

Annual Report January – December 2019



Climate Resilient Agribusiness for Tomorrow Project

Submitted by SNV Netherlands Development Organization in collaboration with Wageningen University & Environmental Research, CGIAR's Climate Change, Agriculture and Food Security Programme, Agriterra and Rabo Partnerships

Disclaimer

This document is issued solely for the party which commissioned it and for specific purposes connected with the above mentioned project only. It should not be used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to or otherwise shared with other parties without consent from us and from the party which commissioned it.



Annual Report January – December 2019

Climate Resilient Agribusiness for Tomorrow Project



List of Abbreviations

BC	Business Case
22	Climate Change
CCAFS	Climate Change. Agriculture and Food Security
CGIAR	Consortium of International Agricultural Research Centres
CIIF	Climate Innovation and Investment Facility
CRA	Climate Risk Assessment
CRAFT	Climate Resilient Agribusiness for Tomorrow [Project]
CS	Climate Smart
CSA	Climate Smart Agriculture
DGIS	Directorate General for International Cooperation
EE	Energy Efficiency
CR-FFS	Climate Resilient Farmer Field School
ICT	Information and Communication Technology
IR	Intermediate Result
Ke	Kenya
M&E	Monitoring and Evaluation
MoU	Memorandum of Understanding
MSP	Multi-Stakeholder Platform
MToT	Master Training of Trainers
RE	Renewable Energy
RP	Rabo Partnerships
PMU	Project Management Unit
PPP	Public Private Partnership
SHF	Smallholder Farmer
SNV	Netherlands Development Organisation
SME	Small and Medium sized Enterprises
SO	Strategic Objective
SP	Service Provider
ТоТ	Training of Trainers
Tz	Tanzania
Ug	Uganda
VC	Value Chain
WEAI	Women Empowerment in Agriculture Index
WEnR	Wageningen Environment Research
WUR	Wageningen University and Research

Table of Contents

1.	Intro	duction		5
	1.1.	Back	ground	5
	1.2.	Key l	mplementation Efforts of the Past Year	5
		1.2.1	Business Case Development Process	5
		1.2.2	Climate Innovation and Investment Facility Process	6
		1.2.3	Climate Risk Assessment Process	8
		1.2.4	Scaling and Advocacy	10
		1.2 5	Integrating Renewable Energy and Energy Efficiency Solutions	10
		1.2.6	CRAFT Visibility and Communications	11
2.	Proje	ect Impl	ementation	12
	2.1.	Parti	ner Contributions	12
	2.2.	Worl	kstream – Practices and Technologies for Farmer Systems and SMEs	13
	2.3.	Worl	kstream – Investments in Inclusive Value Chains	20
	2.4.	Worl	kstream – Enabling Environment for Development and Scaling	28
	2.5.	Worl	kstream – Learning and Knowledge Sharing	34
	2.6.	Workstream – Gender and Youth Inclusion		36
Anne	xes			
	Anne	хI	Performance Indicator Target Tables – 2019 Summary Overview	
	Anne	x II	Online Links to CRAFT Articles, Papers and Publications	41
	Anne	x III	Gender and Youth Mapping & Analysis	46
	Anne	x IV	2019 Business Case Pipeline Summary Overivew	48
	Anne	хV	Business Case Snapshots – Business Cases Approved for Award in 2019	51

1. Introduction

1.1. Background

In May 2018 the Netherlands Ministry of Foreign Affairs/DGIS awarded SNV (Netherlands Development Organisation) the Climate Smart Agriculture East Africa (CSA-EA – now known as the CRAFT) project (Activity #400000819) to be implemented in Kenya, Tanzania and Uganda. This five year project, valued at approximately €39 million, will be implemented by SNV in partnership with Wageningen University (WU) and Wageningen Environmental Research (WEnR), CGIAR's Climate Change Agriculture and Food Security Programme (CCAFS), Agriterra, and Rabo Partnerships (RP). The project is expected to leverage at least €10 million in additional private sector investments.

The consortium offers a strong platform to not only manage and coordinate a robust CSA project, but also provide targeted technical assistance, business facilitation, and research and knowledge management support. The consortium partners will also leverage and create synergies with existing programmes as well as public and private sector partners in the three targeted countries, thereby creating the institutional environment for wide-scale adoption of CSA practices and technologies.

This annual report describes and emphasizes the key activities and performance results achieved during the period January 1 through December 31, 2019. Section 1 will provide a review of the overarching achievements and processes supported by the project for effective roll-out for full implementation beyond the inception phase (which ended May 2019). The lay-out of Section 2 on project implementation will follow the logic of the Results Framework (RF) with sub-sections by project workstreams, which are linked to the Strategic Objectives (SOs), as well as the Intermediate Results (IRs) and sub-Intermediate Results (Sub-IRs). The implementation of the combined efforts are measured through our project performance indicators. In order for this annual report not to divert into great detail, only the key activities are described for which results will feed into the project indicators, as presented in the indicator tables – presenting the targets versus achievements in 2019. Performance indicator targets and results are however presented by country and rolled up into a total for the entire project. This format is in line with the latest work plan for 2019 (June-December), thus allowing for easy comparison between work planning and annual reporting for the same period. Annex I provides a summary overview of all the performance indicator target and results tables.

1.2. Key Implementation Efforts of the Past Year

1.2.1 Business Case Development Process

The inclusive business case development process is central to the implementation approach of the CRAFT project. The CRAFT specific approach, which was developed with a detailed set of different tools was developed during the project's inception phase. This process follows a 4 stepwise logic which includes; scoping, screening & selection, planning & design, and implementation. Each stage responds to, and helps overcome, current barriers to private sector engagement in climate smart (CS) activities. The process and its stages, as well as use of various tolls, have been now been strictly followed in a logical sequence that is driven by climate-adaptation considerations and the need to develop strong viable business cases. A summary of the steps, along with the objectives, expected results in each step are describes below.



<u>Scoping</u> - The scoping stage is undertaken in order to better understand the past, current and future impacts of climate change on different sub sectors, value chains and/or companies as well as the responses needed. This information helps to determine which value chains to prioritize and ultimately which agribusinesses, cooperatives and farmers associations to engage. As a result of the application of the various tools and guidance carried out during this stage, companies are able to better understand the risks to their operations and possible business opportunities, from a changing climate.

<u>Application, screening and selection</u> - This stage involves identification, assessment and screening of SME's, cooperatives and farmers associations to identify potential business champions. Businesses are identified through a solicitation process that involves three phases. In the first phase a call for expression of interest (EOI) is issued, targeting private sector-led agribusinesses to co-invest in the implementation of climate change adaptation, productivity improvements and inclusive business models. The EOI call can either be through a public announcement, or through networking and meeting events involving various value chain stakeholder platforms. Applicants provide a snapshot of their climate smart innovations which is then evaluated against the merit review criteria. Those applicants who meet or exceed the merit review criteria are invited to participate in the next phase. In the second phase qualified applicants are requested to fill out the company intake form which enables businesses to provide a more detailed description of their business proposition, including a break-down of the investment budget. In the third phase, the businesses participate in a pitching session to assess their efforts in meeting climate smartness, business experience & competitiveness, scalability, financial health, business feasibility and inclusivity, as well as other goals of the project and ultimately to determine which businesses should be omitted or selected for support.

For those businesses which are provisionally selected, though the screening process, a letter of intent (LOI) is issued by the project, and due diligence is carried out, as passing this is a pre-condition for further support to any company. Due diligence focuses on the financial status of the company and partners, as well as providing an assessment of their 'capacity to implement', ensuring there is an ability to deliver on climate and financial commitments, as well as delivering benefits to the small holder farmers.

<u>Planning and design</u> – At this stage business case 'co-creation' is done with companies to support them in structuring their businesses to respond to climate risks. This responds to the technical barrier of SME's, cooperatives and farmers associations of inadequate capacity and initiative to translate climate risks into business opportunities. There is often inadequate legal, technical, and financing expertise to produce high quality climate relevant business cases and investment propositions. At this stage, support may be made available to co-develop climate smart bankable business plans and investment plans to attract financing from financial institutions. Prior to developing the business plans, businesses are supported in developing or improving their business model and incorporating climate smart and gender inclusive innovations.

After developing the business and investment plan, it is important that this is discussed with different stakeholders involved. Therefore a validation workshop is organized in which representatives of the involved value chain actors participate. The goal of the workshop is to secure buy-in from the stakeholders that affect and influence the business, but at the same time validate the business idea and better understand the value chain dynamics; in particular the market opportunities and the competitive playing field. It is also an opportunity to revisit the climate, economic and social benefits of the idea – i.e., to what extent will it promote climate smartness, inclusive business, including gender equality. Validation workshops also provide an opportunity for different service providers (seed companies, insurance providers, Fintech solutions, etc.) to present and 'market' their service for buy-in by other actors present at the event.

Implementation and monitoring - This stage involves implementation and monitoring of the agreed interventions. Technical support is provided to companies during implementation. The support generally focuses on strengthening key gaps of companies in particular around aspects of productivity, climate change adaptation, business development, gender inclusion and scaling – much emphasis is thus put on ensuring the companies also gain the climate smart insights and (training) capacity to incorporate this into their business model and extend these services (e.g. private agricultural extension) to for instance their outgrowers. The businesses are responsible for the day to day implementation of the activities, and also any reporting responsibilities are part of the agreement between the CRAFT project and the business champion as 'grant recipient'. Quantitative and qualitative minimum reporting requirements are needed. Activity/progress reporting templates (both narrative and financial) are used; including an M&E dashboard with targets and results, bringing all elements into one monitoring tool. If milestones are not met then consideration is provided to either modify or suspend support. Overall monitoring of performance is done through the indicators in the project performance results framework. Project implementation is assessed in direct relationship to progress in achieving results, at the outputs, outcomes, and impact levels.

In 2019 much of the emphasis of the CRAFT teams' efforts was on taking various business cases through the first 3 steps in this process. With the continuous onboarding of business cases in 2020 and beyond, this becomes a revolving process whereby different cases find themselves at different stages of the process, and eventually all moving into full implementation and monitoring mode.

1.2.2 Climate Innovation and Investment Facility Process

The process related to the roll out of the investment facility (CIIF) is closely linked to the business case development process where, in the end, a co-investment award is extended to a grantee (e.g. business champion) as described in section 1.2.1 above. At the same time, the investment facility also provides a potential financial leveraging and de-risking mechanism that instils and at the same time requires close collaboration with (commercial) financial sector partners. As such, a combination of different efforts flow out of the CIIF roll-out and management process that cut-across various facets of the project as described below.

<u>Sensitization and networking events</u> - During the period under review, CRAFT rolled out its Climate Innovation and Investment Facility (CIIF) to drive investments in climate smart agriculture (CSA) targeting private sector agribusinesses (SMEs, cooperatives, and service providers). The main criteria for engagement included:

- small holder farmer inclusion i.e. a well-defined linkage structure with smallholder farmers (SHFs);
- ability and willingness to co-invest with CRAFT and therefore ability to promote economic wellbeing of the SHFs;
- engagement in the CRAFT pre-selected value chains of focus;
- availability of clear and structured market linkages;
- promote market led interventions;
- economic viability of the business hence promotion of sustainable CS interventions;
- demonstration of climate smart agriculture innovations and solutions both at the SHF level as well as the company level (SME and or cooperative);
- opportunities for scaling, as well as g) gender and youth mainstreaming.

Based on the above, the project issued an expression of interest (EoI) to attract private sector entities in co-investing with the project and hence leverage on climate smart business ideas. The EoI targeted private sector led agribusinesses, companies with an energy background, ICT/finance/insurance providers, storage and logistics suppliers, weather information services, and water for production technology providers, to co-invest in the implementation of climate change adaptation, productivity improvements and inclusive business models that demonstrate deliberate efforts to engage youth and women among the targeted small holder farmers in the promotion of climate smart agriculture. Out of the 340 applicants that responded to the EoI, only 5 (five) were considered for award.

Whereas CRAFT had planned to issue more calls for funding proposals, considering the time and effort it takes to analyse a large volume of proposals vis-à-vis the agricultural seasonality, the CRAFT project decided to expand application solicitation strategies to include strategic identification of private sector actors to support climate smart initiatives. These alternative strategies included (a) referrals of business cases from partnering financial institutions; (b) innovative climate smart agribusinesses identified during the climate risk assessment workshops; (c) intensified scoping mechanisms by CRAFT staff and partners; and 9d) referrals from other development agencies, project and programs. CRAFT also leveraged on the existing value chain specific platforms such as SoyNet – a soybean platform in Uganda, and the sunflower platform for processors in Tanzania. Worth noting, however, is that despite the identification procedures (competitive bidding vs. strategic "cherry-picking") all applicants follow the same on boarding processes and are subjected to the same evaluation criteria to ensure transparency.

<u>Operationalisation of Investment Advisory Committee (IAC)</u> - In line with SNV's contractual obligations, and as per the guidelines in the approved CIIF manual, the project instituted and operationalised the Investment Advisory Committee (IAC). The IAC is composed of a team of 5 (five) East African and international agribusiness and financial experts. IAC members are independent and impartial, with no relation or contact (personal or professional) with the applying businesses. The main responsibility of the IAC is to review the presented business cases against a set of impact and feasibility criteria in alignment with the CIIF manual and approve or advise which applications should be awarded.

<u>CIIF management and information system</u> – CRAFT, with the support of an ICT service provider, developed a customised integrated web based management and information system (MIS) to track the on-boarding, development and implementation process of business cases, which are linked to the operationalization of the project's CIIF as well as the Monitoring and Evaluation framework (which is IATI compatible). This integrated cloud-based platform is capable of supporting the country teams as well as management needs for project monitoring and implementation across the three CRAFT countries. The system promotes efficiency and transparency in the various business case development and implementation related processes, as well as real-time monitoring and tracking of activities to support evidence-based decision making, and allows for a repository of business case related data and reports at the same time, accessible to all those assigned to the system within the CRAFT team.

The CRAFT CIIF and M&E cloud-based MIS enables grantees (e.g. business champions) to directly input data related to their contractual deliverables which in turn allows them to assess progress and support decision making. The CRAFT staff trains every newly onboarded grantee in the use of the MIS, which functions as a business monitoring and management platform. Using its adaptive management concept, a learning process that allows the project to build on successes, learn from failures, and make timely evidence based course corrections to improve outcomes, the CRAFT project will continue to leverage on a success factors to adjust and/or redesign the tracking system as needed to respond to the requirements of the project as well as those of the grantees where possible.

Financial Institution Engagements
Uganda
DFCU Bank
Equity Bank
Centenary Bank
Micro Support Centre Limited (MSC)
Tanzania
Tanzania Agricultural development Bank (TADB)
Tanzania Post Bank

Engagement with Financial institutions – During the reporting period the CRAFT teams pursued linkages and collaborative efforts with financial institutions (FIs) in Kenya, Tanzania and Uganda to address access to finance issues, given that this often presents one of the major barriers that hinders climate smart adoption by input suppliers, farmers, SMEs involved in trading and processing.

> CRAFT held strategic meetings with identified financial institutions to explore effective de-risking of activities and increase potential portfolio financing needed for successful adoption of climate smart technologies and practices among the small holder farmers as well as SMEs/ cooperatives. As a result, CRAFT signed MoUs to formalise the framework for collaboration with 6 financial institutions. These MoUs will further strengthen cross referrals between CRAFT and FIs in prospecting and supporting climate smart agri-businesses development.

CRAFT has learned that working with financial institutions from the start to develop relevant and targeted financial products for various actors in the project value chains is essential. Increasingly positive results are observed from this approach, including discussions to de-risk the project supported business cases through access to finance. As a result, CRAFT engaged the partnering FIs in the co-creation as well as validation workshops of business cases, analysis of viability of the proposed business cases. CRAFT has noted that the deep engagement of FIs in the development of funding proposals creates considerable interest for more financial institutions seeking partnerships with the project, and as such, CRAFT will continue to seek and operationalise additional partnerships in 2020.

Climate Finance Technical Assistance - In October 2019, CRAFT conducted a climate change impact workshop with financial sector partners in Uganda. The workshop supported FIs and Fintech service providers to better understand climate change related impacts on agricultural production as well as agribusiness development, and therefore the risks that would follow/accumulate for the entire value chain and for their own investments and loans portfolio. The workshop created a 'sense of urgency' with the financial sector partners and motivated them to take first steps to support CRAFT targeted agribusinesses and beyond. As a result, CRAFT has increasingly been approached by FIs seeking partnerships to de-risk agribusinesses. The project, through Rabo Partnerships, will continue to seek more strategic partnerships and train additional financial sector partners in Kenya, Tanzania and Uganda in 2020.

1.2.3 Climate Risk Assessment Process

During the reporting period, the Climate Risk Assessment (CRA) activities included the following four activities:

Tailoring the CRA methodology to the context of the CRAFT project

Building upon partners' previous experience with climate related assessments, a climate risk assessment (CRA) methodology specific to the CRAFT context was developed. The CRA methodology is documented in Groot et al., 2019¹. The graphic presentation below shows the different features and activities of the CRA methodologies as applied in the CRAFT project. The methodology was tested in a first round of CRA activities for six value chains² during the first half of 2019. Based on the lessons learned, the methodology was

Climate risk assessment in the CRAFT project



¹ Groot A., J. Bolt, C. Duku , M. Budding, C. te Pas, B. Harding, R. McNally, G.Kabuka, A. Wayira, C. Muchina, A. Mbazzira, K. Ninga, J. Recha, D. Teferi, J. Osumba, R. Lyimo and H. Mpanga (2019). Climate Risk Assessment in the CRAFT project (version 2). Wageningen Environmental Science, Wageningen.

² 1st round - Ke: Green grams, potato; Ta: Sunflower, common beans; Ug: sesame, soy beans; 2nd round Ke: sorghum, common beans; Tz: potato, sorghum; Ug: potato, sunflower

slightly adjusted and applied in a second round of CRA activities for six new value chains during the second half of 2019.

Development of climate change projections for a set of indicators that are relevant to the value chain actors

First round CRAs (January-April, 2019): Climate change projections led by CCAFS were developed for different climate variables. A first set of standard climate variables (e.g. average temperature, max. rainfall) was defined in consultation with the stakeholders. These indicators guided the climate change projections for the six selected value chains. For both the short and long rainy periods, projections for temperature and precipitation were carried out for the 2050s and for two different climate scenarios (RCP 4.5 and RCP 8.5). These crop specific and downscaled projections informed the assessment of the impact of climate change on crop yield.

Second round CRAs (June-November, 2019): WEnR led the identification of supplementary climate variables to inform the climate change projections for the six additional value chains (e.g. onset, cessation, length of the growing spell of a season). These additional variables as well as a shorter term project focus (2030 in addition to 2050) helped the value chain actors to better place the climate projections to the perspective of their own livelihoods and businesses.

Quantitative assessment of the impact of climate change on crop production

A quantitative approach was used to assess the impact of the plausible climate projections on crop yield. Initially, the idea was to apply an approach based on literature review. However, it appeared that little literature was available, showing recent and crop specific information on climate change impact.

As a result, WEnR deployed the World Food Studies (WOFOST) crop models to model the impact of climate change on crop yield for the two different climate scenarios (RCP 4.5 and 8.5) and for two different futures (2030, 2050). For the first round of CRA activities, the impact of climate change was modelled for *potential* yield only. Potential yield represents optimum conditions under which farmers apply agronomic practices such as fertilizer application, weed and pest management. However, for the second round of CRA activities, it was decided to model the impact of climate change for the *actual* yield referring to existing on-farm practices in terms of nutrient application, weed and pest control. It was decided to undertake climate change impact assessment of actual yields in order to understand current and future yield gaps. A measure of yield gaps then provided an understanding of opportunities to increase yield and how climate change is likely to affect or erode such opportunities.

In addition, for the second round of CRAs it was also decided to complement climate risk assessment with an agricultural drought risk assessment. WEnR assessed the effect of climate change on (fresh) water availability (for crop production) in terms of the frequency and severity of agricultural drought for which the Standardized Precipitation Evapotranspiration Index (SPEI) was deployed, which represents the standard approach recommended by the World Meteorological Organization for quantifying droughts.

-	
Kenya	CC (optimal yield) impact assessment for green grams & potato (both rainy seasons, RCP8.5, historical, 2030s, 2050s)
	CC (optimal yield) impact assessment for sorghum (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)
	CC (actual yield) impact assessment for sorghum (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)
	Agricultural drought risk assessment -WRSI- for common beans & sorghum (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)
Tanzania	CC (optimal yield) impact assessment for sunflower (both rainy seasons, RCP8.5, historical, 2030s, 2050s)
	CC (optimal yield) impact assessment for potato & sorghum (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)
	CC (actual yield) impact assessment for potato & sorghum (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)
	Agricultural drought risk assessment -WRSI- for potato & sorghum (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)
Uganda	CC (optimal yield) impact assessment for soybean & sesame (both rainy seasons, RCP8.5, historical, 2030s, 2050s)
	CC (optimal yield) impact assessment for potato & sunflower (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)
	CC (actual yield) impact assessment for potato & sunflower (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)
	Agricultural drought risk assessment -WRSI- for potato & sunflower (both rainy seasons, RCP4.5, RCP8.5, historical, 2030s, 2050s)

More specifically, the following climate change assessments were carried out:

A summary of the results of the climate change impact assessment activities are incorporated in the climate risk assessment reports, documented in the "CRA 4 pagers", is made available separately.

Climate risk assessment workshops

Directly linked to the two rounds of climate risks assessment, there were also two rounds of CRA workshops in 2019, thus 4 climate risk assessment workshops per country were held (see results reporting on location, value chain and participant

details under Ind. 32). In the process of facilitating the various workshops on climate risk assessments (CRA), CCAFS brought out issues of climate risk, climate policy, climate advocacy and scaling. It is during these CRA workshops that messages inform participants on policy advice and policy influencing on CSA scaling and investments began. Presentations made at the workshops, as well as news articles reported in various mass media outlets are made available separately.

Each workshop brought together different value chain actors. They discussed perceptions of and experiences with climate change and critically reflected on their current coping capacity. The new information on climate projections and their likely impact on crop yield, created a sense of urgency and fed the discussions on the need for new adaptation options to better anticipate plausible future climate conditions.

Based on the lessons learned in the first round of CRA workshops, the second round of workshops:

- Focussed less on climate smart business ideas. In the first round, emphasis was put on adaptation as potential business ideas. Adaptation strategies to better deal with future climate phenomena are often seen as costs. For others, however, adaptation measures could present new business opportunities (e.g. agro-dealers selling a new product, i.e. drought resistant seeds);
- Focussed more on multiple plausible climate futures and uncertainty, with more focus on adaptation strategies from an implementation and no-regret perspective._Actors systematically assessed the drivers and barriers to adaptation, and prioritise adaptation strategies that have multiple benefits (e.g. climate change, ecology, nutrition, employability);
- Made use of real-life stories to better capture actors' experiences with climate change and related risks.

1.2.4 Scaling and Advocacy

The CRAFT project promotes a bottom up market-driven approach to scaling that supports inclusive CSA business models to enhance climate resilient farming systems through sustainable intensification along selected oilseed, pulse and potato agricultural value chains. To do so systematically, CCAFS's scaling specialist drew insights from the PPP-lab's Scaling Scan tool to assess scaling barriers faced by business champions and relevant actors working in project targeted value chains. Through CCAFS coordination, the CRAFT team assessed the Scaling Scan and concluded that it adequately covered vital complementary non-technological requirements that highly shape the scalability of any new 'innovation package' while offering useful guidance to help project teams to identify potential enabling factors and barriers to their scaling ambitions. Understanding well the scaling barriers that face business champions at an individual or sector-wide level through iterative communication with project staff and beneficiaries as well as evidence-based research is critical to project success. The process contributes to gathering information on decision-making efforts that can foster an effective policy agenda for improving enabling environment for scaling CRAFT selected VCs and BCs.

Through results of scoping studies and through presentations during and after the climate risk assessment (CRA) workshops, the climate smart farmer field school (CSFFS) workshops, as well as the crop specific manual development sessions, CCAFS sensitized representatives of private sector, farmer organizations, cooperatives, and small and medium-sized agrobusinesses enterprises (SMEs) and government officers on scaling and evidence-based policy advocacy. This was based on evidence gathered by CCAFS, to help them identify and pick relevant issues for targeting policymakers at sub-national and national levels. Evidence emerging from scoping studies indicated that scaling adaptation and mitigation is a collective effort and needs a long-term institutionalized strategy and long-term programmes with sustained funding, not short-term projects. Evidence also shows that promoting ICT-based information and services can support women's efforts to close gender disparities, because they rarely get information that is shared in male-dominated places. All these elements will help project staff together with agribusiness partners and value chain stakeholders identify and pick relevant issues for developing a targeted advocacy agenda for dialogue with policymakers at sub-national and national levels.

1.25 Integrating Renewable Energy and Energy Efficiency Solutions

Towards the end of the reporting period the CRAFT project successfully brought on board an energy expert, based in Uganda at the PMU, thus providing regional technical expertise into the regional project portfolio. During Q4 of 2019 a number of initial start-up activities relating to the introduction and identification of renewable energy (RE) and energy efficiency (EE) solutions were implemented. The emphasis of this technical component is to ensure that, where possible and feasible, RE and EE is considered an integral part of climate smart agricultural technologies and practices for agribusiness SMEs and cooperatives that engage with the project in business case development.

Mapping value chain energy needs and associated RE and EE technologies

Energy needs across the selected CRAFT targeted value chains have been mapped with feasible renewable energy and energy efficient technologies identified. For the oil seeds and pulses value chains, solar drying technologies were identified as one of the interventions for improving quality of grain after harvest, increasing shelf life and reducing potential grain loss due to aflatoxins. Solar powered pumps for irrigation were identified as a feasible option for increasing production and productivity of seed multiplication for potatoes and oil seeds such as soya bean. The technology increases readily available soil moisture hence addressing impacts of unreliable rainfall and increased length of dry spells on quantity and quality of seed produced. Due to perishability of potatoes, solar powered cold storage was seen feasible especially for cooperatives engaged in potatoes aggregation and marketing, this addresses the heat stress due to evidenced increased temperatures during harvest. These solutions should contribute to the development of scalable and replicable business cases that deliver irrigation, drying and cooling services through renewable energy and efficient technologies to small scale farmers, SMEs and cooperatives.

Developing energy assessment methodology and tools

Energy assessment methodologies and associated tools have been developed to support energy use assessment for selected CRAFT agribusiness SMEs and cooperatives. These tools enable renewable energy and energy efficiency opportunity and potential mapping together with feasibility analysis of energy management options identified in respective agribusiness SMEs and cooperatives. These tools have been mainstreamed as part of the CRAFT business case development tools, and will also serve as example for energy related activities in other SNV project beyond CRAFT.

Initial profiling of RE and EE service providers

The profiling of various service providers for RE and EE, as well as services for productive use in production, post-harvest and processing across CRAFT selected value chains in Kenya, Tanzania and Uganda was undertaken. The service providers for solar drying technologies, solar water pumping, solar powered cold storage technologies, energy efficient motors, efficient heating technologies and biomass briquettes have been identified. The idea is to support linkage of these service providers to agribusiness cooperatives and SMEs so as to further develop tailored business cases targeting small holder farmers across the selected value chains.



Climate resilient value chains

for improved livelihoods

1.2.6 CRAFT Visibility and Communications

During the reporting year, the project initiated the process of developing a unique name to differentiate itself from other similar Climate Smart Agriculture projects and programs implemented in the East African region. This led to the DGIS official approval and rebranding of the project as the *Climate Smart Agriculture East Africa* to *Climate Resilient Agribusiness for Tomorrow (CRAFT)* project. In addition, a tagline was developed to express more explicitly the overarching objective of the project, to be used in combination with the CRAFT project name – *Climate resilient value chains for improved livelihoods.*

Subsequently the project engaged a firm to develop a project logo, as well as the comprehensive visual identity and brand guidelines to strengthen the project's brand and create a uniform identity beyond the individual identities (e.g. logos) of the individual consortium partners. This process was finalised in August 2020, and endorsed by all the consortium partners.

The CRAFT project name, brand, logo and tagline have since been applied on any project related communication, presentation and publication by all consortium partners. A number of project related icons were also developed for use in presentations, banners or other project promotional communication tools, when addressing and/or referring to four key thematic domains the project envisions tackling through its interventions. In addition, different



Women & Youth Inclusion Scaling of Climate Solutions

project brand promotional items (for use primary by business champions, trainers, service providers, and farmers) as well as banners have been printed to increase visibility of the project during events and field activities. Project branded templates for letterhead, reports, flyers, banners, PowerPoint presentations, etc. have been created for all partners to use in an effort to increase visibility.

During 2020, and in direct collaboration with the business case stakeholder, the project will develop a media repository with high resolutions images as well as videos that can be used for further show casing project results through visual aids. Via separate submission, a number of knowledge products (e.g. reports, presentations, briefs, articles and publications) are made available to showcase not only present the results of the project, but also the use of CRAFT branding where possible and appropriate. However, as part of this report, Annex II provides a comprehensive list of web links to all published articles and papers.

2. Project Implementation

2.1. Partner Contributions

The consolidated performance target and achievement table (Annex I) provides a summary of results achieved in 2019 through the combined project implementation efforts of all CRAFT consortium partners. The following sections of this chapter will provide additional detail on the key activities implemented, the results achieved, the challenges encountered, as well as the (lead) roles and contributions of the various partners based on the expertise they bring into the project as consortium partner. In summary, the key contributions for each partner in 2019 included the following:

- WU Recruitment and engagement of 2 PhD students and their onboarding at the university in Wageningen to start and complete initial course work, as well as the development of the research proposals for the field work to be undertaken during the life of the CRAFT project.
- WEnR Deepening climate risk assessments for the CRAFT projects through the development of climate variables, climate change impact assessments, climate risk assessments workshops, lay-out of climate narratives, as well as the support provided to building the capacity of financial institutions on climate change.
- CCAFS Designed and conducted a gap analysis on the potential for roll-out of climate information services, agroweather advisories and other innovative CSA technologies & practices, including best practices for relevant crops in East Africa. CCAFS also supported the development of effective climate information through climate modelling and projections that were useful in communicating the choice of CSA technologies, practices and business decisions. CCAFS also supported the review and analysis barriers to scaling, which will not only feed into the priority setting for targeted investments that support scaling of interventions under climate change scenarios, but will also lay the foundation of the advocacy agenda that will support the creation of an enabling policy environment to be rolled out in 2020 and beyond.
- Agriterra Coordinated the identification, development and roll out of the cooperative-led business cases through the detailed scoping (total 103) and assessments (total 24) of cooperatives and farmer organizations. Some of the cooperatives/farmer organizations will either be considered as stand-alone business case leads (Category A), yet others do not have the same level of business intensions and/or organizational capacity, but are rather linked to agribusiness SME cases as outgrowers or service end-users (Category B).
- Rabo Partnerships (RP) Provided continued support on the business case development process, with particular
 emphasis on the business plans, financial analysis and projections to ensure that only viable and bankable cases
 are in the end awarded. Engagements with financial institutions for capacity building and climate smart financing
 gained traction in Uganda, with the other two countries to follow.
- SNV Continued to provide overall management and coordination support to all staff and project partners, and the lead in collaborative efforts with local partners, stakeholders, and government agencies, as well as DGIS and the Netherlands Embassies in the three countries. SNV ensured the development and DGIS approval of the M&E plan, the CIIF manual and the work plan(s), which are the key guiding documents for project implementation. Many of the field based efforts for the value chain assessment work as well as business case development and multi-stakeholder platform events will be led by SNV in collaboration with all other consortium partners.

"The chemicals I use to control pests and diseases like pod bores and common blight are expensive, which at the end reduces my profit from the produce I sell," Hellen Ngétich, a farmer in Narok County.

Nowadays, the long rainy season comes with longer cold periods which leads to more severe sucking pests than in the past. These days, my beans are affected more by pests like pod bores, but also by common blight and bean rust. The chemicals I use are very costly and not effective due to increased resistance of these pests and diseases to these chemicals. My yields are getting lower, operational costs are increasing and my income is declining, which in the end affects my family negatively.

I also make use of pre-season weather information. In case they forecast low rainfall for the short rainy season, I don't plant beans, but instead I plant oats, which after harvest also becomes a source of food for my cows.

If climate change will increase the cold periods in March-May, my situation will be really bad. My beans will be more affected by pest and diseases and the yield will be much lower and of lower quality. I will have difficulties in feeding my family and keeping my children healthy.

2.2. Workstream – Practices and Technologies for Farmer Systems and SMEs

The project will test and facilitate the introduction of CSA practices and technologies, and build the capacity of value chain partners to ensure that smallholder producers and agri-SMEs adopt CSA innovations

SO 1 - Increased income for smallholder farmers (SHF) and SMEs				
IR 1.1 – Increased adoption of climate smart practices and technologies among smallholder farmers, SMEs and Cooperatives				
Performance indicators	Targets for 2019	Achieved in 2019		
Ind. 1 - Reached number of smallholder farmers with increased income	Ke-1,000; Tz-1,000	Ke-0; Tz-0; Ug-0;		
	Ug-1,000; Total-3,000	Total-0		
Ind. 2 - Percentage increase in yield for selected crops due to application	Ke-5%; Tz-5%; Ug-5%;	Ke-0%; Tz- 0%; Ug-0%		
of CSA practices and technologies	Total-5%	Total-0		
Ind. 3 - Reached number of smallholder farmers whose farming enterprise	Ke-1,000; Tz-1,000	Ke-0; Tz- 0; Ug-0;		
become more resilient to possible stresses and/or shocks	Ug-1,000; Total-3,000	Total-0		
Ind. 4 - Number of smallholder farmers that have applied 2 or more climate	Ke-0; Tz-0; Ug-0;	Ke-0; Tz- 0; Ug-0;		
resilient farming practices in the past 12 months	Total-0	Total-0		
Ind. 5 - Reached number of hectares of farmland with agroecosystems that	Ke-300; Tz-300;Ug-300	Ke-0; Tz- 0; Ug-0;		
became more resilient to possible stresses and/or shock	Total-900	Total-0		
Ind. 6 - Number of SME business and cooperatives applying at least 2	Ke-6; Tz-5; Ug-4;	Ke- 1 Coop; Tz-3 SMEs;		
climate smart practices and technologies within their business and/or	Total-15	Ug-2 SMEs		
value chain		Total- 5 SMEs, 1 Coop		

Performance results review

CRAFT's programming revolves around business cases. Business case development involves potential business champions and their partners gathering supporting documents, approaches and resources to co-invest in the business case. This process however is rigorous, it involves CRAFT conducting due diligence, supporting the potential business champion in co-creation of the business case and business plan development until the case is investment ready. As a result, this process of on-boarding business cases initially took more time than anticipated, particularly for the first batch of cases under development in 2019, and this contributed to delays in having cases approved during the reporting period. As such, a limited number of cases were approved for award in the last quarter of 2019 i.e. three for Tanzania, two for Uganda and one for Kenya. However, while the case for IMCOS in Kenya was approved in 2019, it wasn't awarded until early 2020 due to some adjustments that had to be made. While business case implementation for these initial cases started in the last quarter of 2019 the actual results for the outcome indicators are expected mid-2020 (after the first production season early 2020) and will thus be reported on in the 2020 annual report. In addition to the cases approved and/or award in 2019, a number of other cases moved forward during this period in the co-creation process and advanced to the CRAFT investment advisory committee (IAC) for approval in Q1 of 2020.

Plan to catch up or corrective actions

In 2019, the project country teams were mostly active in two value chains (i.e. potato and green grams in Kenya; sunflower and common beans in Tanzania; and soybean and sesame in Uganda), limiting the number of businesses eligible for consideration as grantees for the CRAFT CIIF awards. It is illustrative that to date, no businesses cases in the potato value chain have reached the approval and award stage.

Therefore, during the last quarter of 2019 the CRAFT project increased the number of value chains from two to four for each country (as described under the CRA process as well) to cast a wider net and have greater diversity, keeping in mind the CRA process logic at the same time. Secondly, CRAFT initially planned on identifying cases through public calls (EoI issued in 2019), however at the end of 2019 the team decided to adapt its strategy for identifying new business cases to more actively include referrals, head-hunting/'cherry picking', appeals to industry associations, as well as scoping for cooperatives, service providers and conscious solicitation in various (value chain) platforms supported by CRAFT and other projects and programs through workshops, learning events, etc. A specific call for proposals targeting women and youth is planned for to attract expression of interests from this specific groups. Lastly, with regards to the rigorous PMU and IAC screening process, CRAFT country teams in the three countries have made internal adjustments and steps to improve the quality of applications reaching the final stages in the approval process.

Given that much of the co-creation, award approval and award making process was 'under construction' during the majority of 2019 (including the development and approval of the CIIF manual itself), which was in part also still an inception year for

the project, this process has since shown great improvements resulting in increased numbers of intake forms being reviewed and appreciated in order to subsequently move forward to business case and plan development.

It is also anticipated that the combination of all these initiatives will substantially increase CRAFT's applicant pool whilst ensuring that only quality applications – with prerequisite due diligence - are considered for approval and award. As such, the targets for the 2020 work plan were reviewed against this learning and growth curve for corrective action in an effort to catch up.

Sub-IR 1.1.1 – SME capacity in climate smart technologies, products and services developed			
Performance indicators	Targets for 2019	Achieved 2019	
Ind. 7 – Number of service provider representatives trained on profitable	Ke-15; Tz-15; Ug-15;	Ke-0; Tz- 15; Ug-40	
climate smart supply chain development and opportunities	Total-45	Total-55	

Performance results review

In 2019, the Uganda team held a dialogue workshop with targeted service providers in the financial sector. The purpose was to create awareness of the financial institutions representatives about the financing opportunities and needs by the agricultural sector given the impact of climate change. The workshop attracted a lot of attention resulting in an attendance higher than originally anticipated by representatives of key financial institutions, as well as insurance companies and fintech providers. A total of 40 participants (13 women, 27 men, including 21 youth) attended the workshop which was held in Kampala, Uganda. In Tanzania, 15 representatives of service providers attended the training of trainings (ToT) Climate Smart Farmer Field School (CSFFS) training provided to extension workers, lead farmers and representatives of service providers. In Kenya, due to the delays in on-boarding of business cases, as well as engaging service providers and financial institutions, this particular training is expected to happen in 2020. While the distribution of performance results did not happen as originally targeted, overall achievements on this indicator is satisfactory.

Plan to catch up or corrective actions

A three-fold strategy is being implemented to correct this indicator's non-performance in Kenya especially. First, increasing the number of focus value chains from two to four will lead to an increase in the number of eligible businesses to engage with. Secondly, the push for inclusion of service providers' cases should increase the project's ability to reach out to more businesses with influence on climate smart practices in respective value chains. Lastly, within the first two quarters of 2020, the project plans to undertake a series of sensitization events including using CRAFT's communications component to reach out to more actors in our respective value chains. This is expected to bring on board more new business champions with their respective collaborative business partners, thus making training of service providers on profitable CS supply chain development opportunities possible.

Training service providers on profitable CS supply chain development opportunities

Given that the results reported under this activity for 2019 relate to the financial service providers who were targeted by a workshop on climate smart agribusiness financing, this activity is described in more detail below under Sub-IR 2.1.1 - Trainings and dialogues held on climate smart agriculture with financial institutions.

Sub-IR 1.1.2 – Increased availability of high quality and affordable climate smart services			
Performance indicators	Targets for 2019	Achieved 2019	
Ind. 8 – Number of smallholder farmers, cooperatives and SMEs that are	Ke-500; Tz-500	Ke-0; Tz- 0; Ug-0	
satisfied with the quality and affordability of climate smart services provided	Ug-500; Total-1,500	Total-0	
Ind. 9 – Number of small holder farmers using climate smart inputs and	Ke-2,000; Tz-2,000	Ke-285; Tz-6,000;	
services	Ug-2,000; Total-6,000	Ug-11,000; Total-17,285	

Performance results review

Non achievement for indicator 8 can be attributed to the delays in awarding of grant agreements as previously described, which only happened in Q4 of 2019. As a result, the implementation of farming activities will happen early 2020, hence the reason that this indicator of farmers, cooperatives and SMEs satisfied with the quality of climate services provided will be measured and reported in the Annual Report of 2020 (and will also include the second season of 2020 for certain crops).

The business champions who signed their grant agreements at the end of 2019 as well as those whose agreements were in the final stages of the approval process were encouraged to move forward with seasonal activities, such as provision of improve and climate resilient seed varieties to SHFs. This was accompanied with training of farmers on climate smart agronomic practices, including planting methodologies. This explains the overachievement of indicator 9 in the case of Tanzania and Uganda, where dynamics among those businesses engaged were already strong. As in Kenya only one business champion whose agreement was approved by end of 2019, while the rest of their business cases were still in

earlier stages of development and completion, the results were thus well below the original target set for Kenya. The delay in Kenya was also occasioned by the absence of suitable training materials with suitable climate smart inputs. Developing training materials that will stand the test of time takes significant stakeholder contribution and acceptance.

Plan to catch up or corrective actions

Since the initial delay in getting the first 'batch' of cases through the approval process, as well as awarding (including postaward training) the process has smoothened, expectations have become much clearer and the country teams have since seen higher levels of engagement in getting additional cases approved, a trend that should be strong and continue in 2020 and beyond. During this period, the CRAFT PMU was also preoccupied in setting up systems and processes that would facilitate a quicker roll out of business cases and related activities. With a robust system and clearer framework in place now CRAFT expects to move faster and smoother in the next reporting period

During the reporting period, SNV and CCAFS began the process of developing training manuals, hereby targeting the training service providers and farmers. While a great number of manuals and training aides already exist in the countries for different crops, it has become clear that the 'climate smart and resilience' angle is often not incorporated yet. Instead of developing yet another set of project specific manuals, the CRAFT project has decided to put emphasis on the nationally approved crop manuals/handbooks/curricula. The manual development process follows a rigorous process involving the identification of national body to 'own' the manual and the subsequent formation of an industry-wide 12 member technical committee to review existing material, further refine training content, and ultimately validate and prepare materials developed for publication. During the year, the CRAFT team especially made significant progress towards the completion of manuals for green grams and potato for Kenya, as well as sunflower and common beans for Tanzania, with only the initial steps started for soybean and sesame for Uganda. With Kenya being the most advanced on this particular activity, we can report that by the end of 2019, two manuals (i.e. Climate Resilient Potato Production Handbook and Climate Smart Green Grams Resource) were at advance stage awaiting validation, approval and official sign-off by the respective national bodies. The validation workshops are planned to take place in January and early February 2020.

The project facilitated the training of Master Trainers of Trainers in each of the three countries to support the cascade training of Training of Trainers in CSA practices already using key elements from the manuals under development, as well as the more generic, yet newly developed Climate Smart Farmer Field School (CSFFS) training guide the CRAFT team worked on. The idea of this cascade MToT and ToT training logic is to create pools of trainers who are well versed in climate smart crop specific farmer field school and demo site training methodologies, involving both public and private sector agronomists, to eventually train and support small-holder farmers in their production efforts, hereby increasing climate resilience, and improving yields and income. With the onboarding of more business cases, the pool of MToTs and ToTs will continue to expand into 2020 and beyond.

Sub-IR 1.1.3 – Evidence based climate smart agriculture solutions implemented through business cases			
Performance indicators	Targets for 2019	Achieved 2019	
Ind. 10 – Number of climate smart business cases implemented under the project	Ke-7 SMEs/5 coops;	Ke- 0; Tz- 3 SMEs	
	Tz- 7 SMEs/3 coops:	Ug- 2 SMEs;	
	Ug- 6 SMEs/2 coops;	Total - 5SMEs	
	Total- 20SMEs/10coops		

Performance results review

Approvals of business cases took place towards the end of 2019, and as a result of the delays incurred and previously described, a number of the potential business champions could not secure co-funding in time to start implementing activities, thus resulting in a shortfall on the initial target for this indicator. One of the key challenges in 2019 (which has since been corrected) was finding and engaging with the right SMEs or cooperatives, specifically in terms of capacity to match the CIIF grant that was offered by CRAFT, as a number of SMEs had challenges meriting credit facilities with banks for one reason or another. The other minor challenge during the inception year was that CRAFT was testing and streamlining processes with regards to SME onboarding, however, moving forward this is no longer an issue.

Plan to catch up or corrective actions

Going forward, CRAFT has embraced more strategies to increase the number of value chains from two to four per country, seek referrals, widened geographical area of coverage within Kenya, and implementing a series of tasks to approach agribusinesses that ordinarily would not respond to calls for proposals yet are eligible for consideration of co-investment under the CRAFT project. In addition, CRAFT has increased quality control and robustness of its process for business case co-creation and onboarding, and will thus see more cases reach the final approval and award stage.

Facilitate identification and implementation of business cases

The entry point for private sector engagement is through business cases, which are central in the CRAFT approach. Viable, and sustainable business cases were identified that have a desire to invest in CSA practices and technologies, but at the same time have an ambition to engage in inclusive business. Through a co-creation process, project teams supported companies to structure their businesses to respond to climate risks, to mainstream inclusive business intentions, and to strengthen the company's capacity to develop sustainable relations with smallholder farmers (including women, and young farmers), producer organisations, and other value chain actors. Since the last quarter of 2019, when the first businesses in designing business models that are climate smart, inclusive and functional in order to achieve their climate and business goals. The 4-step process for business case development is thus applied on an ongoing basis. It does however also mean that a number of the initially identified cases will never make it beyond step 1 and 2, or do not pass the due diligence test as part of the process.

Uganda

The CRAFT Uganda team put much of its time and effort on facilitating the engagement between different actors in the business cases such as smallholders, off-takers, input service provider etc. to have dialogue with each other, so that priorities can be agreed, and a collective action articulated to implement the business cases. This lays at the foundation of the inclusive business case approach that is central to the CRAFT project, and enforces the idea of shared benefits and co-dependence when working through the small and medium private sector agribusiness entities.

For example business case validation workshops for Equator seeds, Acila Enterprises, RECO Industries, Masindi seed, Alito Joint, Nyekorac, SESACO were held in the last half of 2019 in order to get a buy-in and develop shared role and responsibilities among a range of stakeholders for the successful implementation of the business cases. In many cases, the business champions have signed MOU's with local actors to provide specific services within the business cases. For instance, Okeba signed an MOU with Ensibuuko an insurance service provide to provide weather index insurance to smallholder farmers; Acila signed off-take agreements with Mukwano Industries to buy soybean grains at a pre-determined price; Nyekorac and Alito Joint cooperatives signed contracts with local seed businesses to produce and supply quality declared seed to the cooperative, and the list goes on.

Annex IV provide an example of the business case pipeline for Uganda that was developed in 2019, and which will be approved and awarded so as to move forward to their in implementation stage by Q1 of 2020

Tanzania

The SNV and Agriterra Tanzania team expanded on their scouting efforts for new businesses, cooperatives and service providers. This was done by tapping into professional networks, attending meetings, trade shows that will assist in identifying high potential companies and cooperatives. To increase the number of female and/or youth led business cases a specific EOI is planned for in 2020.

In addition to the various scoping assessment tools SNV and Agriterra advisors apply when identifying new cases, they are also backed up by experts from Rabo Partnerships during the financial due diligence to ensure that only financially sound businesses move to the stage of case co-creation and business plan development. To assist the country team in moving the pipeline forward, an external consultant is recruited to spearhead the development of business and investment plans of few selected business cases, and in a few cases the business champion might engage a BDS provider directly for this purpose. It remains important throughout this process to understand the linkages the business champion has with other stakeholder and service providers and that all involved derive proper benefits from any climate investments made.

Kenya

The Kenya team relied on two key approaches in 2019 that were applied to identify potential business cases and champions; a regional call for expression of interest was launched and interest was generated from agro-entrepreneurs participating in the climate risk assessment and profiling workshops that were held across the country. In addition, though at a small scale, some cold calls were made to potential business champions based on the team's personal networks.

However, many agribusinesses did not meet the basic minimum qualifications i.e. capitalization, past enterprise performance, proper financial records, climate specific value proposition, CRAFT targeted crop value chain, clear scaling/outreach strategy, benefits to smallholder farmers, etc. Arguably, the biggest challenge for the Kenya team has been the unstructured market systems that govern the CRAFT targeted value chains. There are numerous small actors especially in the market off-takers segment often with poor internal governance standards, minimal capitalization and no backward linkage services to the small holder farmers. The fragmentation is a major reason where larger and eligible firms with the

potential/capacity to have significant influence on systemic change (processors and or exporters) decline to participation in the CRAFT CIIF process, citing their dis-interest in vertically integrating through formals markets and/or direct small holder farmer engagement. For instance, large players in Kenya's grain and potato sector - Capwell, Norda, Pisu, Tropical Heat, Export Trading group have indicated that whilst keen on having reliable supply chain, the costs of vertically integrating far out way the business benefits of investing upstream of their positions in the respective value chains.

There was thus a need for the Kenya team to refocus its efforts, not just on the large players, but on the small and medium enterprises (SMEs) as originally foreseen in the project approach, as this not only represents the missing middle in many of the value chain and market structures, but also enforces the co-dependence between value chain stakeholders that the CRAFT project seeks out to reinforce, as well as the tight linkages with small holder farmers, so as for that segment of value chain stakeholders to truly benefit from climate smart interventions.

Sub-IR 1.1.4 – Farmers, cooperatives and SMEs trained on profitable climate smart practices and technologies			
Performance indicators	Targets for 2019	Achieved 2019	
Ind. 11 - Total number of smallholder farmers reached by training on	Ke-5,000; Tz-5,000	Ke-0; Tz-3,135; Ug-1,085	
climate smart practices and technologies for their farming system(s)	Ug-5,000; Total -15,000	Total-4,220	
Ind. 12 – Total number of hectares of farmland reached by the project	Ke-600; Tz-600; Ug-600;	Ke-0; Tz-2,552; Ug-878	
	Total-1,200	Total-3,430	
Ind. 13 - Number of SME representatives that trained on climate smart	Ke-15; Tz-15; Ug-15;	Ke-0; Tz-35; Ug-25	
practices and technologies relevant to their company and/or value chain.	Total-45,	Total-60	
Ind. 14 - Number of representatives of farmer cooperatives trained on CS	Ke-50; Tz-30; Ug-20;	Ke-0; Tz-391; Ug-60	
practices and technologies relevant to their cooperative and/or value chain.	Total-100	Total-451	

Performance results review

During the reporting period, very fewer cases were approved and therefore only a limited number of farmers was trained in CSA practices, however, these numbers will exponentially increase at the start of the planting season in early 2020. The same explanation goes to indicator 12 because the total number of hectares farmland reached is directly linked to indicator 11 which shows number of farmers reached by the project through trainings. In Kenya, the primary reason for underperformance for indicator 11 and 12 is related to not having business cases awarded and operational through which farmer field school training could be carried out. However, the business champions in Tanzania and Uganda who had only been approved and awarded in late 2019 actively engaged so as to be able to report successfully on the majority of indicator under this sub-intermediate results on training on profitable climate smart practices and technologies.

Plan to catch up or corrective actions

Given that the project now has a robust and well streamlined business case development and on boarding process in place, with healthy pipelines, and has also embraced a number of strategies to identify even more additional cases in 2020 (including FI referrals, value chain platforms, and other agribusiness networks) the results reporting on these indicators should see significant increases throughout the year 2020. Considerably more MTOTs and TOTs from representing different business cases (already in the 2019 pipeline) will be trained on CS practices and technologies using climate smart farmer field school approach in 2020 thus greatly expanding the outreach to small holder farmers.

Profiling Farmer Organizations and Cooperatives

To understand the cooperative landscape in the selected value-chains, Agriterra conducted a scoping exercise to map all the cooperatives within the different targeted value chains, in an effort to help identify the potential cooperatives and farmer organizations that would be included as part of the business cases.

In Kenya a total of 127 cooperatives in the selected value chains were mapped. Out of these, a shortlist of 38 cooperatives were selected based on membership and outreach, activities, physical location, value chains opportunities and market access. The selected 38 cooperatives were scoped so as to understand and establish their actual role within the value chain, their suitability for potential co-investment and their institutional capacity. Of these 38 cooperatives, 21 were from the potato value chain, 12 were for mung beans/green grams, and 5 in the common beans. This scoping activity led to a selection of 15 cooperatives that were identified as active with potential for eventual consideration as business champions based on the CIIF co-investment criteria.

In Tanzania cooperative mapping exercise/scoping exercises were conducted in 10 regions for the project's initial two value chains (e.g. common beans and sunflower). In these regions, a total of 12 potential farmers organisations were identified, and 48 cooperatives reached.

During the reporting period scoping was done of 17 cooperatives in Uganda to understand the status and potential viability of these coops in the soybean, sesame, sunflower and potato value chains. The scoping exercise gave quick insights in the status of those cooperatives, and determined whether additional time and effort should be spent for detailed assessment. Out of the 17 scoped cooperatives, a shortlist of four were selected for further assessment.

Establishing working arrangements with farmer groups, cooperatives and SMEs through business cases

Different partnership arrangements have been developed on how farmer groups, cooperatives and SME's fit within the overall framework of the business cases. These arrangements ultimately result in the empowerment of smallholder farmers and their integration into the targeted value chains. Project teams supported the identification and development of business cases with a focus on farmer inclusion including women and youth. The entry point for developing the business cases was the business champion or private sector partners. The business champion is a farmer cooperative or SME operating at grassroots level, aiming for further market integration, climate smart innovations and with sufficient capacity or advantages to invest and develop a competitive edge and serve a targeted market segment.

Under the SME business champions are also cooperatives, farmer groups or farmer associations that do not necessarily have the capacity to invest but have an ambition for increasing productivity and adapt to climate change. For instance the Uganda team worked with Masindi Seed Company to establish two clusters of farmer associations (Masindi District Farmer Association and Hoima District Farmers Association), that the seed company would be working with to supply inputs to the smallholder farmers. A total of 30 small farmer group associations (SFGA's) were identified per district farmer association each with a membership of 1,000 smallholder farmers bringing the total number of farmers targeted in the business case to 6,000 farmers. CRAFT also supported in developing working arrangements with 3,000 farmers in the Nyekorac cooperative business case. Nyekorac has a total of 100 rural producer organization (RPO), however they had limited capacity to reach all the groups through trainings and provision of other services. The teams supported Nyekorac to identify and recruit one lead farmer or trainer of trainers per RPO who were trained and would in-turn train the farmers in the groups.

Cooperative assessments

In depth cooperative assessments were conducted on the champions with the most potential, and focussed on validating the ability to co-invest, understanding the existing market linkages, member involvement and the general business orientation of the cooperative. In Kenya these assessments were in the following value chains: green grams 4; potatoes 2. The assessment resulted in 4 cooperatives proposed for consideration as business case lead, including IMCOS, Starlight, Turima Tumaini and Kibwezi East Cooperative Society. The 4 cooperatives have a combined total membership of 2000 farmers and a potential to increase to 3,500 members within one year of engagement. While the business case for IMCOS was approved in 2019, the others are still under consideration as part of the Kenya business case pipeline.

In Tanzania a total of 14 assessments were coordinated for cooperatives, and of which some emerged in the business case pipeline. Nguvu Mali Cooperative Society has been issues a CRAFT letter of intent for which a business case and plan is to be further developed in 2020. Yet others are also considered as part of the 2020 business case pipeline. However, some of the cooperatives opted out during the scoping exercise due to low capital (inability to co-invest), lack of focus, low membership commitment, or financial instability. The assessments have given an in depth understanding of these cooperatives, and recommendations were given for Agriterra's support pertaining to professionalising their business and strategic planning, priority setting for value chains activities and focus, which will likely have a direct impact on their SHF members and strengthen their relations with financial institutions. By the end of 2019 the prioritized cooperatives in Tanzania includes 5 in sunflower, 9 in common beans, and 2 for potato.

Out of the 17 cooperatives scoped in Uganda only four were selected for a detailed assessment. Agriterra's efforts in assessing Alito Joint Cooperative and Nyekorac community farmers' cooperative allowed both of these to advance in the business case co-creation process, having their cases and business plans in draft format at the end of 2019, for them to both be approved and award during Q1 of 2020. Additional cooperatives in the potato value chain have been identified for further assessment and business case co-creation as part of the pipeline moving into 2020. Based on the assessments and the development of the business cases and plans with these cooperatives it became clear that certain cooperatives are providing their members with some agricultural services such as post-harvest handling/store, foundation seed and fertilizers distribution among others. Climate smart services and technologies are in most cases not yet embedded as part of the business and strategic plans. These services are offered as ad hoc or peripheral services for now, with the majority of cooperatives focused on aggregation, bulking and marketing of produce. The integration of specific, climate smart practices, technologies and operational improvements will thus be new elements to be incorporated in their business cases under the CRAFT project.

Agripool advisory missions in support of cooperatives

In Kenya two technical expert missions were conducted using the Dutch Agripoolers. One was on Business plan development for mechanization services. This was to enable the cooperative, Kibwezi East cooperative, offer the mechanization services to members sustainably, taking a business approach to the services. A second technical mission was effected on developing a business plan on seed potato multiplication for Starlight cooperative. This was conducted by a seed potato expert from STET Netherlands.

In Tanzania a total of (3) Agripool missions were conducted in the common beans and sunflower value chains. These missions had several positives outputs including proper business planning for 4 cooperatives that were assessed, mechanisation advice, and recommendations on the best use of input for the cooperatives, including the affordability for smallholder farmers. These experts had knowledge and experiences in respective value chains and climate-smart agriculture thus helping the cooperatives to identify priority areas that they can potentially co-invest in with support from the CRAFT project.

In Uganda the cooperative assessment of Alito joint, Nyekorac, Panyimur Dei and Wadelai Pakwinyo were supported by Agripool experts and Agriterra country teams. In December 2019, through the support of an Agripooler, a total of 20 representatives from these same cooperatives were trained in basic financial management in an effort to more efficiently manage their investments as part of their business case.

Facilitate training of representatives of farmer cooperatives, lead farmers and SMEs, lead farmers

The country teams, combining efforts from SNV, CCAFS and Agriterra, jointly facilitated CR-FFS trainings for business case champions and the public and private sector extension agents that collaborate with them to train smallholder farmers at community level. Through the trainings, CCAFS supported the mainstreaming of climate change and climate variability module into Farmer Field School (FFS) methodology for Master/Training for Trainers (M/ToT). The purpose was to integrate a climate-resilience (CR) lens into the FFS methodology so as to ultimately encourage the adoption of climate smart agricultural practices and technologies as an integral element of rural farming systems. The FFS methodology was introduced in East Africa in 1996, but climate change and climate variability aspects had not been incorporated into the methodology to date. Using the FFS approach with an additional climate change and climate variability module, the training focused on integrating climate-resilient agricultural practices in selected value chains, i.e. climate resilient/smart farmer field schools. The MToT and ToT training sessions took place during the second half of 2019, and involved employees (e.g. trainers, agronomist, and extension agents) of the partner cooperatives, SMEs, farmer organisation representatives, as well as local government public sector agricultural extension workers.

The training was instrumental in empowering participants with knowledge and skills in the CR-FFS methodology, and thus:

- Equipped trainees with knowledge about climate change, climate variability and climate related agricultural risks;
- Provided participants with the right tools for facilitating CR-FFS learning;
- Enabled trainees to pass on the skills to identify the right stakeholders:
- Prepared the learners on how to better plan for the implementation of farmer field schools;
- Prepared the key elements for a climate resilient crop production curriculum for selected crops;
- Shared knowledge, skills and experience in different farming systems to improve production.

The training process provided a mixed approach of brainstorming, group work, as well as practical field and plenary sessions:

- Group work was mostly used to ensure the participants would get acquainted with tools commonly used in FFS;
- Plenary sessions sharpened the facilitation skills (for providing onward training) and stimulated participant debates;
- Field based practical sessions were used to bring the learning to the real world for participants;
- PowerPoint presentations aimed at providing a snapshot of theories and scientific concepts grounding the FFS methodology, as well as climate change notions.

The participants sharpened their decision-making skills when faced with production constraints, including the use of climate information and appropriate climate smart technologies and practices in different agro-ecological zones and/or for specific crops. Lessons learned from these trainings reflect a strong need to work more closely with meteorological agencies to ensure that farmers are guided to collect agro-meteorological data which they can interpret easily and utilize for their agricultural production purposes.

The outcome is reflected in the development of the climate resilient farmer field school (CR-FFS) handbook, as well as the efforts to influence the inclusion of climate change related considerations in the national crop specific curricula/handbooks. In addition, this will also support the climate narratives under development for finalization in 2020.



2.3. Workstream - Investments in Inclusive Value Chains

The project will co-invest and assist in building up the business cases and financing solutions necessary for the wide-scale adoption of climate smart practices in selected crop specific value chains

SO 2 - Increased business performance for agribusiness SMEs and Cooperatives due to climate smart investments			
IR 1.2 – Increased investment and business growth in climate smart value c			
Performance indicators	Targets for 2019	Achieved 2019	
Ind. 15 – Number of agribusiness SMEs and cooperatives that have increased	Ke-6; Tz-5; Ug-4;	Ke-0; Tz-0; Ug-0	
their turnover due to climate related investments	Total-15	Total-0	
Ind. 16 - Number of agribusiness SMEs and cooperatives that have worked to	Ke-4 SMEs/2 coops;	Ke-0; Tz-0; Ug-0	
improve key manageable climate risks	Tz-4 SMEs/1 coop;	Total-0	
	Ug-3 SMEs/1 coop;		
	Ttl-11 SMEs/4 coops		
Ind. 17 – Number of agribusiness SMEs, cooperatives and farmer organizations	Ke-7 SMEs/5 coops;	Ke-0**; Tz-3; Ug-2	
that accessed finance for the implementation of climate change adaptation	Tz-7 SMEs/3 coops:	Total-5	
practices and/or technologies at the level of their company and/or value chain	Ug-6 SMEs/2 coops;		
	Ttl-20 SMEs/10 coops		
Ind. 18 - Amount of private sector funds invested as part of matching	Ke-500,000;	Ke-0**	
grant/investment facility (in Euros)	Tz-500,000;	TZ- 577,124	
	Ug-500,000;	Ug- 17,231,043	
	Total-1,500,000	Total-17,808,167	

** note that while the business case of IMCOS (cooperative) for Kenya was approved in 2019, the award was not signed until early 2020, as such, the actual results for Ind. 17 and 18 for Kenya will be kept at '0' as access to finance through the CIIF mechanism and co-investment/matching cannot be accounted for under the results until the actual grant award is signed and extended to the business champion.

Performance results review

One of the key expected results of this project is improved business performance for the different businesses in the Business Case. Under achievement for indicator 15 and 16 is because the grant agreements were awarded late in 2019 due to reasons previously discussed in this report. These indicators will therefore not be measured until the end of the harvest season once produce is sold. As such, results will thus become available in 2020 for performance results reporting at that time.

An overwhelming number of expression of interests from agribusinesses were received in 2019 across the three countries, however, the grand majority did not meet the basic minimum qualifications i.e. capitalization, past enterprise performance, financial records, climate smart value proposition, priority value chain, outreach/scaling potential, not-farmer driven, etc. A total of 6 bases were finalized and approved and 5 were subsequently awarded full grant agreements in 2019 (3 in Tanzania and 2 in Uganda) as per indicator 17 (with the IMCOS coop grant in Kenya being approved, but only fully awarded early 2020).

The amount of funds invested by the different business champions in indicator 18 provides an indication of the matching provided by the businesses themselves (own-contribution) combined with commercial finance obtained – often consisting of bank/MFI loans for working capital, seasonal investments as well as CAPEX related loans, or third party private/capital investment in the business. The level of these matching contributions varied greatly, with Uganda having Equator Seeds Limited investing considerable funds (through third party financing) for large business expansion in outreach through seed multipliers and grain growers coinciding with their wish to increase climate resilience in their business model through support of the CRAFT project. Tanzania's co-investment funds were also substantial through the combined efforts to match CRAFT co-investment through the 3 business champions that were on-boarded in 2019. The section below on the application of the CIIF provides additional details.

Plan to catch up or corrective actions

In 2020, the CRAFT project plans to conduct Annual Reviews for all business champions that received an award in 2019 so as to track and measure progress on performance indicators against their targets, which will then ensure that results for indicator 15 and 16 are documented accordingly. The strategies put in place as earlier discussed will considerably increase the number of new cases to be onboarded and awarded in 2020 (Ind 17), and thus the positively impact the private sector contribution for co-investment to be captured under indicator 18.

Generally, the majority of cooperatives either have difficulties with governance and/or the ability to co-invest in a business case. In an effort to increase the number of cooperatives to be onboarded as business case leads, Agriterra has developed a trajectory that targets those cooperatives who need support with pre-investment tailored advice and trainings. This will enable the cooperatives to improve their internal (governance) systems and adapt to the CRAFT co-investment criteria faster. These are thus cooperatives that have shown potential in terms of numbers and ability to grow their enterprises but because of weak internal systems, they may delay raising enough internal capitalization and take long to attract enough third-party funding from financial institutions for co-investment and co-funding. The pre-investment advice and trainings will enable them to close existing gaps and be fast tracked for potential business case co-investment under the CRAFT project.

Business Champions	Targeted SHFs	CRAFT CIIF Obligated Funds(Euros)	Leveraged funds (Euros)	Total value of awarded projects
Uganda				
Equator Seeds Ltd	33,000	203,939	16,764,003	16,967,942
ACILA Enterprises Ltd	5,000	150,542	467,040	617,582
Tanzania				
Jackma Enterprises Ltd	6,000	126,048	150,893	276,941
Three Sisters Oil mills Ltd	3,000	83,721	229,707	313,428
Rogimwa Agro Company Ltd	6,000	150,814	196,524	347,338
Totals	53,000	715,064	17,808,167	18,523,231

Climate Innovation and Investment Facility (CIIF)

In 2019 the CRAFT project awarded co-investment grants to 5 private sector bankable business entities (each presented as а business case). The project worked to co-invest with awardees in an effort to derisk their business cases. facilitate access to (commercial) finance and trigger further investments

for climate smart value chains, resilient farming systems and agribusiness SMEs (including farmer cooperatives). The idea of the businesses case is that it will not only improve linkages between farmers, cooperatives, service providers, SMEs and off-takers to strengthen the market-led approach, but also ensures that all stakeholders involved derive benefits from the implementation of the business plan.

As implementation of these grants is rolled out in 2020, the business cases will both feed into and benefit from results of the learning and knowledge sharing work stream. Similarly, wherever relevant, each business case will be supported with results reached under the enabling environment work stream, including targeted support on climate information services, index-based insurance, and a targeted strategy for including women and youth, among others.

Climate Finance Technical Assistance

Throughout the reporting period, 3 Rabo Partnerships (RP) experts were working together closely with the three country teams. The RP experts were request to provide input and feedback on the business plans as part of the co-creation process for the business case development process. Towards the end of Q2 and into Q3 of the year, it appeared that additional support was needed to smoothen to process of financial projections and analysis needed for the development of bankable business plans. As a result, CRAFT management decided to pull in additional RP support in Q4 through the short term incountry assignment of 2 experts (1 expert covering Tanzania and 1 covering Kenya and Uganda), so as to not only smoothen the process, but work hand in hand with and also train the CRAFT country teams, while at the same time accompanying the business champions in the process of financial due diligence, as well as financial projections and analysis for a select number of cases.

The effect of this direct push-in support was significant as the process and requirements for all involved became clearer, business cases were completed and approved, and entered the implementation phase. It proofed important for the CRAFT country teams to work this closely with RP experts through the entire cycle of business planning for a number of cases. This timely intervention increased the capacity of the SNV and Agriterra advisors working directly with business champions on the co-creation process, while at the same time enables the RP experts to have a better understanding of some of the hurdles advisors are confronted with, and the realities of agribusiness operations in the CRAFT countries.

The intensified in-country collaboration was concluded with an internal training for the three country teams on finance planning, projections and analysis. CRAFT staff members were trained on how to read financials, how to make cash flow projections and perform sensitivity checks. Based on this process and some lessons learned along the way, the country teams and the RP trainer updated the templates for the business plans to better reflect field realities. It was also concluded that RP would develop a short 1 page 'opinion letter' on each case to be submitted for PMU and IAC approval so as to provide a quick overview of some of the financial strengths and weakness of each case to be considered for grant award. While not all cases might be perfect from a financial point of view, this then also provides an opportunity for the CRAFT project to provide capacity building support to SMEs and cooperatives in the form of business and financial management skills training (either through the SME business training modules developed by RP and PMU, or through Agriterra's modules specifically designed for cooperatives).

In addition and as needed, interactions with involved financiers were held per business case in various forms depending the logical and most efficient and effective approach – either through physical visits and meetings, or via phone, Skype or email.

Based on the push-in support and lessons learned from 2019, RP will continue to assign an expert as 'country point person' who support the country teams in their business case co-creation process through virtual as well as country missions, emphasizing the need for bankable climate smart business plan development.

Sub-IR 2.1.1 – Trainings and dialogues held on climate smart agriculture with financial institutions				
Performance indicators	Targets for 2019	Achieved 2019		
Ind. 19 - Number of representatives of financial institutions trained on climate	Ke-22; Tz-12; Ug-22;	Ke- 0; Tz-0; Ug-40;		
smart agribusiness, de-risking and financing for climate adaptation in	Total-56	Total-40		
agribusiness value chains.				

Ind. 20 - Number of dialogues held with financial institutions on climate smart	Ke-3; Tz-3; Ug-3;	Ke- 0; Tz-2; Ug-4;
agribusiness, de-risking and financing for climate adaptation in agribusiness	Total-9	Total-6
value chains.		
Ind. 21 – Number of financial institutions reached with training or dialogues	Ke-6; Tz-3; Ug-4;	Ke-0; Tz-0; Ug- 5
	Total-13	Total-5

Performance results review

In 2019, the CRAFT team in Uganda held a workshop with targeted representatives of different financial institutions (including banks, MFIs, Fintech and insurance providers). The workshop was attended by a total of 40 participants (13 women, 27 men, including 21 youth) in Kampala (see below for further details). This high attendance was attributed to the fact that the financial sector partners are getting interested in understanding the climate challenges as well as potential climate related investment opportunities in agriculture, given that this is still fairly new territory for most operating in the financial sector in East Africa.

While Uganda has seen great interest coming from financial sector partners to dialogue, engage in MoUs as well as business case development and deferrals, Tanzania started to slowly catch up in 2019 with a few initial engagements from Tanzania Postal Bank (TPB) and Tanzania Agricultural Development Bank (TADB). In 2019 exchanges have been undergoing with National Microfinance Bank (NMB) but there was still some reluctance in full engagement through a MoU, which should hopefully see resolution in 2020. While some initial steps were also made in Kenya, no formal engagements have been made to date – with some saying that the competition is higher in Kenya, and funding sources for agricultural sector activities being plentiful and diverse – thus potentially having a negative impact on them latching on to the project, possibly not knowing its objectives well enough yet.

Plan to catch up or corrective actions

To increase interaction points in Kenya with financial sector partners, the plan is to have quarterly breakfast meetings with key representatives from various financial institutions. These informal settings, along with more structured follow up meetings, will result in better traction thereby increasing the opportunities for specific climate related dialogue and engagements in climate smart agribusiness development in 2020. In Tanzania, two banks have given their full support, and have agreed to extend financial support business champions referred by the CRAFT project.

Training financial institutions on CS agribusiness, de-risking and financing

In October 2019, CRAFT invited representatives of the financial sector for a workshop in Uganda. Rabo Partnerships led the event as the theme was to have "*Discussions on climate smartness and sustainability for Agribusinesses among financiers*" and understand how these trends would affect "our" role and activities, being actors in the finance domain. The workshop was well attended with representatives from banks, MFIs, SACCOs, digital service providers, insurance companies, investors, etc.

While led by RP, SNV, CCAFS and WEnR also supported this workshop to add the overarching CRAFT objectives and agenda to the discussion, as well as climate change, modelling and projections related realities from the scientific/knowledge angle. Presentations from the CRAFT partners to the participants led to intense interactions and interesting discussions that shared the basis for continued follow up discussion. In addition, it also gave the CRAFT team more insight in the level of understanding of FIs on climate change and all its complexities, as well as the challenges FIs and related actors are confronted with. Despite the fact that COVID 19 impacted potential follow up interactions scheduled for Q1 and Q2 in 2020, the workshop provided some clear and shared outcomes – while everyone is aware of the potential impacts of climate change in the agricultural sector and thus of the importance for the financial sector to act and develop an appropriate response, the exact 'how, what, when, where and by whom' will require further review and action planning. However, two axes for potential interventions should be considered:

- 1. At management level within the FI: to align insights and visions, and create not only the awareness but also a sense of urgency to start working on implementing climate trends in the day to day operations, processes and procedures.
- 2. At business case level: to better understand the practicality of how this affects the FIs clients and business in practice. FI's need a certain number of practical cases/applications to understand the sense of urgency in practice.

RP together with the other CRAFT partners have come to the conclusion that we are now increasingly introducing business cases to the financiers to feed the effect outlined in axe #2 as threshold to further build on a push for and change in the effect outlined in axe #1 (listed above). As such, this was pushed as a priority for the 2020 work plan, in an effort to not only develop more concrete plans and next steps with the FIs in Uganda, but to also organise similar workshops in Kenya and Tanzania. In addition, FIs (particularly in Uganda, where multiple MoUs have been established) are encouraged to share prospective and deferred business plan and funding request with the CRAFT project that have a potential climate angle, so as to start the co-creation process with the business champions around a business case together.

Sub-IR 2.1.2 – SMEs develop bankable business plans for climate smart inclusive business cases				
Performance indicators Targets for 2020 Achieved 2019				
Ind. 22 - Number of SMEs and cooperatives that have developed a bankable	Ke-10; Tz-8; Ug-6;	Ke-1 Coop; Tz-3 SMEs;		
business plan and apply for finance for their climate smart business case	Total-24	Ug- 2 SMEs,		
Total-5 SMEs & 1 Cool				

Performance results review

The business case development process is very thorough to ensure that agribusinesses become investment ready with all required supporting documentation in place not only for CRAFT CIIF award purposes, but also for third party financing as part of the co-investment deal. While some agribusinesses are smooth running and have internal capacity to develop a business plan with the required market and financial analysis, the majority of the business champions require a considerable amount of hand holding in this co-creation process. While this in itself is a capacity building activity that generally also enhances the professionalism of the business, this situation – combined with the limited English language/writing capacities of some business champions – has led to the delays in churning out sound business plans. Please see Annex V for business case snapshots for all cases developed and approved for award in 2019 (as per Ind 22).

Plan to catch up or corrective actions

In Q4 of 2019 CRAFT staff received on the job training from Rabo Partnerships experts in building the internal capacity of its advisors to improve the financial analysis and interpreting financial data needed for business plan development. This in turn allows the staff to pass on this knowledge to business representatives. In 2020 the newly acquired competences will ensure a quicker turn-around-time of the business plans. In addition, the country teams also engaged business development consultants to help support and thus speed up the business plan development processes with potential business champions. This has helped in building strong bankable business plans for climate resilient business cases, and the project intends to continue with this process going forward, given that all countries developed healthy pipelines during the last months of 2019 going into in 2020.

<u>Train SMEs on business management and pitching</u> SMEs

The emphasis of the team's efforts under this activity was to strengthen the capacity of the SME's and cooperatives to better provide services to smallholder farmers and to develop business and investment plans for climate smart innovations, aggregation and marketing of produce, distribution of agro-inputs, processing etc. Strengthening of SMEs involved training management and staff of the business champions in business skills which included topics such as organizational management, business development skills including how to write investment/ business plans, a solid understanding of financial management & business models, and to increase access to finance to enhance investments. The trainings took place in November 2019 and training support was provided by Rabo and PUM experts. Participants that participated in the training were drawn from different SME's which included TRAFORD, Equator seeds, ACILA Enterprises, RECO, SESACO, World Food Bank and Masindi Seed. A total of 18 men, 6 women attended the business skills training in Kampala while 19 men and 13 women attended the training in Lira district. Training for cooperatives was done with support of an agri-pooler and the cooperatives trained were Alito and Nyekorac who were trained in financial management and governance. Strengthening of farmer cooperatives is key to support sustainable integration of smallholder farmers in targeted value chains, and to support their capacity to link to markets.

The development of the collaborative effort between Rabo and PUM experts on the design and delivery of this business management training curriculum was piloted in Uganda, with the idea to not only repeat it for other, newly onboarding SMEs in Uganda, but also in Kenya and Tanzania in 2020 and beyond.

Cooperatives

Given that cooperatives struggle with internal management and governance issues that are different in nature than those encountered by non-cooperative agribusinesses, Agriterra has a series of modules developed to specifically support cooperatives in increasing their capacity and improving their professionalism. Agriterra provides this support to selected cooperatives under the CRAFT project through a combination of field staff support as well as agripooler missions. The emphasis of the support provided to the previously mentioned cooperatives in the CRAFT countries who entered the process of business case co-creation and business plan development largely focused on:

- Business plan development for increase business sustainability;
- Improving business operations for increased operational efficiencies (and thus optimization);
- Development of improved business models (e.g. expansion of the seed multiplication through a decentralized outgrower scheme at Starlight);
- Financial/cash flow management, projections and planning (by setting achievable and manageable objectives);
- Financial reporting, budgeting and forecasting;
- Membership management for improved business and financial planning.

Lessons learned in 2019 from these capacity building support sessions showed that there was a need to adapt some of the training content to specific thematic and/or technical domains (as listed above) in order to create added value and increase consistency of the training with the overall objectives of the project. In addition, training facilitators would integrate climate related references during the training, which will be further reinforced in future trainings as well.

Sub-IR 2.1.3 – Finance providers and SMEs willing to invest in bankable climate smart business plans			
Performance indicators	Targets for 2019	Achieved 2019	
Ind. 23 - Number of finance institutions offering financial services for climate	Ke-3; Tz-3; Ug-3;	Ke-0; Tz-2; Ug-4;	
adaptation in agribusiness value chains	Total-9	Total-6	
Ind. 24 – Number of private sector partners (SMEs, finance providers, others)	Ke-6; Tz-5; Ug-4;	Ke-5; Tz- 9; Ug-9;	
that have signed a letter of intent on co-funding of business case activities to be	Total-15	Total- 24	
developed under the project.			

Performance results review

CRAFT has built relationships with financial institutions across the three countries. In Uganda 4 banks have signed MoUs with CRAFT to offer financial support to qualifying potential business partners whereas in Tanzania two banks have fully supported to work with CRAFT, while the third is pending. The number of private sector partners that signed a letter of intent (Ind. 24) for co-funding surpassed the target in Tanzania and Uganda (see Annex IV). This is attributed to the focus of value chains that had developed and strong business cases, yet in Kenya the potato value chain never got a strong potential business case in 2019.

Plan to catch up or corrective actions

In Kenya two banks have been approached to collaborate with CRAFT in 2020, with others to be approached through the earlier suggested breakfast meetings. It is anticipated these efforts help in accelerating the process of third party funding for business cases, so as to ensure they are linked to commercial finance from the get-go for long term sustainability.

Contributions to the development and piloting of financial services for CS agribusiness

Rabo Partnerships, through its coordinator and country focal point experts connected regularly to each of the country teams, hereby actively motivating and supporting the financing structure per business case, keeping in mind the 'blended finance' nature of the cases (a mix of private and public funds). The business case specific financing need is covered by exploiting the following levels:

- The business champion should finance as much as possible him/herself, and only seek external finance for those investments that are not easy to finance within the business model. Maximum self-financing will minimise the cost of finance (as interest rates are often still considerable), while at the same time safeguard enough for remaining liquidity/working capital.
- Together with CRAFT, review and invite formal external financiers (e.g. banks, MFIs, SACCOs, investors) to finance what is possible in line with the FIs regulations and risk appetite policy. Preferably the FI will be challenged to stretch its risk appetite a bit, based on the vision and sense of urgency for climate smart investments in the

important food and agricultural value chains. Emphasis for FI financing is particularly on (seasonal) working capital, bank overdrafts, as well as large equipment/construction/CAPEX related loans.

CRAFT can offer a financial contribution to close the circle of finance needs, especially for those investments that
are difficult to finance by FIs. This often concerns climate smart training and capacity building interventions,
technologies, and sometimes materials/inputs – given that FIs are still unfamiliar with this, do not see the immediate
importance and thus need to 'learn as we go'.

It is important to monitor who is contributing and/or financing what of the entire business plan, so as to ensure that agribusiness SME and cooperatives receiving CIIF grants get a boost to climate smarten their business while at the same time have them linked to commercial sector financing as the project weaning and exit strategy. While the above outlines the ideal situation on paper, this is sometimes still challenging if not very difficult in practice, due to the fact that business cases need to move forward under the project timeline, and formal applications at banks or MFIs may be on another timeline with a long turnaround time, potentially resulting in a "No-Go". Therefore in several cases the financing need can be split and covered through CRAFT contribution and the business itself.

Carry out campaigns to attract and identify private providers of financial services for co-funding business case activities

This activity was kept at a relatively low profile due to the fact that the number of business cases that would be suitable for alternative finance were limited in 2019. Meanwhile potential alternative investors have been contacted and synergy from other projects that RP is active in are identified for further exploration in 2020 (e.g. ABC fund with Agriterra, Bamboo finance which is active in financing SMEs directly and indirectly, is willing to consider optional BC-champions from the CRAFT project in the three countries).

IR 2.2 – Increased involvement of women and youth in agribusiness development					
Sub-IR 2.2.1 – Women and youth-led agribusinesses that received grants					
Performance indicators Targets for 2019 Achieved 2019					
Ind. 25 – Percentage of SMEs and cooperatives managed by women and youth	Ke-10%; Tz-10%;	Ke-0%; Tz-33% (1of3);			
	Ug-10%; Total-10%	Ug-50% (1of2);			
Total-28%					
Ind. 26 - Number of women and youth-led businesses that received matching	Ke-1; Tz-1; Ug-1;	Ke-0; Tz-1; Ug-1;			
grant/investment facility allocations	Total-3	Total-2			
Ind. 27 - Number of women and youth farmers engaged in farmer groups and	Ke-1,800; Tz-1,800	Ke-247; Tz-941; Ug-500			
cooperatives	Ug-1,800; Ttl-5,400	Ttl-1,688			
Ind. 28 - Number of women and youth employed in SMEs, farmers groups and	Ke-10; Tz-10; Ug-10;	Ke-2; Tz-52; Ug-144;			
cooperatives	Total-30	Total-198			

Performance results review

During the reporting period the country teams carried out scoping activities in the three countries to specifically identify SMEs and cooperatives managed by women and youth. Although a few women-owned businesses were listed, only 1 in Tanzania and 1 in Uganda met the minimum criteria for CRAFT and CIIF consideration. While a number of the business champions that were reviewed and assessed have a significant number of youth and women actively participating in their farmer groups/ cooperatives, the target for 2019 was not achieved due to the low number of business cases approved and awarded meeting the overarching criteria. It should be noted that the majority of other (non-youth/women led) business champions do however engage women and youth as their technical agents employed as commission agents, which explains the overachievement for Uganda and Tanzania on indicated 28.

Plan to catch up or corrective actions

Results from gender mapping carried out during 2019 indicate specific areas for investment considerations to mitigate the effects of gender inequality in business cases currently under consideration. In 2020, CRAFT will increase its level of effort in sensitizing women and youth-led enterprises to express interest co-investing with CRAFT through the CIIF mechanism. As outlined in the 2020 work plan, the teams plan to target SMEs, farmer groups and cooperatives leaders to implement affirmative action towards women and youth among their recruitment and membership targeting efforts. A specific EOI for women and youth led businesses will be published, in addition during the active scouting strategy, for which a special focus on women and youth led businesses will be observed. More farmers across the three countries will start their project and

business case supported farming activities in January/February 2020, hence the number of youth and women will also increase during the next reporting period.

Sensitize women and youth led enterprises to express interest to CIIF

An e-Summit on Climate Resilient Agribusiness Development for Youth in East Africa was held in Kampala in November, 2019. The theme of the e- summit was "*Investment in climate change adaptation: positioning young agripreneurs to build more climate resilient agribusinesses.*" The e-summit was initiated by AgriProFocus in collaboration with the Uganda CRAFT team, the e-summit had a total of 2,360 participants from Kenya, Tanzania and Uganda connected by video conferencing software ZOOM and live streamed on Facebook and Twitter. The participants represented various stakeholder segments in the agricultural value chains such as production, value addition, processing, marketing, input and service provision, and logistics. The key objective of the e-summit was to provide a platform for young agripreneurs to learn about climate change adaptation and mitigation strategies, ask questions for clarification, and be better placed to explore opportunities to innovate and develop lucrative climate resilient interventions.

The participants across the region viewed live presentations and shared their views via Facebook, Twitter as well as at the physical hubs. The presentations focused on understanding the concepts of climate change and agribusiness, including possible practices, technologies, approaches and methodologies that have proven to be successful to improve business performance. Also, issues surrounding access to climate smart financing opportunities for youth-led (both men and women) initiatives aimed at enhancing the adaptive capacities and incomes were discussed.

Through its cooperative networks, Agriterra also joint in the effort to sensitize youth groups/cooperatives. In Uganda a total of 500 youth groups registered as cooperatives were mapped, and many of them were or will be linked to SMEs considered for CIIF co-investment by the CRAFT project. Youth cooperatives working in sesame were linked to Equator Seed Company and Nyekorac Community Farmers Cooperative, and other active in soybean were linked to Mt. Meru Millers and Alito Joint Farmers Cooperative.

Agriterra also started a program to promote hiring of young experts at cooperatives through a jointly financing agreement. As an example, in Kenya IMCOS was supported in hiring an accountant on a cost sharing basis. This gap was identified during the cooperative assessment of the capacity gaps where the current manager was in the process of leaving the organization with no clear succession plan in place. To catalyse change, engaging a professional qualified accountant in the position, Agriterra supported the hiring of a qualified accountant to strengthen financial transparency of the organization while reinforcing the financial structure of the cooperative. For sustainability purposes, Agriterra agreed to co-finance the salary of the expert on condition that after the contract lapses the cooperative will engage the young expert as a full time staff. In addition, Agriterra will support in building the capacity of the staff member to ensure quality of work.

In Tanzania Agriterra identified potential cooperatives to have youth experts who can assist cooperatives in business planning and some professional tasks like accounting. This aspect helps the cooperative to realise the importance of investing in youth, while proper governance of the cooperative leads to the sustainability of the cooperative, especially in a business atmosphere that involves dealing with other stakeholders.



2.4. Workstream – Enabling Environment for Development and Scaling

By working with national and regional government agencies, extension services, researchers, meteorological services, and financial service providers the most significant institutional and socio-economic barriers for large scale CSA adoption will be addressed, in cooperation with other climate funding programs.

SO 3 – Improved enabling environment favourable for large scale roll out of climate smart agriculture				
IR 3.1 – Increased collaboration and exchange among public private actors on large scale roll out of climate smart agriculture				
Sub-IR 3.1.1 – Dialogues with value chain actors on CSA policy developmen	nt and improvement create	ed		
Performance indicators	Targets for 2019	Achieved 2019		
Ind. 29 - Number of CSA related legal, policy and institutional frameworks	Ke-1; Tz-1; Ug-1;	Ke-0; Tz-0; Ug-0;		
developed and operationalised with support from CRAFT	Total-3	Total-0		
Ind. 30 – Number of best practices in climate smart business cases captured and	Ke-1; Tz-1; Ug-1;	Ke-0; Tz-0; Ug-1;		
disseminated Total-3 Total-1				
Ind. 31 – Number of tested and tried inclusive climate smart farming system or Ke-1; Tz-1; Ug-1; Ke-1; Tz-0; Ug-1;				
service delivery models developed and disseminated Total-3 Total-2				
Ind. 32 – Number of CSA learning events organised Ke-1; Tz-1; Ug-1; Ke-5; Tz-5; Ug-7;				
	Total-3	Total-17		
Ind. 33 – Number of learning and exchange visits organized for smallholder Ke-2; Tz-2; Ug-2; Ke-0; Tz-2; Ug-0;				
farmers, cooperatives and private sector partners Total-6 Total-2				
Ind. 34 – Number of national policy dialogues held on CSA and policy-related Ke-1; Tz-1; Ug-1; Ke-1; Tz-0; Ug-0;				
enabling factors Total-3 Total-0				
Ind. 35 - Number of value chain actors reached through policy influencing Ke-50; Tz-50; Ug-50; Ke-0; Tz-0; Ug-0;				
activities and/or national policy dialogues	Total-150	Total-0		

Performance results review

In relation to indicator 29, there is a need to acknowledge that the development of legal, policy and institutional frameworks is often a long and time consuming process, requiring significant level of engagement from all parties involved and time to capture measurable results. Therefore, CRAFT used the inception year and the rest of the reporting period to introduce the project at various levels and it made the first steps in the development process by engaging with stakeholders as well as government agencies/representatives to identify key areas of focus in the policy space. This is thus also linked to underperformance in results for indicators 34 and 35.

Although a number of CSA practices were identified in relation to indicator 30 the absence of business cases being fully implemented during the reporting period itself the results to be reported here were especially affected in Kenya and Tanzania. The awarded business cases first need to complete full production, processing and marketing cycles in order to

distil and disseminate lessons learned to be captured here. Similarly, while the testing of various CS technologies and practices started in Dec 2019, the initial and additional results to be reported under indicator 31 will be available by mid-2020.

Indicator 32 saw some important achievements across the three countries. As mentioned in Section 1 of this report, each country organised 4 CRA workshops during the reporting period, which are considered CSA learning events, given that they bring together various value chain stakeholders to review, understand and discuss the risks and impact of climate change. The table provides an overview of the breakdown of these 12 CRA workshops and their attendance.

Country	Date	Location	# of participants		
			women	men	
Kenya					
Green grams	24-25 April, 2019	Kitui	10	39	
Potatoes	29 -30 April, 2019	Nakuru	13	37	
Common beans	19-20 Nov, 2019	Narok	25	30	
Sorghum	26-27 Nov, 2019	Meru County	17	26	
Tanzania			·		
Sunflower	15 -16 April, 2019	Dodoma	14	24	
Common beans	18 -19 April, 2019	Arusha	10	14	
Potatoes	21-22 Nov, 2019	Mbeya	12	23	
Sorghum	24-25 Nov, 2019	Singida region	10	18	
Uganda		•			
Sesame	29-30 April, 2019	Mbale	9	33	
Soy beans	25-26 April, 2019	Gulu	51	20	
Potatoes	14-15 Nov, 2019	Kabale	9	32	
Sunflower	18-19 Nov, 2019	Lira	9	25	

In addition, and in collaboration with AgriProFocus (as described in more detail under activities for IR2.2/Sub-2.2.1), the CRAFT project engaged in an e-summit for youth entrepreneurs, increasing their understanding of challenges as well as opportunities related to investments in climate adaptation in order to develop more climate resilient youth-led agribusinesses. This summit which took place across the three countries was attended by 2,360 participants from Kenya, Tanzania and Uganda connected by video conferencing and live streaming.

In Uganda, two separate multi-stakeholder platform (MSP) meetings were organised. The first one was a strategic meeting among various stakeholders from public and private sector on "*climate information and agro-insurance*". It was held on December 11 in Kampala, and was attended by 21 participants (including 4 women and 17 men). The second MSP was on the "*negative impacts of indiscriminate bush burning among stakeholders in the sesame value chain*" in Gulu (Dec 18-19) which was attended by 40 participants (30 men and 10 women) coming from actors representing various segments of the sesame supply chain, mainly from Mid-North, Northern and West Nile provinces of northern Uganda. The second MSP.

In relation to indicator 33, only two exchange visits were organised for business champions to attend trade shows in Mbeya (Rogimwa and Nondo) and Dodoma (3 Sisters). It was decided that for Uganda and Kenya, business champions with their business case partners/stakeholders will be supported to attend exchange visits in 2020 when the implementation of various cases is further along and there will thus be more and richer opportunities for exchange and learning.

Plan to catch up or corrective actions

CRAFT has identified 4 policy agenda items to be promoted and has already drafted an initial strategy to enter this realm through an advocacy agenda, which will be carried by the stakeholders on the ground, and also builds off the barriers to scaling analysis that have been done. Building on relationships established in 2019 with key industry practitioners, government agency representatives, private sector agribusiness champions, service providers and smallholder farmers, the CRAFT project will hold at least one learning event per country at which policy engagement will be of focus.

After the completion of various production cycles, lessons will be filtered, and messages created to be disseminated to a variety of stakeholders and actors. This, in combination with the effort on the development of the climate smart national crop manuals/handbooks, as well as additional training aides for the CSFFS, should be considered as a way to catch up with the projects projected targets for indicator 30 and 31.

PhD student Research Contributions

The Two PhD students started in April and June and have spent most of 2019 attending courses in Wageningen, while at the same time developing their research proposal in consultation with the other partners involved in the project and their supervisors.

PhD Student 1: Emmanuel Bizimungu (MSc.)

Supervisors: Prof. Dr. Ruerd Ruben, Dr. Robert Sparrow.

Topic: The role of incentives for smallholder adoption of climate-smart agricultural innovations in Uganda.

University and School: Wageningen University, School of Social Sciences (WASS), Development Economics Group. **Start**: June 2019

Coursework /Training completed in 2019

No.	Course	Date	Status
1	Theory and Practices of Efficiency and Productivity Measurement	June 2019	Completed
2	Crash Course in Experimental Economics at Tinbergen institute.	June/July 2019	Completed
3	Advanced Microeconomics	02/09/2019 - 25/10/2019	Completed
4	Advanced Econometrics	28/10/2019 - 18/12/2020	Completed
5	Impact Assessment of Policies and Programmes	06/01/2020 - 31/01/2020	Completed
6	Communication with Media and General Public	November 2019	Completed
7	Scientific Writing	09/12/2019 - 03/02/2020	Completed
8	Research Proposal	June 2019 – Dec 2020	Completed

Outputs in 2019

- Approved Teaching and Supervisory Plan (TSP)
- Detailed Research Proposal and Planning
- Household questionnaire programmed in ODK

Summary of research proposal developed

Agricultural productivity in Uganda is low and declining for many crops, including soybean. This is caused by limited adoption of climate-smart agricultural (CSA) innovations due to risks and uncertainties associated with increased incidences of droughts, floods, and changes in prices, crop diseases/pests, and storm. High dependence on rain-fed agriculture means that farmers are vulnerable to climatic shocks and their impacts. To take risks and invest in CSA innovations, farmers will

need incentives. Such incentives should address production and market risks as well as informational constraints, contemporaneously. The CRAFT project offers a wide range of push and pull incentives including (1) farm-level training in CSA practices and technologies; (2) agricultural extension services; and (3) value-chain linkages through contracts and index-insurance to encourage smallholder farmers in Uganda, Kenya, and Tanzania to adopt climate-smart agricultural innovations. Improved adoption would build resilient farming systems, enhance productivity and household welfare. Through a field experiment, we assess the effectiveness of these incentives for the adoption of CSA innovations, and ensuing impacts on farming system resilience, productivity and household welfare. We also implement a lab-in-the field experiment to examine the extent to which uncertainties regarding weather, market and timing of payment affect investments in CSA innovations with/without incentives, and the implications for intra-household decision making. The key research question is, what is the optimal combination of push and pull incentives, and under what conditions do incentives induce adoption of CSA innovations for enhanced farming system resilience, productivity and household welfare?

PhD Student 2: Thomas Kitinya Kirina (MSc.)

Supervisors: Prof. Ludwig Fulco, Dr. Annemarie Groot and Dr. Teferi Demisse

Topic: Scaling climate smart agricultural interventions in agricultural production and ecosystem in East Africa: Assessing potential trade-offs, synergies and limitations

University and School: Wageningen University and Research, Wageningen Institute for Environment and Climate Research (WIMEK)

Start: April 2019

Coursework /Training completed in 2019

No.	Course	Date	Status
1	Introduction to R	13-14 May 2019	Completed
2	Research data management	9,16,23 May 2019	Completed
3	PhD Workshop Carousel	24.May 2019	Completed
4	WFA (Wilderness First Aid) Course	01-02 June 2019	Completed
5	Reviewing Scientific manuscripts	20-June 19	Completed
6	Geo-computation using free and open source software	8 - 12 July 2019	Completed
7	Introductory SENSE PhD course A1	23-25 October 2019	Completed
8	Programming using Python language		Ongoing

Workshops and Seminars and Presentations

- African Climate Risks Conference 7-9 October 2019 Addis Ababa, Ethiopia.
- Proposal presentation 4 July 2019 Wageningen Netherlands

Outputs

- Approved Teaching and Supervisory Plan (TSP)
- Detailed Research Plan and Proposal
- Publication: First draft paper on "Reviewing the upscaling potential of different CSA interventions."

Summary of research proposal developed

Climate change has been identified as a major risk for agriculture, land and water resources in East Africa. Climate Smart Agriculture (CSA) is a potential response. CSA concept provides a means to adapting to, and to some extend help mitigate climate change, making cropping systems and dependent value chains more resilient and sustainable. However, in reality, CSA practices are rarely subjected to projected future climate to ascertain their long term suitability. Additionally, agriculture depends on exploitation of natural resources with increasing complexities in management as you move across and up the scale. Studies assessing impact of large scale implementation of these practices and trade-offs and synergies in crop production and water dynamics are rare. This research will analyse the potential synergies, trade-offs and limitations of large scale implementation of cCSA interventions and their impact on crop production and ecosystem long term sustainability. The study will involve stakeholders across the value chain and employ an integrated modelling framework combining crop model, World Food Studies (WOFOST) and hydrological model Variable Infiltration Capacity (VIC) for the assessment. The output of the study will contribute to the evidence base for scaling CSA interventions as a climate change adaptation and mitigation pathway and provide evidence to advance planning and policy orientation for regional food security and natural resource management under climate change conditions.

Development of Climate Change narratives

Given that CRAFT is focused on generating climate smart business cases, it is critical that the business cases are driven by climate science and trends. CRAFT partners felt the need to use the CRA findings to better ground the business cases development in climate reality. It was decided to draft climate narratives that:

- Describe how climate change is likely to affect crop production, the marketing trends and the dynamics of the entire value chain, as well as the climate related risks actors are perceiving;
- Tell the story of how a company or service provider aims to respond to these plausible climate-related risks through a business case;
- Explain how the business case is not only driven by climate change but also by future markets, economic and agroecological potentials and barriers.

In collaboration with SNV and CCAFS, WEnR co-organised an internal workshop on climate narratives on 12 October, 2019. The workshop resulted into a better understanding about the need for climate narratives. An outline was drafted showing the different topics to be addressed in such a narrative, for further detailing and development from Q4 of 2019 into 2020.

Initiate policy dialogues toward enabling large scale roll out of CSA

In order to get dialogues and a policy dynamic going, CCAFS initiated engagements with ministries, departments and agencies in target countries:

- Jointly with SNV/Kenya, CCAFS formed a Standing Committee in Ministry of Agriculture (CCU & Crops Dept.), Agriculture & Food Authority (AFA), Kenya Agricultural & Livestock Research Organization (KALRO), Joint Agriculture Sector Steering Committee (JASSCOM) and others, for development of climate smart value chain training manuals and crop specific handbooks. While started in 2019, this is a continuous process going into 2020.
- In Tanzania meetings were held with officials in the Ministry of Agriculture and with the Tanzania Agricultural Research Institute (TARI), Tanzania Insurance Regulatory Authority (TIRA) and Tanzania CSA Alliance (TCSAA).
 Follow-up meetings will be in 2020 to establish agreements when the CRAFT policy and advocacy agenda is driven by project targeted value chains partners and stakeholders.
- Discussions were held in Uganda with the Desk Officer for CSA in Ministry of Agriculture, as well as officials of Agro-Insurance Consortium (AIC), Uganda National Meteorological Authority (UNMA) & National Agricultural Research Organization (NARO). Follow-up meetings to develop more specific steps in the policy trajectory are scheduled for 2020.

Initial CSA policy issues that need to be tackled around selected value chains and business cases were reported in the scoping briefs and reports (made available under separate submission). Critical issues identified (both gaps and barriers) included technology, capacity, finance, and knowledge/information and service delivery. Specific issues to tackle within those broad categories comprised of measures to develop and streamline systems for climate-resilient seed; strengthen technology transfer; enhance awareness campaigns to catalyse adoption; strengthen market linkages; structure service delivery models; expand access to finance for climate-resilient investments; develop capacity for climate resilience (institutional & technical); conduct a cost-benefit analysis, including gender & equity issues, of scaled projects; assess models for CSA (both technical & financial). These issues must be addressed in combination with investment plans, policies and strategies to give political and legal backing for CSA. Barriers require policy interventions but technologies, practices and services require opportunities to test and scale. Supporting the growth of medium and small climate-resilient agribusinesses represents a catalytic approach to CSA adoption.

At the end of the reporting period CCAFS, jointly with SNV Uganda, co-organized and facilitated a policy engagement workshop in Uganda to share scoping findings on climate information, agro-weather & index-based insurance for sesame and soybean in Kampala on 11 December 11, 2019. This was the first in a series of additional dialogues that will be organised in moving forward, and CCAFS has already identified climate change oriented national level multi-stakeholder platforms (MSPs) in each country, through which bottom-up processes will be channelled to engage policy makers.

<u>Scaling readiness of CSA technologies, practices and models implemented within selected value chains and business cases</u> During the reporting period, the emphasis for this activities was on the development of a preliminary scaling framework for CRAFT that includes:

- A synthesis of PPP-Lab scaling logic;
- Insights from broader scaling literature;
- Enabling environmental considerations (policy/institutional) to facilitate the scaling process;
- Key objectives for refining scaling potential and readiness for selected value chains and business cases.

The CCAFS scaling specialist worked closely with the SNV-CRAFT country teams to build and deepen internal capacity around scaling—key concepts and processes as well as to pick up their priority concerns over key scaling barriers in selected Value Chains (VCs) & Business Cases (BCs). These interactions cumulated into scaling assessment work on three selected VCs potato (Kenya), sesame (Uganda) and common bean (Tanzania) using a contextualized CRAFT Scaling Methodological Strategy. The review findings were documented in a synthesis review paper (30 pages) and a short summary (3 pages) and found that:

- Seed systems of the potato, sesame and common bean value chains in East Africa remain underdeveloped and are characterized by low supply and demand for improved seed varieties;
- Weak market relations contribute to irregular quality and quantity of produce, use of inputs and application of climate-smart practices;
- There is limited access to finance for producers and SME business champions alike;
- Delivery models of low-cost climate-smart agronomic practices need further development /impulses.

In addition, a 'light' version of the Scaling Scan was also developed for climate-smart agribusiness champions to help them gauge key scaling barriers that they face in taking their innovations to scale, and to better understand CRAFT's four domains of scaling: technology and knowledge; business and markets; empowerment and transparency; and policy and enabling environment.

Overall, this work contributes to gathering information on decision-making efforts that can foster an effective advocacy and policy agenda for improving enabling environment for scaling CRAFT selected VCs and BCs, informed by evidence-based research, backed by strong local advocates or constituencies, and clear recommendations for reform and implementation of action. As such, the project efforts on scaling will contribute to indicators 30, 31, 34 and 35 moving forward.

Sub-IR 3.1.2 – Accessibility of climate information services for CSA and index based insurance products created				
Performance indicators Targets for 2019 Achieved 201				
Ind. 36 – Number of farmers that have access to climate/weather information	Ke-1,000; Tz-500	Ke-0; Tz-0; Ug-0;		
services	Ug-1,000;Total-2,500	Total-0		
Ind. 37 – Number of farmers that have access to index based insurance products	Ke-50; Tz-50; Ug-50;	Ke-0; Tz-0; Ug-0;		
Total-150 Total-0				

Performance results review

The project teams were initially under the impression that the information and services were readily available in a user friendly format and at reasonable costs. It turned out that the key providers of this information (national metrological authorities/institutes) do have some seasonal weather information available, however, this is not presented in a format or language that is easily understood by and/or relevant to smallholder farmers, some extension workers, and even input providers, aggregators and processors. In addition, the dissemination strategy and platforms for this information is not always clear or appropriate either. For this reason, CRAFT started with the engagement of the relevant stakeholders; including the national metrological authority to influence further synthesis of available information before its dissemination. There is a clear need to ensure that information is shared in a format and language appropriate for the audience, ideally specific to geographic regions and/or crops, and depending on the user (farmers vs input providers vs aggregators and processors). The timing of availability of the information needed might be different as well. It has also become clear that the meteo-agents working with this data might benefit from additional training in interpretation and 'translation' of data for relevancy purposes as well. As such, the CRAFT project led by CCAFS will move forward in 2020 on developing a clear framework to generate, synthesize and dissemination climate and weather information that is relevant and comprehensible to the various value chain stakeholder segments which should eventually result into a more efficient and effective access to and use of this information. Climate information services and agricultural index based insurance continue to be very critical CSA services that are in considerable demand, and which the CRAFT project will promote once made relevant and appropriate for the various users.

Plan to catch up or corrective actions

Based on the findings of the information and services that exist, CRAFT has started to expedite the process of identifying innovative and appropriate weather and insurance service providers to drive this result area during the next reporting period. The process of engaging stakeholders and linking them to existing business cases shall also be expedited to enable the roll out of these services in 2020.

Provide climate/weather information services through ICT platforms and weather index based insurance services.

Formal engagement on climate and weather information services through ICT platforms and weather index-based insurance services had not started by end of 2019 because this activity is tied to availability of seasonal forecasting data and agroweather advisories relayed to farmers and value chain actors in specific localities. The innovation on seasonal forecasting synthesis, dissemination and application was to be initiated in 2020 together with SNV Uganda to work closely with climate information providers (e.g. Ugandan meteorological office and ICPAC) and all concerned CRAFT stakeholders (business case champions, insurance service providers, SMEs, etc.) to further synthesize this information to a level that it is relevant to all stakeholders. As described earlier, the relevancy of the data, as well as the format and language in which it is currently presented is of considerable concern, hence the reason an adjusted approach to this activity had to be adopted.

As the business cases, which are supposed to be engaged with these services only got awarded during Q4 of 2019, thereby delaying assessment of users' requirement (demand) for climate and weather related information and index-based insurance services. The scoping study referred to in this report determined preliminary status of user demand for climate/weather related information services and for index-based insurance services. The preliminary demand was determined as low, due to several gaps and barriers identified, but detailed studies on the extent of user demand were deferred to 2020 because the business case champions who are the entry points of implementation would need to be more directly engaged in this review.

The policy engagement workshop held in Kampala for climate information and insurance stakeholders discussed the demand issue with a view to reaching a consensus on the way forward for climate information and index insurance. Informal engagement was also initiated with the Kenya Meteorological Department (KMD) and Kenya Agricultural and Livestock Research Organization (KALRO) Agricultural Observatory Platform (KAOP) in Kenya; Tanzania Insurance Regulatory Authority (TIRA) and Ministry of Agriculture and Cooperatives (MoAC) in Tanzania for index-based insurance; Agriculture and Climate Risk Enterprise (ACRE Africa) in Kenya and Tanzania for index-based insurance, and Uganda National Meteorological Authority (UNMA), Environmental Analysis and Remote Sensing (EARS)/ eLEAF Competence Centre and Agro-Insurance Consortium (AIC) in Uganda for Agro-Weather Information and index-based insurance, as well as a number of private sector prospective index-based insurance service providers.

While the pilot activities have started in each country, the process is hindered by so many gaps and barriers. In Kenya there is the Kenya Agricultural Insurance Program (KAIP) Crop Insurance Sub-Program (K-CIP), which started in 2015. Uganda Agriculture Insurance Scheme (UAIS) a PPP, started in 2016. Tanzania has just put in place a strategy on Tanzania Agriculture Insurance Program, which is likely to start in 2020. The process of establishing consensus with partners on index insurance products to be availed to farmers was initiated with the earlier stated scoping study. As with many policy framework related activities, the engagements and roll out of the project efforts are scheduled along a timeline that does not provide immediate results, but with the some of the groundwork laid in 2019 and having gained a better understanding of the gaps and barriers to move this agenda forward, the CRAFT team hopes to record more tangible results in 2020.

Sub-IR 3.1.3 – Extension services that incorporate weather information and climate risk projections instituted				
Performance indicators Targets for 2019 Achieved 2019				
Ind. 38 – Number of farmers that received extension services on climate smart	Ke-3,000; Tz-3,000	Ke-0; Tz-3,135;		
practices and technologies	Ug-3,000; Ttl-9,000	Ug-1,085; Total-4,220		
Ind. 39 – Number of extension service workers trained on climate smart practices	Ke-100; Tz-100;Ug-100;	Ke-0; Tz-251; Ug-331;		
and technologies Total-300 Total-582				

Performance results review

Extension of agronomic services is an opportunity to impart practical skills to the farmers, and allows to incorporating various messages and information on new practices, technologies, but also climate related knowledge gained over time and generated by the project. However, this indicator is dependent upon the number of business cases that are awarded and target smallholder farmers. During the reporting period, it was only through the limited number of cases in Tanzania and Uganda that extension services were provided to farmers (Ind 38). The extension workers trained under indicator 39 to provide these services ended up exceeding the target as it included both public sector agriculture extension agents, as well as the extension agents engaged through the private sector, which are generally attached to the agribusinesses concerned by the project's business cases.

Plan to catch up or corrective actions

The on boarding process for business cases targeting both technical field extension services, as well as smallholder farmers, has been expedited since the last months of 2019, therefore the number of extension against to be trained and farmers to receive extension services will increase exponentially next year.

Updating the extension curricular to include climate smart practices and technologies and training of NGO, private and public sector extension service providers

Given the need to have scientific underpinning and recognition for the 'climate smarting' of extension curricular and crop handbooks, CCAFS was heavily involved in this activity. As such, CCAFS provided input in development of CRAFT's

Training Handbook for climate-resilient farmer field school (CR-FFS) methodology and curriculum, and various national crop specific handbooks and manuals. While the CR-FFS Guidebook was finalized in 2019, the printing and distribution will take place early 2020, in time for seasonal training activities.

Crop manual development was led by the Kenya country team, followed by Uganda, and took the approach of climatesmarting the existing manuals for crops that already had a manual in the country. The CCAFS team worked very closely with the stakeholders who developed the original manual to incorporate climate lens and produce a newly updated version. For value chains that did not have a manual in place in each country, development of a new one was initiated, developed and validated. It quickly became clear that for Kenya there was a manual for potato but none for green gram and sorghum. In Uganda there was a manual for soybean but none for sesame. At the end of 2019, the CCAFS-led efforts on this allowed for the development of climate smart manuals on potato and green grams for Kenya, however, the official validation by the national committee is to take place early 2020. Next in line for full development are sorghum and beans in Kenya, soya bean, sesame, sunflower and potato in Uganda; and sunflower, beans, sorghum and potato in Tanzania. Given that the CRAFT project has set out to have an impact at national level, the validation and approval processes for this work is a lengthy process which will likely take up the better part of 2020.



2.5. Workstream – Learning and Knowledge Sharing

The project will further the existing knowledge base on CSA in food systems through monitoring and applied research related to market-driven adoption and scaling of technologies and practices for climate resilient value chains.

Assess M&E gaps for business cases

The M&E team conducted an assessment with each of the business cases for M&E gaps. This aimed at getting a better understanding of the existence of M&E databases, how data flows from the field to the BC level, which methodologies are used and what the system is able to capture. For cases assessed, it was noted that they had simple databases and data collection systems that presented considerable gaps. For instance not all farmers would be listed in their "farmer database", and information regarding gender, age, acreage of each farmer were missing. In addition, they also did not have designated M&E focal persons. The results of this review thus laid the foundation for determining the M&E support to be provided to each of the business case champions and stakeholders through the MIS trainings and subsequent 1-on-1 coaching and follow up sessions. Naturally, this is a continuous process that stretches out across the implementation period of each case.

Conduct business case baselines

As each business case incorporates a mini-results framework that requires the champion and case related stakeholders to report on various indicators that are relevant for the CRAFT project, there is thus also a need to conduct a baseline assessment each of the business cases. The baseline exercise aims at collecting relevant data to establish benchmarks against which to measure overall business case performance. Data collection is done in close collaboration with the representatives of the different cases, and thus presents an opportunity to strengthen the business partners' capacities in these aspects of M&E. In 2019 the baseline exercises were conducted for ACILA in Uganda, IMCOS in Kenya, as well as Jackma and Three Sisters in Tanzania, with the other 2019 approved cases lined up to be roll out during early 2020.

In a bid to improve data collection during implementation and monitoring, these staff of the agribusinesses, business champions and other business case representatives were trained in M&E and performance indicator reporting. They were also trained in the use of data collection forms, data reporting and date utilization through the mobile phone app linked to the cloud-based MIS. Moving forward in 2020, the business case champions will be supported to collect quality data during implementation, as well as data extraction from the MIS for reporting purposes.

Joint field monitoring

While the CRAFT team envisioned to conduct joint field monitoring visits that are value chain specific with various stakeholders, and the lead business case champions, this did not happen as planned due to the fact that cases were only

awarded during Q4 of 2019. Joint field monitoring visits are most valuable and effective when implementation is ongoing and lessons can be drawn from that – as such, this will be further explored during 2020 when a larger number of cases will be in full implementation mode.

Develop and operationalize business case monitoring data base/dash board

As previously described in Section 1 of this report, the CRAFT project engaged a consultant/ICT provider to develop an integrated management information systems that captures data and produces reports in real-time thereby responding to the internal project reporting and performance monitoring needs, as well as donor needs (IATI compatibility), and feed into country government plans where and as needed. The MIS data base provides project overall performance and business case specific cloud-based platform so as to monitor, track and extract progress by business case, as well as across the three countries. Every business champion has access to the database specific to its business case in an effort to capture their own monitoring data and run reports that provide them real time performance on their progress. This MIS is thus not only relevant for project management purposes, but also for the champions for business case management purposes as it can assist them as a business planning and operational monitoring tool.

Knowledge generation and learning

A number of external, project organized, CSA learning and knowledge sharing events have already been mentioned and described in other sections of this report. These events relate specifically to indicators that the CRAFT project reports on, and the support to and development of the business cases generated through the project. In addition, the project also has an important internal learning and knowledge sharing agenda, given the diversity of the consortium partners and the specific expertise each of them brings to the project, as well as the range of country specific experience and expertise available within the country teams.

While not exhaustive, the following provides a summary of a number of key knowledge sharing and learning opportunities, events and tracks that CRAFT worked on during the reporting period:

- An all CRAFT partner and staff workshop was organized in May 2019 marking the end of the inception phase, in
 which EKN/Ug and DGIS representatives participated to review the processes developed, lessons learned and
 efforts made during the period October 2018 (after the project kick-off meeting) through May 2019. A number of
 papers, briefs and reports that were developed up to that point were reviewed, discussed, adjusted and then shared
 with DGIS. In addition, the work plan for the rest of 2019 (June-December 2019) was developed with the entire
 CRAFT project implementation team to lay down to strategic path to go into full implementation mode.
- Also in May, SNV representatives from the CRAFT team were requested to support the IGG Regional Learning Journey for the Horn of Africa Region, which brought together representatives from various Dutch Embassies in the region. The CRAFT project was able to share the initial Climate and Business tool kit and climate smart business case development logic, and hone in on the climate risk assessment methodology. Sharing our tools, as well as challenges and lessons learned could provide the different EKN teams to take this into consideration when developing climate smart projects and programs in the future.
- The CRAFT project, through the development of a range of different tools as part of the Climate and Business toolkit, has shaped the Climate and Business Product within the SNV Agricultural Sector corporate framework. In addition to the climate and business tools, also the CIIF manual and related templates, as well as the M&E plan for CRAFT have been widely shared with other SNV projects to learn from and tap into.
- In October 2019 the senior technical and management team of SNV met, and had a series of virtual meetings with the various consortium partners to review implementation logic and progress at that point in time, and develop the work plan for the year 2020. Some strategic decision based on knowledge gathered, lessons learned and results achieved were made at that point, which are described in the CRAFT work plan for 2020.
- Depending on the tasks at hand, a sub-group of CRAFT project partner staff (primarily WEnR, CCAFS and SNV agronomists) has virtually met throughout the year 2019 on Skype 1 to 2 times per month. This particular group (aka "climate group") discusses climate specific related topics from projection to modelling work, to the preparation of the CRAs and related workshops, to training events and required presentation/documentation, as well as the climate narrative development that started in Q4 of 2019.,
- In addition, a separate sub-group involving M&E staff and WEnR have held virtual meetings on the development
 of the CRAFT project's Significant Change method, as an additional monitoring tool. This is under development for
 roll out and application in 2020.
- The review and sharpening of the business case development tools and business plan templates which happened
 at different points throughout the year was mostly a combined effort led by the SNV and Agriterra agribusiness
 advisors in direct collaboration with the experts of Rabo Partnerships, and directly supported by CRAFT regional
 PMU team to ensure adherence to the DGIS approved CIIF manual and M&E framework, as well as the financial
 management policies and principles of SNV for extending grants to third parties.

2.6. Workstream – Gender and Youth Inclusion

CSA planning inclusive of gender equality and opportunities for youth can provide economic opportunities for enterprise development and the creation of an on- and off-farm labour force if systematically integrated throughout all workstreams.

WEAI survey including gender evaluation of CSA technologies

During the reporting period CRAFT sought to understand the levels of empowerment and barriers to empowerment of men and women in agribusinesses. To this end, the project conducted a customised Women Empowerment in Agriculture Index (WEAI) survey to focus on qualitative methods, rather than the survey-based methods of the WEAI and pro-WEAI. Results aim to support the design of gender responsive project strategies and implementation choices for each business case in CRAFT.

The adjusted WEAI tools were applied through Focus Group Discussions (FGDs) to agribusiness owners (e.g. the business champion) and farmers in the business cases that were in the pipeline for the three countries. The FGDs were held between September and December 2019. For owners, the tool focused on the power from within, power to do, power over, and power with. This helped to establish the level of empowerment of the business champion to achieve its goals. Across Uganda, Tanzania and Kenya 10 business champion owners were interviewed.

Many of the business champions were empowered on at least 3 out of 4 power domains. However, 4 out of 10 indicated inadequacy in more than 1 domain. Almost all business champions in Tanzania, Kenya and Uganda, indicated that access to financial services was a major constraint, closely followed by understanding and addressing training needs, and research and innovation. These all fall under the Power to Do. However, in some cases the Power Within was also inadequate when looking at setting and achieving clear goals, as well as the Power With, where business champions did not engage in collective action in the value chain with others. There was no specific pattern for women- or men-owned businesses.

For farmers, the tool focused on intrinsic agency, instrumental agency and collective agency – assessing the extent to which women, men and youth have access to and control over resources. The focus group participants comprised a sample from the intended beneficiaries of the intervention clustered into four groups; older men (35+ years of age), older women (35+ years of age), young men (18-34 years of age) and young women (18-34 years of age). In total 30 FGDs were conducted in Tanzania (16), Uganda (11) and Kenya (3) with 501 participants.

The results of the FDGs with farmers show differences in empowerment between countries and the respective value chains. In Uganda, between 37 and 56% of women were considered empowered, vs 79% in Kenya and 0% in Tanzania. General conclusions are that (especially young) women are more often disempowered than men. They particularly struggle when it comes to accessing credit, fairness in work distribution, input into marketing decisions and control over income. Men are also often not empowered (ranging from 38% to 71% empowered), but are particularly lacking in access to credit, access to land and resources, and control over income. Given the results of the FGDs, it seems that encouraging joint planning and budgeting within farming households could improve the sense of lack of input and control both men and women face.

Gender and youth mapping and analysis business cases

The project also conducted a gender-responsiveness assessments of the businesses that were part of the business cases that entered into the final review and approval process during the second half of the year. The exercise was also undertaken between September and December 2019 and aimed at identifying constraints and opportunities for women and youth participation in the target value chains and the strategic actions to address underlying structural bottlenecks. This would assure equitable outcomes for men, women and youth in the project.

Gender mapping exercises were conducted for nine business case champions in Tanzania, Uganda and Kenya. The maps show to what extent women and youth are present at different nodes in the value chain, e.g. production, services, ownership or extension. Moreover, it highlights enabling environment constraints and opportunities and specific actions business cases can take towards becoming more inclusive. Annex III provides a short summary of conclusions per business case.

Annexes





Annex I Performance Indicator Target Tables – 2019 Summary Overview

SO 1 - Increased income for small holder farmers and SMEs			
IR 1.1 – Increased adoption of climate smart practices and technologies among smallholder farmers, SMEs and Cooperatives			
Performance indicators	Target 2019	Achieved 2019	
Ind. 1 - Reached number of smallholder farmers with increased income	Ke-1,000; Tz-1,000	Ke-0; Tz-0; Ug-0;	
	Ug-1,000; Total-3,000	Total-0	
Ind. 2 - Percentage increase in yield for selected crops due to application	Ke-5%; Tz-5%; Ug-5%;	Ke-0%; Tz- 0%; Ug-0%	
of CSA practices and technologies	Total-5%	Total-0	
Ind. 3 - Reached number of smallholder farmers whose farming enterprise	Ke-1,000; Tz-1,000	Ke-0; Tz- 0; Ug-0;	
become more resilient to possible stresses and/or shocks	Ug-1,000; Total-3,000	Total-0	
Ind. 4 - Number of smallholder farmers that have applied 2 or more climate	Ke-0; Tz-0; Ug-0;	Ke-0; Tz- 0; Ug-0;	
resilient farming practices in the past 12 months	Total-0	Total-0	
Ind. 5 - Reached number of hectares of farmland with agroecosystems that	Ke-300; Tz-300;Ug-300	Ke-0; Tz- 0; Ug-0;	
became more resilient to possible stresses and/or shock	Total-900	Total-0	
Ind. 6 - Number of SME business and cooperatives applying at least 2	Ke-6; Tz-5; Ug-4;	Ke- 1 Coop; Tz-3 SMEs;	
climate smart practices and technologies within their business and/or	Total-15	Ug-2 SMEs	
value chain		Total- 5 SMEs, 1 Coop	
Sub-IR 1.1.1 – SME capacity in climate smart technologies, products a	nd services developed	1	
Ind. 7 – Number of service provider representatives trained on profitable	Ke-15; Tz-15; Ug-15;	Ke-0; Tz- 15; Ug-40	
climate smart supply chain development and opportunities	Total-45	Total-55	
Sub-IR 1.1.2 – Increased availability of high quality and affordable clim	nate smart services		
Ind. 8 – Number of smallholder farmers, cooperatives and SMEs that are	Ke-500; Tz-500	Ke-0; Tz- 0; Ug-0	
satisfied with the quality and affordability of climate smart services provided	Ug-500; Total-1,500	Total-0	
Ind. 9 -Number of small holder farmers using climate smart inputs and	Ke-2,000; Tz-2,000	Ke-285; Tz-6,000;	
services	Ug-2,000; Total-6,000	Ug-11,000; Total-17,285	
Sub-IR 1.1.3 – Evidence based climate smart agriculture solutions imp	lemented through business	cases	
Ind. 10 – Number of climate smart business cases implemented under the	Ke-7 SMEs/5 coops;	Ke- 0; Tz- 3 SMEs	
project	Ug- 6 SMEs/2 coops:	Ug- 2 SIMES,	
	Total- 20SMEs/10coops	Total - 5SMEs	
Sub-IR 114 – Farmers cooperatives and SMEs trained on profitable of	limate smart practices and t	echnologies	
Ind. 11 – Total number of smallholder farmers reached by training on	Ke-5.000 [°] Tz-5.000	Ke-0: Tz-3,135: Ug-1,085	
climate smart practices and technologies for their farming system(s)	Ug-5.000: Total -15.000	Total-4.220	
Ind. 12 – Total number of hectares of farmland reached by the project	Ke-600: Tz-600: Ug-600:	Ke-0: Tz-2.552: Ug-878	
· · · · · · · · · · · · · · · · · · ·	Total-1.200	Total-3.430	
Ind. 13 – Number of SME representatives that trained on climate smart	Ke-15; Tz-15; Ug-15:	Ke-0; Tz-35; Ug-25	
practices and technologies relevant to their company and/or value chain.	Total-45,	Total-60	
Ind. 14 – Number of representatives of farmer cooperatives trained on CS	Ke-50; Tz-30; Ua-20;	Ke-0; Tz-391; Ua-60	
practices and technologies relevant to their cooperative and/or value chain.	Total-100	Total-451	

SO 2 - Increased business performance for agribusiness SMEs and Cooperatives due to climate smart investments				
IR 1.2 – Increased investment and business growth in climate smart value chains				
Performance indicators Targets for 2019 Achieved 2019				
Ind. 15 – Number of agribusiness SMEs and cooperatives that have	Ke-6; Tz-5; Ug-4;	Ke-0; Tz-0; Ug-0		
increase their turnover due to climate related investments	Total-15	Total-0		
Ind. 16 - Number of agribusiness SMEs and cooperatives that have	Ke-4 SMEs/2 coops;	Ke-0; Tz-0; Ug-0		
worked to improve key manageable climate risks	Tz-4 SMEs/1 coop;	Total-0		
	Ug-3 SMEs/1 coop;			
Ttl-11 SMEs/4 coops				
Ind. 17 - Number of agribusiness SMEs, cooperatives and farmer	Ke-7 SMEs/5 coops;	Ke-0**; Tz-3; Ug-2		
organizations that accessed finance for the implementation of climate	Tz-7 SMEs/3 coops:	Total-5		

change adaptation practices and/or technologies at the level of their	Ug-6 SMEs/2 coops;	
company and/or value chain	Ttl-20 SMEs/10 coops	
Ind. 18 – Amount of private sector funds invested as part of matching	Ke-500,000;	Ke-0**
grant/investment facility	Tz-500,000;	TZ- 577,124
	Ug-500,000;	Ug- 17,231,043
	Total-1,500,000	Total-17,808,167
Sub-IR 2.1.1 – Trainings and dialogues held on climate smart agricult	ure with financial institutions	;
Ind. 19 - Number of representatives of financial institutions trained on	Ke-22; Tz-12; Ug-22;	Ke- 0; Tz-0; Ug-40;
climate smart agribusiness, de-risking and financing for climate adaptation	Total-56	Total-40
in agribusiness value chains.		
Ind. 20 – Number of dialogues held with financial institutions on climate	Ke-3; Tz-3; Ug-3;	Ke- 0; Tz-2; Ug-4;
smart agribusiness, de-risking and financing for climate adaptation in	Total-9	Total-6
agribusiness value chains.		
Ind. 21 – Number of financial institutions reached with training or dialogues	Ke-6; Tz-3; Ug-4;	Ke-0; Tz-0; Ug- 5
	Total-13	Total-5
Sub-IR 2.1.2 – SMEs develop bankable business plans for climate sm	art inclusive business cases	
Ind. 22 - Number of SMEs and cooperatives that have developed a	Ke-10; Tz-8; Ug-6;	Ke-1 Coop; Tz-3 SMEs;
bankable business plan and apply for finance for their climate smart	Total-24	Ug- 2 SMEs;
business case		Total-5 SMEs & 1 Coop
Sub-IR 2.1.3 – Finance providers and SMEs willing to invest in bankal	ble climate smart business p	lans
Ind. 23 - Number of finance institutions offering financial services for	Ke-3; Tz-3; Ug-3;	Ke-0; Tz-2; Ug-4;
climate adaptation in agribusiness value chains	Total-9	Total-6
Ind. 24 – Number of private sector partners (SMEs, finance providers,	Ke-6; Tz-5; Ug-4;	Ke-5; Tz- 9; Ug-9;
others) that have signed a letter of intent on co-funding of business case	Total-15	Total- 24
activities to be developed under the project.		
IR 2.2 – Increased involvement of women and youth in agribusiness of	levelopment	
Sub-IR 2.2.1 – Women and youth-led agribusinesses that received gra	ants	
Ind. 25 – Percentage of SMEs and cooperatives managed by women and	Ke-10%; Tz-10%;	Ke-0%; Tz-33% (1 of 3);
vouth	Ug-10%: Total-10%	Ua-50% (1 of 2)
	0	Total-28%
Ind. 26 - Number of women and youth-led businesses that received	Ke-1; Tz-1; Ug-1;	Ke-0; Tz-1; Ug-1;
matching grant/investment facility allocations	Total-3	Total-2
Ind. 27 – Number of women and youth farmers engaged in farmer groups	Ke-1.800: Tz-1.800	Ke-247: Tz-941: Ua-500
and cooperatives	Ug-1.800: Ttl-5.400	Ttl-1.688
Ind. 28 – Number of women and youth employed in SMEs, farmers groups	Ke-10 [,] Tz-10 [,] Ug-10 [,] Total-	Ke-2: Tz-52: Ug-144:
and cooperatives	30	Total-198
		10.01100

SO 3 – Improved enabling environment favourable for large scale roll out of climate smart agriculture				
IR 3.1 – Increased collaboration and exchange among public private actors on large scale roll out of climate smart agriculture				
Sub-IR 3.1.1 – Dialogues with value chain actors on CSA policy development and improvement created				
Performance indicators	Targets for 2019	Achieved 2019		
Ind. 29 – Number of CSA related legal, policy and institutional frameworks	Ke-1; Tz-1; Ug-1;	Ke-0; Tz-0; Ug-0;		
developed and operationalised with support from CRAFT	Total-3	Total-0		
Ind. 30 – Number of best practices in climate smart business cases	Ke-1; Tz-1; Ug-1;	Ke-0; Tz-0; Ug-1;		
captured and disseminated	Total-3	Total-1		
Ind. 31 - Number of tested and tried inclusive climate smart farming	Ke-1; Tz-1; Ug-1;	Ke-1; Tz-0; Ug-1;		
system or service delivery models developed and disseminated	Total-3	Total-2		
Ind. 32 – Number of CSA learning events organised	Ke-1; Tz-1; Ug-1;	Ke-5; Tz-5; Ug-7;		
•	Total-3	Total-17		
Ind. 33 – Number of learning and exchange visits organized for	Ke-2; Tz-2; Ug-2;	Ke-0; Tz-2; Ug- 0;		
smallholder farmers, cooperatives and private sector partners	Total-6	Total- 2		

Ind. 34 – Number of national policy dialogues held on CSA and policy-	Ke-1; Tz-1; Ug-1;	Ke-1; Tz-0; Ug-0;		
related enabling factors	Total-3	Total-1		
Ind. 35 – Number of value chain actors reached through policy influencing	Ke-50; Tz-50; Ug-50; Total-	Ke-0; Tz-0; Ug- 0;		
activities and/or national policy dialogues	150	Total-0		
Sub-IR 3.1.2 – Accessibility of climate information services for CSA a	nd index based insurance pr	oducts created		
Ind. 36 – Number of farmers that have access to climate/weather	Ke-1,000; Tz-500	Ke-0; Tz-0; Ug-0;		
information services	Ug-1,000; Total-2,500	Total-0		
Ind. 37 – Number of farmers that have access to index based insurance	Ke-50; Tz-50; Ug-50;	Ke-0; Tz-0; Ug-0;		
products	Total-150	l otal-0		
Sub-IR 3.1.3 – Extension services that incorporate weather information and climate risk projections instituted				
Ind. 38 – Number of farmers that received extension services on climate	Ke-3,000; Tz-3,000	Ke-0; Tz-3,135;		
smart practices and technologies	Ug-3,000; Ttl-9,000	Ug-1,085; Total-4,220		
Ind. 39 – Number of extension service workers trained on climate smart	Ke-100;Tz-100;Ug-100;	Ke-0; Tz-251; Ug-331;		
practices and technologies	Total-300	Total-582		

Annex II Online Links to CRAFT Articles, Papers and Publications

Country	Article/ Publication/ Activity
Published	l Articles
Kenya	Climate risk assessments
	29 th April: Charms Media YouTube: <u>http://bit.ly/ClimateSmartKitui</u>
	3 rd May: KBC News Hour - Why potato farmers need to move away from traditional farming
	https://www.youtube.com/watch?v=qBEjBF7EGqk
	• 4th May: The East African - Dutch fund to give \$43m towards regions climate smart agriculture (No URL access for
	The East African because the story was classified as prime content see clip at the bottom)
	• 6th May: Capital FM Kenya – Small scale farmers in East Africa to benefit from Kshs 4BN Climate Smart Project
	https://www.capitalfm.co.ke/business/2019/05/small-scale-farmers-in-east-africa-to-benefit-from-sh4bn-climate-
	smart-agriculture-project/
	• 5 th May: Citizen digital - <u>https://citizentv.co.ke/news/kenyan-farmers-urged-to-embrace-climate-smart-agriculture-</u>
	<u>243991/</u>
	• 7 th May: Citizen TV - Kenyan farmers urged to embrace climate smart agriculture <u>https://citizentv.co.ke/news/kenyan-</u>
	tarmers-urged-to-embrace-climate-smart-agriculture-243991/
	• 9" May: Daily Nation - Scale up climate-smart farming for food security, higher incomes
	nttps://www.nation.co.ke/oped/opinion/Scale-up-climate-smart-tarming-tor-tood-security/440808-5106320-
	<u>yruauu/index.ntmi</u>
	• To May. The Star - why some famers enjoy harvest in doubtful climate <u>https://www.the-</u>
	 <u>Stat.co.ke/business/kenya/2019-03-10-winy-some-raimers-enjoy-naivest-in-doublidi-climate/</u> 11th May: Daily Nation Seeds of Gold: - Smart agriculture key to fighting climate change effects
	 The may barry harden been of bold Small agriculture key to righting climate charge enects https://www.nation.co.ke/business/seedsofaold/Smart-agriculture-key-to-fighting-climate-change-effects/2301238-
	5109408-tas9aa/
	 13th May: Pan African Media Alliance for Climate Change - Climate smart agripreneurs in East African to benefit from
	\$43 Million Dutch Funding https://www.pamacc.org/index.php/k2-listing/item/1077-climate-smart-agripreneurs-in-
	east-african-to-benefit-from-43-million-dutch-funding
	 3rd May: KTN News Jukwaa la KTN – studio interview with Dr John Recha CCAFS https://youtu.be/MgNQn41pyHs
	Feedback on studio interview https://youtu.be/bGOmGaq2CII
	 6th May: K24TV – <u>https://www.youtube.com/watch?v=wt8Wf2azpXY&feature=youtu.be</u>
Uganda	Climate risk assessment
-	• 2 nd May: Daily Monitor – Scientists predict hotter Uganda https://www.monitor.co.ug/News/National/Scientists-
	predict-hotter-Uganda/688334-5096168-52r328/index.html
	July SNV: First series of climate risk assessment reports CRAFT project published https://snv.org/update/first-
	series-climate-risk-assessment-reports-craft-project-published
	 17th July: The Independent - CLIMATE CHANGE: East Africa faces 2°C rise in temperature
	https://www.independent.co.ug/climate-change-east-africa-faces-2c-rise-in-temperature/
	 <u>https://ccafs.cgiar.org/news/media-centre/in-the-news/climate-change-east-africa-faces-2°c-rise-temperature-</u>
	independent
	Financial institutions urged to go green during climate seminar in Uganda
	November SNV website: <u>https://snv.org/update/financial-institutions-urged-go-green-during-climate-seminar-uganda</u>
	• 29" October The Independent Online: <u>https://www.independent.co.ug/uganda-hosts-first-craft-climate-seminar-for-</u>
	Inancial-Institutions-and-service-providers/
	<u>Intps://ccais.cgiar.org/news/media-centre/in-the-news/ugarida-nosis-inst-crait-ciimate-seminar-imancial-institutions-</u> and
	anu a 24 th October LIBC TV: https://youtu.be/k.12.lcDa.t7V
	SNV/CRAFT launches FOI for co-investment under the Climate Smart Agriculture Fast Africa project
	Eabruary SNV Website: https://snv.org/undate/snv-launches-expression_interest-co-investment-under-climate-smart-
	agriculture past africa
	<u>สนานแนเย-ยสรเ-สิกินัส</u>
Othor	A 'spotlight' providing highlights of the CPA workshop in Tanzania in the Dutch newspaper. Velkskreat
Culler	A sponger providing ingringers of the GRA workshop in Tanzania in the Dutch newspaper - volkskrant • Sentember 2019 WHR- ELI Spotlight (Volkskrant): https://weblog.wur.eu/costight/working.op.climate.regilient
sources	- September 2019 WOR- ED Sponight (Volkskrand). https://weblog.wur.eu/sponigh/working-on-chinate-resilient-
L	agnovitoro in cast antoa

Publicati	ons: Climate Risk Assessment Pagers
Kenya	Green grams
	SNV website: <u>https://snv.org/cms/sites/default/files/explore/download/kenya_green_gram_and_climate_risks.pdf</u>
	CCAFS website: https://ccafs.cgiar.org/publications/green-grams-kenya-climate-change-risks-and-opportunities Poteto
	SNV website https://snv.org/cms/sites/default/files/explore/download/kenva_potato_and_climate_risks.pdf
	CCAFS website: https://ccafs.cgiar.org/publications/potato-kenya-climate-change-risks-and-opportunities
	Common beans
	SNV website: https://snv.org/cms/sites/default/files/explore/download/kenya-common-beans-and-climate-
	risks_final.pdf
	CCAFS website: https://ccafs.cgiar.org/publications/common-beans-kenya-climate-risk-assessment
	SNV website: https://spy.org/cms/sites/default/files/explore/download/kenva-sorghum-and-climate-risks_final.pdf
	CCAFS website: https://ccafs.cgiar.org/publications/sorghum-kenya-climate-risk-assessment
	······································
Tanzania	Sunflower
	SNV website: <u>https://snv.org/cms/sites/default/files/explore/download/tanzania_sunflower_and_climate_risks.pdf</u>
	CCAFS website: https://ccafs.cgiar.org/publications/sunflower-tanzania-climate-change-risks-and-opportunities
	Common beans
	 SNV website. https://snv.org/cms/sites/default/files/explore/download/tanzania_common_beans_and_climate_risks.pdf
	CCAFS website: https://ccafs.cgiar.org/publications/common-beans-tanzania-climate-change-risks-and-opportunities
	Potato
	SNV website: https://snv.org/cms/sites/default/files/explore/download/tanzania-potato-and-climate-risks_final.pdf
	CCAFS website: https://ccafs.cgiar.org/publications/potatoes-tanzania-climate-risk-assessment
	Sorghum
	SNV website: https://snv.org/cms/sites/default/files/explore/download/tanzania-sorgnum-and-climate-risks_final.pdf
Uganda	Sesame
Uganda	• SNV website: https://snv.org/cms/sites/default/files/explore/download/uganda_sesame_and_climate_risks.pdf
	CCAFS website: https://ccafs.cgiar.org/publications/sesame-uganda-climate-change-risks-and-opportunities
	Soy beans
	• SNV website: https://snv.org/cms/sites/default/files/explore/download/uganda_soybean_and_climate_risks.pdf
	CCAFS website: https://ccais.cgiar.org/publications/soybean-uganda-climate-cnange-risks-and-opportunities Potato
	SNV website: https://spy.org/cms/sites/default/files/explore/download/uganda-potatoes-and-climate_risks_final.pdf
	CCAFS website: https://ccafs.cgiar.org/publications/potatoes-uganda-climate-risk-assessment
	Sunflower
	SNV website: <u>https://snv.org/cms/sites/default/files/explore/download/uganda-sunflower-and-climate_risks_final.pdf</u>
	 CCAFS website: https://ccafs.cgiar.org/publications/sunflower-uganda-climate-risk-assessment
Seening	
Scoping	Studies
	 CCAFS website: Scoping study brief - Potential for adaptation and mitigation:
	https://ccafs.cgiar.org/publications/scoping-study-brief-potential-adaptation-and-mitigation
	 CCAFS website: Scoping study brief – State of climate information services in East Africa:
	https://ccafs.cgiar.org/publications/scoping-study-brief-%E2%80%93-state-climate-information-services-east-africa
	CCAFS website: Scoping study brief - State of index-based crop insurance services in East Africa:
	https://ccafs.cgiar.org/publications/scoping-study-brief-state-index-based-crop-insurance-services-east-africa
Info Noto	
	December 2040 COAFe Websites late Note: Outputs is bening to configurate the second state of the second st
	December 2019 CCAFs Website: Into Note: Systemic barriers to scaling private-sector driven climate-smart
	agricultural innovations in East Africa's potato, sesame and common bean value chains
	https://hdl.handle.net/10568/106887
CSA – CI	imate & Business Video & Info Graphic
	SNV website: Climate & business video: https://snv.org/sector/agriculture/product/climate-business-cb
	• SNV website: CSA infographic:
	https://opu.org/opa/doison/doiso
	nups.//snv.org/cms/sites/derauit/nies/explore/download/cbintographictinal_0.pdt
Cooperat	ive Assessments (available on SNV SharePoint)
Agriterra	Agriterra - Kenya_Kibwezi East Cooperative Assessment_March 2019:
Kenva	https://snyworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Proor
Nenya	ess%20tracking%20data/Agriterra%202019%20Documents/Kenva/Assessments/56027%20Cooperative%20Assess
	$\frac{1}{200}$
	IIIEIII /0201XIDWEZI /020Ea5i /0200000 /02050001e1y/%20(1).pui

	•	Agriterra -Kenya_Tharaka Nithi Cooperative Assessment for Mung beans_July 2019:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
		ess%20tracking%20data/Agriterra%202019%20Documents/Kenya/Assessments/56294%20B2O%20report%20Coop
		erative%20Assessment%20for%20Mung%20beans%20Union Kenya%20(1).pdf
	•	Agriterra - Kenya_KCSEED Cooperative Assessment_2019:
		https://snvworld.sharepoint.com/:w:/r/sites/projects/PRM00004916/_layouts/15/Doc.aspx?sourcedoc=%7B9DF37AD0
		-116A-4C66-982B-
		7A1E75383CEF%7D&file=Cooperative%20Assessment%20KCSEED%20Report.docx&action=default&mobileredirect
		=true
	•	Agriterra -Kenya_Starlight Seed Potato Cooperative Assessment_2019:
		https://snvworld.sharepoint.com/:w:/r/sites/projects/PRM00004916/_layouts/15/Doc.aspx?sourcedoc=%7B7B7C8B88-
		BA2A-4CB3-A1D1-
		6616614C3659%7D&file=Cooperative%20Assessment%20Starlight%20Report.docx&action=default&mobileredirect=tintervalues and the set of the set o
		rue
Tanzania		
	•	Agriterra – Tanzania_ MBULU, Upendo, King'ori Saccos Cooperative Assessment_Nov 2019:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
		ess%20tracking%20data/Agriterra%202019%20Documents/Tanzania/Assessments/56386%20MBULU%20Women%
		20Saccos,%20Upendo%20Murray%20Saccos,%20King%E2%80%99ori%20Saccos.pdf
	•	Agriterra - Tanzania_Tanganyika& Mishamo Cooperative Assessment CSA_June 2019:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
		ess%20tracking%20data/Agriterra%202019%20Documents/Tanzania/Assessments/56069%20Cooperative%20Asse
		ssment%20CSA%20-%20Tanganyika%20and%20Mishamo%20AMCOS%20(2).pdf
	•	Agriterra - Tanzania_Cooperative Assessment Mwamko Amscos Ltd_May 2019:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
		ess%20tracking%20data/Agriterra%202019%20Documents/Tanzania/Assessments/56073%20Cooperative%20Asse
		ssment%20Mwamko%20Amscos%20Ltd.pdf
	•	Agriterra-Tanzania_Uso Mama, HomariAmcos, ChaunaAmcos Cooperative Assessment_Nov 2019:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
		ess%20tracking%20data/Agriterra%202019%20Documents/Tanzania/Assessments/56387%20Cooperative%20Asse
		ssment%20Uso%20Mama%20SACCOS,%20HomariAmcos,%20ChaunaAmcos.pdf
Uganda		
	•	Agriterra- Uganda_Panyimur Cooperative Assessment_Dec 2019:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJEC1%20IMPLEMENTATION/Reports/Progr
		ess%20tracking%20data/Agriterra%202019%20Documents/Uganda/Assessments/56507%20Cooperative%20Assess
		ment%20Panyimur%20Dei%20Cooperative%20Society%20Limited.docx.pdf
	•	Agriterra- Uganda_Nyekorach Cooperative Assessment_ July 2019:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
		ess%20tracking%20data/Agriterra%202019%20Documents/Uganda/Assessments/56084%20Cooperative%20Assess
		ment%20NRCFCS.pdf
	•	Agriterra - Uganda_Alito Cooperative Society Ltd Cooperative Assessment_ June 2019:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
		$\underline{ess\%20} tracking\%20 data/Agriterra\%202019\%20 Documents/Uganda/Assessments/56206\%20 Cooperative\%20 Assessments/S6206\%20 Assessments/S6206\%200 Assessments/S6206\%20 Assessments/S620\%20 Assessments/S620\%200 Assessments/S620\%200 Assessments/S620\%2000 Assessments/S620\%200 Assessments/S620\%2000 Assessments/S620\%2000000Assessments/S620\%2000Assessments/S620\%200Assessments/S620\%200$
		ment%20Alito%20Joint%20Farmer%E2%80%99s%20Multi-Purpose%20Cooperative%20Society%20Limited.pdf
	•	Agriterra - Uganda_Wadelai Cooperative Assessment:
		https://snvworld.sharepoint.com/sites/projects/PRM00004916/_layouts/15/Doc.aspx?sourcedoc=%7BEA0F68B0-
		<u>1FEC-43EC-94C4-</u>
		DBD5F4B61322%7D&file=CA%20Report%20incl.%20Annex%201%20Wadelai%20Packwinyo%20ACE.docx&action
		=default&mobileredirect=true&CT=1590494946614&OR=DocLibClassicUI
Cooperat	iv	e Scoping (available on SNV SharePoint)
Agriterra	•	Agriterra- Tanzania_Ibumila Cooperative Scoping_Jan 2019:
Tanzania	1	https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
	1	ess%20 tracking%20 data/Agriterra%202019%20 Documents/Tanzania/Scopings/55955%20 Cooperative%20 Scoping%20 data/Agriterra%202019%20 Documents/Tanzania/Scopings/55955%20 Cooperative%20 Scoping%20 data/Agriterra%202019%20 Documents/Tanzania/Scopings/55955%20 Documents/Tanzania/Scopings/5595%20 Documents/Tanzania/Sco
	1	20Ibumila.pdf
1	1	

	Agriterra- Tanzania_Lusitu Cooperative Scoping_Jan 2019:
	https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
	ess%20tracking%20data/Agriterra%202019%20Documents/Tanzania/Scopings/55956%20Cooperative%20Scoping%
	20Lusitu.pdf
	 Agriterra -Tanzania_Isowelo Cooperative Scoping_Jan 2019:
	https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
	ess%20tracking%20data/Agriterra%202019%20Documents/Tanzania/Scopings/55957%20Cooperative%20Scoping%
	20Isowelo.pdf
	 Agriterra -Tanzania_Cooperative Scooping Potential Sorghum Business Champion_Nov 2019:
	https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
	ess%20tracking%20data/Agriterra%202019%20Documents/Tanzania/Scopings/56412%20Cooperative%20Scooping
	%20Potential%20Sorghum%20Business%20Champion.pdf
	 Agriterra -Tanzania_Cooperative Scoping potential CRAFT Clients_Nov2019:
	https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
	ess%20tracking%20data/Agriterra%202019%20Documents/Tanzania/Scopings/56413%20Cooperative%20Scoping%
Uganda	20potential%20CRAFT%20Clients.pdf
ogunuu	
	 Alito Cooperative Assessment - Agriterra-Uganda_Acwec Omio Cooperative Scoping_Oct 2019:
	https://snvworld.sharepoint.com/sites/projects/PRM00004916/Work/PROJECT%20IMPLEMENTATION/Reports/Progr
	ess%20tracking%20data/Agriterra%202019%20Documents/Uganda/Scopings/56353%20Cooperative%20Scoping%2
	0Acwec%20Omio%20Cooperative%20Society%20Ltd.pdf
	 Agriterra - Uganda_Aluga Cooperative Scoping_Oct 2019:
	https://snvworld.sharepoint.com/:w:/r/sites/projects/PRM00004916/_layouts/15/Doc.aspx?sourcedoc=%7B9AB3952D-
	326E-480F-AAF4-FB624C00D8C4%7D&file=Aluga%20Co-op.docx&action=default&mobileredirect=true





Annex III Gender and Youth Mapping & Analysis

The following summary overview presents the conclusions per business case from the gender and youth mapping and analysis conducted during 2019.

JAKMA - Tanzania, Sunflower

- There is high demand for sunflower oil as well as potential for livelihood diversification with apiculture.
- There are also limitations, such as low productivity due to climate change, long processes to register AMCOS, inadequate and untimely supply of seed and high transport costs.
- The business case is men-dominated, as ownership and job opportunities are mostly filled by men.
- Efforts are being made to include (more) women in the business case, by establishing women only groups.
- The biggest opportunity for making the business case more inclusive of women and youth would be to professionalise the production node and ensuring women, men and youth can equally benefit from opportunities and services.

Kaderes - Tanzania, Common beans

- Currently there is a high demand for grain, facilitated by good road infrastructure to access markets.
- In general, there is high cost of land for expansion, coupled with high bureaucracy and long processes which make it difficult for farmers to expand production.
- In addition to land titling issues, cultural constraints limit women's participation in business as owners.
- At the business case level, approx. 40% of positions are filled by women. Deliberate efforts should be made to bring in women and youth as members and leaders. AMCOS are still predominantly male-dominated.
- At services level, approx. a third of positions are filled by women. This likely leads to low participation of women in up-take of services (also 30%). When services become more gender-responsive (with more women providing services) it is expected that women would also take up more services, such as training and extension.

NCS - Tanzania, Common beans

- There are high supplies of grain, as well as good infrastructure, making markets accessible. However, limitations exist in the form of lack of CSA and bean extension, high cost of seed and lack of formal business association for agro-input dealers.
- Overall, women are engaging as owners and employees at the various nodes of the common beans value chain.
- Youth are often excluded from the value chain, specific action is needed to include them.
- The gender gap in access to services is in relation to the credit, the limited credit that is available goes to men.
- Opportunity to make new services in the value chain inclusive to women, men and youth, such as irrigation, weather information and soil testing.

Three Sisters - Tanzania Sunflower

- High demand for sunflower, but significant constraints in the (timely) supply of seeds, high seed costs, slow service delivery and low productivity.
- Aggregate employment and ownership of businesses in the Three Sisters business case is 36% women.
- Women feature in the production mode, but are underrepresented in other parts of the value chain and the business case.
- Women attend extension services, but may lack incentives to apply what they've learned if they don't have sufficient decision-making power over the use of the land.
- Youth are largely excluded from the business case and the value chain this also applies to accessing services, finance and training.
- Norms, values and mind sets around the position of women and youth inhibit the realisation of their full potential.

ACILA - Uganda, Soybeans

- High demand for grain for oil-processing, but many constraints when it comes to qualification of agro dealers, recognition by MAAIF and control over resources such as land (especially for women and youth).
- Most farmers are men, but about a third are women and a third youth. However, women and youth might be more involved in farming activities, but invisible as family labour rather than registered farmers.

- At the input node, women only take up 17% of positions. With expansion to new districts, new opportunities open up where deliberate space for women and youth should be created.
- Women are predominantly present in low-income jobs, with services dominated by men. Action is needed to provide more equitable opportunity for women and youth in services.

Masindi Seed Company - Uganda, Soybeans

- There is a high demand for soybeans, but there are several limiting factors in the overall environment, such as limited demand for improved seeds, poor road infrastructure and a poor regulatory environment leading to low quality seed influx in the market.
- There is a clear gendered division of labour with casual workforce: women predominantly involved in seed sorting and men in loading and offloading.
- Women are involved at all stages of the production, but this is still male dominated.
- For greater inclusiveness, more attention should be paid to the position and participation of youth.

Equator Seeds Ltd - Uganda, Sesame

- There is a high demand for sesame in the domestic and export and a growing demand from farmers for improved seeds and other inputs.
- However, current sesame production is low due to climate change effects and limited access to improved seeds.
- Women are involved in sesame production and make up about 30-40% of buyers.
- Women are involved in training and services as community-based facilitators as well as soil testers although not currently included in the business case.
- Opportunities for women and youth to become more involved in the sesame value chain (in value addition) are in services with potential to scale: finance, spray services and mechanisation.
- Overall service delivery in the business case needs to be broadened and more inclusive (women and youth).

Nyekorach Cooperative Society - Uganda, Sesame

- There is high demand for sesame, as well as land and labour available.
- There are significant barriers in terms of getting a licence from MAAIF, tax assessments and tax payments. Moreover, there is limited access to finance.
- The business case is significantly women-dominated at the aggregate level. Most of the women are however concentrated around the production node.
- Ownership and service provision is largely men-dominated.
- Women also largely access services, such as extension. There is a risk that men feel left out due to a prolonged NGO focus on women.
- For inclusiveness, youth should be actively targeted as they are now largely absent from the business case.

IMCOS - Kenya, Green Grams

- Despite a high demand for green grams, the enabling environment has many limitations, such as high price fluctuations, low productivity due to climate change, and limited access to expertise and investment capital.
- There is equity in the business case with regards to business ownership across the production, aggregation and services nodes. Services are predominantly accessed by women.
- Women fear credit, which limits their ability to grow their farm as a business
- Youth are largely underrepresented in the value chain.

Annex IV 2019 Business Case Pipeline Summary Overivew

The following table provides an overview of the private sector partners the CRAFT project committed to by signing letters of intent to engage in the business case co-creation process. While some of these were already approved for award in 2019, others follow in 2020 and will be implemented in 2020 accordingly.

These particular results relate to indicator 24, as highlighted below:

Sub-IR 2.1.3 – Finance providers and SMEs willing to invest in bankable climate smart business plans				
Performance indicator	Targets for 2019	Achieved 2019		
Ind. 24 – Number of private sector partners (SMEs, finance providers, others)	Ke-6; Tz-5; Ug-4;	Ke-5; Tz- 9; Ug-9;		
that have signed a letter of intent on co-funding of business case activities to be	Total-15	Total- 24		
developed under the project.				

Business	Value	Target #	Business Model	CSA Interventions
Champion	Chain	farmers		
Kenya	T	1		
Imcos	Green Grams	750	Integrated approach; land preparation, input supplies, extension, threshing, post-harvest management and market linkage; creating a workable market- based solution eliminating unnecessary middlemen reducing costs and hence better margins.	Promotes drought tolerant seed varieties; ripping and providing agronomy services aiming at embedding climate smart technologies. The business case is embedding climate smart agricultural practices for increased productivity per unit area cultivated.
Sorghum Pioneer Agencies Ltd	Sorghum	15,000	Inclusive business approach where 4,929 smallholder farmers have been contracted benefiting with access to certified clean seeds, certified fertilizers, input credit, extension support, mechanization, trainings and linkage to market for sorghum and other dry pulses.	Improve land preparation ripping (company has a ripper) - better in maintaining soil structure. Provides a planter that optimises time and planting precision that avoids wastage. Supplies drought tolerant seeds and through extension team promotes use of integrated pest management.
Farmers Pride Africa	Service Provider	20,000	Franchise Digi-Shop model; Links local agro-dealers to reputable manufacturing companies providing access to quality inputs, information and technology; offering information (weather, financial and insurance services), inputs and extension Services	Facilitate training on climate smart farming and access to climate information, inputs insurance and soil testing services. Focus on last mile distribution of climate information, certified drought tolerant seeds, grain storage bags bundled with improved production technologies and practices trainings to enhance CS farming adoption
Molly Flowers	Potato	4,000	Farm-to-Shelf model integrated supply chain sourcing directly from small- holder farmers and distributes through established grocery markets/ supermarkets enhancing markets backward linkages	Provision of drought tolerant certified seeds, promotes mulching, intercropping with leguminous cover crops, crop rotation, crop diversification, residue management and integrated pest management; reducing application of Pesticides and fungicides; Organic inputs – Compost, manure, slurry; Soil enhancers/ boosters
Sereni Fries	Potato	2,500	Integration of smallholders into markets with provision of market backward support services; facilitating supply of quality seeds, facilitating extension, installed cold storage for farmers and assured market.	In partnership with service providers trains farmers on GAP and climate smart practices in potato production; links farmers to sources of clean certified seeds, quality Agro-inputs and mechanization services

Tanzania				
KPD PLC (Kaderes)	Common beans	10,000	Purchase beans directly from cooperatives, targeting pre-cooked beans market and regional export markets	CS Extension services, warehouse receipt system, marketing, and dissemination of CS inputs, introduction of climate resilient bean varieties, reduce post-harvest losses through introduction of tarpaulins and moisture meters
Union Services Stores Company	Common beans	10,000	Polishing of common beans, buy directly from cooperatives and farmer groups	Provision of extension services to farmers, improve collection centers and stringent quality checks, dissemination of improved seeds, reduce post-harvest losses through introduction of tarpaulins and moisture meters
Nguvumali Amcos	Common beans	3,000	Purchase beans from members, grade and clean, off season production using irrigation	Increase productivity, strengthen irrigation for off season production, introduction of improved common beans varieties, improve access to weather information, pre financing agro inputs
Mwenge sunflower oil mills company Ltd	Sunflower	7,000	Sunflower processing using a double refinery press	Increase productivity, improve access to improved seeds (OPVs and hybrids), increased processing efficiency, lower power usage because of improved machinery, dissemination of weather information
Jackma Enterprises	Sunflower	6,000	Sunflower processing and packaging	CSA training and extension service, aggregation of sunflower seeds, milling and marketing of oil to outlets. Introduction of improved OPVs. Introduction of NIRS to measure sunflower oil content to pay farmers based on oil content and quality
Three sisters oil mill Ltd	Sunflower	3,000	Sunflower processing and packaging	CSA extension service to farmers, provide post-harvest handling services to farmers in the form of tarpaulins and moisture meters
Nondo invetment	Sunflower	5,000	Sunflower processing and packaging	Dissemination of improved seeds to farmers, CSA training and extension service, aggregation of seeds, improved post-harvest handling (tarpaulins and moisture meters), dissemination of weather information. Introduction of NIRS to measure sunflower oil content to pay farmers based on oil content and quality
Rogimwa Agro Company Limited	Common beans	6,000	Commons beans aggregation, supply of agro inputs to outgrowers	CSA dissemination of technologies like improved seeds, fertilizer, extension service, through a farmer field schools approach, improve quality by introduction of solar dryers at various collection centres. Dissemination of weather information, streamlining the supply chain by using an online data management platform (eProd)
Vibinjo Farming Coop Society Ltd	Common beans	1,500	Buy from members and supply institutional buyers and seed companies	CSA extension services and dissemination of improved seeds and agro inputs. Introduce off season production using irrigation
Uganda				
Equator Seeds	Sesame	30,000 farmers	Works with 3,000 seed producers to multiply seed. Through agro-dealer network, make seed accessible to 30,000 grain producers	Extend seed loans to contracted seed producers to multiply seed, establish demonstration gardens, training farmers and agro dealers in CSA
Acila Enterprises	Soybean	5,000 farmers	Work through a village agent model to source grain from smallholder farmers. Aggregate soybean and supply Mukwano Industries	Promote use of high yielding, early maturing soybean varieties, early planting, crop rotation, provide CSA extension services, post-harvest management

RECO Industries	Soybean	10,000 farmers	RECO buys soybean from farmer groups through off-take agreement's and distributes inputs to farmers	Engage in CSA extension services, investments in mobile testing kits, provision of tarpaulins, facilitate access to improved seed, access to finance for smallholder farmers
Masindi Seed	Soybean	6,000 farmers	Masindi seed produces seed through an out-grower scheme and distributes or markets seeds to farmers	Multiplication of early maturing & drought tolerant soybean seeds. Dissemination of seed information, CSA extension services, establish demonstration gardens, introduce soil testing
Alito Joint Cooperative	Soybean	5,500 farmers	Multiply seed, buy back seed and sell to members at an affordable price to produce grain. The cooperative will aggregate grain and sell to buyers	Seed multiplication of early maturing sesame seeds. Promote use of ox-drawn and tractor tillage services. Provide weather alerts and weather index through ICT. Storage and post-harvest handling. Establish demo gardens, introduce soil testing initiatives. Guaranteeing market for sesame growers
Nyekorac Cooperative	Sesame	3,100 farmers	The cooperative multiplies seed through selected farmers, buy back seed from seed producers and supply seed at affordable prices to the membership	Multiply sesame 1&2 seeds (early maturing and drought tolerant seed), climate smart extension services, collaboration with stakeholder's e.g. research, off-takers etc., and solar irrigation in seed production, facilitate access to climate finance.
TRAFORD	Soybean	5,000 farmers	Provide improved seed (Maksoy 3N) to farmers, guarantee market for farmers produce through offtake agreements.	Engage in CSA extension services, facilitate access to improved seed, and fertilizer for smallholder farmers
Okeba	Soybean	8,000 farmers	Providing farmers with quality farm inputs, and linking them to the market though contract farming.	Training SHF's in CSA practices and technologies, access to climate resilient agriculture inputs and promoting technologies that increase adaptability such as weather index insurance
SESACO	Soybean	10,000 farmers	Sign MOUs with farmers groups and supply them with improved soybean seed. SESACO buys back the grain from farmers.	Building capacity of farmers, access to drought tolerant soybean varieties, promote use of post-harvest handling facilities, acquiring efficient energy roasters and grain grading equipment

Annex V Business Case Snapshots – Business Cases Approved for Award in 2019

Igambangombe Multipurpose	Cooperative Society - IMCOS Ltd
Country	Kenya
Sector/ Value chain	Green Grams
Implementation time frame	2020-2021
Organization Description	IMCOS is a Member Based Organization whose primary objective is to promote the economic interests of its members in accordance with co-operative principles. IMCOS has established three main lines of business i.e. savings and credit line, Inputs merchandise, bulking and Marketing of the grains. Since the Cooperative is predominantly owned by farmers, a large percentage of their loans focus on agriculture production, even though they do also offer education loans.
Value Proposition	IMCOS is positioning itself to be a one-stop-shop for farmers in cereal and pulse farming by providing access to Climate Smart Agriculture (CSA) services and products e.g. certified high yielding and drought tolerant seeds and other inputs, aggregation or bulking, minor processing (e.g. threshing) inputs and production financing, mechanized land opening through ripping, capacity building and marketing of green grams and other cereals. The primary goal for IMCOS is to provide quality and affordable services to the members and link the predominant small holder farmers to formal markets.
Key interventions (activities, targets and expected results)	 Increased green gram productivity by reducing the risk of crop failure through adoption of CSA practices and technologies, i.e. crop rotation, minimum tillage, certified seeds, etc. Training and installing 15 ToTs supported by 30 lead farmers for sustained access to information and adoption of CSA practises and technologies for 700 farmers; Lock up supply contracts with key reputable suppliers for long term business relations; Capwell, Spiceworld, Mahindra, Kings and World Food Program; Increase the grain intake from the current volume of 66 tons (in 2018) to 250 tons and a total of 700 members in two years; Installing an accredited food / grain storage facility; equipment racks, pallets, tarpaulins Warehouse certification and installation of warehouse management systems (standard operating practises, warehouse receipts system etc.) Procuring and installing the following machine for enhanced produce quality; Moisture Meter, Digital Weighing Scales, Hermitic Bags, Screens / sieves and automated Threshers Avail weather and climate information to farmers to aid in production decision making. Targets: Benefit 700 smallholder farmers from Tharaka South Sub-County, 420 being women and 380 men; at least 350 of them being youth Benefit 350 youth. This will be made possible through the support to extension (climate smart agriculture practices), aggregation and post-harvest handling Increase the cooperatives active members to 425; currently the number of the active members is 150 involved in climate smart cultivation of green grams. Total number of hectares of farmland reached by the project; 1625 Ha 283 Ha with agroecosystems that are more resilient to possible stresses and/or shocks 20 % increase in vield for selected crops due to application of CSA practices and techonologies
Inclusive business	IMCOS delivers a complete functional market based solution right from input supplies to market linkage. IMCOS business model can see a farmer through land preparation, input supplies, extension, and threshing, post-harvest management and market linkage. It creates a workable market based solution eliminating as many middle-men / brokers which helps to optimize the performance and efficiency of the green gram business with resultant reduced costs and hence better margins. IMCOS as a cooperative, formed and owned, by the smallholder farmers thus has high latency to contribute to poverty reduction and wealth creation as it serves and effectively positions the smallholder farmer members at a vantage point in the value chain.
Climate smartness	Promoting DTC variety, ripping and providing agronomy services aiming at embedding climate smart technologies. The business case is embedding climate smart agricultural practices for increased productivity per unit area cultivated.
Scalability	IMCOS is a Cooperative in the grain trade business providing a market based solutions for the sustainable provision of support services that contribute commercial, social and environmental outcomes for smallholder farmers who include women and the youth. Thus shall contribute to more farmers accessing intensive agribusiness support right from land preparation to market linkage an essential foundation for successful scaling and significantly improving food security, productivity and increased income.

Smallholder farmers	IMCOS is a cooperative Society Ltd constituted of rural small holder farmers – all the members of IMCOS are small holder farmers	
Target market and marketing plan	IMCOS is selling green grams to brokers / traders and supermarkets with whom IMCOS has an existing relationship in addition to seizing the institutional markets; learning institutions (high schools and tertiary institutions), and targeting to lock-in large buyers / processors namely Capwell Industries, SpiceWorld, Mahindra and the World Food Programme . IMCOS will use her local presence & connectivity improved productivity & quality, the aggregation infrastructure and improved certified storage to provide a one stop shop for high volumes of quality green gram grains. IMCOS has not done a comprehensive market analysis but have attempted a customer rapid analysis which has assisted in identifying the potential customers and aided in the segmentation targeting and positioning processes they have done. IMCOS has deliberately provided for marketing budget that is intended to penetrate markets through cold calls and personal selling to build up the customer base while at the same time ensuring that there is sustained interaction with the markets and more so the customers	
Other partners	Agro-input suppliers; Greenlife Agro-input suppliers; Greenlife Agrovet. SPA, OSho, Bayer crop science, Twiga chemicals, Syngenta Mechanization services providers; Agrimech, SPA, Private SPs Equipment suppliers; Brazafric, John deere, Ndume, NewHoland, Hekima Haldings Packaging suppliers; AgroZ, PIC, Elite, Agrodealers Financial partners; AFC, Agriwallet, Equity, Siraji, Solutions Sacco, Juhudi Kilimo, AFC Development services	Roles Provide certified seeds, herbicides, pesticides, bags at favo prices to IMCOS for onward reselling to IMCOS members. current partners for herbicides and pesticides Provide ripping, planting, threshing, harvesting services to IM members. Provide and service processing equipment for IMCOS Supply of packing materials for smallholder farmers and IMC(e.g. hermetic bags Provide affordable and relevant funding for IMCOS to meet c requirements and working capital (AFC to IMCOS and AgriWal SHF's) Provide insurance cover against crop failure for smallholder farm Acre Africa)
	Development partners e.g. KCSAP, KCEP ,FAO, WFP, World Vision, CGA, EAGC etc. County Government	Provide technical assistance, linkages to markets and networks, capacity building, access to finance Provide technical assistance, linkages to markets and other rele networks, capacity building, and advocating for favorable ena environment
	Business development providers	Provide technical assistance and advisory services
Co-investment	Total budget: \in 127,220Own contribution: \in 68,699Third Party: \in 22,727CRAFT: \in 58,521	

JACKMA ENTERPRISES COMPANY LTD		
Country	Tanzania	
Sector/ Value chain	Sunflower oil processing	
Implementation time frame	Oct 2019 – Sep 2021	
Organization Description	JACKMA Enterprise Co. Ltd was established in the year 2009 and has since grown to become one of the leading edible oil seed processing companies in the central corridor (Dodoma) Tanzania, having invested close to USD 300,000 over the last decade in machinery and warehousing. JACKMA Enterprise factory and offices are situated in Dodoma and Mr. Jackson Massawe, the Managing Director, runs the enterprise.	
Value Proposition	 The proposition that JACKMA Enterprises Company Ltd. offers to the smallholder farmers consists of: Offer smallholder farmers improved high yielding, drought tolerant sunflower varieties that are best for the market, Training in climate resilient good agronomic practices and contract farming agreements aimed at guaranteeing the smallholder farmers a premium price for all the high-quality sunflower produce that they supply. A new form of procurement of seeds with "a premium" for "oil content". This will be made possible through the introduction of NIRS technology (spectrometers-machines than can measure the oil content and moisture of sunflower seeds in few seconds and with high degree of accuracy). The premium price will come from the compensation of the high margin on the double refined oil from the high-end markets (supermarkets and cross borders) whereby the company has opted to split payments. The first pricing will be as indicated in the contract based on the existing market price and the second pricing will be a calculated on the percentage of the premium payment received by the company. 	
Key interventions (activities, targets and expected results)	 The following are the key interventions that JACKMA Enterprises Company Ltd. will undertake: Conduct training to smallholder sunflower farmers on good agronomical practices to ensure optimum delivery of high-quality sunflower seeds. Farmers will be exposed to the new drought tolerant OPV record which is better suited to combat changed rainfall patterns. In addition, farmers will learn improved production practices which will boost yields and improve land use efficiency. Set out FFS and demo plots that explicitly exhibit performance of existing but improved and newly introduced seed varieties. Raise awareness on sound post–harvest handling management practices. Improved post-harvest technologies will reduce losses and adhering to quality standards as set by the company will reduce rejected raw materials. The above will lead to strengthen the linkage between 6,000 sunflower smallholder farmers and the company and make the supply chain more resilient to climate shocks. In addition, the productivity of sunflower smallholder farmers will increase by at least 50%, by 2021 and the production efficiency of the company will increase from the current 40% to 70% by 2021. 	
Inclusive business	SHFs will receive various type of support, access to improved seeds, CS GAP and premium prices. Contracts will be signed with farmers which sets out the minimum price with a clause to increase prices if prices in the market have changed. The company is guaranteeing a minimum floor price.	
Climate smartness	 SHFs receive CS GAP training by the extension workers of the company, local government extension workers and lead farmers. The company pre-finances partly the improved climate resilient variety, at the end of the season the costs will be deducted from the crushing materials supplied. Boost productivity of the sunflower yield. Reward farmers for improved varieties grown hence providing an incentive to shift to drought tolerant varieties. 	
Scalability	The use of the NIRS equipment to determine the oil content and base the price upon the oil percentage provides incentives to farmers to improve the quality of the varieties they grow. This system is fairer than the weight-based system which does not reward quality. If proven to be successful, the system can be adopted by other sunflower processing companies in Tanzania.	
Smallholder farmers	Recruits (sensitize, mobilize and enrol) an additional 3,500 smallholder sunflower farmers through formal contract signing with the company. The total number of farmers will increase from the current 2,500 to 6,000 by 2021 (30% farmers will be women and 25% of the farmers will be youth). These farmers are located in 16 villages of BAHI District.	

Target market and marketing plan	The company enjoys a strong position in the regional market with the brand <i>Makao Makuu</i> , which is well recognized for its quality by distributors and consumers. The strength of the <i>Makao Makuu</i> brand allows JACKMA to have a price positioning in the market similar to those of leading brands in Tanzania (Mount Meru), and on average receives a 25% premium vs. smaller local brands sold in less attractive packaging.	
	• Agro input suppliers: These actors will play the critical role of supplying the drought tolerant	
Other partners	 Agro input suppliers: These actors will play the critical role of supplying the drought tolerant improved seeds, chemicals and fertilisers to the smallholder farmers. The agro input dealers will work in partnership with ASA to ensure that the agro inputs supplied to smallholder farmers are certified. Agriculture Seed Agency (ASA): ASA continues to provide sunflower production research in a bid to introduce new and improved varieties on the market. The knowledge shared by ASA will play a key role in informing the set up and design of our demo farms and farm field schools. ASA will be able to provide new varieties which can be tested in the FFS demonstration gardens to observe the varieties under farmer conditions. 	
	Total budget: TZS 692mln (EUR 276,941)	
Co-investment	Own contribution: TZS 377mln (EUR 150,893)	
	CRAF1: 12S 315min (EUR 126,048)	

Three SISTERS OIL MILLS CO	MPANY LTD (TSOM)	
Country	Tanzania	
Sector/ Value chain	Sunflower oil processing	
Implementation time frame	Oct 2019 – Sep 2020	
Organization Description	Three Sisters Sunflower Oil Mill (TSOM) is a medium scale enterprise dealing with the processing and the supplying of high quality sunflower oil. The company is located at Area A, Sokoine Street Plot 1, Block 53 House No.10 Dodoma, in Tanzania and it has been in operation since 2008. Three Sisters Sunflower Oil Mill is a Company Limited by shares and it is a partnership comprised of three enterprising women.	
Value Proposition	 The proposition 3 Sisters Oil Mills Company Ltd offers to smallholder farmers includes: offering smallholder farmers access to the drought tolerant sunflower OPV <i>Record</i>, training in good agronomic practice and contract farming agreements aimed at guaranteeing the smallholder farmers a 5-10% above market premium price for all the high quality sunflower produce that they supply. Access to improved PHH technologies and aggregation centres will lead to a reduction in PHH losses, improved seed quality hence less rejections and reduction in storage losses. All the above interventions will cause a higher efficiency of land use, increase productivity, higher market price ultimately leading to increased resilient households TSOM is in advanced stages of installing a double refinery machinery that will boost their processing capacity from the current 12MT/Day to 30MT/Day. The new processing equipment works in tandem with the new storage facilities already under construction in Chemba district will boost the competitiveness of TSOM in the industry and will enhance their trustworthyness to the contracted farmers thus overcoming the side-selling challenges experiences by most processors in the regions. 	
Key interventions (activities, targets and expected results)	 The following are the key interventions that that TSOM will undertake: To increase farmer adoption of improved sunflower seeds, agro inputs and climate smart agronomic practices (following GAP to increase productivty and proper PHH handling to reduce post harvest losses and improve quality). Emphasis will be placed on the sale and distribution of the drought tolerant, early maturing and high yielding OPV <i>record</i>. The said variety has the potential to produce fifteen bags per acre (70 kg) in comparison to the current yield of three-five bags/acre that smallholder farmers are realizing from their home saved seeds. Additionally, it has a high oil content of about 22-24litre per 70kg of sunflower seeds. A premium price will be offered to farmers who use improved seeds, which are proved to have high oil content of about 22litres per 70kgs bag, which is higher than the normal oil content of the local varieties (18litres per bag of 70kgs). The higher oil content allows the company to pay a premium price that is 5-10% above the prevailing market price. To increase the productivity of sunflower smallholder farmers by doubling their current yield by 2020 	

	To develop contract farming arrangements between 3,000 smallholder farmers and TSOM as the effective but he and of 2022
	 Increase the processing capacity for TSOM from the current 12MT/day to 30MT/day by 2021
	with existing machines
	To increase the procurement of more sunflower produce resulting from the use of high productivity and high oil content sunflower varieties
Inclusive business	The company works with 1,500 smallholder (of which around 60% are women) farmers through contract farming arrangements. Under these arrangements, small holder farmers receive a package of support services from the company which include; building their capacities in sunflower production through farmer training in good agronomic practices and better postharvest handling techniques, supplying them with key inputs including quality seeds, harvesting technologies and packaging bags and also ensuring them of a reliable market for their produce. In the course of building the capacity of the farmers, the oil mill efforts have been centred around supporting and empowering women in rural areas so that they can equally benefit from sunflower cultivation like their counterpart male farmers. Based on this, the oil mill has provided gender equality and econder equality farmers in conjunction with the Kondon and Chemba
	District local governments. Consequently, the investment into these trainings have reaped a positive dividend with locals in both districts now having a positive perception towards women's participation in the sunflower value chain.
Climate smartness	The Cooperative's proposed enhancement project will employ a range of CSA practices and technologies to enable farmers to develop resilient sunflower production systems and adopt to climate change, which will be pursued by making the following improvements: Improved climate resilient OPV, introduction to climate smart GAP, access to PHH technologies, increased productivity and reduction of PHH losses.
Scalability	TSOM is a well-respected woman focused sunflower oil processing company. The newly constructed warehouse and double refinery machinery will provide sufficient room to grow the business for the near future. The inclusion of 3,000 SHFs as contract farmers will be the starting point for business growth. TSOM will not stop here but will continue to grow by continuously offering a premium price for quality sunflower seed, making use of the company's extension workers to offer CS GAP to farmers. It is anticipated that the number of contract farmers will grow in the coming years hence providing more crushing materials. All the efforts done will lead to a sustainable climate resilient supply chain.
Smallholder farmers	Increase the number of farmers in contract farming from the current 1,500, where 60% are women to 3,000 farmers.
Target market and marketing plan	TSOM intends to reach out to its customers by having well-designed marketing and promotion strategies which will include product differentiation for the different segments of the market (based on income levels). The Company will target middle to high-income consumers in cities, district and urban areas who consume large quantities of oil (i.e. 1 litre 3 litres, 5 litres, 10 litres, and 20 litres) at each purchase. Low income earners will be targeted by utilizing low volume packaging (i.e. 200ml, 500ml and 1000ml). Based on the market situation, the company plans to continue producing and selling crude sunflower oil but also introduce refined products for the small segment of high-end customers. The ratio of the TSOM Products will be 70% crude and 30% refined products. The Company's main targeted customers are the wholesaler and traders located in Dodoma, Dar es Salaam, Njombe, Iringa and Mbeya urban areas who contribute to about 85% of the company' annual sales.
	Chemba Districts Council – The LGA will collaborate with TSOM in capacity building activities,
Other partners	 through two departments of agriculture and community development, various trainings like climate smart agriculture and sunflower good agronomic practices and contract farming Agro input suppliers: These actors will play the critical role in the supply of improved seeds and fertilizers to the smallholder farmers. The agro input dealers will work in partnership with ASA to ensure that the agro inputs supplied to smallholder farmers are certified. Agriculture Seed Agency (ASA): ASA continues to provide sunflower production research in a bid to introduce new and improved varieties on the market. The knowledge shared by ASA will play a key role in informing the set up and design of our demo farms and farm field schools. Observations collected from the field will be shared with our partners at ASA for further review.
	Total budget: TZS 783mln (EUR 313 428)
Co-investment	Own contribution: TZS 574mln (EUR 229,707) CRAFT: TZS 209mln (EUR 83,721)

Nondo Investors Co. Limited ("Nondo")		
Country	Tanzania	
Sector/ Value chain	Sunflower	
Implementation time frame	January 2020 – December 2021	
Organization Description	 Nondo is a SME active in the maize, paddy and sunflower value chain. At this moment sunflower is the smallest of the 3 activities, but with the participation in the CRAFT project the company will further grow this business. Nondo provides the 1,200 smallholder farmers with access to seeds and other farm inputs, extensions services and transportation of the sunflower grains. The company buys the majority of the sunflower grains from the farmers and processes these grains to sunflower oil and sunflower seed cakes. The products are sold to both retail and wholesale customers, in the domestic as well as the international market, via outlets (domestically) and agents (export). 	
Value Proposition	 Nondo will provide contracted and interested non-contracted smallholder farmers with access to new seed varieties which are known for their resilient and high yielding potential. In addition, Nondo will offer training in climate smart good agronomic practice and contract farming agreements aimed at guaranteeing the smallholder farmers a guaranteed offtake and a 10-15% above market premium price for all the high-quality sunflower produce that they supply. This premium price will be offered to farmers who use improved seeds, which are proved to have high oil content of about 21 litres per 70kgs bag. Nondo will offer farmers groups and aggregation agents a commission for each kg of sunflower grain collected for Nondo. Nondo will provide moisture meters and weighing scales to all aggregation centers. In addition, Nondo will provide tarpaulins and threshing machines to reduce post-harvest losses. For the improved sunflower seed Nondo will continue working with seed supplier Matamba, who will work closely with ASA for provision of proposed seed varieties. Nondo will engage with 3-4 other agro dealers for the other farming implements. The company will establish sales points and contacts with agents for quick delivery of company' products i.e. sunflower oil and seed cakes. 	
Key interventions (activities, targets and expected results)	 To improve the climate resilience of the smallholder farmers, Nondo will undertake the following activities: Convince the maize farmers that they work with, to change their main crop to the more resilient sunflower; Provide the farmers with access to improved seeds and farm inputs. The first seeds for 2,000 farmers will be subsidized by the CRAFT project; Provide the farmers with specific training on CSA and the use of weather information. Nondo will facilitate the dissemination of weather information to the farmers by SMS; Nondo will equip the collection centres with tarpaulins and threshing machines to reduce postharvest losses; The target is to increase the number of contracted sunflower farmers from the current 1,200 to 3,000 and to improve their yield from the current 350 kg/acre to 650 kg/acre at the end of the project. For Nondo this will result in a 8.5 times higher output of sunflower oil after two years and an increase of turnover in the sunflower chain of TZS 4.5bln. With the interventions farmers that currently cultivate sunflower will improve their income with 227% during the project period and farmers that currently cultivate maize with 357%. 	
Inclusive business	I ne target is that 50% of the contracted farmers are woman and/or youth. Of the current 1,200 farmers, 207 farmers are female and 300 youth. Nondo has 24 permanent staff; 5 female of which 3 youth and 19 male of which 5 youth. In addition, they have 11 temporary staff; 3 female of which 2 youth and 8 male of which 3 youth. In addition, they have 11 temporary staff; 3 female of which 2 youth and 8 male of which 3 youth. In the work shop where Nondo maintains/repairs their equipment and manufactures small tools, they offer young unemployed men to gain working experience as trainee. If they perform well, Nondo offers them a labour contract.	
Climate smartness	 To improve the climate resilience of the smallholder farmers, Nondo will undertake the following activities: Convince the maize farmers that they work with, to change their main crop to the more resilient sunflower; 	

	Provide the farmers with access to improved short cycle seeds and farm inputs. The first seeds
	for 2,000 farmers will be subsidized by the CRAFT project;
	• Provide the farmers with specific training on CSA and the use of weather information. Nondo will
	facilitate the dissemination of weather information to the farmers by SMS;
	 Nondo will equip the collection centres with tarpaulins and threshing machines to reduce post- harvest losses.
	After finishing the 2 years' project, the company will have a stable basis to further increase the number
	of farmers they work with, and their business in the sunflower value chain. With the proven track
Scalability	record that Nondo will have by that time, banks will be willing to finance investments that might be
-	necessary to grow further, for example additional warehousing, oil pressing capacity or transportation.
	Although the value chains of maize and paddy have another business model, parts of the climate
	Smart activities will also be applied to these value chains.
	the sunflower chain. The idea is to increase the number of farmers from 1,200 to 3,000 in 2 years
	First by convincing maize farmers to change their main crop to the more resilient surflower, and then
Smallholder farmers	attract other farmers from the current 3 AMCOS or other farmer groups to cultivate sunflower in
	addition to their normal crop. The company already provides several services to the farmers/AMCOS.
	coordinating the purchase of seeds and other inputs, transportation services and extension services.
	Nondo's critical success factor is being close to the customer, to ascertain a quick delivery and fresh
	oil. Sunflower oil is sold in Mpanda Town, Kasulu Kigoma, Sumbawanga, Mbeya, Burundi and DRC,
	while the seed cakes are sold mainly in Mbeya, Burundi and DRC. With the growth of the quantity of
Target market and marketing	oil available for sale, Nondo is planning to increase the number of sales points.
plan	The sunflower oil is packed into containers of 1, 3 and 5 litres for the regional Katavi market, 5 and
	10 litres for the Lanzanian market and 10 and 20 litres for the export market. The oil is sold under the
	The price of a litre of supflewer oil on the demostic market is TZS 3 500, on the expert market the
	price is around TZS 4 500 for the same quality product 15% of the total volume sunflower oil
	produced is exported.
	Smallholder farmer groups and cooperatives:
	• The smallholder farmer groups will play the critical role of producing the additional volumes of
	high-quality sunflower. Nondo plans to increase the number of smallholder farmers that they
	engage with up to 3,000 sunflower farmers by 2021.
	Mlele and Tanganyika Districts Councils:
	• Through governmental extension workers, the company will organize special training packages
	that will sharpen understanding of sunflower production especially on the pest and diseases
	management and integrating CS practices into the day to day farming practices.
	Seed company:
	Matamba is a seed supplier and works with seed multipliers. Nondo will collect the demand from
	farmers through is extension workers and linking to the cooperatives and lead farmers and
	for purchase during the distribution day. To reduce the cost of transportation to farmers Nondo
	will use their truck to support distribution. Matamba works closely together with ASA for the
	supply of certified seeds.
	Agriculture Seed Agency (ASA): ASA continues to provide sunflower production research in a bid
Other partners	to introduce new and improved varieties on the market. The knowledge shared by ASA will play a key
	role in informing the set up and design of our demo farms and farm field schools. Observations
	collected from the field will be shared with our partners at ASA for further review.
	Agro input suppliers: These actors will play the critical role of supplying other farm inputs to the
	smallholder farmers.
	Agriculture market Development Irust (AMDI): These development partners have invested
	surflower value chain. The lessons drawn from AMDT will add value to the proposed business case
	Weather Agency: The Tanzania Metrological agency will be involved in the training to evolution
	farmers on the climate change, the weather predictions and how they plan effectively for the cropping
	season. The company will facilitate the process of ensuring farmers they receive weather information
	via SMS and usage before the season for farmer be aware of their cropping calendar.
	via SMS and usage before the season for farmer be aware of their cropping calendar. Financial Institutions : This relates to NMB with which Nondo already has a credit facility of TZS
	via SMS and usage before the season for farmer be aware of their cropping calendar. Financial Institutions : This relates to NMB with which Nondo already has a credit facility of TZS 250mln and has requested an additional facility of TZS 1.5bln (of which TZS 350mln for the sunflower
	via SMS and usage before the season for farmer be aware of their cropping calendar. Financial Institutions : This relates to NMB with which Nondo already has a credit facility of TZS 250mln and has requested an additional facility of TZS 1.5bln (of which TZS 350mln for the sunflower project). This application is in the approval process. Nondo can facilitate the farmers to obtain input
	via SMS and usage before the season for farmer be aware of their cropping calendar. Financial Institutions : This relates to NMB with which Nondo already has a credit facility of TZS 250mln and has requested an additional facility of TZS 1.5bln (of which TZS 350mln for the sunflower project). This application is in the approval process. Nondo can facilitate the farmers to obtain input loans from NMB, as Nondo's primary bank, based on the offtake contracts between Nondo and the

	Total budget:	TZS 1,029 mln (EUR 411k)
Co invoctment	Own contribution:	TZS 308 mln (EUR 123k)
Co-investment	Third Party:	TZS 350mln (EUR 140k)
	CRAFT:	TZS 370 mln (EUR 148k)

	g) Increase revenues from	m UGX 2,550,000,000 to UGX 2,932,500,000 in year one and from UGX
	3,372,375,000 to UGX	3,878,231,250 in year two
	n) increase company net	
	A cile plane to well with 500	
Inclusive business	Acia plans to work with 500 $2200(44\%)$ will be women a	and youth and 2 800 (56%) will be men
	Acila will apply models that	promote green growth, adapt and create transformation at the farm level
Climate smartness	e.g. farmers to adopt the use varieties such as Maksoy 3N to replace mineral deficienci information through MAAIF climate information services budgeted package for small cost sharing on the cost of farmers in CSA practices ar smallholder farmers to reduc	e of certified, (quality), early maturing, drought and disease tolerant seed I, soil testing (for mineral deficiency), crop rotations, and use of fertilizers es and to increase the stability of crop yields, facilitate access to weather and the National Meteorology Authority and subscribe for weather and so that expected weather patterns are known for seasonal planning. A holder farmers including women and youth will include but not limited to drought tolerant seeds, tarpaulins, and pics bags. Acila will also train nd technologies and provide tractor hire services at a subsidised rate to be on the time and cost of labour involved during land opening.
Scalability	Acila will adopt a multi-stake at different levels (local, nai non-governmental, busines interventions. Acila will also financing through VSLA's a agricultural equipment on be	holder alliances to drive scalability of this business idea. Key stakeholders tional, regional, international) and from different sectors (governmental, s, etc.) will participate and provide inputs towards scaling up the prioritize and expand the provision of goods, services, functions and nd collaboration with financial institutions, negotiate for pre-financing of shalf of farmers to scale successful models and technologies
Smallholder farmers	The company has 300 farm groups. Each of these farm market for output/grains. A participating 5000 smallhold	er groups located in 6 districts with each district having about 50 farmer er groups are attached to an Agent for easy access of agro inputs and cila plans to Improve soybean production and productivity among the er farmers in the target districts
Target market and marketing plan	Acila targets individual farmers, farmer groups, seed companies, NGOs, Government institutions, and Schools for the supply of inputs such as seed, fertilizer, farm implements etc. Acila also targets buyers such as Mukwano, EAGC, Mt Meru, and JOLA for the supply of quality soybean grains. Acila's timely response to customer's needs who are mainly farmers and farmer groups by providing the required goods and services has sustainably made Acila achieve its set objectives. Acila's market includes a network of farmer communities in Teso and Karamoja sub-region and its operations have expanded to include services in relation to sale of improved seeds, agro chemical inputs and implements to farmers within the region and Karamoja.	
	Village agents Integrated Seed Sector Development (ISSD)	Distribution of Agro inputs: Buying and bulking of grain from farmers for supply to Acila, support in farmer mobilisation registration and capacity building of farmers on new technologies Train Acila staff on seed multiplication Providing seed packaging materials and certifying seed through
	Mukwano Group of	To off take grain from Acila and any other support.
	Government of Uganda	Supporting policy and regulatory framework, monitoring activities advisory and creating awareness.
Other partners	Farmers	Produce and supply grain to Acila through village agents
	UNADA	Train 50 village agents on product knowledge safe use of agrochemicals and get certification from MAAIF
	Microfinance Support Centre/Opportunity Bank	Provide financial services to Acila for working capital and capital investments
	Makerere University	Provide foundation seed
	PAAT Soil Clinic	Support in the provision of soil testing services to smallholder farmers
Co-investment	Total budget: Own contribution: Third Party:	UGX 2,500,592,200 UGX 1,637,701,100 UGX 253,345,000 UGX 609 546 100
	••••••	

Equator Seeds Limited (ESL)		
Country	Uganda	
Sector/ Value chain	Sesame	
Implementation time frame	November 2019 – October 2022	
Organization Description	Equator Seeds Limited (ESL) is a registered limited company since 2011 trading in the production, processing and distribution of farm seeds and related farm inputs and services. The business was established to rejuvenate northern Uganda agriculture, improve food security, exports, enable better livelihoods and help households generate income. The core business of ESL is to produce, process, and market improved farm seeds. The company has planned to pursue both short-term and long-term business goals over the next three years as a strategy to establish itself as the leader in the smallholder farmer segment of the Uganda input market.	
Value Proposition	 ESL will grow its farmer's network from the current 1000 smallholder farmers producing sesame seed to a total of 33,000 smallholder farmers comprising of 3,000 sesame seed growers and 30,000 sesame grain growers. Through the established robust extension network, ESL will contract farmers to produce seed and grains and buy back from farmers. The farmers motivation will be driven by; Access to quality seeds. Access to reliable market for grain producers and seed multipliers. Access to real-time extension services and CS production technologies offered by the business. Access to financial services. 	
Key interventions (activities, targets and expected results)	 ESL will implement the following key activities; <u>Seed Production</u>: The company will provide foundation seed from which multiplication can be carried out. Farmers identified for seed multiplication will be trained in seed multiplication techniques and supervised closely by the field extension staff to ensure adherence to standards required for seed certification. This will target 3000 smallholder farmers engaged as seed multipliers <u>Grain production</u>: ESL will engage farmers in grain production who are also consumers of seed produced by the seed out growers. The company will engage 30,000 farmers to produce sesame grain. <u>Marketing of seeds</u>: This involves promotional activities to create awareness for the farmers to embrace the new technologies of using improved seed variety. The target is to achieve a 70% market share of seed market in the region 	
Inclusive business	ESL will expand its farmer's network and to ensure inclusiveness in its business, it has purposely will prioritise women and youth in their production network that will include 3,000 ((1,600 adult female, 800 youth and 600 adult male) sesame seed growers and 30,000 (15,000 adult female, 6000 youth, 9,000 adult male) sesame grain growers.	
Climate smartness	ESL will promote and ensure adoptability of scalable climate smart agricultural practices by smallholder farmers to improve their livelihoods and increase their income through access to high quality sesame seeds that are drought tolerant, high yielding and early maturing, train the farmers through the community based facilitators/Village Agents and agro-dealers in climate smart agricultural practices and technologies, offer tractor services to farmers to ease on time spent during land opening and burning the bush which eventually is harmful to the environment, offer reliable markets for farm produce (seed and grains) and create linkages to financial services to support smallholder farmer production process.	
Scalability	 The company is well positioned to succeed in both seed and grain business for two main reasons; ESL has put in place the infrastructure of a full line seed company. The company opened a distribution outlet in Kampala, established branches in Kigumba (Midwestern), Soroti (Eastern) Minakulu, Gulu (Northern) and Namanve (central) with head office in Koro, Omoro District. With improvement on the infrastructure ESL will continue to reinvest the profits to expand her operations beyond Ugandan market. To respond to the increasing demand for improved sesame seeds the company will continue to contract more seed growers even after the end of CRAFT support. 	
Smallholder farmers	ESL plans to grow its farmer network from the current 1000 smallholder farmers producing sesame seed to a total of 33,000 smallholder farmers comprising of 3,000 ((1,600 adult female, 800 youth and 600 adult male) sesame seed growers and 30,000 (15,000 adult female, 6000 youth, 9,000 adult male) sesame grain growers. The farmers will be located in northern and west Nile districts.	
Torget market and marketing	EQL convoc a wide range of quotomers and is further planning to wider this successes have There	
plan	include institutions, associations and individuals. Among them are local governments, NGOs, CBOs,	

	 farmers' associations, and individual small and large scale farmers. ESL is also targeting the cooperatives available in the target market reaching out to 33,000 farmers from Acholi, Lango, and West Nile sub-regions. ESL aims to achieve a 30% control of the corporate market in the north and north-eastern regions of Uganda. ESL plans is to realize market leadership with a 70% overall market share in the North and north eastern market. The company will widen the distribution network, expand the out grower seed production scheme to ensure sufficient raw material for seed production and establish a fully-fledged seed processing plant to maintain consistent and reliable supply to the market. 	
Other partners	 Ministry of Agriculture Animal Industry and Fisheries (MAAIF): Certification, training on standards, seed production processes and regulation regulate activities. Yield Harvest Uganda: Will train grain producers in recommended climate smart technologies and support in monitoring and evaluation of the intervention/ project. National Semi Arid Resources Research Institute (NaSARRI) or NARO: Provision of foundation seed and technical backstopping. Agro dealers: Marketing of seeds and offer product knowledge/ agronomic practices to small holder farmers. Farmers (Seed producers & Grain): Engaged in production of grains, market for seed sold by ESL. Banks (Stanbic): Financing the business plan. Community Based Facilitators (CBFs): Provide extension services, bulking of grains and seed from farmers and aggregating seed demands. M-omulimisa: Digital financial services and access to inputs. PAAT Soil Clinic: Real time soil testing services for smallholder farmers. 	
	Tetelburgert 100% 00 700 000 000	
Co-investment	Total budget: UGX. 68,703,200,000 Own contribution: UGX. 927,450,000 Third Party: UGX. 66,950,000,000 CRAFT: UGX. 825,750,000	