Completion Report

Climate resilience and diversification of Livelihoods in Northern Uganda.

NCF6

Grantee: Strømme Foundation

Local Partner(s): Arid Land Development Program (ADP)

Other Partner(s): Woord en Daad (Holland)

Project start date: *01/03/2017*

Project end date*: 29/02/2020*

TABLE OF CONTENTS

Executive summary

Strømme Foundation East Africa (SFEA), in consortium with Woord en Daad (W&D) and Arid Land Development Program (ADP), received a 3-year funding from Nordic Climate Facility (NCF) for implementation of "Climate resilience and diversification of livelihoods in Northern Uganda", which was implemented by Arid Land Development Program in three districts of Abim, Kaabong and Kotido in Karamoja sub-region for period of January 2017 to December 2019 with a no cost extension ending February 2020. The project was purposely aimed at reducing the vulnerability of man and nature to the increasingly extreme climate patterns in the semi-arid Karamoja region (Kotido, Abim and Kaabong districts), through an integrated diversified and sustainable rural production business model that included the components of; (i) planting multipurpose trees (wood, nectar, fruit, fodder), (ii) promoting honey production, (iii) introducing a short-cycle sorghum variety and (iv) introducing efficient cooking stoves.

The project was driven by a participatory process that led to eight (8) Community Action Plans in which eight clusters of villages agreed to protect and regenerate trees in their area. The communities were trained in Farmer-Managed Natural Regeneration (FMNR) practices that allowed for a fast recovery of indigenous trees that were cut but whose root system was still intact. A short-cycle, drought resistant sorghum variety was introduced, in combination with training in integrated agroforestry practices, such as intercropping with trees and (leguminous) soil cover. The project also actively supported the planting of multi-purpose trees. Fruit trees (especially mango and cashew) which were envisaged to provide a growing source of nectar and generate income through the sale of fruits and nuts were distributed. In addition, the Caliandra seedlings were given to households due to their fast-growing nature and ability to provide bee forage (nectar), animal fodder and nitrogen fixing. Other trees were planted for the purpose of firewood, food, fodder, fencing, nectar, shade, soil protection and/or nitrogen fixing.

In order to help households cope with the reduced availability of firewood in the short run, fuel-efficient stoves were introduced, and local artisans trained in their fabrication. For the 1500 households targeted, the intervention contributed to sustainable food production systems that were more climate-resilient and improved livelihoods. Similarly, Savings Groups through their savings and loans function played an important role, both in the start-up phase (to kick-start community-based organization processes) and for the sustainability and replication of the concepts promoted in the project. From the learning the activities will continue in the communities.

A challenge has been unpredictable climatic conditions, with unforeseen rainfall and droughts. This have affected the planting of trees and sorghum in some periods.

1. ASSESSMENT OF IMPLEMENTATION OF THE PROJECT

1.1 Achievement of Outputs and Objectives

Planned Objectives and Outputs	Indicator(s):	Achievement of the objectives and outputs:
Overall Objective Improved climate resilience of rural households and their livelihoods in the Karamoja region (Kotido, Abim and Kaabong district) in Uganda by 2019	▪ 70% of the 1500 households involved have increased their income compared to baseline. ▪ 80% of households have diversified their income sources, compared to the baseline ▪ 70% of households have increased their reserves in terms of savings, food stock and/or livestock.	▪ 85.1% reported that their income had increased due to involvement in the project ▪ 85.5% of the households have diversified their income sources to 2-6 sources ▪ 99.6% increased their stock in savings, 17.6% increased their food stock and 5.2% increased their stock in livestock
Output 1.1: Increased access to financial services in rural communities through Savings Groups (SG)	▪ Average savings per SG member is >20 EUR. ▪ >50% of the loans are used for investment opportunities related to the Project.	▪ Average saving per SG member was 69 EUR ▪ 37.9% of the loans are used for investment opportunities related to the project
Output 1.2: Increased production of honey and white sorghum	▪ Average honey production per farmer has increased from 0 to 60 kg per year in the intervention area among 300 participating farmers. ▪ Average sorghum production per farmer has increased by 50% among 1200 participating farmers.	▪ Average honey production per farmer per year was for 17.31kg per season (approximately 34,62kg per year) for 98 participating farmers ▪ Average sorghum production per season was 136.33kg.
Output 1.3: Reforestation and reduced use of wood-based fuels.	▪ The number of trees per acre of farmland has increased among the participating producers	▪ Average number of trees per acre of farmland was 8 trees.

	▪ Average firewood use of households with improved stoves has decreased by 50%. ▪ Plan to make 500 stoves	▪ Average firewood use of households decreased by 82.7% ▪ 1500 stoves where produced, as many families outside the project adapted the technique

1.2 Deviations from the planned Outputs and Activities

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

Due to different circumstanced a no cost extension on 3 months was needed. All planned activities were implemented as planned

1.3 Achievement of NCF indicators

Please insert below the correct figures on how the project has contributed to fulfilling NCF indicators.

NCF indicators	Results
1. Number of beneficiaries reached (women/men)	1500 (1050 Females and 450 males)
2. Number of people with increased resilience to climate change (women/men)	1500
3. CO2e emissions reductions (actual at project completion and expected during the lifetime of the project's mitigation investments)	16.140, 34 ton
4. Number of green business concepts tested	3-apiculture, Climate smart agriculture; production of energy efficient stoves
5. Number of new decent jobs created (disaggregated by number of permanent (women/men) and seasonal (women and men)	1500 (450 M, 1050 F) Permanent 300, Seasonal 1200
6. Number of people with improved livelihoods/income-generating possibilities (women/men)	1500
7. Number of multi-stakeholder partnerships developed	5
8. Amount of funds leveraged (actual project co-financing and possible secured future investments for scaling-up/replication)	

2. CLIMATE CHANGE

The project promoted both mitigation and adaptation measures to climate change. Mitigation measures included tree planting initiatives, promotion of energy efficient stoves and practical training of farmers in FMNR to promote sprouting of cut trees in their fields. The adaptation measures on the other hand included promotion of forest-based enterprises like apiculture that promote conservation of trees/forests. Quick maturing crop varieties like white sorghum were also introduced. Savings and Credit schemes were promoted to provide ready source of capital for individuals to start up other non-agricultural enterprises as alternative sources of income especially during the dry spells when farming is not possible.

3. DEVELOPMENT IMPACTS AND CROSS-CUTTING ISSUES

Cross-cutting issues mainstreamed by the project included gender equality, environmental sustainability, anti-corruption, disability inclusion and peace building. In the Savings Groups, an affirmative action was made to have membership composition of 70% women with 3/5 of leadership committee members being women in mixed groups. Wide sensitization about women's rights in the savings groups, challenging gender norms which culturally, socially and politically discriminate against women. This has enhanced women's voice in decision-making, leadership and peacebuilding. For example, enhancing participation in decision-making in the community and at household level, advocating for strong representation by women on other community structures like School Management committees and Savings groups committees. Other example: Practical facilitation so women could work with honey productions. Environmental sustainability was promoted through awareness creation and promotion of environment protection initiatives including use of energy efficient stoves, formation of environment management commits and drafting of community environment action plans to protect the environment. Multipurpose trees were distributed and planted while apiculture was promoted as a forest-based enterprise to enhance forest protection. Trainings were conducted on land rehabilitation techniques such as FMNR. Anti-Corruption from the onset of the project was emphasized to all partners and other stakeholders. There was a clear commitment to a zero-tolerance approach to corruption. Inclusion- the project targeted all beneficiaries regardless of their ethnic or religious background. Particular commitment was made to target PWDs together with other marginalised groups are involved at all stages of the project cycle. Stakeholders including staff at ADP were trained on disability inclusion, on rights, needs and capabilities of disabled people. Disability data is included in all planning, monitoring and evaluation reports.

My name is AMONGI JAQLINE aged 29 years. I joined MED-NGECI saving group in April 2017. My plan was to start selling petrol to Boda Boda cyclists. I had thought of this idea before but starting capital was a problem by then. I had earlier informed my husband about it but he said that business is for men and that I would not manage.

The business kept paying my weekly savings of 10.000/= per week and this was consistent for all the weeks in the first cycle. My husband was not concerned with my saving as well as my business, but I thank him, he never at any moment interfered with my business or my saving agenda. It was an amazing story to my husband when he understood that I shared eight hundred and twenty-eight thousand shilling. He advised me to relocate some things in the room and expand my petrol business. My plan was to buy a bull that would be used in cultivation so that I can venture into agriculture alongside petrol selling

My business has grown but my challenge is space. My husband has since been cooperative after the first sharing. We are now constructing a two-room house and it has reached ring beam stage.

My saving group is now very competitive. After the first sharing, all members have become so focused, and no member wants to save less than the other.

4. ASSESSMENT OF THE RESULTS AND IMPACTS OF THE PROJECT

4.1 Relevance

The project interventions were relevant to the identified needs of the target community and the context of the original problem. The totality of households living in the Karamoja region experience drought, climatic conditions, pests, diseases, and high food prices as the most frequent shocks. These conditions have resulted in high levels of poverty and food insecurity within the region. The project conducted a needs assessment in the form of a baseline study to identify the pre-existing problems. The analysis at baseline identified high national rates of poverty in the three districts of project intervention, compared to the national rate of 34.6%. As a response, the project promoted an integrated and diversified production system in Karamoja region with the aim to reduce the vulnerability of man and nature to the increasingly extreme climate patterns through the different approaches.

a) The CMMF approach was relevant due to the high need for credit facilities within the region, as well as the limited number of banking institutions within Karamoja. Additionally, this approach lead to financial inclusion since rights holders are not subjected to financially segregating credit requirements like the need for collateral security. The project approach of using the CMMF as an entry point was also relevant in creation of a platform for awareness on other project interventions and ensuring beneficiaries receive a complete package. The methodology creates a common vision with regards to construction of community action plans. It also increases effort of rights holders to increase incomes for saving.

b) Honey and sorghum production were relevant given the poverty levels of the communities within the three districts as well as the need for Income Generating Activities within the location. In addition, much as agriculture is not yet a dominant economic activity, a transition from pastoralism to settled agro-pastoral livelihoods has been taking place in the last decade and will continue. Beekeeping enables rural communities to earn an income with low investment and maintenance cost; low labour requirement, and without necessarily destroying the environment. The variety of sorghum (white sorghum) is also fast yielding and resistant to adverse climatic conditions. This signifies that interventions that support the transition of this community are required for enhanced livelihoods and the most effective will be those that require little capital to set up and run. The approach used also responds to the high food insecurity challenges within the districts.

c) Promotion of energy saving stoves was relevant due to the scarcity of trees within these locations. In addition, this methodology aided in reduction of tree cutting in the region as a technique to promote environmental protection.

d) Provision of seedlings and tree planting promotion was relevant given the climatic challenges of the region. In addition, distribution of fruit trees also responded to nutrition security problems. In addition, trees such as acacia were relevant in support of other programme initiatives such as apiculture.

4.2 Effectiveness

The overall objective of the project was to improve climate resilience of rural households and their livelihoods in the Karamoja region (Kotido, Abim and Kaabong district) in Uganda by 2019. It was envisaged that 70% of the 1500 households involved would have increased their income compared to baseline. According to the project end line evaluation, 85.1% of the rights holders shared that their income levels increased with participation in the project. The highest percentage was attributed to savings groups and access to loans. A high percentage also shared that their incomes did not increase due to having little to save (33.3%). According to this analysis, the CMMF has been highly effective in enhancing household income. The project objectives also targeted that 70% of households were envisaged to have increased

their reserves in terms of savings, food stock and/or livestock. There has been increased access to savings for rights holders. As one example, there were positive unforeseen result with production of stoves as persons outside the project adapted the technique.

The project was implemented in a consortium and the evaluation noted an equivalent number of advantages and disadvantages of this approach. One of the key benefits was that teams within ADP had the ability to harness technical expertise from sector heads within Stromme Foundation. It was however noted that there was limited monitoring and communication within the two parties, which may have injured project outcomes. The project within ADP trickled down to community structures that included the CBF, and Community Environment management structures. The evaluation identified several factors that may have affected the effectiveness of the project in achieving pre-determined targets.

4.3 Efficiency

Assess the cost efficiency of the project.

Overall, the project was efficient in achieving of results. The budgeted funds and resources were utilized effectively to achieve an equivalent translation of inputs into outputs with regards to the pre-set targets. At activity level, the amount of funds budgeted were used to achieve more targets than was set at. At output level however, contextual characteristics, including but not limited to; harsh weather that hampered sorghum production and absence of available environmentally enhancing characteristics for honey production (water and nectar), affected the overall achievement of results, leading to low translation of inputs into outputs.

The funds allocated for the project were enough to achieve the targets set at baseline. However, given contextual dynamics, additional funds are required to achieve adverse impacts of the project. The literacy level of the community requires continuous trainings and refresher sessions of more than one day in order to attain the knowledge adoption required to experience change in attitudes and practices.

Based on achievement levels, the budget for formation of CMMF was enough. However, analysis of their adoption levels of skill indicate need for additional funds to cater for refresher trainings especially on financial management. On the contrary, budgets on identification of CBFs were high as these could have been identified from within the different CMMF structures. In relation, quarterly CBF review meetings were highly budgeted. The finances within these should have been allocated to a monitoring budget that involves frequent community feedback meetings to inform implementation. A different methodology would be to require every CBF to conduct community meetings with respective groups using a predesigned template and combine the quarterly CBF meetings with their initial and refresher trainings budget.

The budget on community sensitization on apiary and white sorghum was sufficient. There is however need for scale up on this activity given the achievement of this output is still low based on production. There is need for community attitude change and adoption. In future implementation, this budget can be utilized to identify and support model farmers within the location, to act as role models and demonstrators for the sorghum and apiculture based on experience. In addition, the achievement levels of linkages of bee farmers to processors has been low as shown by the budgetary expenditure. The budget for conducting community sensitization on agro-forestry and conservation practices was relatively low. There is need for additional funds to facilitate this activity as it is the core to reduction of climatic shocks within the location. Community sensitization needs to be adopted in other methodologies that attract community engagement such as inter district sports events, youth club tree planting awareness events, among others.

The project was not timely, and implementation was not completed by the end of project date. As such, a no cost extension was provided up to February 2020 to enable 100% utilization of funds, as some of the activities was connected to the harvest season. This evaluation noted that the timeliness between milestone 1 and 2 was due to the procurement process for inputs to be used, which is done outside the district of implementation. Interaction with staff also revealed that the late disbursement of funds from the funders, and delay in provision of financial documentations by the implementing agency presented challenges in early implementation and completion of activities. In addition, the project milestone 2 report provides details on a risk assessment and forensic audit that not only delayed activities but also resulted in a three month no cost extension, which was not part of the original project design, to enable final utilization of funds and closure of activities.

The repayment approach used in implementing the project was not cost effective. In milestone 1, there were anticipations of difficulty of repayment as reflected in the intention of farmers to repay the hive using harvest from the borrowed hives. During the end of project evaluation, there was still no evidence of beneficiaries' willingness to repaying the resources provided for the activities as was agreed at inception. The project approach of entry through the CMMF was cost effective as it reduced expenses that would have been incurred in mobilization and organization of separate activities.

4.4 Impact

The project has impacted the lives of beneficiaries. Access to savings and credit facilities have been increased to a large extent. The rights holders have been able to form and participate in CMMF activities that have enabled them to enhance their income and meet other household demands. In a Key Informant Interview with a Community based Facilitator in Kaabong district, it was revealed that in one of the CMMF, members have been able to start up their own IGAs within the same locality. As such, a market was created for the community to buy different produce. The beneficiaries have acquired numerous skills that they did not

have before the project intervention. This knowledge provided as a result of the project will still be applied in future, to improve their livelihoods. Food security has increased within the areas of intervention from the baseline as a lower percentage reported shortage in food within their households. The project has enhanced the resilience targeted groups but to a small extent. Most of the rights holders were able to improve and diversify their household incomes and adopt other IGAs in the areas of intervention provided by the project.

Attitude change has been enhanced among different target groups. The community is aware about the need for conservation of trees and are willing to participate in activities that promote environmental conservation. In addition, the attitude of the community towards agriculture and bee keeping has been improved, as seen from its composition in the various household IGAs. The exchange visit initiatives created numerous exposures for farmers, leading to enhanced capacity. This activity is highly recommended especially in promotion of attitude change within the community.

The project has promoted change of behaviour of the practice and attitudes of decision and policy makers at the local level through their involvements in key activities like development of community action plans. In addition, while they maybe similar activities, the programme was being implemented in different sub counties and parishes. This cultivated active engagement and participation of the leaders.

4.5 Sustainability

The project benefits/ outcomes are likely to continue after the official closure of the external support. This is because there was a clear sustainability plan and exit such as;

1. Training of rights holders: Capacity building has been recognized as highly sustainable strategies due to continuity of knowledge. By the end of the project, beneficiaries still have the knowledge to construct energy saving stoves, carry out agriculture, among others. The limited number of contact hours between trainees may however affect the adoption level of knowledge thus there is need for continuous supervision and monitoring.

2. Utilization of community members to form environment committees and community-based facilitator structure. This will continue to ensure willingness of rights holders to participate. In addition to this, these people will continue to share information and support continuity of concepts.

3. Involvement of district leadership: The stakeholders at the community level in the region have been adequately involved. They have participated in selection and identification of

beneficiaries, and sensitization sessions, as well as trainings. This strategy increased the project ownership as it took advantage of the trust communities have in their leadership.

4. Formation of CMMF groups and trainings. The CMMF groups were a point of entry for other interventions. As such, all target duty bearers had to belong in a group before receiving any additional support from the project, enabling them to grow as a whole and promote their livelihoods as they save. The project also provided for avenues through which incomes can be enhanced so that CMMF members have a source of income and able to save even after the exit of the support.

Programme ownership is high among direct beneficiaries. Even at the end of the project, CMMF members have continuously turned up for the meetings. In addition, the community has owned and taken part in implementation of the community action plans and environmental plans. The youths who were trained in energy stove construction have actively been involved in training group members and majority of the households have adopted the methodology.

The evaluation report also identified other positive factors that may affect sustainability of the project within the community. They include;

- Availability of market especially for bee keeping products within the community and district; the evaluation noted that there is wide presence of market for honey within the community, as well as in other districts within the country. As such, given farmers continue with this intervention, they will be able to sell their produce and earn incomes.

- High willingness of the community to participate in activities that reduce their vulnerability to adverse climate effects; the interest of the community was very high. This signifies that they will participate when given any opportunities or channels.

5. POTENTIAL FOR SCALING UP AND FOLLOW-UP INVESTMENTS

The project provided avenues for unlocking the potential of beneficiaries, offering an opportunity for scale up. For example, we are optimistic that there will be continued membership growth among CMMF groups. Already some groups have beyond the recommended maximum membership (of 30 people) and have had to subdivide to fit within the recommended membership thus replication and scale up. Additionally, besides the improved KTB hives provided by the project, some members have acquired additional local or improved hives to expand on their apiary sites. The project structures including CBFs, group leaders, CMMF clusters and environment committees all have the potential to scale up with the current project areas. These may not need additional funding.

Beyond these, there is potential to scale up some of the activities to new areas (districts) and include further interventions like formation Beekeepers' associations through which value addition initiatives to the bee products can be channelled. Furthermore, some interventions

like soil testing needed to be popularized in the region thus scale up. These will need additional funding.

Generally, the project has been used as a pilot to test synergies among interventions like Savings groups, food security, climate smart agriculture and environmental sustainability interventions. In fact, Strømme Foundation East Africa has based on this project to enhance some of its livelihood's interventions among other partners in Uganda, East Africa. For example, lots of lessons were drawn from this project to design and implement the commercial village model on South Western Uganda to transform subsistence agriculture into commercial agriculture.

6. UNEXPECTED OUTCOMES

Two major activities and technologies however did not gain full acceptance in the communities, the technologies include the soil scanning technology with its associated costs, being a new technology, needed more time to popularize and convince the farmers of the advantages of testing the soil for improved productivity besides the required soil nutrients inform of fertilizers. The second technology that did not gain wide acceptance is the Peko pe energy saving stoves, this is mainly because the materials required for the construction of Peko pe stoves cannot easily be got besides the cost involved in acquiring the materials.

However, the Lorena stoves gained great acceptance among project targeted beneficiaries ad spilled over to nearby Households within the project target areas

The changes in the weather pattern confused the farmers and they failed to prepare to take care of their seedlings, this caused some of the seedlings to dry up

7. LESSONS LEARNT

Establishment of environment committees and stakeholder participation: These have proven efficient in enforcement of environmental protection. This can be replicated in other upcoming projects/ programmes. It also ensured high levels of project ownership and response within the community. There was high level of willingness and participation of rights holders in activities that promote environment protection and rejuvenation.

Project entry points: Utilization of CMMF as an entry point to implementation is a good strategy. Once people are organized into savings groups, it is easy to channel all other project interventions through these already mobilized groups. That should be replicated in upcoming projects

Community contexts: The communities within Kaabong, Abim, Kotido and generally Karamoja region are in the period of transition and attitude change, and thus require high amount of sensitization and awareness to enable adoption of interventions.

Food and income security interventions key in promoting sustainable livelihoods: For example, participation in apiculture has a positive effect on incomes whereas sorghum production provides a higher effect on producing food reserves. Households that participated in both had a higher improvement in both incomes and food security. Provision of both interventions to households was more effective.

Livelihoods and resilience projects design and implementation: Generally, the project has been used as a pilot to test synergies among interventions like Savings groups, food security, climate smart agriculture and environmental sustainability interventions. In fact, SFEA has based on this project to enhance some of its livelihoods' interventions among other partners in Uganda, East Africa. For example, lots of lessons were drawn from this project to design and implement the commercial village model on South Western Uganda to transform subsistence agriculture into commercial agriculture.

8. FINANCIAL SUMMARY

.

Table 1. Project financing per partner

	Financing, EUR					
Expenditures, EUR	NCF	Grantee	Co-funding Grantee, Woord & Daad		Revenues from the project	Total
Grantee	86 720	9 761				96 481
Aridland Dvlp. Programme	251 621		147 421			399 043
Woord & Daad	54 757					54 757
Total	393 099	9 761	147 421			550 281

9. CONCLUSIONS AND RECOMMENDATIONS

The project has been successfully implemented and give great impact for the beneficiaries.

Annex 1 Project completion fact sheet

Project Name:	**Climate resilience and diversification of livelihoods in Northern Uganda**		
Country/ Region:	Uganda, East Africa	**Financing:**	
		EUR	**%**
Nordic Partner:	Strømme Foundation	72573	13,2
Local Partner:	Arid Land Development Programme	0	0
Other Partner:	Woord en Daad (Holland)	84609	15,4
	NCF grant disbursed	393099	71,4
	Total	**550281**	**100.00**
Classification:	Mitigation/ adaptation/ combination		
Project cycle:	Contracted: 01/03/2017 Original Closing Date: 29/02/2020 Actual Closing Date: 28th February, 2020		
Project description:	Strømme Foundation East Africa (SFEA), in consortium with Woord en Daad (W&D) and Arid Land Development Program (ADP), received a 3-year funding from Nordic Climate Facility (NCF) for implementation of "Climate resilience and diversification of livelihoods in Northern Uganda", which was implemented by Arid Land Development Program in three districts of Abim, Kaabong and Kotido in Karamoja sub-region for period of January 2017 to December 2019 with a no cost extension ending February 2020. The project was purposely aimed at reducing the vulnerability of man and nature to the increasingly extreme climate patterns in the semi-arid Karamoja region (Kotido, Abim and Kaabong districts), through an integrated diversified and sustainable rural production business model that included the components of; (i) planting multipurpose trees (wood, nectar, fruit, fodder), (ii) promoting honey production, (iii) introducing a short-cycle sorghum variety and (iv) introducing efficient cooking stoves. The project was driven by a participatory process that led to eight (8) Community Action Plans in which eight clusters of villages agreed to protect and regenerate trees in their area. The communities were trained in Farmer-Managed Natural Regeneration (FMNR) practices that allowed for a fast recovery of indigenous trees that were cut but whose root system was still intact. A short-cycle, drought resistant sorghum variety was introduced, in combination with training in integrated agroforestry practices, such as intercropping with trees and (leguminous) soil cover. The project also actively supported the planting of multi-purpose trees. Fruit trees (especially mango and cashew) which were envisaged to provide a growing source of nectar and generate income through the sale of fruits and nuts were distributed. In addition, the Caliandra seedlings were given to households due to their fast-growing nature and ability to provide bee forage (nectar), animal fodder and nitrogen fixing. Other trees were planted for the purpose of firewood, food, fodder, fencing, nectar, shade, soil protection and/or nitrogen fixing. In order to help households cope with the reduced availability of firewood in the short run, fuel-efficient stoves were introduced, and local artisans trained in their fabrication. For the 1500 households targeted, the intervention contributed to sustainable food production systems that were more climate-resilient and improved livelihoods. Similarly, Savings Groups through their savings and loans function played an important role, both in the start-up phase (to kick-start community-based organization processes) and for the sustainability and replication of the concepts promoted in the project.		
Key results:	**NCF indicators**	**Results**	
	1. Number of beneficiaries reached (women/men)	1500 (450M,1050F)	
	2. Number of people with increased resilience to climate change (women/men)	1500 (450M,105OF)	
	3. CO_2e emissions reductions (actual at project completion and expected during the lifetime of the project's mitigation investments)	16.140,34 tons	
	4. Number of green business concepts tested	03	
	5. Number of new decent jobs created (disaggregated by number of permanent (women/men) and seasonal (women and men))	1500 (450M,1050F) Permanent 300 Seasonal 1200	
	6. Number of people with improved livelihoods/income-generating possibilities (women/men)	1500 (450M,1050F)	
	7. Number of multi-stakeholder partnerships developed		
	8. Amount of funds leveraged (actual project co-financing and secured future investments for scaling-up/replication)		

Project performance:	**Main Expected Outputs**	**Achieved**	**End-of-project status**
	Overall Objective Improved climate resilience of rural households and their livelihoods in the Karamoja region (Kotido, Abim and Kaabong district) in Uganda by 2019	▪ 85.1% reported that their income had increased due to involvement in the project ▪ 85.5% of the households have diversified their income sources to 2-6 sources ▪ 99.6% increased their stock in savings, 17.6% increased their food stock and 5.2% increased their stock in livestock	Achieved
	Output 1.1: Increased access to financial services in rural communities through Savings Groups (SG)	▪ Average saving per SG member was 69 EUR	Achieved
	Output 1.2: Increased production of honey and white sorghum	▪ 37.9% of the loans are used for investment opportunities related to the project	Achieved
	Output 1.3: Reforestation and reduced use of wood-based fuels.	▪ -Average honey production per farmer per year was for 17.31kg per season (approximately 34,62kg per year) for 98 participating farmers	Achieved
Final beneficiaries:			
Climate change impacts:	The project promoted both mitigation and adaptation measures to climate change. Mitigation measures included tree planting initiatives, promotion of energy efficient stoves and practical training of farmers in FMNR to promote sprouting of cut trees in their fields. The adaptation measures on the other hand included promotion of forest-based enterprises like apiculture that promote conservation of trees/forests. Quick maturing crop varieties like white sorghum were also introduced. Savings and Credit schemes were promoted to provide ready source of capital for individuals to start up other non-agricultural enterprises as alternative sources of income especially during the dry spells when farming is not possible.		
Development impacts:			
Innovation, technology and learning:			
Partnership:			
Sustainability and replicability:	**Sustainability** The project benefits/ outcomes are likely to continue after the official closure of the external support. This is because there was a clear sustainability plan and exit such as; 1. Training of rights holders: Capacity building has been recognized as highly sustainable strategies due to continuity of knowledge. By the end of the project, beneficiaries still have the knowledge to construct energy saving stoves, carry out agriculture, among others. The limited number of contact hours between trainees may however affect the adoption level of knowledge thus there is need for continuous supervision and monitoring. 2. Utilization of community members to form environment committees and community-based facilitator structure. This will continue to ensure willingness of rights holders to participate. In addition to this, these people will continue to share information and support continuity of concepts. 3. Involvement of district leadership: The stakeholders at the community level in the region have been adequately involved. They have participated in selection and identification of beneficiaries, and sensitization sessions, as well as trainings. This strategy increased the project ownership as it took advantage of the trust communities have in their leadership. 4. Formation of CMMF groups and trainings. The CMMF groups were a point of entry for other interventions. As such, all target duty bearers had to belong in a group before receiving any additional support from the project, enabling them to grow as a whole and promote their livelihoods as they save. The project also provided for avenues through which incomes can be enhanced so that CMMF members have a source of income and able to save even after the exit of the support.		

	Programme ownership is high among direct beneficiaries. Even at the end of the project, CMMF members have continuously turned up for the meetings. In addition, the community has owned and taken part in implementation of the community action plans and environmental plans. The youths who were trained in energy stove construction have actively been involved in training group members and majority of the households have adopted the methodology. The evaluation report also identified other positive factors that may affect sustainability of the project within the community. They include. ▪ Availability of market especially for bee keeping products within the community and district; the evaluation noted that there is wide presence of market for honey within the community, as well as in other districts within the country. As such, given farmers continue with this intervention, they will be able to sell their produce and earn incomes. ▪ High willingness of the community to participate in activities that reduce their vulnerability to adverse climate effects; the interest of the community was very high. This signifies that they will participate when given any opportunities or channels. **Replicability** The project provided avenues for unlocking the potential of beneficiaries, offering an opportunity for scale up. For example, we are optimistic that there will be continued membership growth among CMMF groups. Already some groups have beyond the recommended maximum membership (of 30 people) and have had to subdivide to fit within the recommended membership thus replication and scale up. Additionally, besides the improved KTB hives provided by the project, some members have acquired additional local or improved hives to expand on their apiary sites. The project structures including CBFs, group leaders, CMMF clusters and environment committees all have the potential to scale up with the current project areas. These may not need additional funding. Beyond these, there is potential to scale up some of the activities to new areas (districts) and include further interventions like formation Beekeepers' associations through which value addition initiatives to the bee products can be channelled. Furthermore, some interventions like soil testing needed to be popularized in the region thus scale up. These will need additional funding. Generally, the project has been used as a pilot to test synergies among interventions like Savings groups, food security, climate smart agriculture and environmental sustainability interventions. In fact, SFEA has based on this project to enhance some of its livelihood's interventions among other partners in Uganda, East Africa. For example, lots of lessons were drawn from this project to design and implement the commercial village model on South Western Uganda to transform subsistence agriculture into commercial agriculture.
Lessons learned:	Establishment of environment committees and stakeholder participation: These have proven efficient in enforcement of environmental protection. This can be replicated in other upcoming projects/ programmes. It also ensured high levels of project ownership and response within the community. There was high level of willingness and participation of rights holders in activities that promote environment protection and rejuvenation. Project entry points: Utilization of CMMF as an entry point to implementation is a good strategy. Once people are organized into savings groups, it is easy to channel all other project interventions through these already mobilized groups. That should be replicated in upcoming projects Community contexts: The communities within Kaabong, Abim, Kotido and generally Karamoja region are in the period of transition and attitude change, and thus require high amount of sensitization and awareness to enable adoption of interventions. Food and income security interventions key in promoting sustainable livelihoods: For example, participation in apiculture has a positive effect on incomes whereas sorghum production provides a higher effect on producing food reserves. Households that participated in both had a higher improvement in both incomes and food security. Provision of both interventions to households was more effective. Livelihoods and resilience projects design and implementation: Generally, the project has been used as a pilot to test synergies among interventions like Savings groups, food security, climate smart agriculture and environmental sustainability interventions. In fact, SFEA has based on this project to enhance some of its livelihood's interventions among other partners in Uganda, East Africa. For example, lots of lessons were drawn from this project to design and implement the commercial village model on South Western Uganda to transform subsistence agriculture into commercial agriculture.

Annex 2 Logical Framework Matrix

Narrative Summary	**Objectively Verifiable Indicators (OVIs)** **Achieved results in bold**	**Means of Verification (MOV)**	**External Factors (Assumptions)**
Overall Objective Improved climate resilience of rural households and their livelihoods in the Karamoja region (Kotido, Abim and Kaabong district) in Uganda by 2019	1. 70% **(85,1%)** of the 1500 **(1050 Females and 450 males)** households involved have increased their income compared to baseline. 2. 80% **(80%)** of households have diversified their income sources, compared to the baseline 3. 70% **(99.6% increased their stock in savings, 17.6% increased their food stock and 5.2% increased their stock in livestock)** of households have increased their reserves in terms of savings, food stock and/or livestock.	Baseline study End term evaluation	Security situation remains stable. The baseline year is not exceptionally wet and the end-line not exceptionally dry (in case of a non-representative measurement year, the data will be averaged with the previous 2 years).
Purpose 1500 Farmers have adopted of a climate-resistant, integrated production system, with a focus on honey and sorghum and linkages to stable, formal markets.	1. 90% of 1500 (**1500)** households apply at least two climate smart agricultural practices (e.g., inter-cropping with trees, leguminous soil cover, use of short-cycle sorghum seeds, natural regeneration) 2. 1500 **(1500)** farmers produce either honey or white sorghum as an income generating product	Baseline evaluation of a representative sample. Annual monitoring. End evaluation of representative sample	Markets for honey and sorghum continue to develop as in the past years. Respect of purchase contracts of final products by both buyers and sellers.
Output (Results) 1. Increased access to financial services in rural communities through Savings Groups (SG) 2. Increased production of honey and white sorghum 3. Reforestation and reduced use of wood-based fuels.	1.1 Average savings per SG member is >20 EUR. **(69 Euro)** 1.2 >50% (**37,9%)** of the loans are used for investment opportunities related to the Project. 2.1 Average honey production per farmer has increased from 0 to 60 kg per year **(34,62 kg)** in the intervention area among 300 (**98)** participating farmers. 2.2 Average sorghum production per farmer has increased by 50% among 1200 **(1200)** participating farmers. **(Average sorghum production per season was 136.33kg.)** 3.1 The number of trees per acre of farmland has increased among the participating producers; **(Average number of trees per acre of farmland was 8 trees.)** 3.2 Average firewood use of households with improved stoves has decreased by 50%. **(82,7%)**	Baseline and end term evaluation. Production information, sales records of the farmer groups.	The intervention areas are not hit by an extraordinarily extreme drought during the project period. Household and group savings are sufficient for timely investments and purchase of the needed inputs
Activities ***Activities with result 1: Increased financial access.*** 1.1 Sensitisation, formation and training of SGs. 1.2 Recruitment and training of Community Based Facilitators (CBF) 1.3 Procurement and supply of SG tool kits	1.1 Formation of 60 new SGs. **(60)** 1.2 Sensitization of 80 SG **(80),** involving 2000 people of which at least 70% is female are trained. At least 60 **(60)** of these groups are new. 1.3 4 CBF recruited and trained in SG methodology. **(Achieved)**	Quarterly activity reports, based on minutes of meetings. Data from cash books of the groups. Training reports,	Proper management of the SGs. Absence of an extreme crisis situation that forces SG members to divert all their savings to

1.3 Procurement and supply of SG tool kits 1.4 Follow-up of SGs 1.5 Conducting quarterly CBF review meetings 1.6 Clustering SG groups for sustainability and better negotiation power.	1.3 4 CBF recruited and trained in SG methodology. **(Achieved)** 1.4 SG tool kits procured and provided to groups **(12 SG kits were produced)** 1.5 10 Quarter review meetings conducted with CBF and action points developed **(Achieved)** 1.6. Conduct training for group leaders in clustering and federation **(9 clusters)**	Training reports, distribution acknowledgement list	emergency expenditures, instead of income generating activities.
Activities with result 2: Increase of the production of honey and white sorghum 2.1 Conduct community sensitization on the benefits of honey and white sorghum production. 2.2 Training of farmers in honey production as a business, with particular attention for female farmers 2.3 Developing a honey harvesting service that monitors production and provides inputs. 2.4 Linking the beekeepers to local processors through sustainable market linkages. 2.5 Procurements of improved bee hives 2.6 Training farmers in production of short-cycle white sorghum varieties and climate smart agricultural practices 2.7 Introducing a soil analysis app that makes fertilizer recommendations 2.8 Procurement and supply of quality sorghum seeds 2.9 Training farmers on group sales and link sorghum producers with buyers	2.1 6 Community sensitization sessions conducted in the three districts of Abim, Kotido and Kaabong **(Achieved)** 2.2 300 (**300, -12 groups)** farmers trained in beekeeping (70% women) 2.3 300 **(300)** farmers have access to inputs for beekeeping **(1040 beehives distributed)** 2.4 At least 80% of crude honey is sold at fair market prices to processors; 20% is for home consumption (**no figures –honey different quality and prices)** 2.5 1200 (**1200-48 groups)** farmers trained in white sorghum production and have access to improved varieties. 2.6 At least 200 lead farmers have received fertilizer recommendation by the soil scanner and have developed a farming fertilising plan **(5 soils scanners used – limited interest as the fee of using it was to much for the farmers)** 2.7 At least 70% (**70%)** of the white sorghum produced by farmers is bulked and sold to buyers 2.8 **Certified Open pollinated variety seeds were distributed to the 1,200 farmers, with each farmer receiving 2Kgs** 2.9 **24 selected farmers (16F, 8M) visited cooperatives**	Quarterly activity reports, based on production data of farmers, training records, Community store produce records	Quality or timely availability in supply of hives by local manufacturers and farm inputs from suppliers
Activities with result 3: Reforestation and reduced use of wood-based fuels 3.1 Conducting community sensitization on agroforestry and conservation practices 3.2 Developing participatory Community Action Plans aimed at increasing the tree cover in the intervention area 3.3 Training farmers in agroforestry practices 3.4 Training farmers in Farmer Managed Natural Regeneration approach 3.5 Promoting energy efficient stoves among the households	3.1 8 Community sensitization conducted in the districts of Abim, Kotido and Kaabong with focus to protection and regeneration **(Achieved)** 3.2 8 Community Action Plans at Parish level are adopted by community leaders and under **(8 participatory Community Action Plans)** implementation 3.3 300 **(1500 farmers were trained in Farmer Managed Natural Regeneration approach)** farmers trained in agro forestry practices 3.4 45,000 trees **(15000 milestone 1 and 22,500 milestone 3)** producing fruits, nectar, firewood	Quarterly activity reports, based on production data of farmers and households	Community leaders understand the need and support the Community Action Plans.

	cassia, calandran, pigeon pea) are planted by 1,500 farmers on their farms and surrounding areas. 3.5 500 **(1500 Lorena stoves)** households use the energy saving stoves **(90% were female)** 3.6 30 (**9 people - Peko stoves)** youth trained in producing efficient stoves		

Annex 3 Pictures

Above: Improved KTB hives distribute to farmers with finding from NCF Below: a fuel-efficient stove promoted by the project

Annex 4 Other supplementary deliverables/documentation

Attached N/A

- Not cost Extension addendum
- Financial/ Audit report

Annex 5 Impact story

See also impact story at point 4.

ANGOM EUNICE is a young lady of 27 years. She is married and a member of MEDN-NGECI saving group that started in 2017. She was elected to be the group's secretary. In the beginning Eunice borrowed a loan of one hundred and twenty thousand (approx. USD 6) at 10% interest rate for three months. She used the loan to buying quality Soya bean seeds and weeding her Cassava garden as well. Three months later she sold off the soya beans harvest part of which used to pay the loan while she reserved the rest for her home consumption.

During the 2018 group she got a new and bigger loan oft UGX 280,000 (approx. USD 76). This time she wanted to invest in animals and bought a mature female goat that has since kidded four times. The rest she used for soya bean seeds. The experience from this made her able to continue saving and she manged to buy an ox to cultivate and expand her soya bean and cassava production.

It has been important for her to have a contact with an NGO like ADP. She is appreciative to ADP for the interventions the community that have made women active. This is a society with strong traditions sand it takes time to change them. Eunice also belongs to a honey group that was supported with improved hives harvesting suits. This gave them opportunity to get better quality for the honey. With proceeds from honey, Eunice's savings have been boosted