Transforming Lives, One Business at a Time

Annual Report 2018

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Acronyms

ACE	Africa Clean Energy Business Initiative
ACET	African Centre for Economic Transformation
The AECF	Africa Enterprise Challenge Fund
AfCTA	African Continental Free Trade Agreement
AfDB	African Development Bank
AGRA	Alliance for a Green Revolution in Africa
AGRF	Africa Green Revolution Forum
ASALs	Arid and Semi-Arid Lands
BDS	Business Development Services
BEL	Bridge Electric Limited's
CEO	Chief Executive Officer
CGIAR	Consultative Group On International Agricultural Research
COGS	Cost Of Goods
DFID	Department For International Development
DRC	Democratic Republic of The Congo
EEP	Efficient Electrification Project
EEP	Energy and Environment Partnership
FICCF	Finance Innovation for Climate Change Fund
GCF	Green Climate Fund
GDP	Gross Domestic Product
IBLT	Index Based Livestock Takaful
IFC	International Finance Corporation
IIW	Investing in Women
ILRI	International Livestock Research Institute
IoT	Internet of Things
KPMG	Klynveld Peat Marwick Goerdeler
LMCP	Last - Mile Connectivity Project
MFI	Micro Finance Institutions
NDVI	Normalised Difference Vegetation Index
PCW	Post Conflict Window
PICS	Purdue Improved Crop Storage
PV	Photovoltaic
REACT	Renewable Energy, Adaptation and Climate Technologies
RIB	Research into Business
SDGs	Sustainable Development Goals
SEforAll	Sustainable Energy for All
SFSA	Syngenta Foundation for Sustainable Agriculture
SHS	Stand - Alone Solar Home System
Sida	Swedish International Development Cooperation Agency
SIP	Seeds for Impact Programme
SMEs	Small and Medium Enterprises
SMIs	Small and Medium Institutions
SSA	Sub-Saharan Africa
SWP	Solar Water Pump
TA	Technical Assistance
VAT	Value Added Tax
WTO	World Trade Organisation

Message from AECF Board Chair

Lord Paul Boateng
Board Chair

In 2018, AECF celebrated ten years of our investment and impact in sub-Saharan Africa. In this time, our portfolio of investments in enterprises has transformed millions of rural and marginalised communities. This continues to increase year on year, and in 2018 alone, we benefited 1.3 million people with a commitment of US $7.9 million to 153 businesses across sub-Saharan Africa.

I am proud to be part of this impact as the Board Chair of AECF. I recall a conversation with Ntirampeba Vestine, a smallholder farmer growing mushroom in Rwanda. Although mushroom is not a staple food in Rwanda, Vestine was excited that households were buying it as an alternative source of affordable protein. From her other farming activities, she barely harvests enough to feed her family till the next season, therefore the additional income she gets from selling mushroom helps her feed her family and contribute to the household expenses. This was made possible by our investment in Kigali farms, a business working with smallholder farmers providing them with substrate from which the mushrooms grow. The smile on her face is unforgettable.

AECF's vision of transforming rural Africa was born ten years ago, with initial funding of US $35 million. This has grown ten-fold over the years to US $356 million. Today, AECF seeks to dutifully manage the funds on behalf of our partners. The growth of the fund demonstrates the confidence that our development partners and stakeholders have in us, and the need to provide capital to the early and growth stage enterprises that provide a pipeline for the next unicorns. As of the end of 2018, The AECF has leveraged US $750 million from its investments, which enterprises are most frequently contributing on their own from private and public sources.

With additional funding raised, we launched four new competitions, i.e. REACT Sub-Saharan Africa Programme, REACT Household Solar Programme, Seeds for Impact, and Investing in Women, all of which represent areas where we believe we can have the greatest impact. We thank our development partners for making this possible. We also acknowledge emerging strategic partners who we are currently collaborating with, such as the United Nations Industrial Development Organisation (UNIDO), who share a common vision for impact for the future.

The growth witnessed over the past two years has been remarkable. As an institution we have grown the number of programmes, our geographical reach and investment portfolio. We also continue to learn from our work and areas to make continuous improvements. In order to take the AECF to scale and assist the institution to consolidate its impact, the AECF Board appointed Victoria Sabula as Interim CEO in July of 2019. Over the past five years, Victoria has been instrumental in the transition of AECF from the Alliance for a Green Revolution in Africa (AGRA) and she brings with her intimate knowledge of AECF. Starting her career with Kenya Commercial Bank (KCB) Group, she has extensive experience structuring and negotiating corporate finance transactions, financing of SMEs, and advising on governance, compliance, and risk management across sub-Saharan Africa. We welcome Victoria to the AECF family.

The next year will be a defining year for the AECF, as an institution we shall bring on board over 100 new businesses into our investment portfolio; we shall be going deeper and wider into markets of fragility – such as Somalia; and introducing new financing mechanisms aimed at de-risking businesses to allow them crowd in commercial investments. We are up to the task along with each of you as our partners, and we look forward to the work ahead as we contribute to a prosperous and enterprising rural Africa.

Lord Paul Boateng

Message from the CEO

Victoria Sabula
Interim CEO

Business enterprises serve as the engines of growth in developing economies and provide many of the best solutions to Africa's development challenges. This has been the core belief of AECF since its founding in 2008, when great minds converged to explore how to incentivise private sector in ways that sustainably shape Africa's development agenda.

This year's annual report demonstrates what this vision looks like, as it captures the significant role Private Sector plays in transforming rural communities across the continent. The AECF has provided patient capital to support early and growth stage enterprises across several different markets and geographies, which is now bearing strong returns.

I come on board as Interim CEO at a time when AECF – including its Board, staff, investees, and partners – can all be proud of the significant social economic and results that have been achieved year on year. At the same time, we are continuously learning and putting these lessons to transformative use with new programmes and processes to make our work ever more efficient and effective.

A significant part of the AECF's portfolio and set of results is in agribusiness. Rural economies are overwhelmingly dependent on agriculture, which comprises nearly half of Africa's Gross Domestic Product. Agricultural transformation has tremendous potential to improve food security, nutrition, incomes, and livelihoods, and yet African agriculture still underperforms and remains a market for significant growth. With holistic value chain approaches, we have seen farmers able to enhance their production, companies able to sell more in markets, and the cycle of social economic advancement begin to spur rural development. As at the end of 2018, AECF's agribusiness portfolio committed US $125 million to 190 businesses that have positively enhanced production and market access for smallholder farmers. Overall, the agribusiness Portfolio has benefited 8.8 million lives.

One of the businesses AECF has invested in that is transforming the lives of smallholder farmers is NASECO, a seed company in Uganda that supplies improved seed variety to farmers in Democratic Republic of Congo and Burundi. Claude Baguma is one of the 33,000 beneficiaries benefiting from this investment. She uses an improved maize variety known as Bazooka on her 1.5-acre farm in Walungu village, Chiherano County in the Democratic Republic of Congo. In the past year, her maize yields have significantly increased from 887 kgs to 2,300 kgs per cropping season. Claude's household is now food secure, consistently processing her surplus to flour and selling in the local market to earn US$ 139 per season. With the additional earnings, she is now able to pay school fees for her two children, which reflects social economic advancement that has the potential to unlock intergenerational change for entire families.

Our learning from such investments and the demonstrated impact has led to the development of the Seeds for Impact Programme, with the aim of supporting businesses to scale up production of improved seeds for use by millions of smallholder farmers. This programme was launched in 2018 with initial support from AGRA and the Syngenta Foundation for Sustainable Agriculture.

Alongside agribusiness, the AECF has found over the years that investment in energy and other complementary infrastructure and services is a critical input for reducing poverty and stimulating economic growth. Without access to affordable and reliable electricity, rural and marginalised communities in Africa will continue to face constraints to economic growth and thus lag behind their counterparts in the developing world.

Today, over 600 million people in Africa still lack access to modern energy sources. The need to accelerate our efforts to promote access to energy has never been more urgent. Most of the markets and business models we invest in as AECF are nascent and thus considered a high risk, however these businesses have the potential to transform the livelihoods of rural Africa. As at 2018, our Renewable Energy portfolio committed US $56.1 million to 78 businesses enabling clean energy access by 8.3 million people across sub-Saharan Africa.

Micro Energy Credits (MEC), is one of the businesses in the renewable energy portfolio that is transforming access to clean and affordable energy solutions in Kenya. In partnership with Equity Bank, MEC developed a loan facility known as Ecomoto loan for customers wishing to purchase energy products. Aileen Chemng'etich is one such customer that took advantage of the loan facility to purchase an energy saving cook stove and a solar lighting system. She noticed that with the new products she was spending less on her charcoal. Spotting a business opportunity, she secured a guarantee from her women's group and collateralised her energy assets to enable her to access a loan of US$2,500 to stock and sell clean cooking stoves targeting fellow women. She has since paid up the loan and applied for a new loan to expand her business further. To date MEC has benefited over 14,000 customers at household and SMEs.

Our lessons from such investments has informed the design of the Renewable Energy, Adaptation and Climate Technology Programme for sub-Saharan Africa (REACT SSA) and the Household Solar Programme targeting new markets, new geographies and technologies that promote productive use, and improve the health and well-being of women and children.

Finally, AECF's gender and inclusion agenda to develop and empower women demonstrates our commitment to entrepreneurs that promote financial inclusion. Businesses like Reliance Financial Services, a Micro Financial Institution (MFI) in Gambia, have reached over 28,000 women, enabling them to access loans with a repayment rate of 95% over the years. Our learning from these efforts has led to the development of the Investing in Women Programme, a deliberate effort towards empowering and increasing the value of women on the African continent. At the institutional level, we continue to lead by example. The AECF is mainstreaming gender across our operations and processes. We strongly believe that for us to be gender champions we must start with ourselves.

None of these programs, results, and continued efforts to scale development impact would have been possible without the unwavering support from our partners who have walked the journey with us.

We thank all of these partners and welcome others to join with us.

Victoria Sabula

Chapter 1: The Africa Enterprise Challenge Fund

"The Africa Enterprise Challenge Fund mitigates market risks for businesses, while spurring innovation to create jobs, improve food security and increase access to clean and affordable energy in Africa"

The Africa Enterprise Challenge Fund (AECF) is a non-profit institution that supports early and growth stage businesses in the agribusiness and renewable energy sectors to reduce poverty, promote resilient communities and create jobs through private sector investment.

AECF invests in businesses that strive to find innovative solutions to tackle development challenges across Sub-Saharan Africa. Our aim is to transform lives, one business at a time by funding early and growth stage businesses that improve the lives of rural communities and display potential for credible commercial viability and growth.

AECF Delivery Model

AECF uses a challenge fund approach that addresses market failures by inviting private sector businesses to respond to the development challenges in a competitive manner. Successful businesses receive funding of between US$ 100,000 - US$1.5 million and technical assistance. The overall intent is for businesses to provide solutions that contribute to poverty reduction and transform the lives of rural and marginalized communities. Most of the businesses we support have innovative ideas that address market failure and would need financing to do so as on their own they are not be able to test their ideas and take them to scale.

We de-risk businesses. We empower smallholder farmers. We improve access to clean energy. We transform lives.

AECF Impact in numbers

To date, AECF has raised US$356 million out of which US$181 million has been invested in to 268 businesses spread across 26 countries in Sub Saharan Africa. The businesses work with rural communities to reduce poverty and create jobs resulting to increased income generation for millions of households.

We Deliver High Impact

Over its life, AECF has benefited over 17 million rural and marginalised people across Africa, created and sustained over 12,000 jobs.

We Leverage Additional Funding

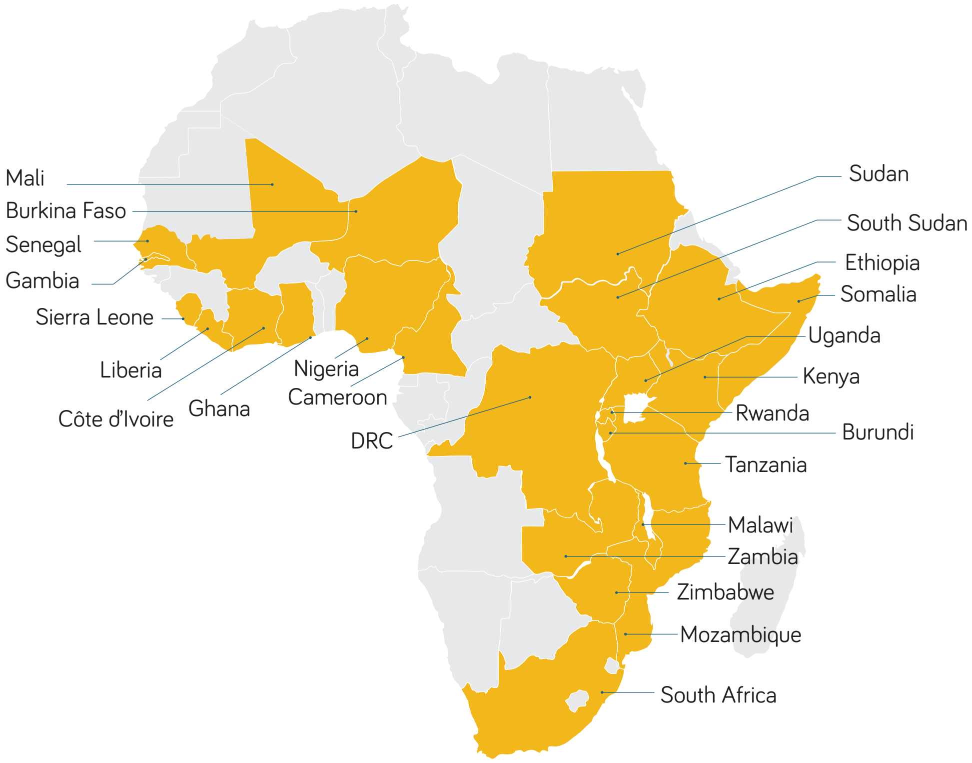
Since 2008, AECF has leveraged an additional US$750 million from private and public sources.

We have an Effective Delivery Mechanism

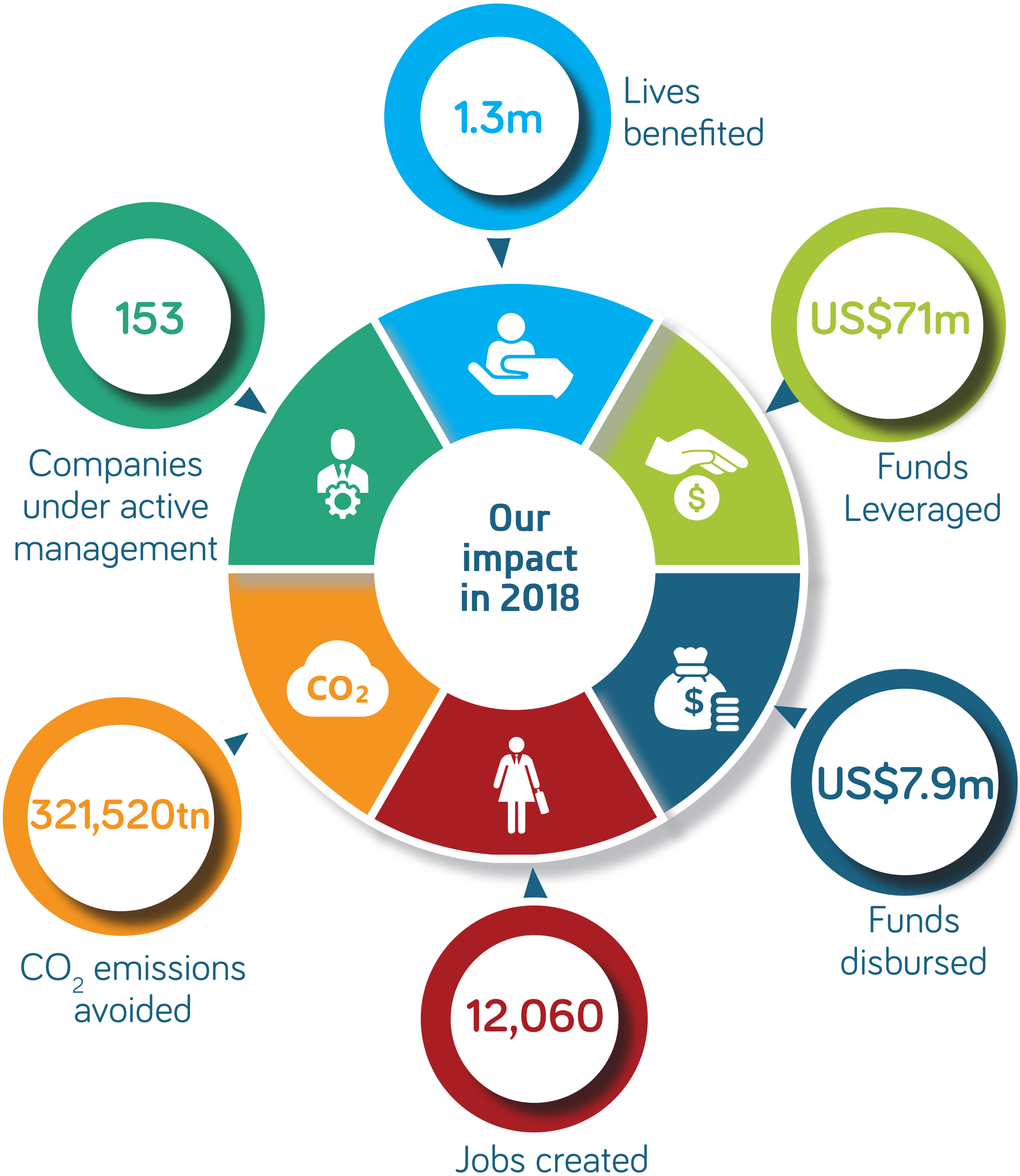
AECF has successfully developed and scaled over 40 different value chains and improved sustainable electricity access to households, avoiding over 1 million tonnes of CO_2 emissions.

AECF Across Sub-Saharan Africa

"Across Sub-Saharan Africa, AECF investments and technical support have assisted the private sector create jobs, promote resilience and influence how markets work in rural areas."



Our impact in 2018



Cumulative


268
Companies invested in
17m
Lives benefited
Cumulative
CO_2
1 million
CO_2 emissions avoided
US $750m
Amount leveraged from private and public sources
US $181m
Amount committed

Transforming lives, One Business at a Time

Leveraging on 11 years of programme work and as a multi-donor special purpose vehicle for private sector investments, AECF rebranded in June 2018 with a mandate to establish itself as the leading investor in early and growth stage businesses in agriculture/ agribusiness and renewable energy sectors in sub-Saharan Africa.

Agriculture and agribusiness have been the mainstay of AECF's investments in the past decade. We are now fast-tracking access to clean and affordable energy through our new programmes - Household Solar programme and REACT sub-Saharan Africa. The new programmes will take AECF to new countries – Somalia, South Sudan, Mali, Burkina Faso, Cote d'Ivoire and Liberia. With climate change driving conflict, poverty and migration, AECF is increasingly mainstreaming climate adaptation technologies throughout its portfolio and increasing its work in fragile markets and regions to boost income and employment. We are cognisant of the fact that fragile and conflict-affected states find it hard to attract investment, hence the move by AECF to de-risk Small and Medium Enterprises (SMEs) plays a crucial role in rebuilding the local economies.

Remaining true to our inclusion agenda, we launched the Investing in Women (IIW) programme which seeks to increase economic opportunities for women in Africa's agricultural value chains, targeting Burkina Faso, Cote d'Ivoire, Ethiopia and Sierra Leone. Further, as part of its strategy, AECF launched the Seeds for Impact Programme (SIP) that seeks to address the funding gap faced by seed companies in their quest to produce seed for food security crops, and publicly bred varieties. Both are pilot programmes designed to be expanded with future funding to cover more countries.

Setting the Scene

Agribusiness

The African Union's (AU) Agenda 2063 and the United Nations Sustainable Development Goals (UN SDGs) provide focus areas and goals to measure the continent's progress towards economic transformation. Agricultural transformation, underpinning the broader goal of economic transformation, is thus a critical component to achieving most, if not all, of these goals.

The 2019 Africa SDG Index and Dashboards Report confirms that progress is being made towards these goals, and there are some positive trends to celebrate. However, multiple challenges of stagnation, decline and slow progress persist in certain areas. The report notes that "majority of African countries are off-track on most of the 17 goals" and shows that this is the case for SDGs 1- No Poverty, SDG 2- Zero Hunger, and SDG 8-Decent Work and Economic Growth, which are directly within the agri-sector wheelhouse. This shows that while the 2019 dashboard shows progress, comprehensive effort is still necessary to achieve these goals.

Although global poverty levels are decreasing, Sub-Saharan Africa (SSA) cannot match the progress of other countries and has an average poverty rate of 41%. Poverty is the principal cause of hunger in Africa, contributing to the highest prevalence of undernourishment. The undernourishment rate in 2016 was estimated to be 20% of the population with 27.4% food insecure. In most African countries, the agricultural sector is the largest employer, employing an average of 54% of the working population and much higher in some African countries.

To achieve economic transformation and to make impactful and sustainable progress towards the SDGs, it is important to channel efforts towards agricultural productivity initiated by technical innovation, economies of scale, shifts to higher-return crops and animal products associated with rising rural incomes, urbanisation, and improving market access conditions. Higher incomes among farmers will stimulate rural economies and overall labour productivity will increase when people move from less productive agriculture to more productive manufacturing and service sectors.

Productivity growth eventually leads to stronger agri-food systems with increased agribusiness value addition as we see greater economic activity in upstream input manufacturing, supply and downstream trading, processing, and retailing. We believe that increased farm production, if approached well, can lead to stronger agri-food systems, helping alleviate poverty levels in rural areas, improving quality food production and correcting irregular farm labour patterns in rural communities.

Agri-food and Small and Medium Enterprises (SMEs) are the backbone of both rural economies and local and national agri-food systems. These entities play a critical role in the agricultural transformation, yet they remain under-invested. This stifles their growth and potential. Closing the investment gap for agri-food and rural SMEs requires a concerted, multi-stakeholder effort to transform the ecosystem. The same is needed to close the gap between demand and supply for finance and complementary services in the ecosystem, as a critical part of the solution. Agri-food and rural SMEs are critical to achieving, and are often the drivers of, agricultural transformation. To achieve economic transformation on the continent through the AU's Agenda 2063 and the UN 2030 Agenda on Sustainable Development Goals, the importance of agri-food and rural SMEs cannot be overlooked.

Cleantech Innovations, Solutions and Resilience

Access to energy remains a critical component of the climate change challenge. Coverage of electricity services in sub-Saharan Africa is mostly confined to higher-income households and urban areas. The rural population suffers. Lower rate of connectivity results to lower rate of development.

Without access to power, households must use higher-priced petroleum fuels. African households and small businesses spend approximately US$17 billion on lighting every year, mainly on kerosene. Many households spend up to 30% of their disposable income purchasing fuel. The technology is inefficient, expensive and it provides limited, poor-quality light and exposes users to health and fire hazards.

Wood and charcoal make up around 90% of the primary energy supply in SSA, resulting in the annual loss of 4 million hectares of forest cover, the degradation of water catchment areas and soil erosion.

Renewable technologies such as hydropower, solar energy, biomass, and wind offer significant potential for these countries as they strive to develop their regional infrastructure. However, dissemination of solar technologies has been minimal across most countries in SSA with the partial exception of Kenya, resulting in unfulfilled market potential.

The slow progress and high cost of conventional solutions to the household energy crisis means that cheaper and new clean energy technologies offer a better chance of improved access to energy for rural households in the foreseeable future. Over the last decade, clean energy technologies have become more economical than conventional energy generation for many applications. The regulatory environment to facilitate their application has also improved.

While the private sector has had some success in developing business models and technologies to address these issues, high risk and market failures limit innovation and the scale-up of successful business models and technologies. Innovation that improves market accessibility to the impoverished communities in SSA is hampered by a wide range of challenges.

These include:

- Poor investment climate
- Depressed and uncompetitive business innovation environment
- Pervasive market failures
- Lack of information on the needs of impoverished communities
- Uncertainty over the commercial viability of innovative wealth generation methods for the impoverished communities

Supporting innovative ideas by a credible intermediary like AECF and offsetting project risk through financial support will help mitigate these constraints.

Gender

By 2030, agriculture and agribusiness are expected to become a US$1 trillion industry in Africa, delivering more jobs, income and economic growth. Similarly, the United Nations Secretary-General's Sustainable Energy for All (SEforAll) initiative and the 2030 Agenda for Sustainable Development aim to achieve universal access to modern energy services by 2030.

Despite the strong presence of women in agriculture, their commercial benefit is minimal. Throughout Africa, entry-level factors prevent women from operating highly profitable and productive enterprises. Some of these factors are:

- Smaller land size
- Lower crop prices
- Restricted access to agricultural inputs
- Limited finance.
- Restricted access to finances and energy-related services in the formal sector
- Gender discrimination in the pursuit of electrical grid connectivity in Ethiopia, Ghana, Kenya, Tanzania and Zambia
- Expectation to give bribes
- Exclusion from discussions about energy plans and policies
- Restricted entry into the energy industry resulting in project planning, financing, execution and implementation

Whilst Africa boasts the highest share of "women entrepreneurs," these women are disproportionately concentrated in the ranks of the self-employed rather than employers. Women's productivity is lower than men's, not because they are inferior, but because their informal, smaller firms are inherently less productive, and more women operate these types of enterprises. Majority of these women-led enterprises are concentrated in micro and small business segments because of the limited ecosystem support regarding access to finance, market linkages and networks. The real challenge in empowering women and expanding opportunities is not to help more women to become small-scale, informal entrepreneurs, but to enable them to shift to activities capable of delivering higher returns and creating employment.

Women face a worldwide credit shortfall of US$300 billion. Yet, the female economy is the world's largest emerging market, equivalent to twice the size of India and China's economies. This represents a multi-trillion-dollar opportunity, which has the potential of adding US$12 trillion to the global GDP by 2025. Investing in women pays dividends since women invest 90% of their earnings in food, health and education for the household. When women are fully included in the economy, their contributions to prosperity are multifaceted. The African Development Bank (AfDB) estimates that the financing gap for African businesswomen is as large as US$42 billion, of which US$15.6 billion is necessary for women in agriculture, highlighting the untapped potential of female entrepreneurs and the missed opportunity for job creation from SMEs .

Research has shown that women are better borrowers and register higher loan repayment rates and lower default rates than their male counterparts. Despite this, lending to female entrepreneurs remains low compared to the increase in the number of women-run enterprises in most African countries. Despite the increase from 10 to 30% in the past decade in countries such as Egypt, Ivory Coast, Nigeria, Ghana, Zambia and South Africa; women-led enterprises receive less than 10% of the overall invested capital.

At AECF we are now making deliberate efforts to address this challenge by running gender targeted programmes.

Chapter 2: Agricultural Transformation

We transform lives by championing an agricultural transformation throughout sub-Saharan Africa, reaching over 8.8 million people over the past ten years.

While Africa has made positive strides in agricultural transformation and broader economic transformation, this success differs across regions and countries.

Agricultural transformation has underpinned economic transformation in regions around the globe. While Africa has made positive strides in agricultural transformation and broader economic transformation, this success differs across regions and countries. The sustainability of this progress remains a challenge.

AECF plays a key role in Africa's agricultural transformation.

- 40% of the portfolio comprises businesses in upstream input manufacturing, trading, processing and retailing, all of which share a similar goal of increasing the productivity of African farms.
- 50% of the portfolio comprises businesses in downstream trading/export and value addition. These companies recognise the challenge of working with smallholder farmers. They have accepted the challenge to not just be a "buyer" but rather provide support and services to equip smallholder farmers and scale them from subsistence farming to 'farming-as-a-business. AECF has intentionally sought-after service providers who are focusing on the sector.
- The remaining 10% of the portfolio comprises businesses that are providing farmers support services like input credit, insurance, mechanisation services, and training/education.

Africa has made positive strides towards agricultural transformation and broader economic transformation. However, this success fluctuates across regions and countries. The sustainability of this progress remains in question. AECF's agribusiness portfolio companies have been part of this positive progress and we continue to seek new companies to join the AECF fraternity and work towards agricultural transformation in SSA.

2018 Impact Trends

As at 2018, AECF's agribusiness investment has impacted over 8.8 million lives, sustaining 1.76 million farming households. Net household benefit differs widely depending on the type of agribusiness and the measure of service and support to farmers. Our portfolio shows that downstream businesses supporting farmer production and market accessibility have a far more transformative impact on each farmer reached. However, the overall reach is lower. While upstream businesses, like input processors and distributors, reach farmers at scale, the net benefit is lower and therefore less transformative. In 2018, the agribusiness portfolio achieved an average net household benefit of US$183 which continues to grow from US$136 in 2017. While we aim to reach more, we also know the level of impact we generate for each household. The combination of down and upstream businesses, coupled with support services, is all part of our strategy to build, develop and transform the agribusiness ecosystem to reach and impact smallholder farmers at multiple touchpoints. This is the only way we will create transformative change in the lives of these farmers to reduce poverty while ensuring that rural and urban families alike have access to enough food with the aim of reducing food insecurity and undernourishment.

The impact AECF portfolio has on rural households, the ultimate beneficiaries, is important. However, we cannot overlook the importance that our investees have had in creating economic opportunities in rural and urban areas.

In 2018 the portfolio created and sustained 6,113 jobs. Twenty-four per cent of these jobs are held by women. This is a good start, but we still have some work to do to reach the AECF target of 40% of jobs held by women. Sixty-eight per cent of the total jobs created to date are held by youth, showing great progress towards job creation for the youth which addresses the growing youth market in SSA and the achievement of the 70% AECF job creation target.

The Agri-business portfolio's cumulative development impact rate stands at US$359 million. This figure includes farmer impact and the wage bill creation. This nearly doubles the cumulative development impact since 2008, which now stands at US$751 million.

Beyond impact, the AECF agribusiness portfolio has realised incredible and invaluable lessons that support and provide insights into the numbers above. In 2018, we focused on understanding the type and level of impact that out-grower schemes have on smallholder farmers and the broader ecosystem, and the formal job opportunities for youth and women in the agri-sector.
As we prepared to close the Post-Conflict Window at the end of 2018, we reflected on what we learned over the course of the programme to support our increasing interest in building resilience in fragile and conflict-affected states through the agri-sector.

Key learnings

Unpacking impact across out-grower models in Sub-Saharan Africa

Relative to the difference between downstream and upstream agribusinesses and their reach in terms of transformative net benefit per farmer versus scale, we carried out a study on our out-grower scheme sub-portfolio. We were enlightened by the findings. AECF's agribusiness portfolio includes 50 businesses, leveraging out-grower schemes in their business models, across 14 countries in SSA. The study segmented out-grower schemes into five segments:

1. Informal - Informal arrangements on an annual or seasonal basis, or spot-trading between farmers and company/ traders, with no specification or requirements as to quantity and no credit or extension services provided.
2. Intermediary - Agricultural commodities pass through an intermediary organisation (e.g. local buyers, lead farmers, or farming groups) before going to a commercial buyer or processor.
3. Multipartite – An Out-grower partnership between a commercial buyer of the product and one or more MFIs, NGOs, and/or input suppliers.
4. Centralised – Company provides inputs and/or extension services and buys produce, usually subject to strict product quality requirements.
5. Nucleus-estate – Company has a central farm and processing facilities, and supplements own crop production with supply from out-growers located on smaller parcels of land surrounding this central farm.

The study provided several robust findings about how the AECF-funded out-grower projects benefit smallholder farmers, common characteristics of successful out-grower projects and common challenges faced by out-grower projects. What's interesting here is a closer look into what schemes generate the highest development impact and why.

Before diving into this understanding, we first have to ask ourselves, what kind of impact are we trying to achieve? Is it transformational smallholder farmer benefit? Or are we seeking scale to touch the highest number of farmers possible, even if in a smaller way? Or perhaps we should focus on job creation and the economic growth angle? The truth is that all these questions are important; one can target specific out-grower schemes with their interventions and funding to achieve the type and level of impact they are interested in creating.

Intervention Insights

Analysis of the AECF portfolio shows that intermediary out-grower models reach the highest number of households per project, at 5,282 on average. However, this is a smaller average net benefit per household of US$93 compared with the nucleus model which has an average net benefit per household of US$246, but only reaches an average of 421 households per project. The total net benefit of an intermediary model project is much higher at an average of US$491,226 compared to the nucleus model project achieving an average of US$103,566. This makes sense as intermediary models have a limited direct relationship with farmers, usually working through farmer cooperatives or other farmer groups. The touchpoints are minimal, offering larger reach with a smaller investment. On the other hand, nucleus models require heavy investment and a much more intense farmer relationship. The investment and time spent directly with farmers back up the more transformative impact these models have on farmers while providing insight into why the reach is much smaller.

But numbers don't give the full picture. A net benefit per household of US$246 is far more transformative than US$93. This cannot be overlooked when considering the type of impact, one wants to achieve. Looking at reach and farmer benefit also doesn't tell the whole story. Centralised models have a commendable average total net benefit of US$365,664, reaching an average of 2,344 households with an average net benefit of US$156 per household, balancing perhaps the benefit of scale and transformative impact. The centralised model lies between that of the intermediary and nucleus regarding investment and direct farmer engagement. Greater investment and direct farmer engagement results in transformative impact. But at some point, the trade-off happens, and a business must choose whether to reach fewer households with greater impact or fewer households with lower impact to support its bottom line.

The AECF's calculation of total development impact includes the wage-bill of all jobs created within the business. Nucleus models have very clear job creation potential which increases its total development impact significantly – showing that nucleus models are both transformative and high job creators. This is because of the high intensity of farmer engagement and the fact that most nucleus out-grower models are higher-value products, requiring more intense extension services. The centralised model also attracts significant job creation. With a much higher average net benefit and wage-bill created, it outpaces that of the nucleus and intermediary models as the highest total development reaching impact model.

While arguments can be made in favour of all impact types, at AECF we see the benefit of a diverse portfolio in driving our impact and learning agenda. These insights are important for us as we assess new applicants through new programmes, improving our ability to assess impact outcomes and ensure we are balancing numbers of farmers, with numbers at the farm and job level. The one common goal across these types of impact is sustainability, so that we achieve lasting impact in whatever form that comes in.

The Agri-sector has potential across the value chain and support services to absorb youth and women

Respectable work is at the centre of the development agenda, with the need for increased job creation in SSA, where the working-age population is predicted to double over the next 40 years. This presents both a challenge and an opportunity. Whilst youth and women often find it difficult to break into commercial agricultural production because of lack of access to land and other production factors, the move towards greater industrialisation and additional value addition on the continent has significant job creation potential benefiting both youth and women while supporting broader economic transformation.

Youth are particularly well placed to absorb production roles in factories as they are cheaper lower level, entry jobs. National agendas support rural agro-industrial parks in some countries. There is therefore considerable potential to bring jobs closer to rural-based women who often find it hard to transition into off-farm labour due to responsibilities at home. Concerted effort to address challenges rural women face in adopting formal jobs will help rural agro-industrial parks transition women into formal work placements, reducing the need for rural migration.

Beyond processing, AECF's agribusiness portfolio offers insights into early stage businesses that are using innovative technology to deliver smallholder solutions. These businesses have a high youth employee count. This is probably due to the technical knowledge the youth possess. Indeed, these cheaper hires are beneficial for early stage businesses at proof of concept stage prior to achieving sustainability.

Intervention Insights

Analysis of youth and women-held jobs under the AECF agribusiness portfolio in 2018 shows that there is no clear "type" of agribusiness company that creates more jobs for the youth and/or women. Thirteen of the companies that have 90% or more youth employees span input production and distribution, agro-processing and financial services. Ten companies in the portfolio have over 50% women employees. These companies also contrast in nature - from input suppliers and distributors to logistics companies, support services, traders and agro-processors. This tells us that the youth and women have lots of options in the agri-sector and it's not limited to certain value chain actors or service providers.

However, what appears to be important is intentionality. As businesses become more conscious of the growing youth market and take a firm stance on gender equality, we can see adaptation to their hiring practices that support the adoption of more formal jobs for women and the youth. This can be seen in the uptake of jobs held by women and the youth in 2018. Eighty-five per cent of businesses in the AECF agribusiness portfolio, up from 45% before AECF funding, are now mostly employing youth. In 2018, over 55% of the new jobs created by AECF agribusiness portfolio companies were held by women. It's important that as we look beyond strictly funding to provision of technical support to businesses, we continue to push the intentionality of inclusive hiring to create jobs fit for the youth and open more opportunities for women in the formal workforce. It's clear that there is no place they cannot go, so we need to drive home the business practices that create more inclusive workforces.

Investing in people in fragile states

AECF exists to invest in places and ideas that are too risky for commercial financing. Fragile and conflict-affected states - where the government struggles to provide services to its citizens – are difficult places for the private sector to engage with, which is precisely why they are a focus area for AECF.

AECF has invested in fragile states across SSA, funding businesses emerging from conflict-prone areas to bring stability to markets that so desperately need it. 2018 marked the end of one of AECF's flagship programmes, the Swedish International Development Cooperation Agency (Sida) funded Post Conflict Window (PCW), with agribusiness investments in Somaliland, Sierra Leone and Democratic Republic of Congo (DRC) gaining significant traction and benefiting almost 350,000 people annually.

The key learning from our experience is *'invest in the person, not the place'*. Physical challenges can be readily overcome by the right entrepreneur. Community and culture in fragile places have a significant influence on investment approaches. Societies with fewer safety nets and recent trauma experience are usually more conservative, more risk-averse and more difficult for outsiders to penetrate. Change needs to be negotiated and agreed amongst a broader constituency than anywhere else, so investors need to take their time, recruit the right local connections, invest in indigenous enterprises and include local government and political leaders from the very beginning.

Intervention Insights

Fragile states require more vertical integration than in other areas because of the limited number of companies operating in these regions, leaving a sparse and weak agri-sector ecosystem. Vertical integration happens in more stable markets as well, but it's practically required in fragile states. Agribusinesses working in these markets must look beyond their core business to provide an array of services to provide farm-level support.

In our Post Conflict Window portfolio, two agro-processors, Capital Foods Limited in Sierra Leone and Layuka S.P.R.L. in the Democratic Republic of Congo (DRC), achieved success in setting up integrated out-grower schemes to support their agro-processing businesses, increasing farm-level productivity and reducing post-harvest loss.

Capital Foods Limited is a fruit juice processor, producing natural juices under the brand name 'Sierra.' In 2013, with an investment of US$800,000 from AECF, the company set up a juice processing plant and an out-grower scheme for purchasing pineapples and mangoes from smallholder farmers in the Kenema region of Sierra Leone. Over the duration of the AECF support, Capital Foods organised and established a stable market for over 7,000 rural farmers. In addition, the company created the Sierra brand of juice and water. Most Sierra Leoneans are proud of an indigenous brand given the proliferation of imported products that dominate their shelves. This kind of impact is unquantifiable and gives great boost to a country that has experienced such conflict.

With an investment of US$471,000 from AECF, Layuka set up a cassava flour and starch processing facility on the outskirts of Kinshasa, DRC. Layuka currently works with over 500 farmers providing them with training on good agricultural practices and a market for their cassava harvest. Previously, the cassava market was dominated by intermediaries who purchased cassava for the fresh market in Kinshasa, predisposing the farmers to fluctuating prices and a lack of an assured market after harvest. By providing an alternative, stable market with pre-set prices, farmers produce cassava and increase the area under production due to the confidence of an assured market and stable pricing. This kind of stability at the farmer level is important to incentivise farmers to re-invest in their land after times of uncertainty.

The AECF's post-conflict window portfolio offered a wealth of learning and understanding, of which we fully intend to leverage as we continue to support economic stabilisation through investments in post-conflict and fragile states.

The key learning from our experience is 'invest in the person, not the place'. Physical challenges can be readily overcome by the right entrepreneur.

Changing fortunes for Smallholder farmers in Burundi

Agriculture accounts for more than a third of Burundi's GDP and employs more than 90 percent of the workforce. Due to the high population density and land pressure, most farms in rural Burundi are approximately 0.5 ha per farmer. To maximize their output most smallholder farmers, practice mixed cropping to feed their families and generate income.

We meet Mzee Amos Mbaye a sixty-eight-year-old farmer who has been growing coffee, maize, and bananas in Cibotoke province. From his farm, he is able to earn US$40 from coffee which he harvests twice a year and the money is partially paid at delivery with a third of it paid at the end of the year. This leaves him with very little disposable income to meet their basic needs perpetuating the poverty cycle. This is the story of many farmers.

In 2017 he started planting patchouli, a key raw material in perfume making. The soil and climate of Burundi are suitable for patchouli and have an adequate market potential considering that the world market demand is bigger than supply. From his first harvest Mzee Mbaye got 15Kgs, from a small plot, earning him US$3. He has since increased the area set aside for Patchouli significantly increasing his yield to 320 kgs earning him additional income of US$57 every three months. With the additional income Mzee Mbaye says he now has disposable income that he can use to provide for his six children and plans to improve his house by replacing his roof from grass thatch to iron sheet.

Rugombo agro-business is an agro-business that provides farmers with Patchouli seedlings, extension services and purchases the crop at harvest. With an investment of US$450,000 from AECF, Rugombo has reached 3,000 smallholder farmers in Burundi, processed 0.3 MT of oil that has been exported to Astier Demarest.

With the changing fortunes of Mzee Mbaye, indeed Pachuoli farming is changing the lives of farmers in Burundi.

Moving Forward

As 2018 comes to a wrap, preparations are already being made for 2019. The planned activities will lead to a full year of not only transforming lives, one business at a time, but also new programme portfolios- the Seeds for Impact Programme and the Investing in Women Programme.

Seeds for Impact

AECF has supported the seed sub-sector in Africa with commitments of US$15 million to 26 companies across 10 countries. A Study commissioned by AECF this year validated that AECF's model of grants/repayable grants to early and growth-stage businesses is ideal for increasing rural smallholder farmers' access to improved seed varieties. However, we know that this sector has not achieved scale and smallholder farmers lack access to quality seeds. The truth is, seed companies, despite receiving financial support from AECF and significant technical support from other key players in the sector, still struggle to access commercial financing at the levels needed for significant growth. Thus, AECF came together with Alliance for a Green Revolution (AGRA) and Syngenta Foundation for Sustainable Agriculture (SFSA) to design and launch a new programme – the Seeds for Impact Programme (SIP).

The first SIP competition programme was launched in Quarter three, 2018 with competition phase expected to end in 2019. The programme focuses on established businesses rather than early stage companies, intending to provide soft funding in the form of repayable grants to catalyse commercial investment as matching funds. Systemically, we hope that by providing soft bridge financing while attempting to attract commercial funding, these businesses will be in a much better position to raise commercial funding for future needs at the end of AECF's funding cycle. The proportion of repayable grants to grants in this portfolio is expected to be much higher than a typical AECF portfolio comprising early stage businesses.

To progress this intention, the companies will receive technical support to help strengthen capacity gaps, largely focused on getting them "investor ready" to ensure that these businesses are graduating away from relying on grant funding.

We are thrilled by the scaling focus of this first window and aim to make a significant impact across SSA, improving smallholder yields and incomes, while playing a critical role in diversifying the improved seed varieties that are available to smallholder farmers to address food insecurity and undernourishment in SSA.

Investing in Women

AECF launched its new women focused programme – Investing In Women (IIW) in Quarter three, 2018 to drive great inclusion in line with its Gender Lens Investing strategy. The programme focuses on women-led agribusinesses and women-dominated value chains. Women founders still face grave challenges in raising capital. The financing gap for women-run agribusinesses is exponential compared to their male counterparts. AECF tries to address this with a focused programme that aims to put the woman founder at the centre, to not only support her with funding for growth, but provide significant technical support to build her business capacity.

Women smallholder producers who heavily dominate the sector are right at the heart of the programme alongside women founders. Investing In Women places great emphasis on businesses that are working with women smallholder farmers, narrowing in on women dominated value chains.

The Department for International Development (DFID) funded the pilot programme which covers Burkina Faso, Cote D'Ivoire, Ethiopia and Sierra Leone. The programme has incredible potential as a first-driver of AECF's gender strategy. We look forward to building a diverse and interesting portfolio to showcase the work on women in agriculture across SSA.

A 2019 of intentionality

In 2019, we aim to further solidify AECF's role in agricultural transformation through the agribusinesses and SME's we work with. As we define a new and more intentional agri-sector strategy, we will not forget the impact, growth and learning we have from our legacy portfolios. We will absorb this understanding and knowledge garnered in the design of future programmes. Based on the understanding of the complexities of agricultural value chains and the revolving relationship between production, supply and demand, the proposed focus will be encompassing, targeting a broad, diverse impact across the sector ranging from high farmer reach, high farmer impact, strong job creation and greater inclusivity.

Production demand serves as an incentive for businesses to invest in production technologies and innovations, leading ultimately to their adoption by farmers. Increased value addition and growing agricultural industrialisation benefits the continent through job creation. More nutritious and diverse food products will be locally available. It also increases cross-border trade supporting the operationalisation of the African Continental Free Trade Agreement (AfCTA) that was signed earlier this year and will encourage African countries to focus on their core outputs while creating seamless trade that improves industrialisation.

AECF acknowledges the support, trust and relationships that have been established with the investees over the years as critical to future achievements. AECF is confident that its work will continue to impact millions of people in the future.

Chapter 3: Cleantech Innovations, Solutions and Resilience

We transform lives by pioneering new, clean, renewable energy solutions for sub-Saharan Africa.

2018 Impact

Clean energy is an essential component in our response to the climate crisis. Not only does clean energy help to lower carbon emissions, but globally cleantech innovations and solutions support the development of value chains, livelihoods and rural communities.

Within the clean energy landscape, the private sector plays a key role in bringing new technologies to market. Businesses, entrepreneurs and investors drive innovations which generate transformative impact, creating jobs, leveraging investments, providing access to markets and boosting climate resilience.

Since 2010, AECF has supported over 70 early and growth-stage enterprises, enabling the development of renewable energy value chains and climate technologies. Sixty-nine per cent of our portfolio is dominated by companies whose business models address access to renewable energy products and services. These companies have shown tremendous growth and recorded the highest development and environmental impact across our portfolio. By December 2018, our investments had reached over 8 million people who benefit either as consumers of renewable energy products and services, or as company suppliers.

Since 2010, AECF has supported over 70 early and growth-stage enterprises, enabling the development of renewable energy value chains and climate technologies.

In 2018, the total development impact of our clean energy investments was US$341 million, a figure which not only reflects the number of households reached but also includes the positive effect of job creation. In addition, during the year 8,491 SMEs and agents benefited from REACT-funded supply chains.

As part of our commitment to clean energy, we are also keen to measure our own environmental impact as an organisation. We therefore assess installed energy, in line with industry practice set out by GOGLA. By the end of 2018, we had enabled 29.5 MW of clean electricity capacity and achieved 1.03mt of CO2-equivalent emissions reductions.

The positive impact of AECF's investments at household level also continued to grow in 2018, exceeding US$400 million for the first time and increasing by US$70 million from 2017. Three quarters of this amount was generated by agro-based value chains. In recent years we have witnessed a steady increase in net benefit among households using renewable and clean energy technologies for productive use. For example, solar-powered irrigation pumps, used for tree nurseries and horticulture, have generated on average US$137 worth of net benefit per household per year. In 2018, according to the Efficiency for Access Coalition Study, the overall weekly average expenditure on irrigation in East Africa dropped to US$0.57

per customer following the use of solar water pumps (SWP).

Solar products for domestic lighting consistently generate low benefit per household, albeit at an expanded reach. This is due to the extensive 36-month payment plans for each product. Within the renewable energy portfolio, only certain customers are serviced by funded, stand-alone solar home system distribution companies. Forty per cent of customers have completed their payment plans and benefit from an average gross savings of US$35.6 per household per year. Sixty per cent continue to service their payment plans and therefore do not benefit from net savings.

Meanwhile, over 70% of rural households use their solar home system as collateral and/or an anchor product to access credit for additional household items or small business loans. All outstanding repayments for the additional household items are added to the value of the anchor asset, leading to low net benefits. Most importantly, solar home systems contribute to improved quality of life, although it is difficult to put a financial value on this improvement.

In addition to investments in solar home system distribution, AECF provides funding and technical assistance to small-scale power generation and mini/micro grid projects for productive use.

Key Learnings

Lessons learned from our work in cleantech innovations have shaped our investment focus on rural development solutions and technologies.

Patient capital for small-scale power generation and mini/micro grid projects

Most governments in sub-Saharan Africa find it difficult to accept the reality that extending the energy grid will take many years. As a result, they do not include mini/micro-grids in rural electrification programmes. The exception is Ethiopia, where the new National Electrification Plan proactively accommodates the contribution of off-grid generation. It also incorporates the distribution of energy to logistically challenging markets to complement the national grid.

Overall, Africa has one of the world's highest marginal connection costs, with households paying up to US$400 per connection. This figure is significantly higher than in countries like Vietnam and the Philippines, where connection fees are under US$25. Even though connection costs in Africa are heavily subsidised, they still prevent many households from accessing the grid.

If mini/micro-grids could provide a more affordable option, they could bring down the household cost of connectivity and increase overall access to energy. However, mini/micro grids face unclear policy environments and high costs of infrastructure for generation and power distribution. These factors lead to tariffs that exceed those for grid electricity, making it difficult to reach a break-even point. Indeed, financial viability would only be achieved if the off-grid utilities charged US$4 per month, which is not affordable for low- and middle-income customers in off-grid markets. Therefore, such businesses must fend for subsidised capital for continued operation.

Intervention

In addition to solar home systems, AECF's renewable energy portfolio features electricity access business models supported by small-scale power generation and mini/micro-grid projects. These solutions require substantial patient capital and longer-term time horizons if they are to have the anticipated impact in off-grid African markets. To date, AECF has invested over US$7 million in eight mini/micro-grid businesses, with a total installation of 8MW in rural Kenya and Tanzania, benefiting over 500 SMEs and 4,000 people.

Looking ahead, we will continue to invest in mini/micro-grids in East Africa. We will also expand our investments to West and Southern Africa as part of an early-stage search for

the optimal business model, with a view to ensuring:

- mutually beneficial public-private partnerships;
- public sector contribution, with favourable regulations;
- optimal utilisation of installed capacity;
- effective and affordable tariffs for low- and middle-income off-grid customers; and
- enhanced project bankability.

Enhancing access to clean cooking solutions

Across Africa, creating a market for alternatives to firewood and charcoal for cooking has proved extremely challenging. Somewhat unsurprisingly, consumers have been reluctant to give up familiar cultural practices and a widely available, unregulated resource. In addition, the proposed alternatives are unfamiliar products which are costly and subject to taxation and regulation, deepening people's resistance to change.

However, companies selling stoves and associated fuels have attracted increased visibility and investment in recent years. Such businesses benefit from enhanced consumer data, stronger customer feedback and a regular revenue stream from fuel sales. The ability to reduce the upfront cost of stoves has also been a major advantage. These factors have the potential to make such businesses financially viable, assuming they can grow and manage significant fuel supply chains. This 'tool and fuel' model addresses historical problems associated with domestic cooking, since it relies on convincing consumers to purchase stoves and, more importantly, to use them on an ongoing basis. Businesses can also quantify and verify the impact of carbon emissions reductions and potential health improvements.

While distributors of clean cooking products thrive, manufacturers are generally small-scale and early-stage businesses. As such, they are rarely financially capable of delivering large-scale installations, often requiring full payment for their stoves at the time of purchase. Patient, affordable and blended financing is therefore necessary to enable manufacturers and artisans to continue making quality stove products. In addition, technical assistance and business development support are critical to accelerate growth.

Interventions

To date, investors and institutions have invested US$35 million in clean cooking solutions and other bio-energy value chains providing heat for cooking in the rural market. Of this amount, AECF has invested US$6.7 million, representing 17% of total investments in the industry. Such investments have focused on the distribution of clean fuels and improved cook stoves, benefiting over 200,000 rural households in East Africa. Currently, 20% of the AECF portfolio comprises renewable energy companies providing clean cooking solutions to rural customers in sub-Saharan Africa.

In 2013, AECF invested US$1 million in Inyenyeri, a Rwandan Social Benefit Company that distributes cooking pellets and energy efficient cook stoves in Rwanda. Over the following six years the company grew, setting up a pellet production plant and extending its reach to over 4,000 households. Inyenyeri's products have helped to deliver health improvements through reduced indoor air pollution, while also minimising the time and drudgery involved in searching for fuelwood. The company has subsequently been profiled by Cleantech Group as part of a new generation of innovators developing high-impact solutions to tackle the world's most pressing challenges.

Addressing market failure in climate financing

Global trends and experiences have shown the catalytic potential of technological innovation in promoting and improving climate resilience. Proactive solutions to the effects of climate change help to shape a sustainable adaptation and growth path for the most affected communities and markets. In this way, climate change presents opportunities for socioeconomic development, with resilience projects evolving into high-impact business models which can lead to the creation of transformative industries. Indeed, profitable businesses can emerge by financing innovations that provide solutions to environmental issues, allowing the private sector to lead a green and sustainable economic growth trajectory. This paradigm also creates synergies between UN Sustainable Development Goals (SDGs) 7, 9 and 13 on Affordable and Clean Energy, Industry, Innovation and Infrastructure, and Climate Action.

However, climate-smart innovation is a risky business. Companies operating in this area target logistically challenging markets and low-income customers. They also require a lot of capital to develop distribution networks and make their products known. For these reasons, key test cases are needed for the role the private sector can play in supporting climate change resilience and adaptation, as well as low-carbon development. Criteria for the selection of business models also needs to embed both commercial and sustainability milestones. In addition to supporting climate-smart innovations to verify business concepts, scaling businesses require climate funds to expand transformative economic, social and environmental impact.

Below are some of the lessons AECF has learned while financing climate-smart technologies in East Africa. Through this work we sought to improve Kenya's capacity for medium-term climate change adaptation. We also aimed to help put in place the necessary instruments to support long-term climate-smart investment.

Innovative climate change action through private sector funding

In recent years climate action has evolved to engage the private sector. However, most of the business models which have been devised to deliver renewable energy and climate-smart solutions are still in their infancy. They therefore require integrated financing instruments to drive growth and demonstrate commercial viability. Though the private sector has had some success in addressing these issues, high risk and market failures are limiting innovation and the scale-up of successful business models and technologies. The contextual challenges around financing energy and climate technologies have also increased.

Energy access financing *is* beginning to penetrate hard-to-reach areas in emerging, rural, transitioning and fragile markets, offsetting business risks and reducing the costs of investment. Blended finance is also providing a solution for businesses in these areas, strengthening markets for the continued delivery of cleantech solutions to customers in rural Africa.

For over five years, AECF has demonstrated the strong potential of investment in private sector solutions that address climate change impacts. In some cases, climate technologies have exposed the risks and dynamics involved in addressing mitigation and adaptation, as well as the difficulty in determining whether adaptation has been genuinely targeted or accomplished. However, transformative private sector business models can contribute to climate resilience through market-based engagements, offering real climate-smart innovations, products and services which empower affected communities. To date, AECF has invested US$13.8 million in private sector-led business initiatives which enable communities in arid and semi-arid lands (ASALs) in Kenya to cope with climate-related stresses and shocks.

Each year, governments and donor organisations invest millions of dollars in rural water supply infrastructure in Africa. Much of this infrastructure stops functioning after a few years. In Kenya, about 42% of all small and medium-sized piped systems are non-operational. The main problems are inefficient revenue collection, lack of transparency, poor community management, failure of preventive maintenance and financial mismanagement.

Looking to address these issues, Maji Milele Ltd provides a range of water management services to water utilities to help boost revenue collection and efficiency. The company installs prepaid water meters and online monitoring software which makes it easy to keep track of water distribution, consumption and payments.

The company can also provide full-service infrastructure maintenance, collect revenue from users and monitor water consumption patterns, enabling water systems to run indefinitely.

With an investment of US$350,000, AECF supported Maji Milele's installation of prepaid water meters at communal water kiosks across rural Kenya. Through this investment, women and children can now reliably access clean, safe water within reach of their local communities. This has reduced the burden of water collection, freeing up time for economically productive activities, school attendance and childcare.

In Lodwar, north-western Kenya, women and girls used to travel up to 2.5km to the nearest water point and spend up to six hours queuing – and even then, due to rationing and low supply, water was never guaranteed. Now, thanks to the construction of water kiosks, located within a kilometre radius of each other, and the installation of prepaid meters, the women and girls of Lodar can fetch water without travelling long distances.

Furthermore, Maji Milele's water tariff is affordable, with a rate of US$0.05 per 20 litres compared to the US$0.10 per 20 litres charged by water vendors. Local women have welcomed the prepaid water system, highlighting key benefits such as guaranteed access to safe, clean water upon demand; reduced waiting times; and flexibility as to when water can be collected. In addition, the local water committee receives training on the use of water tokens, hygiene and sanitation, which is then passed on to community members. To date, Maji Milele has benefited 4,000 households (up to 10,000 individual customers), with each household expected to save around US$36 per month on household water budgets.

Improved resilience for rural farmers through climate-smart agriculture

Approximately 90% of the economy in rural Africa is supported by agriculture and agribusiness. As we know, smallholder farmers cultivate crops and livestock for food and income; but in order to make their livelihoods sustainable, vulnerable communities need to increase their resilience to the impacts of climate change.

Over ten years, we have demonstrated how financing can be leveraged for adaptation through investment in climate-smart agriculture. Our work in ASALs is a good example, with capital and technical assistance provided to private sector companies to distribute affordable, low-gravity irrigation systems.

In addition, through our Renewable Energy and Adaptation to Climate Technologies (REACT) window, we have been collaborating with the StARCK+ Consortium to work with selected microfinance institutions (MFIs). The aim of this project is to provide small loans to smallholder farmers who are switching to more climate-resilient crops, like sorghum and cassava, and embracing adaptive measures (such as insurance) to reduce commercial risk. These efforts should, over the long term, help to catalyse the financial market for orphaned and climate-resilient crops. Additional capital will be provided to local MFIs and banks through innovative tools such as blended finance, leveraging public and private funds for sustainable markets and reducing vulnerability to climate change.

From rain-fed to irrigated agriculture

Farming in Africa is largely rain-fed and Africa's reliance on agriculture makes it singularly vulnerable to the vagaries of climate. Rainfall is erratic, while natural hazards such as droughts and floods are frequent. In recent decades, Africa has also experienced growing environmental degradation such as deforestation, desertification, declining soil productivity, loss of biodiversity and the depletion of freshwater.

With an investment of US$360,000 from AECF, Liquid Lever Ltd has manufactured and distributed high-quality, gravity-fed drip irrigation kits, helping to ensure smallholder farmers can grow food throughout the year. The company works with microfinance institutions and village-based lending organisations in 10 counties in Kenya, providing flexible loan facilities to enable farmers to access the drip irrigation systems. To date, Liquid Lever has distributed about 60 irrigation kits to households and development organisations. This has reduced the number of farmers using diesel-run generators to irrigate their farms.

Leveraging funding through a risk-free demonstration effect

The purpose behind AECF's programmes is to enable market entry by funding markets or business models where investment is too risky for other commercial lenders. Within our REACT portfolio, 80% of the companies we have funded are start-ups with a failure rate of 19%. By de-risking the delivery of innovative models through grants and interest-free loans, start-ups are given the chance to prove themselves and prepare for commercial finance. Through our work, we have provided a compelling case for channelling increased funding to private sector models to support adaptation and clean energy solutions, including for low-income households in ASAL areas. The supporting evidence for this case should attract larger investors, public investment and even private sector investment through the Green Climate Fund (GCF).

Since 2012, AECF has invested over US$13 million in 36 climate technologies and leveraged over US$60 million from additional private sector financing. With more capital allocated to this type of risk investment, a potentially significant amount of private investment could be obtained. Overall, the leverage ratio of our renewable energy and climate technology portfolio is 1:8.8, which means for every US$1 we invest, US$8.8 is matched by additional private and public sector investors.

Post-harvest grain management solution for smallholder farmers in rural Kenya

Post-harvest losses are a major contributor to food insecurity in Kenya. Losses of 10-20% are usually reported three months after storage, sometimes rising to 50% after six months. Most of the damage is caused by weevils and grain borers, with the infestation starting in the field and continuing during storage. In sub-Saharan Africa, periods of bountiful harvest are often followed by periods of intense drought; and without proper storage, households are unable to buffer themselves adequately, which contributes to ongoing food insecurity across the continent.

Bell Industries Ltd, with a market share of 80%, helps to provide long-term storage solutions through the production of Purdue Improved Crop Storage (PICS) bags. The PICS bag is a cost-effective, chemical-free hermetic storage bag based on grain storage technology used by smallholder farmers for many years. The bag is produced by adding layers of plastic inside traditionally woven storage bags, creating an airtight environment in which pests cannot survive. Access to PICS bags therefore provides an opportunity for households to store grains for longer, contributing to improved food security and increased income from the sale of yields at higher prices. Since 2013, Bell Industries has sold its PICS bags to 120,000 smallholder farmers in Kenya.

Climate insurance models tailored to local conditions

Insurance is an effective tool for building climate resilience by managing climate risks. Through the AECF REACT programme, we are supporting innovative, index-based livestock insurance products in Turkana, north-western Kenya. These products allow pastoralists to receive pay-outs in case of drought-induced scarcity, cover the cost of animal feed and prevent livestock mortality. The trigger for pay-out is a certain threshold in forage levels in the Normalised Difference Vegetation Index (NDVI), a satellite-derived proxy for vegetation cover.

Insurance is an important component of climate-smart farming, and relationship-building with private insurance companies is helping to accelerate risk reduction. However, mutual understanding among MFIs, aggregators and farmers needs to be developed, while the supervision of insurance processes is required from policy through to pay-out.

Index-based livestock insurance in Turkana, Kenya

Drought is the most pervasive hazard and natural disaster encountered by pastoralists in ASAL regions. However, until recently the Kenyan insurance market did not offer any cover to meet risk transfer needs in these areas.

Following a successful pilot in 2014, Takaful Insurance of Africa Ltd introduced a scale-up insurance project to cover Mandera, Garissa, Isiolo, Tana River, Marsabit, Moyale and Wajir Counties. The business model involves providing cover for forage scarcity, thereby making pay-out on reduced pasture, rather than livestock mortality, providing the herder with much needed cash to help nourish and save his animals.

The Index-Based Livestock Takaful (IBLT) product is designed to protect against drought-related livestock mortality. To implement the product, Takaful Insurance has created a strategic partnership with the International Livestock Research Institute (ILRI). As the technology partner, ILRI calculates forage scarcity using a measure of pasture availability that is recorded by satellite imagery every two weeks. This data is collated and sent to IBLT prior to the pay-out periods, indicating which areas have hit critical drought levels. Payments are then made to the affected households. These payments vary depending on how bad the drought conditions are, with IBLT covering four types of livestock: camel, cattle, sheep and goats.

Since 2016, Takaful Insurance has sold insurance policies to over 5,000 policy holders in eight ASAL counties in Kenya. Cumulatively, the insurer has insured over 52,000 livestock valued at US$90,000; by 2018 the annual average compensation was US$100,000.

Moving Forward

Investing in new solutions and challenging markets

Solar home systems in transitioning markets

Around the world, there are more than 1.1 billion people living without access to electricity, of which over 600 million are in sub-Saharan Africa. According to the United Nations Development Programme, 2.9 billion people still rely on solid fuels such as wood, animal dung and charcoal for cooking, leading to high levels of indoor pollution, health problems and environmental degradation.

Unsustainable patterns of energy production and consumption threaten human health and quality of life, while also affecting ecosystems and contributing to climate change. Somalia is a prime example. In Somalia, over 10 million people lack access to electricity, and many Somalians rely on expensive and environmentally hazardous diesel and oil for energy, as well as wood-fuel for cooking and lighting in rural communities.

Clean energy not only tackles these challenges head-on, but acts as an engine for poverty reduction, social progress, equity, enhanced resilience, economic growth and environmental sustainability. And in Somalia, as elsewhere in Africa, private sector and market-based approaches are critical for the supply of sustainable energy to rural communities.

Access to finance in Somalia is expensive due to the country's unstable political, social and economic situation. The Somali market has a very high level of perceived risk, with off-grid players charged significantly higher rates of interest compared to their counterparts in neighbouring Kenya. With this in mind, assistance in resolving the problem of high interest debt could lead to a scaling up of operations across the sector.

AECF recognises that finance is one of the drivers that will enable companies to meet the growing demand for affordable and sustainable clean energy in underserved rural markets. Start-ups require seed finance and competitively rated/ subsidised loan facilities for more established players to help catalyse the energy sector. However, because in countries like Somalia there is no legal recourse due to weak rule of law and established finance mechanisms, the risk to donor funds is high.

Through the REACT Household Solar Programme, we help private sector companies accelerate access to transformative solar home systems. The programme provides grants and interest-free loans to private sector companies, equipping them for costly and logistically challenging rural markets in Somalia and four other target countries: Ethiopia, Ghana, Senegal and Nigeria. In each of these countries, companies will receive between US$100,000 to US$1.5 million based on their financing needs and their ability to absorb the allocated funds over five years.

With no obvious tools for financing off-grid solar energy in Somalia, the programme will leverage existing risk-profiling mechanisms in the market. In addition to financing, funded companies will receive technical assistance and additional investment brokerage support.

The REACT Household Solar programme is expected to enable 150,000 households to access quality, affordable and transformative solar home systems. The programme is funded by DFID under the Africa Clean Energy Business Initiative (ACE).

Overall, AECF's work on energy corresponds to the main targets of UN SDG 7 on Affordable and Clean Energy: to ensure universal access to affordable, reliable and modern energy services; work with countries to make energy systems and usage more efficient; and work to increase the global share of renewable energy.

Investing in energy efficient solutions in nascent markets

Burkina Faso has an estimated population of 18 million people. The electrification rate in the country is still very low, and the national electricity access rate is 20%. While the electrification rate is higher in urban areas, investments by the government and international donors have proved insufficient in meeting rising demand in the two biggest urban centres, Ouagadougou and Bobo Dioulasso.

The national electricity access rate in Burkina Faso is 20%: 40% usage in urban areas and 3% usage in rural areas respectively. While the electrification rate is high in urban areas, the electricity generation mix of the country is significantly dependent on imports. Over 70% of electricity in Burkina Faso is produced from thermal diesel generation and 20% is imported from neighbouring countries, resulting in expensive and unstable electricity. Furthermore, unmet consumer demand leads to periodic load shedding, while grid reliability is vulnerable to interconnection problems, increase in demand and poor infrastructure.

In Ouagadougou, the government charges high electricity connection fees of up to US$264 per household in urban and peri-urban areas. This limits access to grid electricity, the supply of which is unreliable. Retail electricity tariffs also stand at around US$22 per kWh, which is higher than in most urban areas across the continent, doubling from 10% to 20% between 1994 and 2017. Power rationing equivalent to an average of 180 hours is experienced every year in Burkina Faso, leading to the loss of productive time for businesses that depend on grid electricity. This situation provides a business opportunity for the installation of standalone solar photovoltaic (PV) systems.

To address the challenge of energy access, the Government of Burkina Faso has developed a National Plan of Economic and Social Development, which aims to achieve 85% electrification coverage, reach 700 new towns/localities and double connections by 2020. Launched in 2014, the plan has since been revised to include off-grid technologies.

As part of these efforts, stimulation of economic growth in the country will depend on the provision of entrepreneurship support to off-grid actors in accessing capital and supporting market development. To this end, AECF, with funding from Sida, is collaborating with the Government of Burkina Faso on a US$5 million Efficient Electrification Project. The aim of the project is to provide funding to private sector companies that can adequately incentivise small businesses and households to opt-in for solar PV installations and other energy efficiency measures. Customers will use the money saved from electricity bills to pay and own the installed solar PV systems.

The project is packaged with a subsidy to increase access to quality and affordable solar power systems. It also aims to increase efficiency in electrification and create savings of up to 80% in electricity expenses for urban and peri-urban households and small businesses.

Powering agriculture

Agriculture, the predominant economic activity in sub-Saharan Africa, is becoming increasingly unsustainable due to increased population, limited access to resources and evolving markets. The situation is being exacerbated by climate change, which has contributed to a series of droughts culminating in the devastating period of 2016-18. Widespread impacts across the region include: 60% mortality of livestock herds, low market prices and closure of critical export markets, leading to severe food insecurity, increased household indebtedness and internal and external migration.

Economic growth for most countries in the region has also been negatively impacted by escalating fuel prices, resulting in increased food prices which soared towards 20% per annum in 2018. With increased cost of energy access and unreliable supply of fuel, private sector-driven businesses continue to scale down their operations, leading to loss of employment and livelihoods. Markets for farm produce have also become unreliable, creating unstable prices, loss of income and increased vulnerability among rural farmers.

Africa can feed Africa. The continent can industrialise and provide employment opportunities through agribusiness and renewable energy value chains. It is well endowed and has the markets required, but needs more than just good technology policies. Scaling up productivity means tapping water resources for irrigation and providing reliable energy. It also means incentivising financial institutions to invest in renewable energy for commercial farming, which in turn will boost profitability and competition in the agribusiness sector through increased access to low-cost renewable energy.

In sub-Saharan Africa, the agriculture sectors face massive power challenges. Smallholder farmers and processors face a high cost of energy and unreliable supply, while on average agribusinesses spend up to 30% of their revenue on energy. These factors restrict the capacity of farmers and agribusinesses to adopt modern agricultural practices, increase food production, improve operational efficiency and benefit from broad-based, low-carbon economic growth. For instance, cold storage facilities cannot operate optimally due to power outages, while trading in perishable produce is not commercially viable due massive post-harvest losses.

To ensure a sustainable supply of energy for agricultural value chains, we need to support the development and deployment of clean energy innovations. Innovations that can increase agriculture productivity to help end extreme poverty, unemployment and hunger. AECF is fully committed to this cause. Since 2013, for example, we have invested seed capital of US$750,000 in FuturePump, a company specialising in the manufacture and distribution of solar-powered irrigation pumps at affordable costs. In Kenya and Uganda, the pumps have helped smallholder farmers to triple their incomes. In the past two years, the company has expanded its distribution network to Zambia, Ethiopia and Senegal through rural-based financial institutions, NGOs, water service providers, agricultural producers and marketing groups.

To further develop the solar-powered irrigation market, AECF will continue to catalyse resources and focus attention on working with the private sector. In this way, we aim to help power African agriculture towards a sustainable and food-secure future.

Chapter 4: Gender Lens Investing

We transform lives by economically empowering women as part of AECF's 'Gender Lens Investing'

At least 50% of development impact accruing to women across the investment portfolio, 35% of portfolio companies being women-led, 40% of jobs created in these companies are held by women and 70% of jobs created by these companies are held by youth.

Gender Lens Investing in Africa is motivated by SSA's four main economic realities:

1. Agriculture
2. Sustainable enrgy
3. The Private Sector
4. Women.

First, agriculture is the most important sector in most African economies, on average accounting for nearly one-fourth of gross domestic product (GDP).

Second, sustainable energy is a development enabler: It would be impossible to achieve any of the SDGs without improving the quality and reach of energy services in the developing world.

Third, the private sector is increasingly active in transforming African agriculture, energy access and economies.

Fourth, women comprise approximately half of SSA's agricultural labour force (and two-thirds or more in some countries). Women are the key household energy managers, who have a bigger say in household energy decisions.

Investing Strategy

AECF's vision is to achieve higher levels of equality between women and men. Investment finance can be used as a tool to accelerate this vision. The institution is committed to investing in a way that advances gender equality in a sustainable manner through the implementation of its Gender Lens Investing Strategy for Rural Prosperity. The strategy is both a commitment to achieving identified headline figures and a restructuring of the investment process to find, nurture and grow businesses that are providing innovative solutions to increase gender equality in rural communities at the household, business and market levels. Among key headline figures are; **at least 50% of development impact** accruing to women across the investment portfolio, **35% of portfolio companies being women-led**, **40% of jobs** created in these companies are held by women and **70% of jobs created by these companies are held by youth**.

The AECF has increased its focus on the inclusion of vulnerable and marginalised groups; specifically, youth and people living with disabilities. The AECF's Gender Lens Investing Strategy **integrates** a gender analysis throughout the investment process; designs and hosts **inclusive** investment mechanisms that allow equal access to finance for female entrepreneurs and

businesses working for and with women; and shares **insights** from these experiences. Our aim is to level the playing field for all in order to support the equal economic participation of women and men. By ensuring the full participation of women as producers, consumers, business owners and key decision-makers, we hope to create a potent force for change.

As a leading development institution in Africa, AECF's commitment to gender equality is not only about redressing an imbalance, but also about shifting the financial systems and markets where possible, so that they signal and influence how women and men are valued. This stems from a desire to never undermine the role that both women and men play as contributors and innovators in the development of a prosperous and enterprising rural Africa. Our approach to financial development acknowledges that there has been a market failure to equally recognize the participation and leadership of women in fuelling transformation and seeks to reverse the practices that devalue the contribution of women.

Women-owned and women-led businesses constitute approximately **15% of the entire AECF portfolio** (Agribusiness and Renewable Energy). Most of these businesses are in crop and livestock production, distribution of clean energy solutions and post-harvest solutions. By the end of 2018 these businesses have improved the livelihoods of over 631,424 households, created 1,1153 new jobs and leveraged US$41,790,374 million in additional capital.

Key Learnings

Provision of capital is only part of a broader solution in addressing the challenges faced by female entrepreneurs and women-led businesses: Women-owned/led businesses struggle to secure financing needed to realize their growth potential due to a number of different factors despite being an important source of economic growth and creation of new jobs. However, access to finance is not the only solution for addressing the multiple challenges faced by women. Investment readiness is a critical component which is seldom provided to women owned/led businesses who in most cases require support to fully develop their operations and strategy to the rigorous level required by commercial investors. There is a need for a holistic product offering that goes beyond increasing access to finance providing additional pertinent services that are critical to the needs of female entrepreneurs and business growth.

Business development services (BDS) are important in assisting entrepreneurs run their business effectively. It can act as an enhancer of access to finance and as an alternative form of "collateral" in circumstances where tangible collateral may be an impediment to meeting traditional security requirements. Many BDS programme are not sufficiently gender-focused. There's little awareness of the constraints that women face and they do not pay enough attention to the needs of women owned businesses at different levels. Thus, there is a need for BDS programme to be integrated with access to finance strategies for women.

Technical value chain support is a critical driver for the success of women owned/led businesses. Whilst business development services are important in helping drive business growth, customised technical value chain support is of equal importance as it provides technical expertise directly related to the value chain of the business. Access to education remains one of the greatest impediments for women's development and growth. Fewer women than men get access to college/university education and vocational training. Hence, there is a knowledge gap on the technical understanding of the value chains their businesses operate. Thus, there is a significant need to provide customised expert value chain support.

Investment readiness is a key element of the financing chain in addition to supply related matters, as it can increase the volume and quality of deal flow to investors. These include attracting investments in venture capital funds; encouraging more venture capital investments in growth-oriented firms;

Investment readiness builds the capacity of a business or an entrepreneur to understand the concerns of banks, business angels or venture capital funds and providers of external financing that the business is looking for.

increasing investments by business angels; and the availability of exit opportunities. The Investment readiness of entrepreneurs, particularly female entrepreneurs, is a challenge on the demand side of finance that needs to be addressed. Investment readiness builds the capacity of a business or an entrepreneur to understand the concerns of banks, business angels or venture capital funds and providers of external financing that the business is looking for. This includes knowledge about effective communication with investors, provision of well-structured and relevant information, credibility and creating confidence in order to secure the external financing sought. Improving investment readiness of businesses allows them to attract more debt and equity finance.

An in-depth country gender sensitive value chain analysis is critical in supporting women owned/led businesses. Women engage more in cash transactions than loans because they participate in higher transaction - frequent value chains instead of capital-intensive value chains, e.g. cotton vs. vegetables. Hence, it is imperative to map out the value chains women are most actively engaged in within the target markets and provide strategic financing and technical support to spur business growth and crowd-in private capital.

The importance of understanding the different focal country contexts cannot be over emphasised. The factors contributing to the significant variances in the quality of the applications received from different markets must be taken into consideration when reviewing and shortlisting applicants. This is to ensure a fair assessment that does not penalize other applicants based on lack of technical expertise in articulating ideas.

Moving Forward

Based on the lessons above, AECF has expanded its investments in women by launching its flagship initiative on gender, the IIW programme. The pilot of US$5.9 million funded by the United Kingdom is meant to apply AECF's experience in Gender Lens Investing, initially targeting agribusinesses in Burkina Faso, Cote d'Ivoire, Ethiopia and Sierra Leone in 2018. The fund includes a gender mainstreaming prize as a new tool to encourage engagement on gender inclusion at the business level. This prize will be used to generate "blue sky thinking" or pilot activities that address critical population and market segments and encourage investment in women. Since women's economic empowerment is central to achieving gender equality, the gender mainstreaming prize in the IIW programme will identify, support and highlight initiatives that are leading the way. The goal is to grow the fund to a US$50 million initiative that aims to increase economic opportunities for women in agricultural and renewable energy value chains in Africa.

Going forward, AECF will leverage on its experience acquired through investing in women, designing and managing gender focused competitions, its proven ability to attract additional funding and the existing pipeline of private sector companies/social enterprises to replicate their business models and contribute to expanded market-based opportunities. These interventions will contribute to increased jobs, income and revenue for SMEs. AECF will also leverage the success and resources of AECF Connect programme, an investment facilitation unit, which has already supported several AECF investees to raise additional commercial capital over the last five years.


TRUKFIT
ZONFU

Chapter 5: Expanding the Finance Continuum

We transform Africa's economics through the AECF Connect Programme.

Africa currently attracts more impact investors than any other region in the world, and yet only a few SMEs manage to capture a share of available investment capital. There is significant growth in available capital for impact investing. However, investors struggle to connect to investible enterprises in SSA. This can be attributed to three main reasons:

- A significant gap in commercial capital available for mid and lower end businesses.
- Enterprises are often unprepared and ill-equipped to access the capital available.
- Business development service providers face unattractive economics in serving lower end businesses.

The private sector is the engine for job creation. According to the World Trade Organisation (WTO), the private sector accounts for 90% of all jobs in the developing world with SMEs accounting for majority of these jobs. Despite the important role they play, SME's cite access to affordable commercial capital as a major hindrance in their operations and growth. International Finance Corporation (IFC) estimates that Africa's finance gap for small and medium enterprises stands at US$331 billion.

The private sector is the engine for job creation. According to the World Trade Organisation (WTO), the private sector accounts for 90% of all jobs in the developing world with SMEs accounting for majority of these jobs.

As we wrap up the pilot phase of Connect 1.0, a 6-year programme funded by the Sida to help AECF investees to raise follow-on commercial capital from third-party investors, we have both learned a lot and registered big successes from our portfolio companies. AECF Connect was designed to help enterprises raise commercial capital in greater volumes more efficiently with better terms and a greater probability that they probably would not have had without Connect's support on investor-investee matchmaking, and expert and strategic advisory on deal preparation and negotiation.

Since inception, Connect has evaluated over 100 AECF investees for fundraising support and provided free-of-cost, investment facilitation services to 27 AECF investees – in agribusiness and renewable energy – and successfully helped 12 of these investees raise investments in 18 transactions totalling US$44.92 million.

Connect 1.0's focus on facilitating commercial investment into early and growth-stage enterprises came a time when the service was greatly needed, given the fundraising challenges faced by businesses at this stage of growth. These challenges can be characterised as follows:

1) There is an outsized gap in capital targeting early-stage companies;
2) Many enterprises are not quite investment-ready;
3) There are limited economic incentives for service providers to advise enterprises at lower ticket sizes.

Let's illustrate some of these challenges.

In the supply gap, only 10% of the investment capital invested in East Africa up to 2015 targeted deals in the US$250,000 – US$1 million. Of that capital, only another 10% came from commercial investors (hence 1% of the total volume of capital available).

While there are enterprise support programmes in the market, many are either sub-scale (often competition-based, with inconsistent funding) or deemed ineffective by the investors sourcing from them. Given the composition of AECF's portfolio – with two-thirds of companies earning less than US$500,000 per year – investment readiness support will need to become a fundamental part of AECF and Connect offering.

Investors face high transaction costs relative to the size of the deal when considering investments in lower ticket ranges, leading many investors to shift their focus towards larger deals. On the demand side, gaps in internal competencies and resources at the enterprise level – uncompelling strategic plans, lack of qualified talent, weak internal systems – limit the success rate with private investors. As a result, only 2% of enterprises seeking private equity are successful. On the advisory side, few providers have been able to make the economics work when focusing on SMEs: fee structures common in the industry disincentivise their focus on the segment because the risks are high (fundraising is lengthy and may be unsuccessful) and returns too low.

In 2018, AECF Connect co-designed two events. The first event was a deal-room session at the Africa Green Revolution Forum (AGRF), the centre for African agricultural policy discussions bringing together a wide range of stakeholders to discuss development issues affecting the continent. The success of these sessions assures the private sector of an increasingly important platform for future meetings, with deal rooms likely to become a common feature. The maiden deal room hosted 19 companies seeking US$30 million. The second event was an investor forum in collaboration with the Energy and Environment Partnership (EEP) to organise a matchmaking event for active companies and investors in the Renewable Energy and Climate Smart Sector, an event that attracted 22 investors from across the region and 20 businesses seeking more than US$100 million, generating new investment deal conversations for 2019.

Whereas Connect achieved its targets, it cost a little more than market rate to provide an investment facilitation service, compared to private industry players in investment advisory. Considering investment ticket sizes below US$2 million are part of the range underserved by advisors, this highlights the fact that there is need for subsidies in this space – creating a case for a new phase for AECF Connect.

AECF Connect will continue to evolve its approach, integrating its efforts into the ongoing support provided by the AECF to businesses through the alumni network, expanded partnerships, increased local market knowledge and technical assistance services. AECF Connect will integrate an investment readiness programme for all businesses before getting to investment facilitation, addressing the most persistent gaps in businesses; management ability to define and sell a strategic vision, understanding the unit economics of their business, accessing quality talent and, especially for agribusinesses, establishing key supplier and off-taker relationships to scale their business.

AECF Connect programme is an integral part of AECF's value offering to the private sector, using practical experience in overcoming the challenges of raising finances for innovative enterprises in difficult markets and feeding these into the investment ecosystem in Africa and crowding in investors.

Chapter 6: Financial Statements 2018

	Note	2018 US$	2017 US$
REVENUE			
Grant Income	4	15,458,342	14,467,039
Foreign currency translation (loss)/gain		(483,232)	67,364
		14,975,110	**14,534,403**
EXPENSES			
Investments to Companies			
Disbursements to investees	5	8,193,496	8,905,316
Technical Assistance		36,295	45,860
AECF Connect		328,383	-
Total Investments to Companies		**8,558,174**	**8,951,176**
Operational Costs			
Staff Costs	6	3,022,666	1,432,266
Travel Costs	6	792,156	222,081
Consultants & Professional fees	6	1,500,126	2,362,335
Conferences, Meetings & Seminars	6	291,329	89,151
Office Expenses and Services	6	685,182	811,514
Governance costs	6	168,477	172,388
Depreciation	6	89,800	117,311
Total Operational Costs		**6,549,736**	**5,207,046**
Evaluation Management Unit Costs	9	350,432	308,817
Total Expenses		**15,458,342**	**14,467,039**
(Deficit)/Surplus before tax		**(483,232)**	**67,364**
Income tax		-	-
(Deficit)/Surplus for the Year		**(483,232)**	**67,364**
Other comprehensive income		-	-
Total comprehensive (loss)/income for the year, net of tax		**(483,232)**	**67,364**

	Note	2018	2017
ASSETS		**US$**	**US$**
Non-Current Assets			
Property and equipment	10	-	-
Current Assets			
Cash and cash equivalents	11	18,414,586	6,543,703
Account receivable and prepaid expenses	12	18,417,304	37,336,992
Due from Donors	15	2,352,307	4,602,273
		39,184,197	**48,482,968**
TOTAL ASSETS		**39,184,197**	**48,482,968**
FUND BALANCES AND LIABILITIES			
Fund balances			
Deferred income- short term	15	14,770,827	5,030,856
Deferred income- long term		1,553,797	5,947,007
Revolving fund		6,143,207	2,638,399
Restricted operating reserves		(415,868)	67,364
		22,051,963	**13,683,626**
Current Liabilities			
Accounts payable and other liabilities	16	17,132,234	34,799,342
TOTAL FUND BALANCES AND LIABILITIES		**39,184,197**	**48,482,968**

The financial statements were approved by the Board of Directors on 1st May 2019 and signed on its behalf by:

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Chairman Director

Endnotes

1. https://sdgcafrica.org/wp-content/uploads/2019/06/SDGS_INDEX_REPORT_2019WEB.pdf
2. https://www.brookings.edu/blog/africa-in-focus/2018/11/21/figure-of-the-week-understanding-poverty-in-africa/
3. https://www.worldhunger.org/africa-hunger-poverty-facts-2018/
4. https://www.brookings.edu/blog/africa-in-focus/2017/01/11/figures-of-the-week-sub-saharan-africas-labor-market-in-2017/
5. The Journal of Development Studies, Africa's Unfolding Economic Transformation
6. Lighting Africa Initiative http://www.lightingafrica.org. IFC.
7. EA/World Bank (2015)
8. IFC, 2013: Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises
9. AfDB, 2017
10. 1 Cleantech Group Company supports the development and marketability of clean technologies, providing members of its Cleantech network with access to capital, investors, research and promotional opportunities: info.cleantech.com/2019-Global-Cleantech-100-Report-Download
11. UNDP
12. Somali Master Plan
13. http://documents.worldbank.org/curated/en/275641497146431923/pdf/BF-PP-05152017.pdf
14. UNDP, 2016: Gender and Climate Change
15. The World Bank, 2015: Linking Women With Agribusiness In Zambia Corporate Social Responsibility, Creating Shared Value, and Human Rights Approaches

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