see that the poverty outreach rate has reduced from 97% to 95% for the cocoa sector and 76% to 73% in the vegetable sector. Overall, at the program level, poverty outreach rate has reduced from 89% to 86%.

Indicator	Sector	Till Date: Mar-21	Till Date: Mar-22
4.1 Poverty Outreach Rate	Cocoa	97%	95%
	Vegetables	76%	73%
	Program	89%	86%
4.2 Gender Outreach Rate	Cocoa	43%	42%
	Vegetables	64%	60%
	Program	50%	48%
4.3 Youth Outreach Rate	Cocoa	37%	38%
	Vegetables	54%	55%
	Program	43%	44%

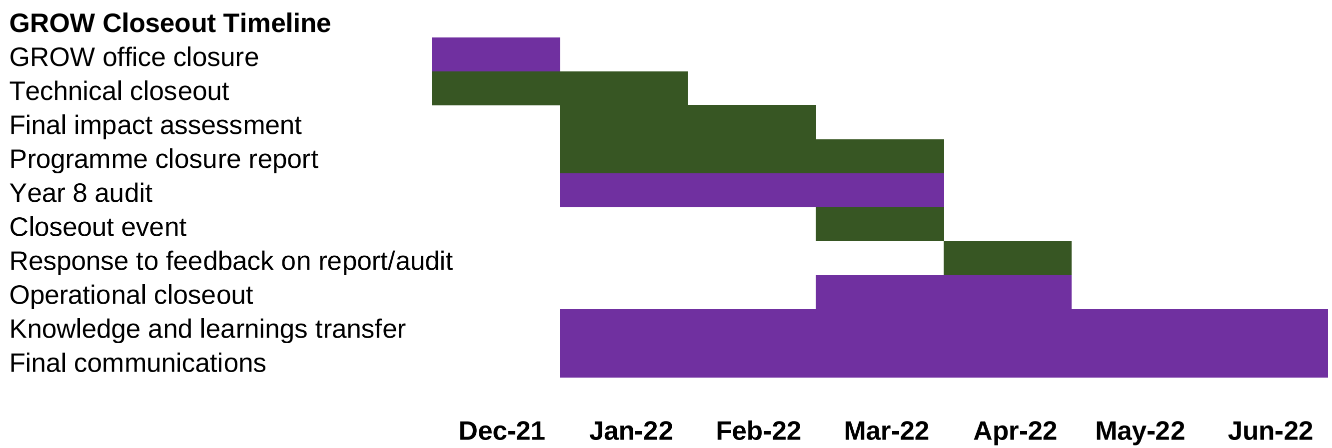
4.2 Gender Outreach Rate: This indicator allows us to measure the rate at which women are benefitting from GROW's interventions. It is calculated by dividing the total female outreach over the total Programme outreach. Gender outreach rate has slightly decreased from 50% in 2020 to 48% in 2021. This could be due to the fact that GROW took a step back and left it to the partners to take on gender work in 2021 and it was not pursued as aggressively as in 2020.

4.3 Youth Outreach Rate: This indicator allows us to measure the extent to which youths are benefitting from our interventions. It is calculated by dividing the total youth outreach over the total programme outreach. Youth outreach rate has increased from 43% in 2020 to 44% in 2021.

Management

GROW Closeout

With the end of ASI's contract with Sida approaching, the GROW management team is preparing for final closeout. We have planned a full closeout according to the following timeline:



Below is a table outlining the remaining deliverables to be submitted to Sida:

Deliverable	Description	Timeframe	Due Date	Status
Year 8 Semi Annual Report	Technical narrative, financial report, and revised forecast for Year 8	January 1, 2021 – August 27, 2021	27 August 2021	Complete

End of Programme Report of Results and Finances	Technical narrative, final impact assessment, final financial statements.	2013-2021	31 March 2022	Pending
Year 8 Audit	Audited financial statements for Year 8	January 1, 2021 – January 31, 2022	31 March 2022	Pending

Asset Disposal

As part of our closeout process, the GROW management team is finalizing the disposal of all programme assets. These include vehicles, generators, and all office furniture and supplies. Per our contract amendment with Sida, all remaining GROW assets would be transferred to UNIDO, to be used in the implementation of the second phase of the programme.

UNIDO, however, has located an office space significantly smaller than that of GROW's, therefore does not need all of GROW's remaining assets. GROW has developed a plan to transition remaining assets to the programme's partners for continued use. GROW will present this plan to Sida separately for approval.

Team Offboarding

With the end of programme activities scheduled for January 31, 2022, the bulk of the GROW team remained in place until that time. Following the close of activities, different teams were (or are scheduled to be) offboarded according to the following deliverable timeline:

- **MRM team:** offboarded in February, following the end of the impact assessments
- **Cocoa team:** offboarded in March, following final contributions and inputs to programme closure report and GROW closeout event
- **Vegetables team:** offboarding in March, following final contributions and inputs to programme closure report and GROW

closeout event

- **Senior management team:** Some members offboarded in March, following final contributions and inputs to programme closure report. The remainder of the senior management team will continue on a part-time basis to revise the final report as required in April, and to conclude operational closeout and transfer of assets in April, and to finalize knowledge transfer to the UNIDO team (once it is fully in place) in May and June.
- **Communications team:** select team members were offboarded in March, following the GROW closeout event. The remainder will remain in place on a part-time basis until the end of June to finalize knowledge transfer to UNIDO, and to oversee delivery of final knowledge management products, and to ensure transfer of all learning content to remaining stakeholders in the agriculture sector.

Remaining Activities

While GROW's technical delivery finished on January 31, 2022, the project period extends to June 30, 2022. Per the diagram above, the GROW team will spend the remaining months focusing on the following:

- **Final reporting:** the team spent much of January-March working on our programme closure report, as well as the year 8 audit. We anticipate the closure report and year 8 audit to be submitted at the end of March, and to respond to requests for feedback and iterations in April.
- **Closeout event**: the team spent much of January-March planning and preparing for the closeout event, which took place on 24 March 2022. Some time is required in March and April to develop video content from the event to be shared, as well as any resultant communications products.
- **Operational closeout:** The main GROW office closed in December 2021. At that time, the UNIDO team had yet to open its own office and so final disposal of assets was not possible. As a result, the GROW operations team located a smaller, significantly less expensive space in which to store assets for the UNIDO team, and out of which we could conducted our year 8 audit. This space will be closed in April 2022, with final asset transfer to UNIDO (and other partners, per Sida's approval) in the first week of April.
- **Knowledge and learnings transfer:** The GROW communications team has placed a premium on knowledge management

in the final year of the programme, ensuring that our extensive research and learnings has is transferred into usable products for those continuing to work in the sector. These products were completed by March 2021. Part-time inputs will continue to be required in April-June, for the purpose of liaising with the Ministry of Agriculture, UNIDO, and other stakeholders to ensure learning products are owned and continue to be useful to others in the space.

- **Ongoing Communications:** The GROW communications team also spent much of January-March completed content and products for final communications campaigns, which will continue on for a few months after the close of the programme. These will offer a retrospective on our work, learnings, and team, and are designed to be of value to other sector stakeholders. While the effort required to manage their release will be minimal, some support will be needed in April-June to launch campaigns, curate content, and manage follow-up conversations across our media platforms.

Annexes