



## Completion Report

### **Growing Resilient Agricultural Enterprises**

**Uganda, NCF6**

**Grantee: Vi Agroforestry**

**Local Partner: Fairtrade Africa**

**Other Partner(s): Kibinge Coffee Farmers' Cooperative Society (KCFCs), Ankole Coffee Producers Cooperative Union (ACPCU), Banyankole Kweterana Cooperative Union (BKCU)**

Project start date: 01/02/2017

Project end date: 31/07/2020

Date: 21 Dec 2021

Person responsible (Signature)

**Gudrun.bostrom@viagroforestry.org**  
**+254 111684268**

**Gudrun Bostrom**  
**Regional Director, Vi Agroforestry**

## TABLE OF CONTENTS

### Contents

1.	EXECUTIVE SUMMARY .....	3
2.	ASSESSMENT OF IMPLEMENTATION OF THE PROJECT .....	4
3.	CLIMATE CHANGE .....	10
4.	DEVELOPMENT IMPACTS AND CROSS-CUTTING ISSUES .....	11
5.	ASSESSMENT OF THE RESULTS AND IMPACTS OF THE PROJECT .....	12
6.	UNEXPECTED OUTCOMES.....	16
7.	FINANCIAL SUMMARY.....	18
8.	CONCLUSIONS AND RECOMMENDATIONS .....	18
9.	ANNEXES .....	20

### ANNEXES

Annex 1	Project completion fact sheet
Annex 2	Updated Logical Framework Matrix
Annex 3	Pictures
Annex 4	Other supplementary documentation
Annex 5	Impact story

## 1. EXECUTIVE SUMMARY

Growing Agricultural Enterprise (GREAN) project was a three-year targeting small scale coffee producer in **Bukomansimbi, Bushenyi, Ibanda Mbarara, Mitooma, Ntungamo and Sheema districts** of Uganda. Vi Agroforestry in partnership with Fairtrade Africa and three Fairtrade certified Small Producer Organizations (SPOs) (Ankole Coffee Producer Cooperative Union (ACPCU), Kibinge Coffee Farmer's Cooperative Society (KCFCS) and Banyankole Kweterana Cooperative Union (BKCU)) worked with Focal point officers in the 3 SPOs and 81 farmer trainers to support 10,000 coffee farmers. Out of the farmers reached, 26% are women and 22% youth, organized in 405 farmer groups. The overall goal of the GREAN project was **“to contribute to improved sustainable livelihoods for small-scale coffee producers in Uganda through climate adaptation and mitigation measures, specifically Sustainable Agriculture Land Management and climate friendly energy solutions**. This would be achieved through:

1. Increasing climate adaptation and mitigation capacity of small-scale coffee farmers living in poverty, for increased crop yields.
2. Enhancing competitiveness of Small Producer Organisations by improving the volume and value of coffee sold.
3. Increasing climate change mitigation capacity by promoting climate friendly energy-businesses and Fairtrade Carbon Crediting providing green growth livelihood opportunities for women and youth.

### **The project intended outputs were:**

- 1.1: Capacity of 10,000 coffee farmers in 3 Small Producer Organisations to implement Sustainable Agricultural Land Management (SALM) practices strengthened.
- 2.1: Participation of three SPOs along the coffee value chain enhanced through organisational strengthening as well as development of new local and regional markets.
- 2.2: Women and youth's participation in decision-making in SPOs and households enhanced.
- 3.1: Access to and adoption of climate friendly energy cook stoves and coffee husk briquettes, enabling Fairtrade Carbon Credits (FCC), employment and income generation opportunities for women and youth; and
- 3.2: Financial literacy and access to financial services for women and youth in SPOs improved.

The outputs were achieved within the 3 milestones phases spread over 38 months of total project duration. There has been high level of project awareness amongst the farmer communities, which was accompanied with high adoption rate of SALM practices. Baseline, progressive and end line evaluations were conducted to inform about status of the project objectives and output indicators. Four start-up meetings were conducted at national and partner levels to launch and sensitize stakeholders about the project. Three participatory climate risk and opportunity assessments were conducted in the participating SPOs. Sustainable Agricultural Land Management (SALM) implementation plans were developed to guide in the adoption of appropriate

practices to be taken up by farmers. 40 SALM demonstration sites were established. They were accessed and used by 30 SPOs staff and a team of 81 farmer trainers to train and sensitise farmers on sustainable coffee agronomic practices. A total of 17,249 farmers organized in 405 groups were reached by the end of project implementation. Farmer field schools (FFS) were also established to support farmer to farmer learning. Using the SCOPE tool methodology, organisation capacity assessments in terms of governance, management, marketing, sustainable agriculture and climate change awareness were conducted. Actions plans were then developed for capacity building on the identified gaps in the SPOs. 30 staff, 81 farmer trainers and 405 farmer groups were trained on SALM practices which resulted in 13,972 farmers implementing at least 3 SALM practices in their coffee gardens. Ten community tree nurseries were established which enabled easy access to tree seedlings for the farmers. The farmers were also trained in gender concepts financial services and financial literacy. The three SPOs were supported to develop gender policies and their implementation plans.

The SPOs were trained on business development and Fairtrade Carbon Credit standards. This led to development of business plans for improved cook stoves and briquettes. A total of 4,000 farmers using improved cook stoves were reached. They formed the base for generation of Fairtrade Carbon Credits (FCC) in the project. Women and youth were trained on how to sell and repair the cook stoves and produce coffee husks briquettes. 10 briquette making machines were distributed to SPOs to facilitate women and youth groups in the production of briquettes.

The 3 SPOs were supported to have product development plans, marketing and campaigning plans in place to carry out marketing campaigns to promote sale of coffee locally/regionally. They now have a Fairtrade certified coffee brand BUTONDE coffee which is also certified by Uganda National Bureau of Standards is ready for the market.

End of project meetings at local level were held in all SPOs to inform stakeholders about the project results and handover to them for sustainability.

## 2. ASSESSMENT OF IMPLEMENTATION OF THE PROJECT

### 2.1 Achievement of Outputs and Objectives

Planned Objectives and Outputs	Indicator(s):	Achievement of the objectives and outputs:
<b>Objective 1:</b> 1. Increasing climate adaptation and mitigation capacity of small-scale coffee farmers living in poverty, for	1.1 60% of farmers adopting 3 or more SALM practices in their farms	This was satisfactorily achieved. By the end of the project, a total of 17,249 small holder coffee farmers had been reached of which 81% had at least implemented 3 SALM practices in their farms. The common practices included mulching (76.30%), use of compost manure (76.95%), and thinning and pruning in coffee (71.10%).
	1.2 80% of the farmers adopting 3 or more SALM practices will	91.8% out of the total farmers reached acknowledged improved crop yields; of these 94.4 % specifically acknowledged improved coffee yields. Quality of coffee

increased crop yields.	acknowledge increased productivity of coffee	increased from screen 12 to 15 and 18 (these are the units used to grade quality of coffee).
	1.3 184,800 t CO <sub>2</sub> e generated by adopting SALM practices.	<b>SALM (carbon stocks):</b> 13,972 Ha of land area was put under SALM practices (agroforestry, mulching and composting). 90% of the land is estimated to be of coffee plantation. A total of 78,896.51 tons CO <sub>2</sub> eq is estimated to be sequestered.
<b>Output 1.1:</b> Capacity of 10,000 coffee farmers in 3 Small Producer Organisations to implement Sustainable Agricultural Land Management (SALM) practices strengthened	1.1.1 30 farmers awareness foras conducted on climate change adaptation and mitigation	<b>Achieved.</b> The project targeted to have 6,000 (60%) farmers with at least 3 SALM practices; by the end of the project 13,972 farmers had implemented at least 3 SALM practices on their farms.
	1.1.2 30 partner organisation staff and 81 farmer trainers trained on SALM practices	<b>Achieved by end of M2.</b> A total of 30 staff from SPOs and 81 farmer trainers were trained. Each of them equipped with SALM manual as r reference material
	1.1.3 3 SALM activity plans developed	3 SALM implementation action plans were developed by each SPO and followed during the project implementation.
	1.1.4 40 demonstration sites established and functional	40 demonstration sites were established for learning and were still functioning by the end of the project; the sites are centres of technology transfer which are farmer led
	1.1.5 3 exchange visits conducted to model farms on climate change adaptation in coffee	3 exchange visits were conducted. Farmers and staff visited model farms in Masaka and Ntungamo districts; over 180 farmers and staff participated in the exchange visits.  6 Project staff also visited SALM and Carbon projects in Kenya.
<b>Objective 2:</b> Enhance competitiveness of small producer organisations by improving the volume and value of coffee sold	2.1. 80% of farmers with increased earnings from coffee	98.1% farmers acknowledged increased earnings from coffee.  Household incomes increased from 142 USD before the project to 273 USD by the end of the project.  Farmers (68%) earned more than 1,000,000 shillings per season (USD 270) whereas 23% reported earning between 500,000-1,000,000 Uganda shillings per season (USD 140-270).  76% of the participating farmers noted that coffee business contributed to over 50% of their overall household incomes.

	2.2. Change in Volume (Kgs) of produce or Fairtrade labelled coffee sold coffee in Uganda and East Africa (The change will be informed by the market study)	The 3 SPOs developed a joint brand of quality roasted and pound Robusta coffee named as BUTONDE coffee with a Fairtrade label and certified by Uganda National Bureau of Standards.
	2.3. Increase in revenues generated from sale of producer labelled or Fairtrade labelled coffee in Uganda and East Africa (The change will be informed by the market study)	The market study was conducted during milestone 2 however, there was no data collected during end line survey as to measure and inform the change created in revenues, however, reports from Butonde coffee secretariate at BKCU headquarters indicate that they started selling BUTONDE coffee, a kilogram of Butonde coffee goes at USD10 on local market compared to USD 7 for other coffee brands. There are plans to sell Butonde coffee on export market.
<b>Output 2.1:</b> Participation of three SPOs along the coffee value chain enhanced through organisational strengthening as well as through development of new local and regional markets.	2.1.1 10 Training of trainers on product development and market access conducted	Achieved. Staff, board and farmer trainers in each SPO received various trainings in product development especially for BUTONDE coffee and how to penetrate the market.
	2.1.2 10 meetings with strategic actors in the value chain	Achieved. Several meetings were held with producers, processors and consumers especially hotels and cafes who are bulk buyers during the coffee expos: <ul style="list-style-type: none"> <li>• Africa Fine Coffee Conference and Exhibition in Kampala, Uganda February 2018</li> <li>• African Fine Coffee's Association (AFCA) which was held in Rwanda Convention Centre in 2019</li> <li>• African Fine Coffee's Association (AFCA) which was held in Mombasa –Kenya in 2020</li> <li>• Local markets through campaigns (Conduct Butonde coffee marketing campaign in Masaka and Mbarara in November 2019</li> <li>• Coffee Technology Expo-Uganda that enabled the understanding of the consumer segmentation in the local market for the market activation of the locally blended coffees.</li> </ul>
	2.1.3 3 SPOs supported to carry out processing and packaging of producer or Fairtrade labelled coffee for local or regional market	This was achieved; 3 SPOs have a joint Fairtrade certified brand of coffee; BUTONDE coffee. It is also certified by Uganda National Bureau of Standards (UNBS) already being sold in the Uganda market.

<b>Output 2.2:</b> Women and youth's participation in decision-making in SPOs and households enhanced.	2.2.1 6,000 farmer families supported for joint planning and financial decision making at household level	<b>Achieved.</b> By the end of the project 13,109 farmer families had been supported. Project end line survey show that 85% of the farmers received gender training., 76% of the respondents reported joint planning and decision making in their households compared to 46% registered at baseline. There was reported increase of more transparency with family incomes at the household level between men and women. Most women reported that they had been allocated a piece of coffee plantations/ land on which they had all the right to own, manage and make decision on their own coffee production and sales.
	2.2.2 3 SPOs with functional gender and youth policies	<b>Achieved.</b> All SPOs have functional policies in place. Each SPO developed a gender policy implementation plan to guide functionality of the policies. The policies were used by 405 groups and 81 farmer trainers and staff in promoting equality in leadership, project management and decision making especially benefits sharing at the groups and households' level. Families were trained in developing Household Roadmaps and in turn resulting into joint planning and decision making.
<b>Objective3:</b> Increase climate change mitigation capacity by promoting climate friendly energy-businesses and Fairtrade Carbon Crediting providing green growth livelihood opportunities for women and youth	3.1: 70% of those engaged in climate friendly energy businesses are women and youth	<b>Achieved.</b> All farmers engaged in the briquette and cookstove businesses are women (42%) and youth (58%).
	3.2: 80% of those women and youth engaged in climate friendly energy businesses are getting income from climate friendly energy businesses	Achieved 100%. 307 women and youth farmers adopted briquette production as businesses. They make briquettes using coffee husks, dry leaves, dry maize corn cobs, saw dust and clay. 10 briquette making machines and 10 briquette production centers were established among coffee farmers, targeting mainly women (57%) and youth (43%) across the 3 SPOs.
	3.3: 61,880 t CO <sub>2</sub> e Generate Fairtrade Carbon Credits as per the Gold Standard	<b>Cookstoves (emission reduction):</b> a total of 4000 improved wood fuel stoves were made, sold and being used in 4000 households in the project area. It is estimated that these 4000 households have replaced traditional cookstoves with improved cookstoves. Quantifications of the generated credits awaits validation and verification by the Gold Standard. An estimated net GHG emissions reductions of 517,147.80 tCO <sub>2</sub> e is expected in 20 years equivalent to Net Present Value (NPV) of 2,725,462.67€
<b>Output 3.1:</b> Access to and adoption of climate friendly energy cook stoves and coffee husk	3.1.1 6 carbon related advocacy and marketing expos attended.	This was achieved. The expos included: <i>This was achieved, they included:</i> <ul style="list-style-type: none"> <li>Africa carbon forum <a href="https://www.goldstandard.org/blog-">https://www.goldstandard.org/blog-</a></li> </ul>

briquettes, enabling Fairtrade Carbon Credits (FCC), employment and income generation opportunities for women and youth.		<a href="#">item/africa-carbon-forum</a> April 11-13th, 2018 <ul style="list-style-type: none"> <li>Cleaning cooking forum Rwanda <a href="https://ccacoalition.org/en/event/clean-cooking-investment-forum-2018">https://ccacoalition.org/en/event/clean-cooking-investment-forum-2018</a> (Nov. 5 to 7 2018)</li> <li>Cleaning cooking forum Kenya. <a href="https://www.cleancooking2019.org/">https://www.cleancooking2019.org/</a> Nov 5 to 7 2019</li> <li>Climate innovation summit- <a href="https://www.goldstandard.org/blog-item/climate-innovation-summit-2018">https://www.goldstandard.org/blog-item/climate-innovation-summit-2018</a>, attended by partner NFOs</li> <li>Others were Africa fine coffee expos attended by SPOs in Rwanda, Mombasa and Uganda.</li> </ul>
	3.1.2 40 women and youth supported in the repair and sale of improved cook stoves as a business	Achieved. 53 farmers including farmer trainers mainly women and youth (Female 22 & 31 Male youth) were trained on the repair and sale of the stoves.
	3.1.3 70% of the farmers involved in the production of coffee husk briquettes are women and youth.	100% was achieved by the end of the project; there are 10 briquette making centres, which are managed by women and youth.
	3.1.4 4,000 cook stoves sold	4,000 stoves were sold to 4,000 households. Farmers were given option to select from a variety of stove models from which they selected the “Masupa” stove model which can burn briquettes efficiently and is made in 3 different sizes to suit different farmer interests.
<b>Output 3.2:</b> Financial literacy and access to financial services for women and youth in SPOs improved	3.2.1 70% of the members accessing financial literacy trainings are women and youth	Achieved with 90.8% of the members trained on financial literacy being women and youth.
	3.2.2 30% of farmers accessing VSLA are women and youth.	Achieved. 94% of members accessing loans from the established VSLAs are women and youth. The model is more friendly to women especially in rural areas who cannot access loans from formal finance institutions due to lack of collateral.

## 2.2 Deviations from the planned Outputs and Activities

*List all outputs and activities that did not take place, explaining the reasons for this.*



Most of the outputs and activities were achieved as planned just one activity indicators that were not completely realised by the end of the project:

### 3.1.2: Facilitate production, monitoring and sale of FCCs.

Monitoring exercises were supposed to kick start with a training to staff on how to monitor carbon and was scheduled for 1<sup>st</sup> and 2<sup>nd</sup> quarter of 2020, however, it was not possible due to Covid -19 pandemic that led to complete lock down in Uganda; FTA has committed itself to conduct this exercise even after the project funding has ended.

## 2.3 Achievement of NCF indicators

NCF indicators	Results
<b>1. Number of beneficiaries reached (women/men)</b>	<b>17,249(Women 5,175, Men 9,832 and youth 2,242)</b>
<b>2. Number of people with increased resilience to climate change (women/men)</b>	16,904(Women 2,192 & Men 14,712 who are farmers that have implemented SALM.
<b>3. CO2e emissions reductions (actual at project completion and expected during the lifetime of the project's mitigation investments)</b>	An estimated net GHG emissions reductions of 517,147.80 tCO2e is expected in 20 years equivalent to Net Present Value (NPV) of 2,725,462.67€. A total of 79,617.01t CO2eq was sequestered by farmers adopting SALM practices and from use of improved cooking stoves.
<b>4. Number of green business concepts tested</b>	2 The cook stove business and briquette business for women and youth.
<b>5. Number of new decent jobs created (disaggregated by number of permanent (women/men) and seasonal (women and men))</b>	1218 direct jobs (496 for youth & 696 for women) whereas 1,139 are permanent jobs and 79 not permanent.
<b>6. Number of people with improved livelihoods/income-generating possibilities (women/men)</b>	8,452(Women 2,536, Men 4,188 & youth 1,728)
<b>7. Number of multi-stakeholder partnerships developed</b>	8 partnerships which included: <ul style="list-style-type: none"> <li>1.Vi Agroforestry in partnership with 3 SPOs and FTA, 2.FTA in partnership with SPOs, 3. Partnership between SPOs to produce BUTONDE coffee. 4.Micro project of improved cook stoves for smallholder coffee farmers-SPOs, 5.AGRRITERA(Netherlands) with KCFCs, 6.GEPA-ACPCU, 7.PSFU-KCFCs, 8.Fairtrade Climate fund-SPOs</li> </ul>
<b>8. Amount of funds leveraged (actual project co-financing and possible secured future investments for scaling-up/replication)</b>	<b>The actual project cost is Eur 539,347 that has been co-financed as below:</b> <b>NCF – Eur 408,596</b>

	<b>Vi Agroforestry – Eur 60,890</b> <b>Fairtrade Africa – Eur 61,289</b> <b>Ankole (ACPCU) – Eur 3,668</b> <b>Banyankole (BKCU) – Eur 2,452</b> <b>Kibinge(KCFCS) – Eur 2,452</b>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### 3. CLIMATE CHANGE

Following the launch of GREAN project and start-up meetings with stakeholders, **climate change risk and opportunity assessments** were conducted in all SPOs. This enabled development of 3 SALM **adaptation and mitigation action plans**. A baseline survey was also conducted to provide a basis upon which changes during the implementation would be tracked. Adoption of SALM practices increases soil nutrients and soil organic carbon, conserving soil and water, reducing pests and diseases. The project promoted adoption of SALM practices which led to increased farm productivity, improved coffee quality from screen 12 to screen 15 and 18 and diversification of food sources, and thus, supported and increased resilience of farmers. Partners (SPOs) trained 405 groups on SALM practices which resulted to an increase from 60% to 81% of agricultural land belonging to households being put under SALM and Agroforestry. 91.8% of the participating farmers adopted at least 3 SALM practices. The 3 SPOs implementing this project were supported to establish 40 SALM demonstration sites that were used by farmer trainers to train other farmers on various agroforestry practices. 94.4 % of the farmers reported improved coffee yields whereas 98.1% acknowledged increased earnings from coffee; Farmers (68%) earned more than 1,000,000 shillings (USD 278) per coffee season (6 months), whereas 23% reported earning between 500,000-1,000,000 shillings (approximately USD 139-278) per season. 88.9% of the farmers were food secure whereas 70.6% were able to send their children to schools due to improved household incomes. The improved household incomes reduce vulnerability of the households and contribute to increase their resilience to climate related shocks. The SALM methodology has enhanced farmers' technical capacity to manage land and water resources in the area. GREAN project introduced and promoted climate friendly stoves, which are efficient and reduce emissions of carbon dioxide into the atmosphere. Farmers testified that the stoves retain heat for a long time and are smoke-free. 4000 farmers bought and are using the improved cook stoves. The SALM methodology has enhanced farmers' technical capacity to manage land and water resources in the area. The project promoted tree planting to mitigate climate change effects. 10 tree nurseries were established and produced over **128,594** tree seedlings of which over 65,000 trees were intercropped in coffee for shade by the end of the project. Selected agroforestry tree species including indigenous trees were integrated in coffee gardens mainly for shade, windbreak and for nutrient management whereas some provided bee forage and attracted bees to fertilize coffee; the tree nurseries are still maintained by SPOs to

produce more tree seedlings for farmers. A total of 79,617.01t CO<sub>2</sub>eq was sequestered by farmers adopting SALM practices and using improved cooking stoves by 2020. It is estimated that by farmers adopting SALM practices and using improved cooking stoves the project will achieve GHG emission reduction of 517,147.80t CO<sub>2</sub>e worthy €2,725,462.67 at net present value. Fairtrade Carbon Standard is following on the verification of carbon credits generated from the use of improved cookstoves.

#### 4. DEVELOPMENT IMPACTS AND CROSS-CUTTING ISSUES

*“We are very grateful to GREAN and ACPCU for the training we got. We now decide on our investments together, we plan together, and this has improved the well being of the family at large” Mr. & Mrs. Bakuneta of Ryakahimbi Village.*

**Gender equality:** The project sensitised farmers and addressed gender equality by ensuring that there is increased participation of women and youth in decision making at organisation and group levels. There was improvement in joint planning at household level where 13,109 families were supported in joint planning way above the project target of 6,000. Women and youth gender policies were developed, approved and implemented in all SPOs. Participating farmers (88%) were aware of gender and equity where both man and woman shared responsibility in the home. The project promoted gender mainstreaming and inclusion of women and youth in the Boards and top management structures of the SPOs. A total of 31 farmers were at leadership role of which 38% were female compared to 25% at baseline.

**Women and youth employment:** The project introduced green jobs in the SPOs specifically, energy related businesses (the cook stoves and briquettes) which created environmentally friendly and sustainable employment for women and youth within and outside the SPOs. 100% of members in these businesses are women and youth. The project contributed to creation of sustainable jobs for 496 youth and 696 female farmers.

**Environmental sustainability:** SALM methodology employed in GREAN project is climate smart agriculture which has no adverse effects on the environment but sustains and conserves the environment. The project promoted tree planting; compost manure; use of improved stoves and coffee husks briquettes which further reduced pressure on the natural forests for fuelwood.

**Good governance:** GREAN project assessed SPOs using the SCOPE tool and identified gaps in governance, leadership, marketing, capacity to cope with the climate change and sustainable coffee agronomy among others. Capacity building on various areas was carried out including trainings in leadership and good governance which were conducted during milestone 1 and 2.

## 5. ASSESSMENT OF THE RESULTS AND IMPACTS OF THE PROJECT

### 5.1 Relevance

The project design was aligned to 8 SDGs (i.e., SDGs: 1: No poverty, 2: Zero hunger, 5: Gender equality, 7: Access to clean, affordable and efficient energy, 8: Decent work and economic growth, 13: Climate action, 15: Life on land & 17: **Partnership for the goals** and national development plans i.e., National Development Plans (NDPII&III) “the objective of increasing house income and quality of life of Ugandans” and the Vision 2040 on coffee production which is “to increase coffee production from 4 million bags of coffee (FY15/16) to 7 million bags (2040)”. The project contributed to this as there was evidence on yield increase of coffee.

The climate change component of the project was aligned to Uganda’s National Adaptation Plan of Action, Uganda National Climate Change Policy and Uganda Green Growth Development Strategy. The project was in line with the national strategies such as skilling programme, Youth Livelihood programme, GREEN Jobs programme and Uganda Women Empowerment Program all spearheaded by Ministry of Labour and Social Development all geared towards improving the livelihood of the youth and women.

The project end line evaluation assessed the relevance of the project design and activities. These were found to be relevant in solving the main challenges faced by small-scale coffee farmers in all the SPOs and Uganda in general, especially relating to coffee productivity, household incomes and climate change effects.

The implementation engaged the primary target beneficiaries and stakeholders in the project implementation, hence creating more ownership. Majority (54.4%) of farmers strongly agreed that the project interventions were relevant.”, the project contributed to this as there was evidence on yield increase of coffee.

#### ***Effectiveness***

**Overall Objective: To contribute to improved sustainable livelihoods for small-scale coffee producers in Uganda through climate adaptation and mitigation measures, specifically Sustainable Agriculture Land Management and climate friendly energy solutions;** the goal is regarded as satisfactorily achieved. The project witnessed a positive impact on the livelihoods of the coffee farmer’s communities with an increase in income per season from an average of USD 142 to USD 273 attributed to improved quality of coffee beans from screen 12 to screen 15 and 18. 49% farmers testified improved incomes and livelihood as a result of the project.

**Outcome 1: Increasing climate adaptation and mitigation capacity of small-scale coffee farmers living in poverty, for increased crop yields.** 81% farmers (against target of 60%) implemented at least 3 SALM activities on the farms of which 91.8% acknowledged increased productivity of coffee. The project targeted to reach 10,000 farmers but by the end 17,249 farmers were reached thus reaching 7,249 more farmers. They included farmers from the 405 groups and others that accessed demo sites/learning sites to learn SALM methodology.

## **Outcome 2. Enhance competitiveness of Small Producer Organisations by improving the volume and value of coffee sold;**

98% of participating farmers acknowledged increased earnings from the sale of coffee compared to the target of 80%. The project produced the first ever Robusta, Fairtrade Certified Coffee Brand roast and ground locally in Uganda by the 3 SPOs “**Butonde Coffee**”. By the end of the project the producer organisations had sold 61.75kgs of the Butonde coffee brand. While there were other few local brands before the project none of them is owned by small-holder farmers nor Fairtrade certified. Additionally, all the roasted coffee types in East Africa are Arabica. Some SPOs had already started roasting and grinding coffee individually but with no Fairtrade label. This background made it easier to further improve on what they were doing by partnering with the project and work to have one common Fairtrade certified product in the local and regional markets.

## **Outcome 3: Increase climate change mitigation capacity by promoting climate friendly energy- businesses and Fairtrade Carbon Crediting providing green growth livelihood opportunities for women and youth.**

The project targeted 70% of SPO members engaged in climate friendly energy businesses to be women and youth. By the end of the project this translated to 100%. The businesses introduced included briquette making, sale and repair of cookstoves. All members participating in these businesses acknowledged getting incomes from the businesses.

Introducing options for employment of youth and women in the coffee value chain was an interesting innovation because coffee has always been regarded as a male crop. Search for firewood for cooking largely affect women and they quickly adopted the stoves and briquettes activities. Employment opportunities for youth especially in rural areas are very few and therefore it was easier for them to join the briquette making business groups.

## **5.2 Efficiency**

*Assess the cost efficiency of the project.* The total project budget was Euro **660,000**, Euro **500,000** was sought from NCF as a grant whereas Euro **160,000** was own contribution from the project partners. 83% of the funds was used for implementation of activities while 17% supported project administration costs of which 10% went to office running cost and 7% to admin staff who supported the project. climate cost **Eur389,486 (72%)** and non-climate cost **Eur149,860 (28%)**.

### ***Impact***

The impact of the project was assessed basing on productivity and household incomes, and food security experience.

**Environmental impacts:** Following the high adoption rate of SALM and implementation of climate Risk and Opportunity Action (ROA) plans, there was increased tree cover in the project areas. Farmers implemented sustainable

Agricultural land Management practices on their farms which included tree planting, soil erosion control practices such as mulching, reducing inorganic fertilisers and chemical through use of compost manure in their coffee. Most of the farmers improved management of their coffee and hence improved quality of coffee harvested.

**Social & Economic impacts:** The SPOs realised bumper harvests of coffee than before as more coffee was bulked for marketing at union and primary cooperative levels during the season of 2018/2019. The end line survey indicated that 99% of participating farmers get income from coffee. Even though there was no significant increase in the area under coffee production between 2017 and 2020 however, there was a 50% increase in the median coffee production per season during the project time both in quality and quantity. This increase is attributed to the project interventions. Farmers (68%) earned more than 1,000,000 shillings per season; Farmers (23%) reported earning between 500,000-1,000,000 shillings per season; and Farmers (76%) noted that coffee business contributed to over 50% of their overall household incomes.

Household welfare improved with majority (89%) of the respondents during end line survey indicating increased availability of food, child education/School fees and medical care services. Reduction in debt burden and acquisition of production and household assets were also reported.

The project aimed at promoting producer owned or Fairtrade labelled coffee in Uganda; and promoting locally processed and packaged Ugandan coffee to the market. The progressive results in SPOs revealed a rise in the green bean sold on Fairtrade standards and a reduction in the green bean sold as conventional. The project introduced a new concept of *farmer trainers* who have helped the SPOs to extend advisory services to their members in a wider coverage than before. Some of these farmer trainers changed their lives completely in terms of self-esteem, respect and confidence in the communities. There was improved cohesion in the 405 groups recruited in GREAN project due to the VSLA model because they meet every month not only to save and loan, but also to learn new things from farmer trainers and staff.

**Institutional impact:** SPOs capacity was built in good governance, marketing, leadership, climate and sustainable agronomic practices of coffee. The SPOs have increased their collaboration with local and international NGOs as a result of GREAN project. For example, GEPA - the Fairtrade company GmbH from German launched collaboration with Ankole Coffee Cooperative Union (ACPCU) to scale up tree planting and the Private Sector Foundation of Uganda (PSFU) is supporting women and youth in Kibinge Coffee Farmers' Cooperative Society (KCFCS) under their project Skilling Development Fund (SDF). The Fairtrade climate fund pledged to increase number of stoves from 4,000 to 10,000 stoves to increase the generation of carbon credits.

Vi Agroforestry gained experience of working with business unions and cooperatives which export coffee and this increased numbers of people supported to improve their livelihoods through SALM and Agroforestry. GREAN and Adapting Tea to climate

change (ADAPTEA 2013-2015) projects both funded by NCF also enabled Vi Agroforestry to increase its visibility in Western Uganda.

### ***Sustainability***

The SPOs have strong ownership of the activities promoted by the project. This ownership will ensure continuity of the activities even as the project ends. The launch of BUTONDE coffee brand will further support continuity of the interventions by the SPOs.

**Economic and financial sustainability:** The SPOs through the introduction of farmer trainers, have expanded their areas of coverage and increased membership that subscribe to the organization besides influencing more women and youth to share in projects benefits. Women and youth were active in savings and loan groups which increased their financial capacity to boost their briquette and stove businesses and to diversify investment hence increase household resilience. Women and youth were also strongly represented in the leadership at SPO and group level. Savings groups were linked to the SPO Savings and Credit Cooperatives organisations (SACCO) as to sustain their operations with easy access to financial services.

The cookstoves will generate carbon credits which is another source of income for the organisations, whereas Fairtrade climate fund has pledged to scale up this project by availing more stoves to the SPOs from 4,000-10,000 stoves. GREAN project created jobs for 496 youth and 696 female farmers which will continue even after the project has ended.

The SPOs produced a joint brand of Butonde coffee that has penetrated the coffee market beyond Uganda. The brand will require increased production of volumes of quality Robusta coffee to meet the demand and this will continue beyond the project period. Farmers' contributions in terms of coffee volumes and quality of coffee has improved in the three years resulting into increased revenues generated by the SPOs. This has meant increase in premiums shared among farmers and increased sustainable flow of income for the certified coffee farmers.

**Environmental sustainability:** SALM practices and use of cook stoves and briquettes are replicable to farmers outside the project through demonstration farms where other farmers come to learn. Climate friendly stoves remain on high demand and raw materials for making briquettes are readily available in the coffee gardens and factories i.e. coffee husks, grass and agricultural wastes. Recycling agriculture and factory waste minimize forest degradation and are a vehicle to carbon sequestration and pollution control. A switch from fuel wood to the recycled, efficient, less expensive, easily accessible briquettes brought a permanent change. Tree establishment through raising seedlings from the nursery equipped staff, farmer trainers and the community with skills on raising and managing trees in the nursery. Due to high demand for trees, this activity will continue. There is increasing demand for climate friendly stoves and briquettes as an alternative energy for cooking among the coffee farmers and existing opportunities for linking women and youth to the briquette and cook stoves market and connect them to Fair trade markets.

### ***Potential for scaling up and follow-up investments***

The interventions will continue even after GREAN project has ended. The SPOs were involved from the design stage all the way to project end and ownership of the processes and results is evident. The project conducted intensive management and leadership trainings for the Board of Directors of the SPOs and senior management. Decision-making and oversight at the SPO level was mainstreamed within the organizational structure. These approaches led to the development, approval and effective implementation of gender policies, business plans and embracing the joint brand of “Butonde Coffee” as a product of a consortium of SPOs with an independent leadership structure which was drawn from the SPOs. The BUTONDE brand will require increased production of volumes of quality Robusta coffee to meet the demand. Therefore, the implementation of SALM will continue to be demanded by farmers to meet the coffee demand. Formation of VSLAs were driven by the community and received technical support from the project. Savings groups were supported with formation guidelines, trainings and opening of bank accounts with the Cooperative Societies for enhanced financial services. The project introduced green jobs in the SPOs for the first time. This were the energy related businesses (cook stoves and briquettes) which created environmentally friendly and sustainable employment for women and youth within and outside the SPOs. The ever-increasing demand for climate friendly stoves and briquettes as an alternative energy for cooking among the coffee farmer’s and existing opportunities for linking women and youth to the briquette and cookstoves market and connect them to Fairtrade markets will enable the project to be scaled up. Some of the scale up activities will require further financial support for example **the carbon monitoring and sale activities**. SPOs extending project interventions to other member primary societies may require funding; the board and management pledged to solicit for funds to scale up GREAN to cover all operation areas. During the end of project meetings in all SPOs, local governments leadership and technical staff, Uganda Coffee Development Authorities (UCDA), other key stakeholders in coffee production and marketing were invited in sharing the results of GREAN project and handover the ongoing processes to them. GREAN project interventions became aligned into the SPOs’ normal routines and activities to continue beyond the project.

## **6. UNEXPECTED OUTCOMES**

Promotion of improved cookstoves that generate carbon: GREAN project intended to join the Improved Cook Stoves for East Africa (ICSEA) CDM/Gold Standard project with Uganda Carbon Bureau (UCB). However during the early stages of the project implementation, the partners learnt that UCB was not a perfect fit for the project work in the cook stove and carbon business; FTA therefore facilitated SPOs to join Certified carbon credit component “accredited bridge builders” through **micro project improved cook stoves for smallholder coffee farmers of Uganda for Gold Standard**.

Majority of the beneficiary farmers acknowledged to have a nutritious and balanced diet and not to have any worries about food since they were trained to intercrop in



their coffee gardens. Household surveys noted improvement in food security among the farmer beneficiaries of the project; farmers were not food secure before. Physical observation proved that farmers were practicing intercropping in their coffee gardens, use of organic fertilizers, trenches and cover crops for soil and water conservation which led to increase soil fertility and hence increased production of food especially Matooke, Maize, Ground nuts and Beans.

### ***Lessons learnt***

- GREAN project provided an opportunity to communities to acquire skills in tree seedlings production, which was new to some farmers.
- Demo sites have led to spill over of technologies to other non GREAN project farmers; they see, learn and implement in their farms.
- It is clear that climate change has had an impact on the SPOs. At the beginning of the project they reported having experienced production challenges of reducing yields and quality of coffee because of climate change effects such as long droughts among others. Adoption of sustainable farming practices is therefore crucial if farmers are to continue producing coffee with changing weather patterns.
- Farmer trainers' approach is good in extending agricultural knowledge to farmers and bridge the gap of few extension officers; farmers learn faster from their fellow farmer in the same community setting.
- There are potential opportunities for local consumption of coffee in Uganda. However, lack of a focused approach and consumer appealing mechanism have been a hindrance. The existing measures should also address needs of local buyers not only external buyers.
- The GREAN project, through project financial management system, has enabled SPOs to improve internal controls, accountability, transparency and financial reporting even for the non-accountants in the project.
- The SPOs acknowledged learning the implementation skills of a multi-faceted project that addresses climate change, gender inclusiveness, financial services and carbon business as it was the first of its kind in all SPOs.
- Staff motivation is beyond salaries but is very key in project success; it should be clearly catered for in projects design. This was unforeseen challenge that at one point reduced the morale of supporting staff in the project at SPO level during the first milestone phase.
- Time allocated to the project was inadequate especially for carbon activities (the project design was very ambitious on the timelines for business arm of the project and the generation of carbon credits).
- Impact monitoring should be inbuilt in the design of the similar future project and capture key impact indicators that can be measured at baseline.

## 7. FINANCIAL SUMMARY

**Table 1. Project financing per partner**

	Financing, EUR							
Expenditures, EUR	NCF	Vi Agroforestry	Fairtrade Africa	Ankole	Banyankole	Kibenge	Revenues from the	Total
Grantee -Vi Agroforestry	111,096	60,890						171,986
<b>Local co-financing</b>								
Fairtrade Africa	130,974		61,289					192,264
Ankole	46,527			3,668				50,195
Banyankole	60,103				2,452			62,555
Kibenge	59,896					2,452		62,347
<b>Total</b>	<b>408,596</b>	<b>60,890</b>	<b>61,289</b>	<b>3,668</b>	<b>2,452</b>	<b>2,452</b>	<b>-</b>	<b>539,347</b>

## 8. CONCLUSIONS AND RECOMMENDATIONS

**Conclusions:** GREAN project introduced methods of combating the effects of climate change in the coffee farming communities of Uganda. The SALM model employed during the project implementation enabled farmers to adapt to the effects of climate change, whereas the cook stoves, briquettes and tree planting enabled farmers to mitigate the effects of climate change. Integrating SALM in farming activities contributed to rehabilitation of degraded land by ensuring reduced loss of soil and fertility thus improving coffee yields in terms of quality and quantity. The new employment in briquettes and stoves had an impact on the livelihoods of women and youth. Mainstreaming gender in coffee value chain enabled the women and youth to also benefit from coffee which was not the case previously. The methodologies used such as group approach, use of farmer trainers, demo sites, farmer exchange visits and farmer field schools were useful in achieving the results.

The project has contributed to the capacity of the SPOs in terms of organisation base (administrative and management structure), policies, technical capacities in addressing climate change, agriculture, and marketing. GREAN has built the capacities in identified weak areas, strengthening the institutions. The SPOs' staff and farmer trainers have developed capacity built to train farmers, enabling farmers to continue to learn even after the end of the project

### **Recommendations:**

- The SPOs and Fairtrade Africa should continue to engage other buyers for carbon credits generated from cook stoves as this will enable more stoves to be distributed since the demand is still high. This will also help to sustain the briquettes businesses by women and youth.
- More briquette machines are needed for women and youth in various primary societies to ensure sufficient availability of briquettes. Continued

strengthening of the business committees, training them on conflict management is also required. More funds would be needed to scale up this business.

- SPOs should maintain the participatory extension methodologies used in GREAN project as they proved to be successful and efficient in terms of time and cost. For example, the exchange visits, demonstration sites, use of farmer trainers and farmer field schools.
- There is need to have another comprehensive market study to assess the increase in revenues generated from sale of producer labelled or Fairtrade labelled coffee in Uganda and East Africa.
- A liaison person or persons fully seconded to support the SPOs would be appropriate especially with follow up and monitoring of the carbon related activities in the project because the focal staff are overwhelmed with a lot of work. Fairtrade will be responsible to recruit one person to support the SPOs in the carbon businesses.
- SALM demonstration sites should be accessed for learning by all people in all SPOs. They should also be open to government workers who would wish to train farmers from there. UCDA in Mbarara district pledged to monitor and support farmers hosting these demos such that they continue to train other coffee farmers from near and far.
- GREAN project results should be shared with all stakeholders from national to local governments. Vi Agroforestry will take the responsibility to share reports at national level whereas the SPOs will share at local level.
- The Project Management structure for future projects need to strengthen the impact monitoring of the project; The evaluation proposed setting up a management information system to generation of administrative data.

\*\*\*\*\*

## 9. ANNEXES

*Annex 1: Project completion fact sheet (attached)*

**Annex 2        Logical Framework Matrix**

*Log frame has been updated and attached.*

**Annex 3        Pictures**

*A few pictures have been attached*

**Annex 4        Other supplementary deliverables/documentation**

*To be attached (if applicable)- Carbon estimation document & t CO2e Green Coffee Project Excel have been attached.*

**Annex 5        Impact story very important, please provide 2 case stories. *Three stories have been provided.***