

REGIONAL INNOVATION PROJECT/PROGRAMME PROPOSAL

PART I. PROJECT/PROGRAMME INFORMATION

Title of Project/Programme: Unlocking investments in gender and youth-inclusive early-growth stage adaptation Small and

Medium-sized Enterprises in Kenya and Uganda

Country/ Countries: Kenya, Uganda

Thematic Focal Area¹: Innovative adaptation financing

Type of Implementing Entity: Multilateral Implementing Entity (MIE)

Implementing Entity: United Nations Industrial Development Organization (UNIDO)

Executing Entities: adelphi, Kenya Climate Ventures (KCV), Finding XY)

Amount of Financing Requested: 5,000,000 (in U.S Dollars Equivalent)

¹ Thematic areas are: Agriculture, Coastal Zone Management, Disaster risk reduction, Food security, Forests, Human health, Innovative climate finance, Marine and Fisheries, Nature-based solutions and ecosystem-based adaptation, Protection and enhancement of cultural heritage, Social innovation, Rural development, Urban adaptation, Water management, Wildfire Management.

List of abbreviations

APT	Adaptation performance targets	ICT	Information and Communications Technology
ASAL	Arid & semi-arid landscapes	IE	Implementing Entity
ASAP	Adaptation SME accelerator Project	IOM	International Organization on Migration
BDS	Business Development Services	IPCC	Intergovernmental Panel on Climate Change
BAU	Business as usual	ITCZ	Inter-Tropical Convergence Zone
CSA	Climate smart agriculture	MoFPED	Ministry of Finance, Planning and Economic Development
DFIs	Development Finance Institutions	MSME	Micro, Small and Medium Sized Enterprise
EE	Executing Entity	NCAP	National Climate Action Plan
ERS	Economic Recovery Strategy for wealth and employment creation	NDC	Nationally Determined Contributions
ESIA	Environmental and Social Impact Assessment	ROI	Return on Investment
ESMS	Environmental and Social Management System	SACCO	Savings and credit cooperative organization
ESSPP	UNIDO Environmental and Social Safeguards Policy and Procedures	SDGs	Sustainable Development Goals
FAO	Food and Agriculture Organisation of the United Nations	SME	Small and Medium-sized Enterprise
FI	Financial Institution	SOC	Soil Organic Carbon
GDP	Gross Domestic Product	SSA	Sub-Saharan Africa
GoK	Government of Kenya	UGEFA	Ugandan Green Energy Finance Accelerator
GoU	Government of Uganda	WRI	World Resource Institute
SSP	Shared socio-economic pathways	WRUA	Water Resource Users Association
TA	Technical Assistent		
ToC	Theory of Change		

Project Background and Context:

This project takes an innovative approach in piloting a catalytic finance facility aimed to support early growth adaptation SMEs in Kenya and Uganda to scale their business models and adaptation impact on highly vulnerable target groups. The finance facility in combination with targeted business and post-investment advisory support will help these SMEs to overcome the missing middle financing gap and related challenges to grow and replicate their business operations, thus, widening the outreach and deployment of adaptation solutions to vulnerable groups. Vulnerable communities will benefit from an increased access to targeted and context-specific adaptation solutions, substantially increasing their resilience to climate change. The project will furthermore capacitate local FIs to gain a better understanding of adaptation solutions and technologies as provided by adaptation SMEs to raise their willingness and ability to provide tailored finance for adaptation businesses. Through its innovative approach, the project addresses both the finance supply (financial actors) and demand side (adaptation SMEs) to achieve transformational change in prevailing financing systems and mechanisms in the two target countries. A pre-screening of gender- and youth inclusive adaptation SME pipelines in Kenya and Uganda, the main target group of this project, conducted by the local executing entities (EE) showed that these SMEs operate across regions and counties, their adaptation business models tackling the diverse climate-related challenges of local customers and beneficiaries. At the same time, the SME market is highly volatile as business failures among early-growth enterprises are common and have been further exacerbated by the COVID-19 pandemic. The project will therefore take a cross-regional approach, inviting enterprises to apply from all regions in Kenya and Uganda. The final selection of participating adaptation SMEs will consider the extent the business model in question addresses specific vulnerabilities of the final customers/beneficiaries in the region of operation. To this end, a detailed scoring system with a positive list of eligible adaptation technologies/ approaches will be developed as part of the project's inception phase (see also Climate Risk and Adaptation SME Solution Matrix as a first guidance). Additionally, it is important to note that an initial gender assessment can be found in Annex 1 to give insight into how gendered challenges have been incorporated into the project planning and development. AA comprehensive assessment will be provided as part of the full proposal, together with a market analysis.

- 1. Geography & historical context: Located on the eastern coast of Africa, Kenya and Uganda lay adjacent to the rift valley and Lake Victoria. Kenya has a territory of approximately 580,000 km² and its landscape is predominantly characterized by drylands located in the north eastern and north western part of the country. In the south western part of the country mountain ranges, forested areas and large lakes define the main ecosystem structures. On the other hand, Uganda located west of Kenya is a landlocked country with relatively homogeneous landscapes of 241,555 km², characterized by large lakes, forested areas, savannahs and the White Nile. With high precipitation rates and large water bodies cover approximately 15% of the country surface area.
- 2. The populations within these two countries are young and rapidly growing (bottom heavy demographic models). According to the Kenya National Census (2019), the population was reported at 47.6 million people, a severe increase from the estimated 28.7 million in 2000². Uganda's population was estimated at 40.3 million by midyear 2019 with an annual population growth rate of 3.1%³. Similarly, to Kenya the demographic model in Uganda is bottom heavy with children below the age of 15, constituting 48.1% of the population. Uganda also has a strong cultural diversity with the most recent census identifying 60 different tribal groups. Over 38.73 million (KE) and 34.3 million (UG) are classified as living in rural areas, accounting for over 76% of households.
- 3. Economic structures and trends: The economic landscapes of both countries have followed similar growth trends since their independence. In 2020, Kenya's Gross Domestic Product (GDP) was 101 billion USD, and Uganda's was 37.6 billion USD, an increase of 694.73% and 505.43% since the year 2000, respectively. However, despite the rapid increase in GDP, not all parts of the population have experienced these financial gains. According to the GINI⁴ index in 2019, income inequalities were classified as high as their scores of 41.61 (Kenya) and 42.80 (Uganda), clearly representing an unequal distribution of wealth. Yes both countries have seen improvements in⁵. However, rural and remote regions have not yet benefitted from these financial gains due to the lack of markets, price fluctuations for the crops they produce, and increasing climate threats leading to crop loss and poor harvest. Despite the substantial growth and improvement in the economic conditions within Kenya and Uganda, economic structures are predominantly dependent on rain-fed and non-mechanised agricultural production.
- 4. Agricultural production is central to Kenya's socio-economic success, agriculture contributes to approximately 80% of the workforce and 23.05% of the annual GDP. Similarly, in Uganda 25% of the country's annual GDP comes from agriculture and employs approximately 75% of the total labor force. In addition, women constitute the majority of this labor force, as highlighted by the World Bank (2020), recording 49.2% (Kenya) and 49% (Uganda) of women employed in the agricultural industry. Crop production is the largest component and most important for food security with sugarcane (6.8 million tons), maize (3.8 million tons) and potatoes (1.9 million tons) being the most produced crops in Kenya. Similarly, in Uganda, crops were also the largest contributor to this sector with sugarcane (3.9 million tons), plantain (3.8 million tons) and maize (2.9 million tons) being the three largest quantity produce⁶.
- 5. In Kenya, crop production predominantly occurs in Central, Rift Valley, Western and Nyanza provinces. Within these regions, there is large-scale production of coffee, tea, floriculture and smallholder production of essential food crops such as potatoes, beans, corn, and wheat. Areas in Uganda with similar climates, predominantly in central, western and eastern regions are the core agricultural production sites. Livestock farming is widely spread throughout Kenya and Uganda due to cultural and traditional practices in pastoralism. However, drylands in the North Eastern and North Western part of Kenya and the cattle corridor (Uganda) are regions where pastoralism is a main source of income and nutrition⁷.

² Kenyan national census. (2019). 2019 Kenya Population and Housing Census - Population by County and Sub-County - openAFRICA

³ Uganda national census. (2019). THE STATE OF UGANDA POPULATION REPORT 2019 | Ministry of Finance, Planning and Economic Development

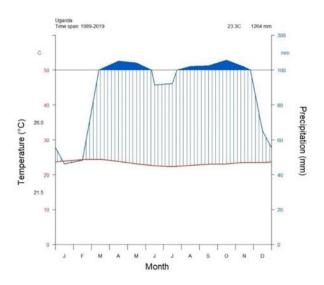
⁴ The Gini coefficient is a measure of the income distribution of a population. Higher values indicate a higher level of Inequality and values closer to 0 represent more equally distributed income. <u>Source</u>

⁵ World Bank, World Development Indicators. (2020). URL: Employment in agriculture (% of total employment) (modeled ILO estimate) | Data (worldbank.org).

⁶ FAOSTAT. (2020). Crop and yield data. URL: https://www.fao.org/faostat/en/#data/QCL and https://www.fao.org/faostat/en/#data/QCL.

Waithaka, M., Nelson, G. C., Thomas, T. S., & Kyotalimye, M. (2013). East African agriculture and climate change: A comprehensive analysis. Intl Food Policy Res Inst.

- 6. Agricultural production within Kenya and Uganda is heavily focused on crop production for staple foods or exportation. Yet, despite the vast number of agricultural exports coming from large-scale producers for products such as tea or coffee, small-scale production is primarily focused on supplying local markets and accounts for 78% and 80% of the total agricultural production in Kenya and Uganda, respectively.
- 7. <u>Climate:</u> Kenya and Uganda are located within a highly vulnerable area to climate change with increasing precipitation variability, extreme precipitation and droughts, and raising temperatures causing irreversible damage to the livelihoods of vulnerable communities. According to the Intergovernmental Panel on Climate Change (IPCC), the East Africa region, which includes Kenya and Uganda, has experienced a 1.5 °C increase in temperate since 1901 and projections foresee an increase by 1.7 °C to 6 °C by 2080. Uganda and Kenya have faced an increase in annual precipitation rates since the 1960s.
- 8. Kenya and Uganda are defined by a bimodal precipitation regime, with a short rainfall season occurring October- December (OND) and a long rainfall season between March and May (MAM). Precipitation is controlled by the movement of the intertropical convergence tropical zone (ITCZ), an equatorial band of low pressure where northern and southern trade winds meet, causing heavy rainfall. Due to changes in the annual movement of the sun's solar position, the band moves either north or south depending on the time of year.
- According to Walter and Lieth climate graph analysis of Kenya and Uganda's climate data between 1989 and 2019, Uganda and Kenya have similar bimodal climates, with annual mean temperatures of 23.3°C and 21.1° respectively (Figure 1 & 2 below). This is represented by the red line illustrating the average monthly temperatures. Evidently, due to the countries' equatorial position, mean seasonal temperatures do not fluctuate significantly. In terms of precipitation, the ITCZ results in bimodal precipitation structures, thee two rainfall seasons are clearly depicted by the blue line which presents the monthly average rainfall. Areas with red dotted shading are dry period, and the blue line shading illustrates a humid period, and the full blue shading is present there Is a wet period. However, due to a variety of factors (direction of wind, altitude, etc.) both countries receive regional variations in precipitation. In Uganda, annual mean precipitation rates are at 1264mm with the majority of the year having humid and tropical rainfall events. Precipitation is much stronger in the central and western parts of the country and arid seasons occur in the southern and northern parts of the country. On the other hand, Kenya has a much lower annual mean precipitation at 701mm and an arid period occurring in the two dry seasons This bimodal structure is very clear throughout Kenya with the exception of the arid regions in the east/northeast and north western arid and semi-arid regions where precipitation rates are much lower.



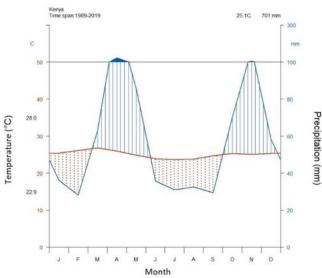


Figure 1. Climate graph Kenya

Figure 2. Climate Graph Uganda

Climate trends and projections

- 10. Temperature: Extrapolating the World Bank Climate Portal data (2020) further, temperature variability plots indicate a statistically significant rise in temperature of 1.83°C (Uganda) and 1.7°C (Kenya) from 1901 to 2019. The data strongly suggest that a warming trend has occurred in both regions, which is in accordance with findings within (IPCC) reports, national and academic assessments, and several reports from non-governmental organizations.
- 11. Precipitation: Climate change poses a significant threat to East Africa's bimodal precipitation models, although mean annual precipitation variability plots indicate no significant trend changes in precipitation within the last 120 years. Anomaly plots derived from the World Bank Climate Portal (2020) show a trend to higher precipitation variability in recent years. Likewise, seasonal variability plots illustrate an altered seasonal occurrence of precipitation (Figure 3 & 4). In Kenya, both short dry seasons and short rain seasons are following a trend of increasing precipitation, whilst long rain seasons illustrate a slight reduction in mean seasonal rainfall over the time series. On the other hand, in Uganda all seasons presented an increasing mean precipitation trend, with the short dry season experiencing the most rapid and statistically significant increase. However, scholars have denoted three key variables that have changed in precipitation patterns in both Kenya and Uganda: (a) failure in the seasonality of rainfall, as precipitation is beginning to occur more erratically and outside of the

⁸ Climate Risk Profile: Kenya (2021)

defined bimodal seasonal structures; (b) higher frequency and severity of heavy rainfall events and droughts; (c) Increased occurrence of the El Niño and La Niña events⁹ patterns¹⁰.

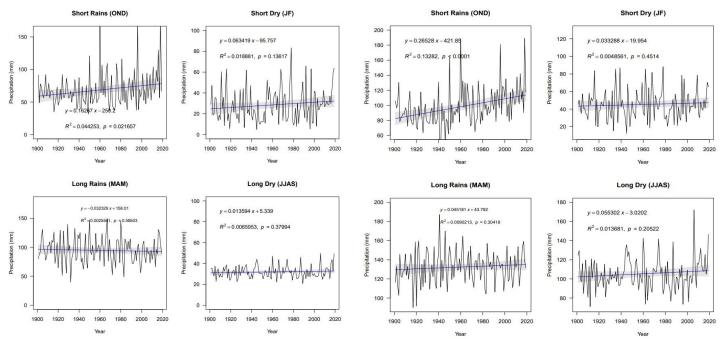


Figure 3. Mean annual seasonal precipitation trends in Kenya in the time series 1900-2019

Figure 4. Mean annual seasonal precipitation trends in Uganda in the time series 1900-2019

12. Climate change projections: In terms of temperature, World Bank's shared socioeconomic pathways (SSP) projection 3 (Low mitigation efforts) projects a broadscale warming trend to continue, leading to average annual temperature of 27°C and 28.4°C by 2100 for Uganda and Kenya, respectively (Naing et al., 2014). According to the World Bank, under all SSP scenarios Kenya and Uganda are projected to have a slight increase in temperatures towards the end of the century, particularly during the short rain season 12. The World Bank and IPCC estimate that there shall also be an increase in "frequency duration, intensity and the proportion of heavy rainfall events" within both countries. However, the dry arid zones in northeastern and northwestern Kenya and northeastern Uganda are projected to experience a decrease in precipitation. Additionally, Kenya as a costal country faces pressures from changing sea level and flooding, it is especially at risk in the city of Mombasa (largest city in the province), Kwale, Mombasa, Kilifi, Tana River, Lamu¹³.

Current and future vulnerabilities, risks and impacts of climate change

- 13. As presented above, Kenya and Uganda's economic structures are highly dependent on agriculture and the availability of water. These two sectors have been selected as their successes are paramount for ensuring adaptive capacity and resilience of vulnerable communities to current and future climactic changes. Kenya has a Human Development Index (HDI) value of 0.61 which puts the country in the medium range (142/189). Uganda ranked low on the HDI as it was valued at 0.483 (163/189). The difference in HDI scores can be attributed to variations in social support systems and economic success between the two countries. In Uganda GNI per capita values are low, with nearly half the value of per capital values in Kenya. As a result, the lack of financial resources halts access to natural resources. Financial availability has been strongly correlated with life expectancy, as individuals with lower incomes have less access to health care services, low food alternatives and high vulnerability to climate related food insecurity. The latter point particularly affects young children, new born and elderly as during moments of food insecurity they are most likely to face severe consequences 14.
- 14. However, currently both countries have similar life expectancy despite the differences in GNI per capita, as values were estimated at 64 (UG) and 67 (KE)¹⁵. Education scores relatively high with 88% (Kenya) and 89% (Uganda) of 15-24-year-old being literate. This has been correlated to growing incomes and increased availability in affordable education. Therefore, all in all both countries have had significant improvements in their social conditions, however, low incomes coupled with insufficient access and availability of affordable health care and frequent food insecurity issues have resulted in these numbers remaining relatively low.
- 15. Agriculture and climate change: With 75% to 90% of the population in Kenya and Uganda being dependent on rain fed agriculture, climate change is a threat to livelihoods especially for small holder farmers¹⁶. The growing frequency of droughts leads to collapse in food

¹⁰ Kogo, B. K., Kumar, L., & Koech, R. (2020). Climate change and variability in Kenya: a review of impacts on agriculture and food security. Environment, Development and Sustainability, 1-21.

⁹ Niang et al. (2014)

¹¹ Under SSP2 - 27.04°C (KE) & 25.49°C (UG). Under SSP1 – 25.61°C (KE) & 24.41°C (UG)

¹² Climate Risk Profile: Kenya. World Bank (2021); Climate Risk Profile: Uganda. World Bank (2021)

¹³ Think Hazard. (2022). Coast of Kenyan risk map. URL: Think Hazard - Coast

¹⁴ World Bank, World Development Indicators. (2020).

¹⁵ World Bank, World Development Indicators. (2020). URL: <u>Employment in agriculture, female (% of female employment) (modeled ILO estimate) | Data (worldbank.org).</u>

¹⁶ World Bank, World Development Indicators. (2020). URL: Employment in agriculture (% of total employment) (modeled ILO estimate) | Data (worldbank.org).

production systems as crops fail to grow and livestock die due to lack of water and pasture availability. These droughts have been a major driver of food insecurity and poverty rates throughout East Africa. The increasing occurrence of extreme precipitation events has caused erosion of crop lands and resulted in permanent alterations in crop productivity and yield potentials.

- 16. Climate change negatively affects crop production as (1) flash floods wash away crops and soil; (2) Unpredictability and out of seasonal precipitation coupled with warmer temperatures increased the presence of pest and diseases occurrences; (3) Erratic rainfall damages the post-harvest processes for crops that require drying; (4) Heavy rainfall causing erosion that permanently damages agricultural success; (5) Out of seasonal precipitation and cloud cover reduces growth rates by blocking solar radiation; (6) The increased frequency of drought experienced caused crop failure due to in reduced soil moisture, fertility and quality.
- 17. Although the above-described climate agricultural shocks are felt throughout both countries, its effects have considerably differing productivity impacts depending on the crops under scrutiny. Warmer temperatures in Kenya, for example, negatively affect maize yields but positively affect tea production. Vice versa, increased precipitation has a positive effect on maize and negative results on tea yields ¹⁷·In addition, the climate impacts on agriculture also include the growing risks and challenges associated with pest and disease management ¹⁸. For example, Jaramillo et al. (2011) found that with increasing temperatures came increasing prevalence of the pest berry borer on coffee plantations in East Africa.
- 18. Evidently, drought-prone areas are highly vulnerable due to agricultural producers' dependency on rain-fed agriculture in both Kenya and Uganda. Droughts and failure in seasonal rainfall are a major challenge for farmers, as during these events crops fail to produce sufficient yield or die due to heat and water stress. However, long-term trends can also result in permanent damages to yields, while frequent droughts and unexpected heavy rainfall events reduce the soil moisture content and quality thus reducing the potential for agricultural growth.
- 19. The above-described climate change and agriculture nexus can have further severe health implications. Food insecurity is directly linked to health in Kenya and Uganda as failure in agricultural production has a direct effect on communities' nutritional status, susceptibility to diet-related diseases, and overall health status. Currently, the majority of rural populations live below the poverty line and a further 70% is projected to live in food poverty. With changing climate conditions this region has become particularly sensitive to droughts or out of season rainfall. As a result, communities have seen an increase in prices of staple foods and reduced purchasing power due to lower incomes from crop failure. Parallel to this, the COVID-19 pandemic and the Ukraine-Russia conflict have further escalated price shocks and restricted movements within this region pressuring food prices to rise as supply reduced.
- 20. Water sector & Climate change: Altering seasonal precipitation patterns, extreme precipitation events, frequent droughts and floods are common problems that all sectors in Kenya and Uganda have to start creating adaptation practices towards. With rapid population growth, water availability is expected to dramatically decline in per capita availability regardless of climatic changes.¹⁹ According to the World Resource Institute (WRI) Water Risk atlas, Kenya is considered categorized in a high-water risk scenario²⁰ with the exception of some areas in the rift value which are considered to have low water risk. On the other hand, Uganda is almost entirely in a medium water risk scenario, with the exception of regions around Lake Victoria.²¹ Throughout both countries the following water-climate related challenges affect the population and water resources.
- 21. Water scarce regions' groundwater and freshwater supplies have been severely depleted or damaged by a failed water abstraction management leading to over-exploitation of water resources. Regions with limited or low water resource availability fail to incorporate comanagement systems due to conflicting demands and requirements of different stakeholders. For example, in the cattle corridor, pastoralists migrating from region to region in search of vegetation and water result in growing conflicts between other pastoralists, water resources users, and management practices for regional water resources²².
- 22. Water availability in Kenya and Uganda is extremely variable across each region. The water resource in Kenya and Uganda is an integral part of vulnerable groups socio-economic standing. The majority of employment activities in these areas heavily depend on direct water availability (i.e. agriculture, tourism, energy, manufacturing industries). Currently, it is estimated that per capita freshwater availability is projected to decline by 80% and 73% for Uganda and Kenya respectively^{23.} This loss is not primarily due to projected climate changes but the sheer projected mass population growth in both countries is expected to double by the year 2060, thus reducing the overall freshwater availability²⁴. The primary driver of this increased water insecurity is the enhanced usage and demand for water resources despite altering precipitation models.
- 23. The desk research and stakeholder interviews have revealed key vulnerable groups are those in water scarce/ dryland regions. Within Uganda the cattle corridor is particularly vulnerable due to its frequency of droughts. The low-income earning community members requiring water for their cattle are particularly at risk. These communities have very little access to boreholes or water storage technologies due to technological and financial restraints. This is clearly seen on the WRI water stress atlas, as both countries are considered to have extremely high inability to access to improved water sources²⁵. At the same time, they predominantly practice agro-pastoralism making

¹⁷ Ochieng, J., Kirimi, L., & Mathenge, M. (2016). Effects of climate variability and change on agricultural production: The case of small scale farmers in Kenya. NJAS-Wageningen Journal of Life Sciences, 77, 71-78.

¹⁸ Jaramillo, J., Chabi-Olaye, A., Kamonjo, C., Jaramillo, A., Vega, F. E., Poehling, H. M., & Borgemeister, C. (2009). Thermal Tolerance of the Coffee Berry Borer Hypothenemus hampei: Predictions of Climate Change Impact on a Tropical Insect Pest

¹⁹ GIZ: Climate Risk Profile Kenya (2020); GIZ: Climate Risk Profile Uganda (2020)

²⁰ This refers to the aggregation of all selected indicators from the Physical Quantity, Quality and Regulatory & Reputational Risk categories

²¹ WRI. (2022). Aquaduct. URL: <u>Aqueduct | World Resources Institute (wri.org)</u>

²² Nsubuga, F. N., Namutebi, E. N., & Nsubuga-Ssenfuma, M. (2014). Water resources of Uganda: An assessment and review. Journal of Water Resource and Protection, 6(14), 1297.

²³ GIZ: Kenya (2020); GIZ: Uganda (2020)

²⁴ Ahmadalipour, A., Moradkhani, H., Castelletti, A., & Magliocca, N. (2019). Future drought risk in Africa: Integrating vulnerability, climate change, and population growth. Science of the Total Environment, 662, 672-686.

²⁵ WRI. (2022). Aquaduct. URL: <u>Aqueduct | World Resources Institute (wri.org)</u>

- them highly dependent on predictable precipitation events for livestock and crops success. Failures in precipitation tend to go hand in hand with increase food insecurity, poverty rates and malnutrition in both countries according to the FAO.²⁶
- 24. Climate change further presents a specific challenge for remote regions with low water access as during extreme rainfall events, waste matter, pollutants, chemical compounds and dangerous biological organisms are washed down into water systems at a more rapid rate²⁷. Coupled with increasing temperatures, water-borne diseases are able to develop faster and, in more regions. According to the WHO, water-borne disease is the leading cause of child mortality (children under the age of 5) in Sub-Saharan African countries.
 Identified vulnerable regions
- 25. Coastal regions: Renya's coast is an important economic zone for East Africa as its ports connect the region's produce with international markets. Currently, the province provides living spaces for 4.3 million Kenyans according to the 2019 national census, and contributed approximately \$5.7 billion to Kenya's GDP in 2019 (Kenya National Bureau of Statistics, 2019; Kenya National Census, 2019). However, for the majority of these economic activities operating near coastal regions, sea level rise is a particular concern as it can damage water systems, wash away agricultural land and increase the risk and spread of water borne diseases. In other coastal locations, sea level rise is likely to render more acute the current water supply and salinization problems, as freshwater aquifers are contaminated with saline water. Water logging of soils and the resulting salt stress is likely to reduce crop production. Kenya's broader economy is also at risk from rising seas as coastal and marine resources are critical to economic development through tourism, fisheries, shipping and port activities. Despite these threats the coast has yet to be severely affected, however future projections predict a sea level rise of 0.3 meters has been projected to submerge 4-6km of the largest coastal city, Mombasa 29.
- 26. Key River/Lake watersheds: A watershed can be defined as the dividing ridge between two different drainage areas. These features are important as they determine the availability of water for certain counties, this proposal has identified 12 (KE) and 18 (UG) counties where the watershed for several important lakes and river is located. According to the desk research conducted, climate change impacts occur differently within these regions. Watersheds areas define almost all areas of land in both countries. However, several watersheds are essential for the provision of water to other regions and communities but remain highly vulnerable to climate change. For example, Lake Naivasha has increased its volume by nearly 30% between 2017 and 2020 due to changes in the hydrological cycle, this caused severe impacts to wildlife, tourism, agricultural production and housing infrastructure. Low income earners located near the shores were most affected as their small holder agricultural plots, fishing grounds and houses were flooded³⁰.
- 27. Within these watershed areas, smallholder agricultural producers are the dominant and most vulnerable group. Due to cultural traits, such as the intergenerational distribution of land and the lack of key resources (in all regards), these agricultural producers have very low adaptive capacities. At highlands, producers face yield losses from heavy rainfall, reduced water availability, erosion driven soil quality reductions and landslides. However, at low altitudes agricultural producers face production shocks from floods, droughts, and landslides.
- 28. Arid/Semi-arid landscapes: Arid and semi/arid regions (ASALs) are landscapes that are characterized by low precipitation rates, high temperatures (during the day and low temperatures during the night) and limited alternative water sources, thus preventing the growth of plant and animal life. The arid/semi-arid landscapes within Kenya range from Northwestern counties Turukana and Marsabait to the north east counties of Wajir and Mandera. In Uganda, drylands occur in both the northern and southern parts of the country in the central and Karamoja districts. Within both of these countries' dryland areas, smallholder subsistence agriculture and pastoralism are dominant forms of livelihood strategies. Pastoralism is estimated to constitute about 15% of the total agricultural GDP in Kenya and employ more than half of the agricultural labor force. In Uganda pastoralism occurs predominantly within the cattle corridor region (hosting 90% of all cattle in Uganda), which is a stretch of land (43% of Uganda's total area) that runs from the northeast of the country down to the southwestern section. This area hosts an abundance of agro-pastoralists, approximately 27% of the total population, that practice both small holder crop production and pastoralism³¹.
- 29. ASAL regions in sub-Saharan Africa are beginning to experience more frequent occurrences of droughts, altered/shorter rainfall seasons, and higher temperatures. In Kenya and Uganda cyclic drought events have occurred and caused severe crop and livestock losses, famine and displacement. For example, despite food insecurity warnings in Uganda being relatively low this year, Kenya is set to experience a severe famine, as 26-50% lower rainfall was experienced in the OND rains at the end of 2021. Future projections for warmer temperatures, altered precipitation patterns and increased frequency of droughts are likely to hamper the availability of water resources, diminish livestock hers and increase competition over grazing lands in ASAL regions. Moreover, an insufficient land tenure system, poor infrastructure, and social factors (such as migration, low literacy and high poverty levels) limit the farmers' ability to cope with climate change and variability.
- 30. <u>High Potential Agro-economic Zones</u>: As most of the agricultural production is rainfed, yields are dependent on water availability from precipitation. Due to high operation costs, limited extension services, lack of credit, and insufficient supply of technical equipment, the adoption of irrigation related technologies has been low³². As a result of such factors, only 1% (KE) and 0.5% (UG) of cropland is irrigated in both countries (ibid). High potential agro-economic zones are responsible for ensuring steady supply of food in Kenya and Uganda, however, they are particularly sensitive to climate changes. These regions are located in central and western parts of Kenya, and are defined by moderate altitudes with bimodal precipitation structures (table 2). In Uganda, these agricultural zones are also spread throughout the central, western provinces and also adjacent to Lake Victoria (table 2).

²⁶ FAO (2019)

²⁷ Wen, Y., Schoups, G., & Van De Giesen, N. (2017). Organic pollution of rivers: Combined threats of urbanization, livestock farming and global climate change. Scientific reports, 7(1), 1-9.

²⁸ As a landlocked country, this section is not relevant for Uganda

²⁹ Kebede, A. S., Nicholls, R. J., Hanson, S., & Mokrech, M. (2012). Impacts of climate change and sea-level rise: a preliminary case study of Mombasa, Kenya. *Journal of Coastal Research*, 28(1A), 8-19.

³⁰ Odongo, V. O., van Oel, P. R., van der Tol, C., & Su, Z. (2019). Impact of land use and land cover transitions and climate on evapotranspiration in the Lake Naivasha Basin, Kenya. Science of the total environment, 682, 19-30.

³¹ FAO (2019

³² AQUASTAT (2002). URL: https://www.fao.org/aquastat/statistics/query/results.html

- 31. Climate changes occurring in Kenya and Uganda presents high potential agro-economic zones with similar production and yield challenges. Overall, the agricultural industry faces challenges ensuring yields as (a) out of season rainfall and cloud covers hampers growing success; (b) increased frequency of droughts and floods results in permanent damage to soil and crop growth potentials; (c) damage to crops during extreme rainfall events reduces soil quality and harms the plant. It is important to note that not all crops are projected to experience losses and regional distribution should be observed as an important factor, as crops like cassava are projected to increase yields by nearly 25% in Kenya and reduce by 12% in Uganda³³.
- 32. Major cities and urban agglomerations: Urban areas are known to be more resilient to climatic changes than rural areas as they have greater financial resources, they do not primarily depend on climate factors for economic success, and they have strong water governance measures on abstraction. However, climate change is expected to increase temperatures most severely in urban areas due to the urban heat effect. For example, according to the climate risk profile assessment by GIZ, Uganda's heat-related mortality is projected to increase by a factor of four by 2080 thus increasing those at risk from 0.2% to 9.5% of the total population. Similarly, projections for Kenya indicate that this figure will increase from 0.6% to 6.0% of the total population by 2080³⁴.
- 33. Urban areas are also at risk of floods. The major cities including Nairobi, Mombasa, Kampala, Entebbe frequently face climate related floods and are areas of concern for the future. Table 1 further clarifies all high-risk areas that were identified for each country. The community members most affected are those living in unregistered housing areas (slums) as their low housing quality, lack of drainage systems and close proximity to rivers results in direct impacts during heavy rainfall events.

Identified vulnerable segments of the population

- 34. <u>Smallholder Farmers</u>: Smallholders have been highlighted by both national governments, NGOs, and academics as key to ensuring food security in developing countries. Unfortunately, these smallholder producers are generally the most vulnerable to climate-related shocks due to their low adaptive capacities. This lack of capacities to adapt is due to their inadequate access to resources (financial, technological, human), unstable markets, poor infrastructure and insufficient access to external expertise to guide them on adaptation practices.
- 35. Pastoralists: In terms of livestock production, Kenya and Uganda have cultural and traditional traits that are linked to pastoralism. The dominant tribal groups who practice pastoralism are the Maasai, Kalenjin, Somali, Turkana, Oromo and Rendile in Kenya, this group is wide spready but 50% is based in the north western and north eastern provinces; and the Bahima/Abanyankole, Karamojong, Basongora, Itesot, Baruli and Banyarwanda in Uganda, interestingly, pastoralism is stretched across 42% of the country in a pastoralist bank known as the cattle corridor. Animal husbandry is a highly climate sensitive industry as production success is determined by precipitation and grassland availability. With increasing frequency and severity in droughts and failure in seasonal rainfall, producing livestock has faced new challenges as accessing grazing lands, pressures from diseases, or lack of water sources for their animals to hydrate³⁵.
- 36. Women in agriculture: Although male and female farmers equally experience climate change-related effects, the adaptive capacities to in agriculture vary significantly among male and female-headed households. This is mainly a result of cultural and customary law barriers affecting the interaction with agriculture. Ugandan and Kenyan women usually grow annual food crops that are of less value and earn less money. Men are engaged in planting mostly high value crops (that earn more money) e.g. coffee and tomatoes and are involved in cattle rearing. When experiencing a climate shock, women tend to face larger financial burdens as to their already limited financial resources. Whereas, men engage are likely to be more financially equipped to tackle certain climate challenges.
- 37. In conjunction with this is their barrier to accessing financing from financial institutions (FI). FIs enable men and women to invest, improve and develop their agricultural resources to be further resilient to climate change. However, as men are the predominant owners of land they are able to take loans and utilize their land as collateral. However, women who already face restricted landownership, due to customary law, are unable to attain commercial finance due to their inability to provide collateral. This is a critical barrier for women as with reduced financial availability they are less likely to invest or develop their agricultural produce, especially during climate shocks.
- 38. Rural saving schemes (such as Chamma or Savings and Credit Cooperative Organisations (SACCOs) have been paramount to ensuring some form of financial services and lending for female farmers in Uganda and Kenya as they often offer more favorable lending conditions than commercial banks. This is due to high interest rates from commercial financing and that business plans ofren not adequately account for women's labor which makes farming less profitable for women and further hinders investments in CSA technologies and practices due to their high upfront costs. Additionally, spending patterns among male and female-headed households vary significantly. Informal loans were more likely to be utilized by female-headed households on food, health and education, while formal loans are more commonly utilized by male-headed households on agriculture/ livestock inputs, food and education.
- 39. Youth and agriculture: The success of agricultural production can have direct impacts on children and youths' lives. In cases of agricultural failure, children can suffer from food-related illnesses that can directly affect their ability to perform in school or even lead to developmental delays. Failure in crop production can put financial constraints on family's abilities to pay school tuition for their children thus reducing their ability to search for other jobs outside of the agricultural or other low skilled jobs. As a result, youth in such scenarios tend to remain dependent on this subsistence agriculture if they choose not to migrate. Others may choose to move to urban centers with the hope of attaining higher paying stable jobs, however, the lack of education, low demand for low-skilled labor and high living costs tends to leave these individuals in low-income settlements.
- 40. Communities without access to improved drinking water: As presented above water access is highly dependent on individuals' access to drinking water, their regional location (urban/rural), the main ecosystem type (drylands, forested, etc.), and their demand. In Kenya and Uganda water access is strongly affected by the ecosystem type and evidently as presented above the arid/ semi-arid regions have the least available amounts of water. According UNICEF, 56% and 69% of people in Kenya and Uganda have access to safe drinking water³⁶ Despite these values being relatively high, rural areas are more secluded from access to improved drinking water sources due to an insufficient government investment in remote water infrastructure and technological challenges relating to storage and maintenance of

³³ GIZ: Kenya (2020); GIZ: Uganda (2020)

³⁴ GIZ: Kenya (2021); GIZ: Uganda (2021)

³⁵ Twinomuhangi, R., Sseviiri, H., Mfitumukiza, D., Nzabona, A., Mulinde C. (2022) Assessing the evidence: Migration, Environment, and Climate change nexus in Uganda. Makerere university center for climate change and innovations.

³⁶ UNICEF. (2019). UNICEF Uganda annual report 2019. URL: <u>UNICEF_UgandaAR2019-WEBhighres.pdf</u>

fresh water that occurs in these regions. In Kenya and Uganda ASAL areas and low-income urban areas are high risk areas due to the unavailability of improved water sources (Table 1).

Adaptation SME

- 41. Role of SMEs in the economy of Kenya and Uganda: A small and medium sized enterprise (SME)³⁷ operates on a relatively small scale, both in terms of employment and the economic outputs they create (assets and annual sales). The project will use the official definitions according to the Micro and Small Enterprises (MSEs) Bill 2012 of Kenya and the definition provided by the Uganda Investment Authority (UIA). Despite their small scale, SMEs play a fundamental role, especially in developing economies as they help reduce poverty rates through job creation and substantially contribute to economic growth. Likewise, they are fundamental for providing equitable jobs and entrepreneurship avenues for women, youth and other vulnerable groups. SMEs play quintessential role in reducing the gender gap as they promote and ensure the effective participation of women in national economies.
- 42. The SME sectors account for approximately 80% and 90% of the private sector and contribute 35% and 75% of the total GDP in Kenya and Uganda' respectively. Additionally, the SMEs in both the formal and informal sector have been found to be job engines. As a result, 14.9 million and +3 million people are estimated to be employed by this sector in Kenya and Uganda.. In Kenya, according to recent survey by the Kenyan Banker's Association and JICA, these enterprises are spread throughout all sectors but were predominantly present in wholesale and retail trade, followed by information and communication technology and then agriculture. Similarly, in Uganda, enterprises are predominantly concentrated in the service sector, with agriculture closely following up. Representing the lion's share of enterprises in the two economies, these SMEs operate on community level and increasingly target vulnerable populations at the bottom of the pyramid, consisting of customers, employees or partners along their value chain. They further provide adaptation solutions that are locally sourced, affordable and tailored to vulnerable communities' needs.
- 43. SMEs as providers of local adaptation technologies, products and solutions: National and large-scale approaches to generating adaptation solutions on a small-scale frequently fail to recognize the discrepancies that exist in different contexts³⁸. Likewise, macro level planning has also been criticized for their failure to include marginalized groups. SMEs as the backbone of the Kenyan and Uganda economies are key to empowering vulnerable communities as they are aware of the context-specific climate challenges individuals and communities are facing. SMEs have local knowledge because they tend to operate, adapt and sell their products within the region they are based, this is particularly useful in terms of climate adaptation as they are aware of the intersections between location-specific climate, environmental and socio-economic factors and context-specific challenges communities are facing with regard to climate change. This can also be used as a force to educate as they can inform community members on the importance and benefits of operationalizing certain adaptation strategies³⁹.
- Parallel to understanding the contextual challenges, SMEs provide products that are affordable and accessible to the surrounding community/ vulnerable target groups. SMEs can also frequently adapt and alter their products which makes them ideal providers of adaptation technologies, a feature that challenges larger corporates who must undergo bureaucracies that restrict timely changes. Furthermore, they develop market-based viable business models for the deployment of their adaptation products and services. All in all, SMEs that focus on providing adaptation solutions can ensure better integrated adaptation practices that support NCAP's and NDC's.
- 45. This project defines adaptation SMEs in accordance with the Adaptation Solutions Taxonomy framework developed by the Adaptation SME Accelerator Project (ASAP)⁴⁰ funded by the Global Environmental Facility (GEF): An Adaptation SME is a company providing technologies, products and/or services (TPS) that: Address systemic barriers to adaptation, by strengthening user's ability to understand and respond to physical climate risks and related impacts and/or capture related opportunities AND/OR contribute to preventing or reducing material physical climate risk and/or the adverse associated impacts on assets, economic activities, people or nature AND do no harm and generate long term value. The selection of adaptation SMEs for this project will be guided by the Climate Risk and Adaptation SME Solution Matrix (see Part I, Chapter 1.5) listing eligible adaptation solutions for the identified vulnerable regions and groups.

³⁷The project will facilitate access to finance for early-growth SMEs, excluding Micro enterprises as they are not be eligible for the loan sizes targeted nor in the position to absorb these. The project indirectly also benefits Micro enterprises as they form part of the beneficiary SME value chains respectively are their customers.

³⁸ Baker, I., Peterson, A., Brown, G., & McAlpine, C. (2012). Local government response to the impacts of climate change: An evaluation of local climate adaptation plans. Landscape and urban planning, 107(2), 127-136

³⁹ Naess, L. O., Newell, P., Newsham, A., Phillips, J., Quan, J., & Tanner, T. (2015). Climate policy meets national development contexts: Insights from Kenya and Mozambique. Global Environmental Change, 35, 534-544.

⁴⁰ https://lightsmithgp.com/wp-content/uploads/2020/09/asap-adaptation-solutions-taxonomy_july-28-2020_final.pdf

Climate Risk and Adaptation SME Solutions Matrix

46. The following matrix is a result of the Climate Risk and Vulnerability Assessment, as well as an in-depth market assessment o adaptation business model conducted in preparation of this Concept Note. It gives a preview of eligible adaptation solutions for the vulnerable regions and groups identified under Part I. The selection of adaptation SMEs to receive support under this project will be guided by the identified adaptation solutions

Table 1. Kenya's & Uganda's regional, sectoral and group vulnerability to climate change and identified solutions provided by adaptation SMEs

Region	Main counties	Main climate challenges	Most climate vulnerable socio-economic sector & group	Potential /Current solutions provided by adaptation SMEs
River/Lake watershed ecosystems	Kenya: Nakuru, Baringo, Kajiado, Busia, Homabay, Kakamega, Kisumu, Siaya, Kericho, Migori, Nyandarua, Tana River Uganda: Hoima, Masindi, Nebbi, Gulu, Apac, Lira, Soroti, Kumi, Pallisa, Mpigi, Masaka, Fort Portal, Bugiri, Iganga, Mukono, Luwero, Mubende	Kenya: Overall: Unstable hydrological flows Main variables: 1) Extreme weather events (droughts/floods) 2) Altered and more extreme hydrological cycles 3) Altered precipitation and cloud cover patterns Uganda: High elevation: 1) Heavy and out of season precipitation causing landslides, flooding, erosion, and soil degradation 2) Increased occurrence and frequency of droughts Low elevation: 3) Heavy precipitation events causing increased loading of chemical and organic compounds in lake ecosystems 4) Unstable precipitation patterns causing more variable lake and river ecosystems.	 Sector: Agriculture Reduced crop yields for lake ecosystem agricultural industries due to flooding and out-of-seasonal rainfall (1 & 2) Crop failure from altered precipitation patterns (2 & 3) Changes in fish availability due to reduced water quality, eutrophication and poisonous compounds flushed into river systems (1,2). Key vulnerable actors: Agricultural producers near lakes and rivers or in low elevation areas Small holder agricultural producers without water storage or protected cultivation systems Sector: Water Lakes and rivers become more unstable from changing climatic conditions resulting in flooding and dropping water levels (1,2,3) Flooding-related damages to infrastructure (1) Low hydro-Energy Output (1 & 2) Pooling of water increases risk for water & vector borne diseases such as malaria, typhoid bilharzia, etc. (1, 2) Key vulnerable actors: Hydro energy producers and low-income earning energy consumers. Failure in hydro production can lead to fluctuations in energy prices Community members residing near lakes and rivers New born children, pregnant women, elderly and young children are highly vulnerable to agricultural failures and water borne diseases 	 Agricultural production and fisheries: Weather & Climate Information Systems (WCIS, e.g. weather forecasting systems)* Protected cultivation systems (e.g. greenhouses) Integrated Soil Fertility Management (IFSM, e.g. organic fertiliser)** Fish stock reloading services Agricultural extension services (including intercropping techniques, agroforestry, climate smart agricultural practices, sustainable agricultural practices)*** Bio pesticides Media educational programs for climate smart agriculture Index-based micro insurance for smallholders**** Pest/disease and drought-resistant crops***** Farming Equipment Leasing Water management Water storage and harvesting systems Drip irrigation and hydroponic systems****** Water resource regulation (e.g. riparian management) Reforestation programs Smart sanitation and water purification systems
High Potential Agro- economic Zones	Kenya: Likipia, Nakuru, Nyandarua, Kiambu, Nyeri, Uasin Gishu,	Kenya: Overall: Unstable precipitation patterns Main variables: 1) Extreme rainfall events	Sector: Agriculture Kenya: ◆ Agricultural producers experience crop failure, lower yields, damaged soils (moisture, quality, carbon), and increased pressure from pests and diseases during extreme and out of season rainfall events (1, 2, 3, 4).	Agricultural production WCIS (e.g. weather forecasting systems)* Protected cultivation systems (e.g. greenhouses) ISFM** Pest/disease and drought-resistant crops******

Region	Main counties	Main climate challenges	Most climate vulnerable socio-economic sector & group	Potential /Current solutions provided by adaptation SMEs
	Embu, Makueni, Kajiado, Machacos, <u>Uganda:</u> Apac, Masindi, Lira, Jinja, Soroti, Kumi, Kamuli, Luwero, Mukono,Mbara re, Masaka, Rukungiri, Bushenyi, Kabale, Kisoro	2) Altered and more extreme hydrological cycles 3) Altered precipitation and cloud cover patterns 4) increasing frequency of droughts Uganda: Overall: Highest projected positive change in average temperatures, extreme heat Main variables: 1) Extreme weather events (droughts/floods) 2) Altered and more extreme hydrological cycles 3) Altered precipitation and cloud cover patterns	 Uganda: Reduced crop yields and quality (particularly for rainfed agriculture) due to higher temperature and/or lack of regular rainfall (1,3) Crops losses due to extreme weather events (2) Soil degradation due to increased temperatures and extreme weather events (1,2,3) Key vulnerable actors: Small holder agricultural producers without water storage, protected cultivation systems and other essential adaptation technologies Women involved in agricultural production, especially single mothers. Sector: Water Kenya: Flooding related damages to infrastructure (1) Pooling of water increases risk for water & vector borne diseases such as malaria, typhoid bilharzia, etc. (1) Uganda: Contamination of water sources (1, 2) Damage to already Insufficient water storage systems (1,2) Hydro-power production failures (1,2) Pooling of water increases risk for water & vector borne diseases such as typhoid and bilharzia, etc. (1, 2) Key vulnerable actors: Damage to roads reduces access to markets for agricultural producers Young children, elderly and pregnant women are most susceptible to these diseases Community members residing near lakes and rivers (Uganda) 	 Agricultural extension services*** Farming equipment leasing Bio pesticides Media educational programs for climate smart agriculture Index-based micro insurance for smallholders**** Water management Flood protection technology Drip irrigation and hydroponic systems****** Smart sanitation and water purification systems
Arid/Semi- Arid Landscapes of Northern Kenya For Uganda, specifically the "Cattle Corridor"	Kenya: Mandera, Wajir, Garissa, Isiollo, Marsabit, west pokot, Mandera. Uganda: Kotido, Moroto, Soroti, Lira, Apac, Kumi, Luwero, Kiboya, Kibale, Mubendu,	Overall: Increasingly drier climate; Droughts are becoming more extreme and frequent Main variables: 1) Increasing frequency of droughts 2) Altered precipitation and cloud cover patterns 3) Cyclone driven locust swarms 4) rare but extreme rainfall events	 Sector: Agriculture Crop failure and severe crop damage and livestock losses due to prolonged drought periods (1) Partial yield losses due to locust pests (3) Reduced soil quality due to intensified erosion dynamics (1, 2 & 4) Livestock losses and increased livestock stress due to lack of vegetation and water (1,2) Key vulnerable actors Pastoralist and agricultural producing communities. New born children, pregnant women, elderly and young children are highly vulnerable to fluctuations in food availability. Chronic dehydration can hamper childhood and prenatal development. Pastoralists are at risk of conflict related mortality. 	Agriculture production WCIS (e.g. weather forecasting systems)* Pest warning systems Protected cultivation systems (e.g. greenhouses) ISFM** Pest/disease and drought-resistant crops**** Animal feed storage facilities Farming equipment leasing Solar borehole solutions Bio pesticides Improved seed and livestock breeds Agricultural extension services***

Region	Main counties	Main climate challenges	Most climate vulnerable socio-economic sector & group	Potential /Current solutions provided by adaptation SMEs
	Sembabule, Marare, Rakai		Sector: Water Severe decline in fresh water availability both above ground and in underground storage (1) Contamination of water sources (1,3) Damage to already Insufficient water storage systems (3) Key vulnerable actors Pastoralist and agricultural producing communities with limited access to water sources. Chronic dehydration can hamper childhood and prenatal development.	 Media education on adaptation avenues Index-based micro insurance for smallholders**** Water management Water storage and harvesting systems Drip irrigation and hydroponic systems****** Smart sanitation and water cleaning systems Drought and food security early warning systems
Major cities, urban and rural agglomerati ons	No specified county: predominantly low-lying areas High risk Cities Kenya: Nairobi, Mombasa, Naivasha, Kisumu, Nakuru, High risk cities Uganda: Kampala, Entebbe, Jinja, Soroti.	Overall: damage to local infrastructure and communities from extreme rainfall events and high temperatures Main variables 1) Increased frequency of extreme rainfall events causing flooding and landslides. 2) Severe warming caused by urban heat effect and Climate change 3) Altered and more extreme hydrological cycles (only Uganda) 4) Altered precipitation and cloud cover patterns (only Uganda)	 Sector: Agriculture Limited damage due to the little amount of producers Key vulnerable actors Urban crop producers face financial losses from production failures Sector: Water Long term damage to water systems and storage (1) Communities living in low quality housing face damages and in some cases become displaced. These migrants face risks from food insecurity and other diet related issues. (1) Pollution of drinking water systems increases the presence of water borne diseases. (1,2,3) Old and young generations are at risk of heat stroke during high temperatures due to metal housing heat insulation (2). Pooling of water increases risk for water & vector borne diseases such as malaria, typhoid bilharzia, etc. (1, 2) Key vulnerable actors Low income earners living in low quality housing areas (i.e. Kibera slum) New born children, pregnant women, elderly and young children vulnerable to heat related mortality and water borne diseases. 	Water management Water storage and harvesting systems Improved drainage systems and flood barriers have been installed. Improved housing infrastructure (including ventilation/cooling systems, concrete walls, etc.). Irrigating gardens, urban farms-decentralised water storage facilities Flood protection technology Water infiltration and attenuation systems sewer system clean-ups Flood warning systems Smart sanitation and water cleaning systems Disease Surveillance Systems

Example enterprises:

Index-based micro insurance for smallholders****: Akaboxi Ltd. (Uganda)
Pest/disease and drought-resistant crops*****: Bakhonya (Kenya)
Drip irrigation and hydroponic systems******: Hydroponics Africa Ltd. (Kenya)

Problem Statement

47. The proposed project aims to specifically address three key barriers in Kenya and Uganda:

Lack of coordinated approach towards role of adaptation SMEs

- (1) **Vulnerable communities as identified in Part I have no or limited access to adaptation solutions** and are particularly susceptible to the negative effects of climate change due to insufficient adaptive capacities, a result of inadequate access to resources (financial, technological, human), unstable markets, poor infrastructure and insufficient access to external adaptation expertise. This is particularly relevant for vulnerable communities in high-vulnerability geographies such as ASALs or high potential agro-economic zones.
- (2) Kenya and Uganda's public institutions are overwhelmed by the task of increasing the resilience of vulnerable communities due to the lack of funds, inadequate enforcement of national-level climate action policy frameworks and overlapping institutional competencies.
- (3) The **private sector** has the potential to leverage climate change adaptation as an increasingly growing business case. **Its adaptation solutions**, however, are not targeted towards the specific, contextualized needs of vulnerable groups.

b) Lack of access to appropriate finance and support to support growth-stage adaptation SMEs

- (4) SMEs, Kenyan and Ugandan SMEs face severe challenges to sustain, grow and replicate their business models due to shortages in available capital as they are largely underserved by FIs referred to as the "missing middle" financing gap⁴¹. Below figure further highlights this "missing middle", depicting how early-growth stage SMEs are too big for micro-financing but too small for commercial banks. Concrete obstacles for such SMEs to access commercial loans or equity finance include collateralization, prohibitive risk ratings for young and small enterprises, and high interest rates. Hence SMEs are hampered to move beyond the scale of "micro" and expand business activities.
- (5) The **lack of gender and youth inclusive investment opportunities is exacerbated**, as women and youth led enterprises mostly operating in the informal sector and suffering from a limited access to land and other collateral, lack of networks and knowledge resources, and legal and policy obstacles to business ownership and development.
- (6) SMEs in the two countries also **lack tailored investment business advisory** for financial planning and management to move from grant and donation-based financing towards accessing commercial capital. Although there is a series of business incubators active in Kenya and Uganda, their focus is mainly on early-stage business support. Hence, there are few opportunities for SMEs offering pre- and post-investment support to develop the required financial records and management structures to access and absorb commercial capital investments.

c) Financing institutions do not support adaptation SMEs

- (7) **High-impact SMEs that directly address climate change adaptation** through their tailored products and services **disproportionately experience the lack of appropriate commercial financing.** This is due in part to the unfamiliarity of FIs and investors with climate change-related business models and growth trajectories, which tend to involve (perceived) riskier technologies and longer timeframes to go to market. FIs and other investors struggle to understand and respond to the financing needs of adaptation SMEs with tailored financial products⁴² that, for example, align lending requirements with readily available collateral, repayment periods with seasonality of businesses, enable investments in resource-efficient technologies and more.
- (8) On the supply side of commercial capital providers, available SME financing tends to be dominated by smaller ticket sizes, shorter repayment periods and a lack of diversity of financing models tailored to SME needs⁴³. Furthermore, larger-scale capital (above the scale of microfinance) needed to move beyond the start-up stage is mostly reserved for a small sub-set of high growth SMEs. Despite varying definitions, the capital typically needed to address this financing gap is for investments of between USD 20,000 500,000 per enterprise with a medium to long-term time horizon or tenure typically above the scale of microfinance and below that of traditional lenders and equity investors⁴⁴.
- (9) As stakeholder consultation with FIs in Kenya and Uganda have shown, there is increasing commitment of the banking sector to comply with international sustainability frameworks while regulatory pressures are also building up to incorporate climate change considerations into bank operations. At the same time, **adaptation-based lending in the two countries is insufficiently anchored in FI investment strategies** as FIs lack climate (adaptation) strategies that lay out lending guidelines and indicators for adaptation-based finance in line with national climate action policies.

Project Objectives:

- 48. In light of these challenges, the project seeks to realise the potential of adaptation SMEs to provide cost-effective and localised adaptation solutions to vulnerable communities in climate change-susceptible geographies (both defined in Part 1) in Kenya and Uganda. It therefore aims at increasing vulnerable groups' climate change resilience through fostering and scaling commercially viable adaptation solutions offered by SMEs thereby generating positive and sustainable economic externalities particularly benefitting vulnerable groups that are integrated in SMEs' value chains.
- 49. Addressing the lack of access to financing for adaptation SMEs in Kenya and Uganda to cater to deliver solutions to vulnerable groups, the project is centred around a holistic innovation approach: Firstly, the project establishes an innovative catalytic adaptation finance facility (supply side) to facilitate adaptation SMEs' access to commercial investment capital. The facility is based on a pioneering

⁴¹ This gap in financing is estimated to affect between 50-70% of formal SMEs in emerging economies. Source: World Bank Group (WBG, 2019): World Bank Group Support for Small and Medium Enterprises.

⁴² International Finance Corporation. (2017). MSME Finance Gap.

⁴³ International Trade Centre (ITC, 2019): Big money for small business. Financing the Sustainable Development Goals.

⁴⁴ Dutch Good Growth Fund (DGGF, 2016): New Perspectives on Financing Small Cap SMEs in Emerging Markets.

performance-based blended financing mechanism, whose innovativeness lies both in its de-risking blended financing instruments with performance-based payments and its inclusive approach to co-creatively integrate local Fls, local impact investors and venture funds at design, investment and post-investment level. To increase the availability of targeted adaptation solutions for vulnerable communities, the project further develops a pipeline of bankable market-based adaptation SMEs (finance demand side). Secondly, the project provides adaptation SMEs with in-depth technical support to ensure financial readiness (pre-investment) and conscientious, effective and targeted implementation of provided funds (post-investment). The technical support's innovativeness is centred on its co-creative and group work-based advisory design. Together, this dual approach enables a highly efficient process of sourcing of tailored commercial finance to financially competent adaptation SMEs that transform investment capital into sustainably grown operations and adaptation impact, as well as amortised credit.

- 50. In parallel to the direct enterprise support, the project fosters financial ecosystem and policy framework changes through its capacity development and strategy support to local FIs to anchor climate adaptation in their investment strategies. Given that the economies of Kenya and Uganda are predominantly made up of SMEs, the proposed project takes a specific focus on gender- and youth inclusive adaptation SMEs as promoters of an increased local climate resilience while also contributing to overcome gender and/or other socio-economic inequalities in the vulnerable communities they operate in.
- 51. Project Objective: The project objective is to achieve transformational change in local financial markets in Kenya and Uganda to become more inclusive towards early-growth women- and youth inclusive adaptation SMEs for them to realises their full potential in providing innovative climate adaptation solutions to highly vulnerable groups, enhancing local climate resilience in the agriculture and water sector while addressing and rectifying gender and/or other socio-economic inequalities exacerbated by climate change. The project seeks to have a transformational impact on the agriculture and water sector, making them more robust and mitigating climate change impacts by introducing sector-specific, innovative adaptation practices that are financially viable and have a standing track record with FIs in the two countries. The showcasing of bankable adaptation SME business models intends to have a spill-over effect within the two sectors, promoting good adaptation practices as a market opportunity for SMEs while opening new avenues for adaptation SMEs to grow and scale their business models.
- 52. The project will be structured around three Components:
 - I. Establishing a Regional Coordination Platform (RCP) that serves as a pioneering regional knowledge platform for Kenya and Uganda on adaptation entrepreneurship to connect actors in the fields of adaptation, climate-smart finance and entrepreneurship, promote knowledge management and cross-learning and encourage action to sustain and create markets for early-growth genderand youth inclusive adaptation SMEs.
 - II. Pilot an innovative **performance-based blended financing scheme** to facilitate and leverage previously inaccessible commercial finance of partnering Fls to selected gender- and youth inclusive adaptation SMEs, supporting them to scale their adaptation impacts on vulnerable groups in Kenya and Uganda. A combination of unique financial instruments will be co-created and rolled out together with financers.
 - III. Promote a **conducive financial ecosystem** by increasing local FI's awareness and knowledge on gender- and youth inclusive adaptation SMEs' business solutions and financing needs, and supporting FIs to develop tailored financial products and institutional climate strategies to anchor climate adaptation in their investment portfolios and internal structures.
- 53. **Definition of target group for this project:** This project focuses on gender- and youth inclusive adaptation SMEs in Kenya and Uganda that provide climate adaptation solutions for the agriculture and water sectors in regions that are highly vulnerable to climate change. Gender- and youth inclusive adaptation SMEs combine characteristics typically associated with smaller enterprises such as local embeddedness and the inclusion of vulnerable communities in their value chains with an adaptation-geared business rationale. They contribute to rectify gender and/or other socio-economic inequalities by providing products and services that close gender gaps or meet the needs of women, girls or youth as well as of indigenous people and marginalised groups, where applicable. Furthermore, they support gender diversity and the participation of youth and marginalised groups (e.g. as part of the workforce) and strengthen inclusion and diversity across their value chains (e.g. indigenous people). The project directly targets Small and Medium-Sized Enterprises (SMEs) excluding Micro Enterprises as the latter due to their comparatively small-sized operations, low turnover and profit margins are not eligible for the target loan sizes (average ticket size is 75,000 USD) offered by commercial banks to be leveraged for participating enterprises under this project. However, Micro enterprises being part of the individual value chains of the participating SMEs will indirectly benefit from the project.

Project Components and Financing:

Table 2. Project components and financing breakdown

Project Components	Expected Outcomes	Expected Outputs	Coun- tries	Amount (US\$)
1. Regional coordination platform to connect adaptation, climatesmart lending, entrepreneurship, knowledge	1.1 The project establishes a sustainable coordination, network and knowledge platform for and between adaptation entrepreneurs, adaptation stakeholders and (future) adaptation financiers	1.1.1 Establishing a multi-stakeholder Adaptation Action Steering Committee 1.1.2 An administrative and functional structure for the RCP is developed and endorsed	Kenya, Uganda	250,000

		<u> </u>		
management and promote cross-learning	1.2 Key stakeholders, ministries, financial institutions (Fls), adaptation SMEs and the end-users (vulnerable groups) create and sustain market for adaptation technologies, services and products	1.2.1 Regular regional Adaptation Action Events are organised 1.2.2 Annual Adaptation Finance Symposia are developed and held 1.2.3 Knowledge products on market-based adaptation solutions and impact of gender- and youth inclusive adaptation SMEs are developed (including the benefits for vulnerable communities and target sectors) and widely disseminated		
	2.1 Developing and implementing enterprise support infrastructure	2.1.1 Scorecard (incl. final selection criteria) for the assessment of at least 250 early-growth gender- and youth-inclusive adaptation SMEs is co-created 2.1.2 Pipeline of at least 100 gender- and youth inclusive adaptation SMEs built for funding readiness support (100% of the SMEs will be women- and/or youth-inclusive, meaning they aim for a 50% gender and youth balance in their work force and/or their primary customer base)	Kenya, Uganda	121,000
2. Innovative performance- based blended financing mechanism,	2.2 Supporting gender- and youth inclusive adaptation SMEs from funding readiness to investment and post-investment management	2.2.1 Two Catalyser Programme Cycles: Business advisory support to achieve funding readiness for 100 selected gender- and youth-inclusive adaptation SMEs provided (50% of allocated budget) 2.2.2 Two Accelerator Programme Cycles: Post-investment support on growth and loan repayment provided for 30 gender- and youth-inclusive adaptation SMEs (50% of allocated budget)	Kenya/ Uganda	600,000
investment brokerage services and direct enterprise support	2.3 Designing and implementing blended financing mechanism and performance-based payments for gender- and youth inclusive adaptation SMEs	2.3.1 Development and refinement of performance-based blended financing scheme 2.3.2 Mobilising at least 15 partner Financial Institutions (FIs) 2.3.3 Implementing performance-based blended financing instruments and portfolio management 2.3.4 Exit and scale-up strategy for innovative adaptation SME financing mechanism developed and operationalised	Kenya, Uganda	2,550,000
	2.4 Potential environmental and social risks of selected SMEs screened, assessed and monitored within the framework of the Environmental and Social Management System (ESMS)	2.4.1 A comprehensive ESMS for SMEs to receive technical and finance support is implemented	Kenya, Uganda	100,000
3. Local financing institutions support adaptation SMEs	3.1: Local financing institutions support the dissemination of adaptation technologies, products and services	Output 3.1.1: An Adaptation Finance Academy training concept is developed and implemented	Kenya, Uganda	350,000
4. Project/Programme Execution Cost				
5. Total Project/Progra	amme Cost			4,608,295
6. Project/Programme	Cycle Management Fee			391,705
Amount of Financing Requested				5,000,000

Project calender

Table 3. Project Calendar

Milestones	Expected Dates
Project Inception Phase	October 2023
Start of Project Implementation	October 2024
Mid-term Review	October 2026
Project Closing	October 2028
Terminal Evaluation	December 2028

PART II: PROJECT JUSTIFICATION

A. Project components description

- 54. At the core of the proposed project lies the support of adaptation entrepreneurship based on a multi-directional project design. Key to this design is the three-pronged approach of
 - 1) Ensuring that adaptation entrepreneurship gains access to markets and partners and takes centre stage in national and regional policy and finance regimes (Component I)
 - 2) Piloting innovative and performance-based blended financing instruments coupled with targeted pre- and post-investment advisory support⁴⁵ (Component II) and thereby incentivising local FIs to bridge the missing middle financing gap for early-growth gender- and youth inclusive adaptation SMEs;
 - Training FIs in adaptation finance to develop their own climate strategies and prototype innovative finance instruments⁴⁶ tailored for gender- and youth inclusive adaptation SMEs (Component III), thus broadening investment product portfolios and anchoring adaptation finance institutionally;

Theory of Change

- 55. By introducing an innovative approach for the delivery of tailored financial support to adaptation SMEs and establishing a pipeline of scalable adaptation SMEs, the project addresses the missing middle financing gap for SMEs. The project will systematically transform the financial ecosystem in Kenya and Uganda. This will enhance the delivery of private sector adaptation solutions that are localised, affordable and tailored to the needs of climate change-vulnerable communities, resulting in substantially improved adaptive capacities for groups susceptible to the negative socioeconomic effects of climate change. The scenario of scaled gender- and youth inclusive adaptation SMEs support would have sizeable impact on the adaptive capacities of vulnerable groups in Kenya and Uganda especially with regards to small-scale and rain-fed farmers as well as low-income communities susceptible to the effects of floods and droughts. Women and youth would directly benefit from the employment and economic empowerment opportunities that gender- and youth inclusive adaptation SMEs provide as well as from indirect effects of climate-induced shock mitigation.
- 56. Envisioned mid-term impacts foresee that FIs will invest in early-growth stage adaptation SMEs through an innovative catalytic finance facility that provides SMEs with investment advisory and finance to access markets and grow their business. At the same time, the national policy and regulatory environments in Kenya and Uganda foster adaptation solution investment and adoption in order toto increase resilience to climate change. On the Output and Outcome level, the project's Theory of Change is based on the following pathways of change and assumptions:

Component I: Regional Coordination Platform

- IF knowledge and awareness on the role of adaptation SMEs in increasing climate resilience and their finance- an market-related challenges is enhanced among key actors in finance, policy and business environment; and
- IF regional coordination on supporting adaptation SMEs in Kenya and Uganda is facilitated through networking and exchange (e.g. at Adaptation Action Steering Committee; Adaptation Action Events and Adaptation Finance Symposia); and
- IF a series of evidence-based knowledge products (e.g. Adaptation SME Taxonomy, Annual Impact Assessment, Action Plan Flagship Report) provides further insights into on the role of SMEs, their challenges and opportunities; and
- ASSUMING that the public and private sector in Kenya and Uganda fully recognise the potential role of adaptation SMEs in supporting the large-scale deployment of locally embedded adaptation solutions;
- THEN, a regional market of adaptation SMEs will be created, allowing them to scale and replicate their businesses.
- Which in turn, leads to national policy and regulatory environment fostering market-based adaptation solution investment and adoption.

Component II: Innovative performance-based blended financing mechanism, direct enterprise support and investment brokerage services

- IF an innovative performance-based blended financing mechanism is introduced in the Kenyan and Uganda market to bridge the missing middle financing gap;
- IF at least 60 outstanding gender- and youth inclusive adaptation SMEs are selected based on a thorough scorecard co-created together with FIs and other ecosystem stakeholders and receive funding readiness support; and
- IF a minimum of 15 local FIs are mobilised to participate in the catalytic finance facility and co-create innovative blended finance instruments tailored to the needs of gender and youth-inclusive adaptation SMEs; and
- IF at least 30 of the selected SMEs access innovative blended commercial financing instruments including a set of de-risking facilities coupled with performance-based payments, business advisory support and investment brokerage services
- THEN, at least 30 selected SMEs will be able to access tailored financial products and make investments to grow and replicate their business models
- THEN selected SMEs will scale the deployment of adaptation solutions across the two countries and enhance the adaptation impact
 they have on local communities;

⁴⁵ The co-creative prototyping methodology foundational to Component III's interdisciplinary Practitioner Labs and commercial bank-focused Finance Academy are refined from over a decade of experience in adelphi's SEED policy and financial product prototyping sessions with key financial actors in Africa and Asia. See also: https://seed.uno/programmes/ecosystem-building/practitioner-labs-climate-finance

⁴⁶ Building on adelphi's and Finding XY's proven financial readiness support in the framework of the European Union-funded Uganda Green Enterprise Finance Accelerator programme. See: https://ugefa.eu/

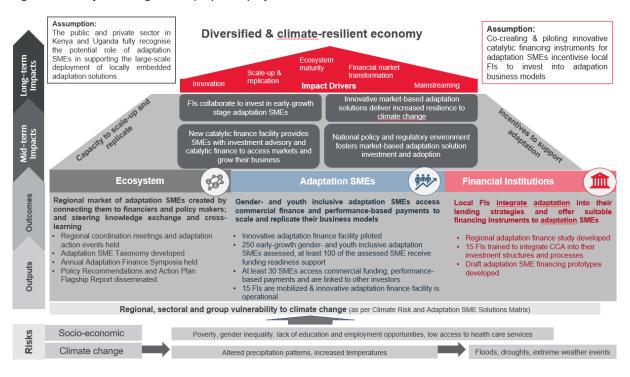
 Which in turn, increases the familiarity and appetite of local FIs and other investors to invest in gender- and youth inclusive adaptation SMEs in Kenya and Uganda even beyond the project period.

Component III: Local financing institutions support gender- and youth inclusive adaptation SMEs

- IF a minimum of 15 local Fls receive guidance on how to develop their own climate (adaptation) strategy
- IF these local FIs understand the concept of climate adaptation (opportunities and risks) and how to integrate it into their investment structures and processes (operationalisation of climate strategy); and
- IF the FIs develop their own financial products targeting adaptation SMEs; and
- ASSUMING that through the co-creation and piloting of innovative catalytic financing instruments for adaptation SMEs (see Component II), local FIs are incentivised to invest into adaptation business models;
- THEN, pioneering local FIs integrate climate change adaptation into their lending strategies and offer suitable financing instruments to adaptation SMEs,
- Which in turn, leads to enhanced access to investment capital for adaptation SMEs in Kenya and Uganda and beyond.
- 57. The **regional approach** of the project will be key to the achievement of intended outcomes and impact as it provides the following added value to the project components:
 - The Regional Coordination Platform (Component I) will establish a cross-country level adaptation entrepreneurship knowledge hub
 that extends Kenyan and Ugandan decision makers' national scope with insights on adaptation entrepreneurship insights and potential
 synergies between efforts and potential for collaboration. Through this, the project will support national policy makers and other
 ecosystem actors in Kenya and Uganda to provide conducive support systems and mechanisms to early-growth gender- and youth
 inclusive adaptation SMEs.
 - Several of the FIs interviewed as part of the stakeholder consultation process provide financial services in both project countries. Including regionally active FIs into the project activities widens the scope of investment opportunities offered to the participating gender- and youth inclusive adaptation SMEs (Component II) and hence multiplies positive outcomes and impacts of this intervention.
 - Kenya being counted as one of Africa's "big four" tech countries⁴⁷ provides enhanced market opportunities to adaptation SMEs, for
 instance in accessing agriculture or financial technologies. Based on similarities in climate change challenges experienced in both
 countries, a regional approach provides the opportunity for co-innovation and partnerships between Kenyan and Ugandan earlygrowth SMEs.
 - Similarly, FIs in Kenya are often more advanced in anchoring climate (adaptation) considerations institutionally and as part of their
 investment portfolios. The proposed Adaptation Finance Academy (Component III) will allow for a peer-learning exchange between
 Kenyan and Ugandan to integrate strategic climate (adaptation) considerations.

An overview of the Theory of Change of the action can be found in the chart below.

Figure 5. Theory of Change of the proposed project



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⁴⁷ Collins, T. (2022). <u>Can Uganda's tech scene compete with Kenya</u>?

Component I: Regional coordination platform

- 58. <u>Baseline situation</u>: A core insight during the consultative process showed that early-growth gender- and youth inclusive adaptation SMEs in the region find it difficult to access finance due to 1) a lack of consideration by and visibility among finance, climate policy and business advisory actors, 2) insufficient coordination between actors in the ecosystem and 3) a lack of institutional knowledge on climate change adaptation and adaptation entrepreneurship (see Section J). Although consideration of adaptation action and SME support are two themes often identified in national development and adaptation plans and policies (see II.F and II.G, respectively), the nexus of adaptation and adaptation solution-oriented entrepreneurship is still nascent in the two target countries. Kenyan and Ugandan policy makers often develop national frameworks within the scope of their own organisational bodies, based on nationally-sourced information inhibiting cross-country and -sector learnings to flow into policy development processes.
 - The dual lack of connections between adaptation action and the opportunities of private sector-based adaptation solutions as well as insufficient cross-country coordination translates into development and climate projects, that, although contributing substantially in supporting and coordinating sustainable SME solutions or adaptation projects, do not yet target adaptation SMEs as the common denominator. While climate finance is an increasingly important investment opportunity of FIs in both countries, climate-smart lending to SMEs is still an exception
- 59. <u>Proposed interventions:</u> Component I aims at establishing a Regional Coordination Platform (hereby RCP) that 1) connects actors in the fields of adaptation, (climate-smart) finance and entrepreneurship; 2) encourages action to sustain and create adaptation markets and 3) serves as a pioneering regional knowledge and coordination platform on adaptation entrepreneurship.
- 60. Alignment with AF Strategic Results Framework (SRF): Component I aims to strenghten the capacity of national and sub-national stakeholders and entities to capture and disseminate knowledge and learning (alignment with Output 3.2); it also aims to improve national policies and regulations that support adaptation SMEs to grow and scale, thus promoting and enforcing resilience measures (alignment with Output 7); it finally aims to generate key findings on effective, efficient adaptation practices, products and technologies developed an deployed by adaptation SMEs (alignment with Output 8.2)

Outcome 1.1 The project establishes a sustainable coordination, network and knowledge platform for and between adaptation entrepreneurs, adaptation stakeholders and (future) adaptation financiers across Kenya and Uganda

Output 1.1.1: Establishing a multi-stakeholder Adaptation Action Steering Committee

- 61. To ensure that gender- and youth inclusive adaptation SMEs take a more central role and are targeted and supported by such actors, an RCP will be set up with a set of key functions:
 - Steer the interaction among different high-level stakeholders across countries, so as to encourage investments in proven adaptation technologies, products and services;
 - 2) Organize regular Adaptation Action Events that link adaptation SMEs with other stakeholders to establish business linkages, access to markets and technologies and exchange knowledge:
 - 3) Serve as a pioneering knowledge hub and distributor for profitable adaptation technologies and products in Kenya and Uganda, providing knowledge on the deployment and financing of adaptation products and services and offering replication business model profiles for future adaptation entrepreneurs
- 62. The RCP will be led and guided by the Adaptation Action Steering Committee, made up of core actors from finance, entrepreneurship, governmental institutions and representatives of vulnerable groups (such as youth-based organisations and rural women associations). The steering committee overlooks the vision and strategy of the project, guides the development and implementation of Adaptation Action Events and high-level Adaptation Finance Symposia and facilitates the exit strategy of the project.

Activity

1.1.1.1 Formation of a multi-stakeholder Adaptation Action Steering Committee

63. The steering committee's formation will be led by UNIDO in consultation with the governments from Kenya and Uganda as well as the EEs. This ensures a committee composition that is highly competent in the interrelated fields of adaptation and entrepreneurship, provides access to high-level public and private networks to leverage participation of key actors in the RCP activities, is endorsed by the respectively critical governmental institutions and includes concerns from representatives of vulnerable groups. To allow for a continuously committed and active committee, the list of committee members and overview of potential priority members will be reviewed and renewed on an annual basis.

Output 1.1.2: An administrative and functional structure for the RCP is developed and endorsed Activities

1.1.2.1 Endorsement of a strategic framework

- 64. The Adaptation Action Steering committee is tasked to develop a sustainable strategic framework for the project duration and beyond. The strategic framework acts as a guide for project implementation and for future government organisations to carry on the project post project maturity. It includes:
 - A rationale for achieving accurately defined project performance indicators such as gender- or youth-inclusive entrepreneurship based on the project's theory of change (ToC)
 - A systemic analysis of the innovation mechanisms, focusing on regular feedback and refinement loops
 - An outreach strategy to meet key objectives of increasing female and youth participation and developing outreach collaborations with representatives of vulnerable groups (CBOs, women organisations)
 - An impact assessment strategy including a long-term vision of scale of impact, including the development of processes for government uptake post-project maturity
 - An inclusion and participation strategy of vulnerable group representatives such as rural women-, youth- or migrant-focused groups into the project design and refinement phases

- A regularly enforced synergy scouting guideline to screen regionally for existing innovations and/or organisations to integrate them into the project
- A process handbook (developed prior to project maturity) to facilitate efficient project takeover

1.1.2.2 Digital platform for adaptation entrepreneurship practitioners and ecosystem actors

- 65. One core component of the RCP is its digital platform for adaptation entrepreneurship practitioners and ecosystem actors. The digital platform will serve four main purposes:
 - 1) Providing a quantified database of profitable adaptation solutions with regularly updated and transparent journey insights (funding, impact, enterprise growth), sourced from regular impact assessments. This lends credibility to potential co-financiers and governmental organisations as future implementing entities.
 - 2) Enabling regional community-building through participant profiles and contact information. This ensures that enterprises can reach out to each other, build networks and explore business linkages across countries. We would, however, refrain from integrating a fully-fledged communication operating system as maintaining communication on "new" systems is resource-efficient and tends to suffer from low usage rates. We thus opt for platform communication channels making use of existing communication tools such as WhatsApp, LinkedIn or emails.
 - 3) Showcasing best practices of adaptation SMEs and offers access replicable business components. These originator profiles will include a step-by-step business development guideline as a "business-in-a-box" blueprint.
 - 4) It serves as an openly available knowledge repository of relevant knowledge products (e.g. symposium reports, multimedia case studies etc.)

Outcome 1.2: Key stakeholders, ministries, financial institutions (Fls), adaptation SMEs and the end-users (vulnerable groups) create and sustain market for adaptation technologies, services and products

Output 1.2.1: Regular regional Adaptation Action Events are developed and implemented

Activity:

1.2.1.1 Adaptation Action Events

- 66. The RCP will feature regular events aiming to facilitate adaptation SMEs' access to networks, markets and finance. Event types are:
 - Adaptation Roundtables multi-stakeholder dialogue fora on adaptation SME challenges and opportunities. Roundtable agenda
 points are inspired by insights from vulnerable groups (farmer associations, cooperatives, women and youth associations) and
 supplemented by evidence gained through project knowledge products such as the Adaptation Finance Study (Activity 1.2.3.3) and
 impact assessments of the project's direct enterprise support components (Outputs 2.2.2 and 2.2.3). Roundtable discussions are
 video recorded and summary videos are uploaded to the project website.
 - Sectoral study tours Study tours are guided to showcase selected direct enterprise support alumni for non-enterprise roundtable participants between countries. This increases knowledge on adaptation entrepreneurship in practice and strengthens cross-country learnings. Sectoral study tours will also be offered between enterprises, as networking events and platforms to exchange ideas and explore linkages was a key finding of adelphi's currently ongoing UGEFA).
 - Further event types that will be implemented are *radio podcast shows*; adaptation breakfasts that are informal cross-country exchanges between adaptation SMEs reflecting on commonly experienced challenges and opportunities; access to market events through which supported enterprises enhance their networks and explore business linkages.

Output 1.2.2: Annual Adaptation Finance Symposia are developed and held

Activity:

1.2.2.1 Annual Adaptation Finance Symposia

67. The Adaptation Finance Symposia will be annual multi-stakeholder events with high-level speeches, panel discussions, interactive breakout sessions, adaptation SME exhibitions⁴⁸ and pitches of the prototyped adaptation finance solutions developed during the Adaptation
Finance Practitioner Labs (Activity 3.1.1.3). The symposia provide a platform for cross-country exchange between financiers, policy
makers and adaptation SMEs. Aiming to be the leading adaptation finance knowledge hub in the region, the RCP's symposia will integrate
into its agenda the presentation and dissemination of key insights of the Adaptation SME Finance Scoping Study (Activity 1.2.3.3) and
Adaptation Market Analysis Report (Activity 1.2.3.1), as well as the developed evidence-based Adaptation SME Taxonomy (Activity
1.2.3.2).

Output 1.2.3: Knowledge products on developing the market for gender- and youth inclusive adaptation SMEs are developed and disseminated

Activities:

1.2.3.1 Adaptation Market Analysis Report

During inception phase, an evidence-based analysis of market-based adaptation solutions in Kenya and Uganda will be conducted. The report will take account of vulnerable groups' climate change risks and adaptation priority sectors with a focus on women and youth before exploring the challenges and opportunities of gender- and youth inclusive adaptation SMEs to scale their operations and adaptation impact for said vulnerable groups. The study expands on initial insights gathered during stakeholder interviews in the course of the consultative process. While its main purpose is to inform and tailor the direct enterprise support activities in Outputs 2.2.2 and 2.2.3, the

⁴⁸ During the first symposium such exhibits are sourced from <u>SEED</u>'s extensive <u>enterprise database</u> due to a lack of enterprise alumni at this project stage. The following symposia will feature enterprise exhibits with direct enterprise support alumni.

report delivers critically needed insights into the still-nascent body of literature on adaptation entrepreneurship, and is thus suited for academia and practitioners active in this field, as well as for (future) adaptation entrepreneurs. It will be the first knowledge product to identify opportunities for successful adaptation entrepreneurship tailored to vulnerable communities as well as barriers to growth and scale for adaptation SMEs in the region.

1.2.3.2 Evidence-based Adaptation SME Taxonomy

69. Based on the pioneering taxonomy work on adaptation SMEs by the IADB's Adaptation SME Accelerator Project⁴⁹, this project will further refine and test the taxonomy assumptions with real enterprise data prior, during and after project completion. This ensures that definitional scopes of adaptation entrepreneurship and their provided adaptation solutions remain distinct and applicable in the context of enterprise support eligibility criteria. It therefore establishes a structured approach for transparently determine whether an SME qualifies as an "Adaptation SME" based on the type(s) of technologies, products and services offered. The adaptation taxonomy is integrated into the Adaptation Finance Academy curricula.

1.2.3.3 Adaptation SME Finance Scoping Study

- 70. Prior to the first Adaptation Finance Symposium (Activity 1.2.2.1), an interview- and desk research-based report on the state of adaptation SME finance in Kenya and Uganda will be conducted. The study will be published onto the project's digital platform, integrated into the Adaptation Finance symposia's curricula and used to inform the direct enterprise support activities in Component II as well as the Finance Academy (Output 3.1.1). It will provide key insights on:
 - The financing needs of gender- and youth inclusive adaptation SMEs (e.g. ticket sizes, repayment periods, financial product type)
 - The volume of adaptation finance and the inclusion of the private sector
 - An analysis of current green and adaptation finance product portfolios in the two countries
 - A status quo analysis of current adaptation finance policies and frameworks and their implications
 - The knowledge and view of FI executives on the financial needs of adaptation SMEs

1.2.3.4 Multimedia case study films to showcase adaptation business models and their impacts

71. The case studies to be developed have the objective to promote and showcase the contribution of selected gender- and youth inclusive adaptation SMEs to the achievement of NDCs and SDGs. The case studies serve to provide visibility for actor groups with limited exposure to the lived realities, struggles and potentials of gender- and youth inclusive adaptation SMEs on the ground. Based on experience with case study films in previous projects, this product also serves as a critical advantage for enterprises, as they often use these films for marketing purposes and to attract finance.

1.2.3.5 Policy Recommendations and Action Plan Flagship Report

72. Insights on the needs of adaptation SMEs and solution pathways to effectively address those needs will be synthesized into a set of tangible policy recommendations for policy makers in Kenya and Uganda in the form of an Action Plan Flagship Report. Information is derived from the project's knowledge products (e.g. Activities 1.2.3.1, 1.2.3.3), impact assessment (Activity 1.2.3.6) and Adaptation Action (Activity 1.2.1.1) as well as Adaptation Finance Academy Events (Component 3). The report will be published on the RCP's digital platform.

1.2.3.6 Annual Impact Assessment

- 73. The project will include both an internal and external impact assessment, aiming at analysing and showcasing the efficient contribution of the project to the achievement of improved access to finance for adaptation SMEs to reach their potential. To increase adaptation action measurability and design robust performance and impact indicators, the project will develop a transparent and publicly available impact data section as part of on the digital platform. This will be led by the Adaptation Action Steering Committee, who will establish an Impact Assessment strategy (as part of Activity 1.1.2.1), at its core serving as the project's impact framework. This includes:
 - Impact Methodology Strategy This strategy will detail how existing EE impact tools can be further tailored, improved and mainstreamed across the project
 - Impact Dashboard Tool for supported enterprises, supporting the planning, measurement and management of their economic, social and environmental impacts. This tool will include tailored indicators to measure adaptation impacts. These impact dashboards will be filled by adaptation SMEs in the course of the capacity building support and on an annual basis post support, contributing to the monitoring of the additional long-term outcome KPIs.
 - Control groups Control groups will be established to be able to measure impacts of the direct enterprise and financial support vis a vis non-support. Shortlisted enterprises that are not selected for the programme are well suited to form a control group. The project will stay in close contact with these enterprises to monitor their development through the annual impact assessment and interim monitoring efforts (interviews/ field visits). The enterprises from cycle one will be incentivised by the opportunity of becoming part of the second financing cycle of the project while enterprises from cycle one and two will be offered participation in Adaptation Action Events (Output 1.2.1) to encourage them to provide company data and insights into their business development.
- 74. Lessons learned and Impact assessment reports Lessons learnt will continuously feed into the program design and implementation throughout the project implementation period. Impact Assessment Reports will provide an evidence foundation for both internal learning and external communication activities during and after this project.
- 75. Integration of feedback loops from vulnerable groups as customers of adaptation SMEs: to gain insights on the impact the project and its concomitantly disseminated adaptation solutions have on vulnerable communities in Kenya and Uganda, the project will regularly collect adaptation SME customer feedback (disaggregated by vulnerability variables such as income, occupation, gender, age). The data generated through feedback loops be important markers for the re-adjustment of project components and activities, such as scorecard criteria (Activity 2.1.1.1).

⁴⁹ Trabacchi, C., Koh, J., Shi, S., Guelig, T. (2020) Adaptation Solutions Taxonomy.

Component II: Innovative performance-based blended financing mechanism, direct enterprise support and investment brokerage services

- 76. <u>Baseline situation</u>: There is a gap in the entrepreneurial support systems when it comes to SMEs phasing from grant-based funding to commercial growth-stage investments. Especially for adaptation enterprises, access to concessional finance is challenging⁵⁰ as described in the Problem Statement (see paragraph 59).) From a financial market perspective, climate change-related investments by international climate funds and multilateral development banks have increased,⁵¹ but there is still a lack of suitable finance mechanisms to deploy the money through local FIs targeting early-growth SMEs. Climate adaptation is a nascent field for bankers and is perceived as high-risk given the climate-induced uncertainties of adaptation market opportunities, lack of clear impact measurement frameworks and the innovative character of adaptation technologies or solutions that lack benchmarks. At the same time, the financing instruments offered by local FIs are barely suited for the SME market as they are often not accessible (e.g. because of high collateral requirements) nor attractive (e.g. due toto high interest rates) for these small market players. Lastly, commercial banks in Kenya and Uganda lack a suitable pipeline of bankable adaptation SMEs.
- 77. Proposed interventions: Component II constitutes an innovative financial mechanism bridging gender- and youth inclusive adaptation SMEs' 'missing middle' financing gap in the two target countries. A performance-based blended financing mechanism will be pioneered together with funding facilitation instruments, addressing the main accessibility barriers to commercial finance. The innovation of this approach stems from 1) the unique combination of de-risking blended financing instruments with performance-based payments to specifically scale and replicate highly impactful adaptation business models; and 2) the highly inclusive approach involving not only local FIs but also impact investors and venture funds in Kenya and Uganda in a co-creation process from design to investment and post-investment stage.
- 78. The mechanisms core modules and processes are:
 - 1) Selected pipeline of gender- and youth inclusive adaptation SMEs receive TA: The EE will select a pipeline of eligible gender- and youth inclusive adaptation SMEs based on a thorough scoring process focusing on main financial, innovation, adaptation and socio-economic impact criteria (see Output 2.1.1). The selected adaptation SMEs receive tailored business advisory to achieve financial readiness.
 - 2) Matchmaking between local FIs and supported gender- and youth inclusive adaptation SMEs: A pipeline of eligible adaptation enterprises will be matched with a selection of local FIs to apply for loan funding.
 - 3) De-risking of commercial bank financing: To facilitate financing agreements between participating adaptation SMEs and local FIs, a certain amount of AF grant financing is transferred to the FIs to blend the loan. The design of blended financing mechanisms will be shaped during inception phase in a co-creation process with the local FIs (see different financing options under Output 2.3.1).
 - 4) Performance-based payments: Upon achievement of individual APTs, the participating adaptation SMEs receive performance-based grant payments. Performance-based grant payments can be used for loan repayment and/or for additional investments.
 - 5) Additional de-risking and incentivising components may be built in as needed to further tackle investment-related challenges (e.g. using AF grant funds to value collateral for an SME to fulfil this prerequisite for the loan agreement).
 - 6) Leveraging complementary investments by impact investors/venture funds: In order to diversify the pool of investors and achieve a greater value of leverage, the project will also work with impact investors and venture funds (e.g. the EEs own venture funds) that offer patient facilities like convertible debt and equity. Investments by this group of financiers will complement the investments by local FIs (commercial banks, microfinance institutions) as they might not be able to solely satisfy the demand for capital by the participating SMEs. Impact investors and venture funds also support participating adaptation SMEs with due diligence costs (and other admin charges), thus, increasing their finance-readiness further. Impact investors and venture funds will not receive any direct financial incentives by the project but they will be involved in the co-creation of the financing facility.
 - 7) Close monitoring of innovative climate adaptation ventures funded: Participating SMEs that received funding will be accompanied through the Accelerator post-investment support programme that allows for a close monitoring of the investment and the overall company development. The performance-based payment scheme offers another touchpoint for monitoring the development of the business models and its adaptation impacts while an annual impact assessment together with the mid-term review round up the project's monitoring and evaluation efforts to make adjustments to the finance facility design where necessary.

In the event that private sector capital cannot be leveraged as expected under the first financing cycle of the proposed project, the instruments will be adjusted accordingly for the second financing cycle. Possible adjustments may, for instance, refer to deploying a larger amount of AF grant funds as straight grant funding to the participating SMEs, e.g. to acquire collateral that is a prerequisite for loan applications. This will allow the participating SMEs to achieve funding readiness and apply for on-lending opportunities beyond the project duration while ensuring that the project achieves its objectives.

79. Alignment with AF Strategic Results Framework (SRF): By selecting innovative adaptation business models and supporting them to consolidate and grow, Component II aims to accelerate, scale-up and replicate market-based, innovative adaptation practices and and technologies at regional level in Kenya and Uganda (alignment with output 8.2); Scaling up of adaptation SME business models is expected to result in diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas where adaptation SMEs operate (alignment with Output 6); Component II also aims at strengthening the institutional capacity of adaptation SMEs to reduce risks associated with climate-induced socioeconomic and environmental losses, decreasing their vulnerability to climate change impacts (alignment with Output 2.1); finally, participating adaptation SMEs will also be encouraged to conduct risk and vulnerability assessments for their company operations and monitor these continuously (alignment with Output 1.1).

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⁵⁰ Cowan, A. (2019). The SME finance gap in Kenya: how are investors missing the 'missing middle'?

 $[\]frac{51}{https://afdb.africa-newsroom.com/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows?lang=encom/press/multilateral-development-banks-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-finance-rose-to-66-billion-in-2020-joint-report-shows-mdbs-climate-rose-to-66-billion-shows-mdbs-climate-finance-rose-to-66-billion-shows-mdbs-climate-finance-rose-to-66-billion-shows-mdbs-climate-finance-rose-to-66-billion-finance-rose-to-66-billion-finance-rose-to-66-billion-finance-rose-to-66-billion-finance-rose$

Outcome 2.1: Developing and implementing the project's enterprise support infrastructure

Output 2.1.1 Scorecard for the assessment of at least 250 early-growth gender- and youth-inclusive adaptation SMEs co-created Activity:

2.1.1.1 Scorecard co-creation

To select a pipeline of gender and youth-inclusive adaptation SMEs for the catalytic financing scheme, a scorecard with a set of robust and fit-for-purpose criteria will be developed jointly with experts from the Adaptation Action Steering committee (Output 1.1.1) and the participating FIs (Output 2.3.3). A positive list of eligible adaptation technologies/ solutions, taking into consideration regional vulnerabilities and socio-economic structures (see also Climate Risk and Adaptation SME Solution Matrix/ Part I, Chapter 1.5), will form the basis for discussion with FIs/ investors to ensure their eligibility for asset finance and the resulting loan products offered. The following overview provides an indication of the proposed scoring categories:

Table 4: Draft scoring categories, as a foundation of the newly-developed selection scorecard.

	Non-Financial scorecard criteria	Financial scorecard criteria		
	Adaptation products/ services		Annual turnover	
	Environ. Safeguards/Maladaptation	Financial	Gross & operating profit	
Impacts	Monitoring, assessment & reporting	Status	Debt Ratio	
	Gender & Youth inclusiveness, non-exclusion of	Status	Quality of financial projections	
	marginalised groups (e.g. indigenous people/ IPs)			
	Value Proposition	Financial	Financial controlling systems	
Business	Product / Service	Systems	Financial Statement	
Model	Growth Potential		Clarity of investment proposal	
	Target Market	Investment	Loan ticket size in line with project	
Team &	No and expertise of Staff	Plans	Investment influencing on business growth	
Expertise	Ratio full time / temporary	i ialis	Job creation potential	
Expertise	No of financial staff			

After the first financing cycle, the scorecard will be critically reviewed vis-à-vis the selected and supported enterprises to consider lessons learned for the second cycle.

Output 2.1.2: The project builds a pipeline of 100 gender- and youth inclusive adaptation SMEs for funding readiness support Activities

2.1.2.1 Outreach campaign

80.

Through a dedicated outreach campaign, a pipeline of high-quality applications will be generated for the intake into the two cycles of the funding program. The action is promoted through a launch event and information campaign among relevant multipliers in the Ugandan and Kenyan ecosystem, making use of the contacts and network of the Adaptation Action Steering Committee (Output 1.1.1) as well as the EEs including: 1) Incubator programs for green and climate-smart enterprises⁵²; 2) Women and youth groups (including village-based savings and loan groups); 3) Women- and youth-led / -owned companies from the EE's current portfolios; 4) Women/ youth empowerment programs like Kenya Women Finance Trust; 5) Impact investors, angel investors, donors and foundations and their networks; 6) Trade and business associations as an entry point to a broad network of enterprises. In order to reach these and other stakeholder groups, a marketing and communication strategy will be developed to select appropriate outreach channels and develop messages that address the selected audiences in the most effective way. The project will work with locally based communication experts that can provide contacts to local media outlets and advise on how to best scout widely for existing innovations. Each application cycle kicks off with a carefully designed hybrid marketing campaign for the respective Call for Applications that unites the benefits of an online approach with those of a classic "offline" promotional campaign. Targeted communication, among others, may include radio/ TV broadcasting; newspaper articles/ adverts; social media posts, roadshows, promotion at relevant trade fairs/ events, personalised mailing and mailing through multipliers. The project will make sure to pay specific attention to reach indigenous communities/ territories owned by indigenous groups (e.g. through radio podcasts in local languages, roadshows in remote regions, outreach through community support groups/ communitybased organisations) for them to apply for participation in the enterprise support programmes.

2.1.2.2 Set-up of online application system and pre-application support

With the EE having implemented various selection schemes (e.g. adelphi has implemented the SEED global selection scheme⁵³ for almost 15 years, having handled over 6,000 applications, the Uganda Green Enterprise Finance Accelerator processed over 2,500 registrations; KCV has implemented a digitalized expert-managed investment applications platform for the past 6 years, with 100-150 applications annually). Building on these lessons learnt, applications will be handled through an online application system with user accounts, which allow for editing the application until the application deadline. A backend interface will be established to manage and monitor the online applications and to provide technical assistance remotely. One-day pre-application workshops will be offered to support applicants to clarify their business concepts and submit comprehensive and consistent applications.

When applying, the enterprises are required to provide quantified information on the expected beneficiaries in terms of existing and future workforce (number of full-time/ part-time employees, formal and informal contracts), current and future customer base/ target market estimation, value chain (suppliers, processing partners etc.), all disaggregated by gender.

2.1.2.3 Selection of funding-ready gender- and youth inclusive adaptation SMEs

53 For details please see https://seed.uno/

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⁵² Incubators and accelerators from Kenya/ Uganda: E4Impact - https://www.e4iaccelerator.org/; Pangea Accelerator - https://www.pangeaa.com/; Kenya Climate Innovation Centre - https://www.kenyacic.org/; Sinapis - https://www.sinapis.org/; Nailab - https://www.kenyacic.org/; Sinapis - https://www.sinapis.org/; Nailab - https://www.kenyacic.org/; Sinapis - https://www.sinapis.org/; Nailab - https://www.sinapis.org/; Open Capital Advisors: https://www.sinapis.org/; Nailab - https://www.sinapis.org

81. Through an elaborated online scoring system and selection process each application is evaluated independently by two to three analysts contracted by the EEs along a scorecard that will be based on the publicly communicated eligibility criteria. The assessment is undertaken along four guiding principles: four/six eyes principle (each application is evaluated independently; where the two analysts' scores differ extraordinarily, a third analyst is drawn in); shared benchmark principle (prior to the evaluation period the facility objectives and the eligibility criteria are thoroughly introduced to each engaged analyst); capacity principle (analysts are engaged for sector and technology expertise, while an interdisciplinary composition of the team ensures an excellent delivery of the task); documentation principle (all inputs, changes and comments are documented). The final selection of enterprises will be executed by an expert jury composed by members of the Adaptation Action Steering Committee (see Output 1.1.1).

Outcome 2.2: Supporting adaptation SMEs from funding readiness to investment and post-investment management

Output 2.2.1: Two Catalyser Programme Cycles: Business advisory support for selected enterprises to achieve funding readiness provided

Activity

2.2.1.1 Catalyser enterprise support programme (2 cycles)

- 82. At least 100 selected adaptation SMEs will receive capacity-building support based on the proven EE's toolkit which consists of five peer-learning workshops in small groups combined with individual support for each enterprise. The capacity building support will be implemented by locally-based Business Development Service (BDS) providers carefully selected and closely managed by the EEs. The content of the capacity building support will be aligned with the specific needs of shortlisted applicants and will include:
 - **Business planning:** Development of growth strategy with gender- and/or youth-related milestones, e.g. with regard to vulnerable groups as primary customer segments, their engagement along SMEs' value chains as well as inclusive approaches to increase the number of direct beneficiaries of adaptation products and services
 - Financial Reporting: Review of financial systems/improvement of financial controlling and management
 - Financial Planning, based on the developed growth strategy, and risk management
 - Investment Planning: Financial growth scenarios, profitability analysis of planned investments
 - Impact Assessment: Setting up an impact assessment framework, validating adaptation impact assumptions
 - Loan Application Preparation, including pitching and loan negotiation training
- 83. The Catalyser programme will also focus on enhancing the competitiveness of the selected enterprises. Gender equality and the inclusion of marginalised groups (including women and youth) will be facilitated by tailored tools to further sensitise the participating SMEs for gender aspects and the inclusion of marginalised groups. Based on 20 years of experience in supporting green and inclusive enterprises, adelphi has developed an easy-to-use advisory methodology and toolbox, which is continuously updated.

 2.2.1.2 Developing Adaptation Performance Targets (APT)
- 84. An integral part of the Catalyser advisory package will be the development of the adaptation SME's theory of change, drafting of adaptation impact chains and identification of outputs and outcomes along their individual adaptation-related impact dimensions, taking into consideration the vulnerabilities of their target customers/ beneficiaries. Based on these impact chains, Adaptation Performance Targets (APT) will be developed for the participating adaptation enterprises to be achieved within a certain time-frame (e.g. 5km of drip irrigation pipeline sold to vulnerable smallholder farmers within the next 1.5 years). The selected APT will form the basis for the performance-based payments (Outcome 2.3).
- 85. APTs need to be ambitious and meaningful to avoid the risk of setting goals, that if met, would not reflect a genuine improvement of the final beneficiaries' climate resilience. They need to be fit for purpose to ensure that the underlying adaptation metric is material to the SME's core business. Especially for businesses operating in the agriculture and to some extent also in the water sector, it will be crucial to build in precautionary measures to manage risks associated with extreme events (e.g. weather or other natural hazards), especially with the project focus being on highly vulnerable regions. To that end, several sets of targets may be developed to provide flexibility for performance-based payments.
- 86. APTs are verified by an external service provider looking back at the enterprise historical trajectory (e.g. turnover and sales number in the past three years) and benchmark against industry peers, if available. As part of the advisory, adaptation enterprises will also develop a sound concept how to measure and monitor adaptation impacts and social inclusion targets using an impact planning dashboard including KPI's/indicators and an individual M&E framework to monitor their APTs in a cost-effective manner.

Output 2.2.2: Two Accelerator Programme Cycles: Post-investment support for enterprise growth and loan repayment Activity

2.2.2.1 Business model and financial management advancement through one-on-one advisory (2 cycles)

- 87. Throughout two funding cycles (year 3 and year 4 of project implementation), the Accelerator Programme enables adaptation enterprises to secure loan funding moving them towards financial resilience and growth, building their in-house financial management capacities and processes, thus putting them in a better position to create jobs while contributing to an enhanced climate resilience. The accelerator support will apply a one-on-one support methodology and closely monitor the participating SMEs development.
- 88. The accelerator support will be provided to all enterprises receiving finance under this project, accompanying the financial support process to strengthen financial management capacity and systems according to FIs requirements while advancing and validating the enterprise growth strategy, investment roadmap and financial assumptions

Outcome 2.3: Designing & implementing blended financing mechanisms & performance-based payments for adaptation SMEs

Output 2.3.1: Development and refinement of performance-based blended financing scheme Activities

2.3.1.1 Co-creative financial facility design

89. To achieve alignment between the project's financing facility and the standard procedures at partnering FIs and investors and tailor the instrument to both their requirements as well as adaptation SME needs, a well-conceptualized co-design process will be implemented to develop and test the most effective blended financing instruments for the Kenyan and Ugandan market. Such instruments mainly need to remedy eligibility knock out criteria, such as irregular cash flows, and de-risk loan agreements with target enterprises from the view of the financing institution as well as increase affordability of finance to the enterprises. To overcome those key barriers to finance, a number of prototype-stage ideas have been developed:

Option 1: Partial Repayment Scheme: Reducing both the risk of default for the FIs as well as the cost of finance for the enterprise, a grant of 25 – 33% of the total loan amount that is unlocked with any eligible loan agreement. This reduces the outstanding loan amount (principal) immediately after loan approval and thus allows the enterprise to access higher ticket sizes, reduces collateral requirements and the total interest amount to be paid by the enterprise.

Option 2: Loan Guarantee Scheme: Guarantee schemes buffering the risk of loans have worked well in various programs in Kenya and Uganda so far, sometimes hindered by exaggerated bureaucracy. A dedicated guarantee fund or, saving transaction costs and ensuring long-term sustainability, cooperation with an existing fund can work well to facilitate the flow of small-scale loans to green enterprises. Both individual, and portfolio guarantee instruments will be considered.

Option 3: Origination costs incentives: Time and cost-intensive due diligence and loan appraisal processes can be an obstacle for FIs to take on new SME borrowers, especially when they are not familiar with the dynamics in a new value chain or market. Financial incentives to cover these costs upfront can lower the barrier for FIs to look into new SME markets and business segments for investing.

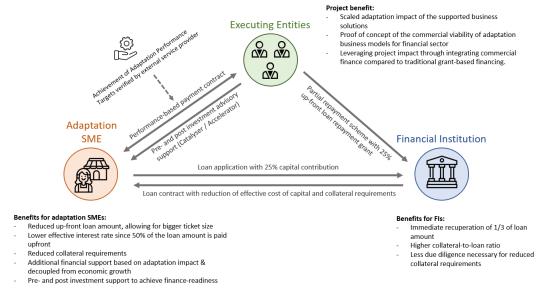


Figure 1: Exemplary set-up for Loan-Attached Repayment Grants and Performance-based payments.

- 90. In a dedicated workshop with FIs these prototypes will be refined for implementation also capturing potentially promising new ideas for other approaches and instruments. Involvement of FIs in this process will not only guarantee alignment with existing processes and structures within the FIs, but also create ownership among FIs. Interested impact investors and venture funds may provide additional capital for the selected gender- and youth inclusive adaptation SMEs, either in the form of ex-ante/ follow-on investments or as dedicated co-financing agreements. Several promising instruments will then be applied in collaboration with partnering FIs and. Based on evaluation of the first cycle, instruments may be further refined, with a final evaluation at the end of the project. The action will aim to result in a solid and tested mechanism with potential to be scaled and/or replicated both nationally in Kenya and Uganda, and internationally.
- 91. Complementary to the blended financing instruments the EE will pilot additional performance-based and incentive mechanisms for participating adaptation SMEs to make commercial investment capital accessible and scale their adaptation impact further:
- 92. Option a: Support SMEs to value collateral: Covering costs for determining the collateral value (3-5k USD) as a prerequisite for the loan application which can be a prohibitive factor for SMEs to apply for financing.

Option b: Cash-Flow Gap Cover: A cover for up to three months to continue repayment in times of low liquidity can close short-time gaps and upon successful repayment of this cover funding it can be accessed repeatedly by any eligible enterprise.

Option c: Covering due diligence and other loan preparation costs: The selected adaptation SMEs may receive support with required due diligence and other cost involved in preparing their loan application.

Option d: Performance-based payments: Upon achievement of individual APTs, the participating adaptation SMEs receive additional performance-based grant payments that will cover up to 15% of the overall loan size and can be used for the repayment of the loan and/or for additional investments.

Any combination of these instruments can be applied, whereas option 1-3 instruments aim at funding facilitation (leveraging private capital) and option a-d as additional incentivizing and enabling instruments (straight grant funding without private capital leveraging). The overall amount of grant financing to be allocated as financial support to the SMEs depends on the selection of the financing instruments and varies between 1,4-2 Mio USD (see table 6) while an amount of 0.5-0.7 Mio USD will be utilized for the development and refinement of performance-based blended financing scheme, the mobilization of at least 15 partner Financial Institutions (FIs), portfolio management of the financing facility and the development of an exit and scale-up strategy for the innovative adaptation SME financing mechanism.

Table 5: Overview of instrument options and grant amounts.

Instrument	No of SMEs	Grant amount per SME	Total Grant amount (for 30 SMEs)	Leveraging effect**		
Option 1:		25 - 33 % of loan ticket size*	562.500 - 742.500	1.687.500 - 1.507.500 USD		
Partial Repayment Scheme		18.750 - 24.750 USD	USD	Factor 2 – 3		
Option 2: Guarantee Scheme	30	35% portfolio or individ. guarantee	787.500 USD	1.462.500 USD <u>Factor 1,9</u>		
Option 3: Origination costs incentives		Average appraisal subsidy 20.000 USD	600.000 USD	1.650.000 USD Factor 2,75		
Performance-based and incentive mechanisms						
Option a: Grant for collateral valuation		3.000 - 5.000 USD	90.000 - 150.000 USD	-		
Option b: Cash Flow Gap Cover		20% of Partial Repayment Scheme	112.500 - 148.500 USD	-		
Casii Flow Gap Covei	30	3.750 - 4.950 USD	030			
Option c: Due Diligence & Loan Prep. Grant	30	5.000,00 USD	150.000 USD	-		
Option d:		Up to 15% of loan ticket size*	675.000 USD	_		
Performance-based payments		11.250 USD	070.000 000			

^{*}Assumption: Average ticket size: 75.000 USD.

Output 2.3.2 Mobilising at least 15 partner Financial Institutions (FIs) Activity

2.3.2.1 Building a portfolio of contractual partnerships with FIs and impact investors/ venture funds

- 93. Formalized partnerships will be sought with at least 15 local Fls and impact investors/ funds that have already been part of the design process. The EEs will leverage their well-established networks with commercial banks and impact investors in Kenya and Uganda. The Kenyan EE, KCV Limited being an investment management company with an established fund to invest in climate-smart, early growth-stage enterprises, will be one key partner here and leverage its well established network of impact investors and local banks. adelphi and Finding XY have established partnership agreements with a number of local banks in Uganda under UGEFA that can be built upon (see also J. Consultative Processes). Specific alignment to the internal procedures, risk scorecards, due diligence and loan appraisal requirements of the partnering Fls and investors will be considered in jointly designing the catalytic financing facility.
- 94. For the implementation of blended financing instruments, a detailed outline of roles, responsibilities and transactional procedures will be agreed upon and refined over the course of the project. Memorandums of Understanding will be signed before the first presentation of enterprises to Fls and impact investors/venture funds. In the second cycle, also new partner institutions will be invited to come on board to increase outreach into the ecosystem and to enable these to benefit from the experience and learnings from the pilot stages, and any conceptual refinements already implemented.

Output 2.3.3 Implementing performance-based blended financing instruments and portfolio management Activities

2.3.3.1 Performance-based blended financing implementation

- 95. Adaptation SMEs that have successfully completed the Catalyser program (Output 2.2.1) will be linked to the partnering FIs and impact investors/ venture funds to apply for funding. At least 30 participating SMEs successfully sign a financing agreement with an FI/investor and thus, become part of the Accelerator programme.
- 96. For each successful financing agreement, an individual contract with the borrowing adaptation enterprises will be signed to agree on the performance-based grant payment that will be tied to the achievement of Adaptation Performance Targets (APT). APTs may relate to different business aspects such as sales targets, vulnerable customers/ beneficiaries served, women/youth representation in the enterprise value chain (e.g. as sales agents) etc. The individual amounts of performance-based grant payments will be determined based on the categorization of participating gender- and youth inclusive adaptation SMEs according to their growth and impact potential. Genderand youth inclusive adaptation SMEs with a medium growth potential but a high adaptation impact potential, for instance, would receive higher performance-based grant payments than high-growth/low-to-medium impact profile enterprises.
- 97. 2.3.3.2: Portfolio management:
 - Portfolio management of funding-eligible enterprises is coordinated through a central database for progress monitoring and documentation, supported by local BDS providers delivering the business support, in order to ensure that enterprises work effectively towards meeting Fls/ investors requirements on funding-readiness in terms of financial management systems and realistic investment plans along funding-readiness action plans. An external service provider will also monitor the borrowing SMEs' adaptation-impact performance, e.g. by reviewing and verifying self-reporting efforts by SMEs. Regular reporting on the status of achievement of APTs by this service provider to the EEs will be an integral part of the performance-based financing system to ensure that individual contract stipulations are met. The Accelerator Support, as well as dedicated contingency planning sessions for enterprises benefitting from the

^{**} The leveraging effect describes the amount of private capital, which is leveraged by the grants provided through this project. Calculated as: Number of loans * average ticket size - (total grant amount)

cash flow gap cover instrument will mitigate the risk of defaults as much as possible. Since this financial facility engages and leverages funding provided by market-based financial institutions in an innovative manner, the facility can rely on due diligence and repayment monitoring processes conducted by financial institutions themselves.

Output 2.3.4 Exit and scale-up strategy for innovative adaptation SME financing mechanism

2.3.4.1 Exit and scale-up strategy development

98. Both the financing facility, which will raise the appetite and familiarize FIs with adaptation business models, products, services and technologies, as well as the Adaptation Finance Academy (outlined in 3.1.1) will prepare local banks and other FIs to deploy international climate finance capital provided by (international) DFIs. FIs will gain first-hand experience with adaptation SMEs, their investments and the integration of adaptation-related criteria into loan appraisal processes and scorecards.

Outcome 2.4: Potential environmental and social risks of selected SMEs screened, assessed and monitored with the framework of the Environmental and Social Management System ESMS

Output 2.4.1 A comprehensive ESMS for SMEs to receive technical and finance support is implemented Activity

2.4.1.1 Application of an Environmental and Social Management System (ESMS)

- 99. A comprehensive ESMS will be set-up and implemented specifically for the screening, assessment and monitoring of environmental and social risks that potentially result from the activities of the SMEs that will be selected to receive targeted technical and financial support through the project. The methodology of the ESMS will be developed and presented at fully developed proposal stage, in line with the environmental and social principles as defined by AF's Environmental and Social Policy.
- 100. Further, this will include assessing any potential risks for maladaptation as a result of the SMEs introducing adaptation solutions such as any negative impact /externality on other groups, potential for future conflict, unwise trade-offs, short vs long term benefits, path dependencies or a technology lock-in that eliminate choices of future generations, or higher risk on other areas that the farmers livelihood depends on, etc. If the screening results in a high or moderate risk category for the sub- project, then additional steps might be taken to avoid or mitigate such risks.
- 101. Project and safeguard information will be disclosed to public and relevant stakeholders for their information and engagement. Regular monitoring of the compliance with required environmental and social management plan will be carried out and documented in the annual progress reports.

Component III: Local financing institutions support gender- and youth inclusive adaptation SMEs

- 102. <u>Baseline situation</u>: The financing of gender- and youth inclusive adaptation SMEs in Kenya and Uganda is limited by the lack of awareness and knowledge among local FIs about the business opportunities of accessing adaptation finance and channelling it into adaptation entrepreneurship. To enable effectively funnelled adaptation finance to locally-led adaptation entrepreneurs who target those most vulnerable to climate change, local FIs need to be capacitated and empowered in understanding adaptation, its funding criteria, and business cases.
- 103. Proposed interventions: The Adaptation Finance Academy serves as an events-based knowledge hub to tackle the insufficient FI portfolio of adaptation finance instruments tailored to gender- and youth inclusive adaptation SMEs, as well as to contribute to increasing efficiently channelled adaptation finance to local interventions and adaptation entrepreneurs. Adaptation Finance Trainings will provide tailored information and knowledge on climate adaptation and the private sector and the specific role of adaptation SMEs in building local resilience. The trainings will be held back-to-back to Climate Strategy Workshops that will anchor strategic adaptation considerations within participating FIs, serving as the strategic foundation for adaptation action. The Adaptation Finance Practitioner Labs, are co-creative multi-stakeholder workshops in which innovative adaptation finance instruments tailored to early-stage gender- and youth inclusive adaptation SMEs are designed by local FIs. The Academy will not have a physical presence but work through a series of workshops and events where FIs meet to network and co-create ideas.
- 104. Alignment with AF Strategic Results Framework (SRF): Component III aims to develop prototypes of innovative adaptation financing instruments to be deployed and offered to adaptation SMEs by local FIs (alignment with Output 8.1.); it will also increase the readiness and capacity of local FI staff to respond to, and mitigate impacts of climate-related events to increase the resilience of their banking portfolios (alignment with Output 2.1); it will finally guide FIs to conduct and update risk and vulnerability assessments for their banking activities (alignment with Output 1.1).

Outcome 3.1: Local financing institutions support the dissemination of adaptation technologies, products and services

Output 3.1.1: Adaptation Finance Academy

Activities

3.1.1.1 Adaptation Finance Trainings

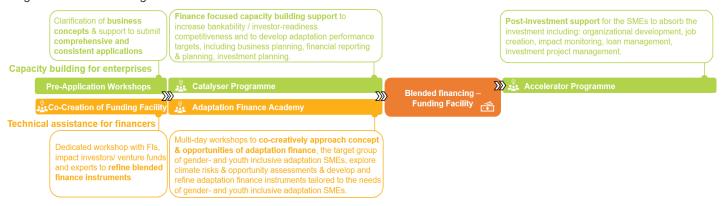
- 105. The banking sector in the two target countries is generally lacking awareness in the concept and prospects of adaptation finance as well as what financial products and services are required for gender- and youth inclusive adaptation SMEs to scale. The Adaptation Finance Trainings offers the opportunity to expand on nascent knowledge on adaptation finance and entrepreneurship as a lever for new financial business opportunities.
- 106. The interactive hands-on trainings will be facilitated by experienced advisors and target local FIs participating in small teams of three to four members. A specific focus of the trainings will be on gender-lens and inclusive financing to create additional awareness on the obstacles of women, youth and other marginalised groups to access finance. The workshops also act as showcasing events for gender-

and youth inclusive adaptation SMEs as blueprints for investable business models. Furthermore, subnational government officials are invited to discuss possible cooperation for joint locally implemented adaptation finance projects.

3.1.1.2 Climate Strategy Workshops

- 107. In order to ensure that the suggested funding facility will be strategically anchored within partner FIs, Climate Strategy Workshops will be implemented, capacitating them to develop Climate Strategies, outlining strategic pillars for climate action, action fields for operationalisation as well as clear climate targets, both on mitigation and adaptation. The Climate Strategy Workshops will engage representatives from different departments, ranging from sustainability and partnership managers to communication teams as well as product developers, client solution managers and commercial departments to embark on co-creation sessions to jointly design Climate Strategies for their banks. Participants will further benefit from capacity building on climate impact measurement, to support sustainability-related reporting.
- 108. These Climate Strategy Workshops will aim at providing the foundation of stimulating the appetite of commercial banks and other FIs to engage with green clients. Furthermore, they will create awareness and stimulate interest to include an assessment of green investments (with a focus on adaptation impacts) as part of loan appraisal processes. In order to increase cross-country learning and exchange, leading commercial banks from Kenya, with a Climate Strategy already in place, will share their experiences in developing and operationalising climate actions.
 - 3.1.1.3: Adaptation Finance Product Innovation Practitioner Labs
- 109. Practitioner Labs aim at prototyping adaptation finance instruments which tackle barriers to access finance facing gender- and youth inclusive adaptation SMEs. These adaptation finance instruments will provide innovative approaches to deploy and operationalise adaptation finance by investing in adaptation enterprises. Based on interactive and innovative learning and prototyping methodologies, the Labs will facilitate the development of instruments and products which increase access to adaptation finance for SMEs in Kenya and Uganda. The Practitioner Labs will emphasise the specific obstacles and needs of women, youth (and other vulnerable groups) entrepreneurs to access finance and seek the integration of inclusive financing elements in the prototyped financial instruments.
- 110. Prototyping is a bottom-up, demand-driven, iterative and human-centred approach to develop targeted and effective instruments, creating ownership among the prototype developers while ensuring that the needs of the target group are met. The Practitioner Labs will leverage the local and thematical expert knowledge and extensive networks of leading FIs and fortify a community of practice through hands-on and collaborative peer-learning opportunities. To maximise the chance of adoption, the validated prototype solutions are pitched and further discussed in high-level annual Adaptation Finance Symposia (Output 1.2.2).

Figure 2: Intervention logic.



B. Promotion of innovative solutions to climate change adaptation

- 111. The project will pilot and test an innovative combination of blended financing instruments with a performance-based payment scheme while training local FIs in climate-smart financing. By both combining capacity building formats with financial support and providing tailored support to SMEs as well financers, it truly bridges the "missing middle finance gap" of adaptation SMEs in Uganda and Kenya. The project will not only replace "traditional" grants for enterprises by innovative and unique funding facilitation instruments which leverage private sector funding amounting up to more than two to three times the amount of grant funding provided, it will also apply an inclusive market-based approach of stimulating and scaling viable and sustainable private sector adaptation solutions with lasting impacts. In doing so, the project seeks to achieve a transformational change in the prevailing SME financing and support mechanisms. The innovation of tailored financing instruments will be sought through a co-creation process involving all core parties. The prototype financing instruments will then be tested throughout two financing cycles to distil those best fit-for-purpose. Access to tailored finance will allow adaptation SMEs to make the necessary investments in order to grow and scale their operations, leading to scaled deployment of adaptation solutions. The project seeks to achieve collaborative innovation, while at the same time building a community of practice across borders, ensuring the sustainability of the action.
- 112. The project will select the most innovative, finance-ready adaptation solutions offered by early-growth SMEs in Uganda and Kenya through regional calls for applications to participate in the catalytic financing scheme. All adaptation SME applications will be assessed against a set of adaptation **innovation criteria** including:
 - **Fit-for-purpose**: The applicant's adaptation solution addresses the prevailing key vulnerabilities in the respective regions they operate in (see Climate Risk and Adaptation SME Solution Matrix). For example, enterprises offering/ running protected cultivation systems to address crop failure and severe crop damage due to prolonged drought periods in the arid/semi-arid landscapes of Northern Kenya.
 - Market viability: The adaptation product or service offered meets the needs of the target market as the final beneficiaries.

- **Financial sustainability**: The applicant needs to demonstrate financial sustainability of the adaptation business model relating to specific characteristics of applicant SMEs enabling them to absorb the project's target average loan size of 75,000 USD and use the capital for growth including: Size of annual turnover; Number of employees (full time equivalent); Stage of enterprise (often in terms of market readiness or financial status); Registration status; Financial history (i.e. financial statements).
- **Different or Better** The market-based adaptation solution offered is an improvement over existing solutions or a new solution that is different from the existing adaptation solutions. It must have an added value over and above what the target beneficiary is currently using/practicing to address the adaptation problem faced. These innovative solutions comprise not only new technologies and approaches, but also build on and/or revive traditional knowledge of indigenous peoples and local communities. The application should also show potential for systemic and sustained improvement of such practices or approaches.
- Scale-up and replication potential: The adaptation solution has a track record in the market. It has been tested and refined to meet the demands of the target market with the potential to reach out to new markets or regions. The applicant must provide proof of concept (growth plan) on how scale-up and replication of the product or service will be rolled out with the intended financing amount.
- Transformational change potential: The applicant's adaptation solutions provides proof of concept of system change or transformations achieved, disrupting existing default social biases that have an adverse effect on local climate resilience. For instance, this may refer to SMEs creating alternative livelihoods for marginalised pastoralist communities suffering from loss of cattle due to longer dry spells or businesses providing their product or service to remote and underserved markets.
- Learning and knowledge capture: The applicant has an effective system in place that ensures product or service feedback as well as ecosystem level information is captured from all relevant stakeholders (within and outside of the enterprise) and utilised to appropriately engage in product/service improvement activities or react to changes within the ecosystem (e.g. policies, climate, competitors).
- 113. The EEs understand innovation as impact-oriented and context-specific and innovations promoted by the action adhere to achieve systemic change to disrupt prevailing socio-economic structures or procedures that have an adverse impact on local climate resilience. Innovation will therefore be assessed under the overarching vision of the action to achieve adaptation impact at scale. The EEs focus on product or service innovation, while organisational innovation is examined in the applicant's learning and knowledge capture systems.
- 114. Design thinking, prototyping and other highly collaborative formats will also be used for ecosystem building events such as the Adaptation Action Events or Annual Adaptation Finance Symposia to ensure that the ideas, knowledge and expertise of various ecosystem stakeholders are leveraged, while fostering cross-sectoral and cross-regional collaboration and facilitate peer-networking.
- 115. The regional approach of the project will allow to identify and promote innovations across borders, e.g. by co-inventing new adaptation solutions by SMEs from Kenya and Uganda. It also widens the scope of markets, investment and support opportunities for gender- and youth inclusive adaptation SMEs to share innovations for specific sectors and replicate these in different geographical areas.

C. Roll-out of successful innovative adaptation practices, tools and technologies

- 116. In order to create sustainable impact and meaningful benefits through innovative adaptation practices, tools and technologies; it is key to not only focus on developing, identifying, and promoting innovation but to also put emphasis on the roll-out and sustainability of such innovations. Therefore, the EEs will make use of a comprehensive and integrated approach to innovation that creates a bridge and flows from innovation sourcing and promotion (see above Chapter B) to sustainability and long-lasting impact (see below Chapter M). The EE's vision for the project is to achieve impact at scale through a multi-pronged approach to innovation roll-out.
- 117. There are several key elements how the roll-out of successful innovations will be supported. Firstly, at the core of this project is the financial system innovation which refers to the piloting of the funding facilitation instruments, combined with performance-based blended financing mechanisms (Output 2.3.1). The co-creatively designed pilot will test the financing mechanism in the market and demonstrate its value to FIs for long-term usage, potential replication by other FIs and full-scale roll-out of such an instrument for financing early-growth stage gender- and youth inclusive adaptation SMEs.
- 118. The pilot will benefit from the experiences of the EEs with climate-smart and green financing instruments for the SME sector in Uganda and Kenya, for instance through the Uganda Green Finance Accelerator programme⁵⁴ led by adelphi in cooperation with Finding XY, and KCV's established fund to invest in climate-smart, early growth-stage enterprises in Kenya. Based on the learnings of the EEs and in a co-creation process with local FIs, blended financing instruments in combination with performance-based payments will be tested and refined during the proposed project implementation.
- 119. The testing of the pilot together with comprehensive monitoring and impact assessment will enable reconfiguring and incrementally refining the innovative finance mechanism in the process of two financing cycles to make full-scale roll-out as impactful as possible and encourage FIs to scale-up their lending to gender- and youth inclusive adaptation SMEs with proven and tested innovative mechanisms. Complementary to piloting these new financing approaches with local FIs, the same FIs are supported to strategically anchor adaptation finance within their institutional set-up and operations.
- 120. A second key pillar for rolling out innovation will be the **support to the selected adaptation SMEs** themselves which builds on the selection criteria for SMEs described above (see Chapter C). Via the Catalyser (Output 2.2.2) and especially the Accelerator (Output 2.2.3), gender- and youth inclusive adaptation SMEs will be assisted in the scale-up and large-scale roll-out of their business model innovations and innovative adaptation products/services, tools and technologies in both target countries. Beyond the financing itself, the two non-financial pre- (Activity 2.2.1.1) and post-investment support elements will be instrumental for enabling adaptation SMEs to develop a clear growth strategy and scale-up plan that reinforces the roll-out potential and long-term viability of respective innovations in a sustainable manner and self-financed in the long run. Put differently, gender- and youth inclusive adaptation SMEs create new solutions and seek innovations. The project selects such enterprises to support the design and development of market-based, innovative and viable solutions through technical support while the enterprises pilot and demonstrate their products and services. The project then provides support to scale adaptation solutions and to replicate it in other areas and to reconfigure it wherever evidence from the piloting suggests the need for it.

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⁵⁴ https://ugefa.eu/

- 121. Thirdly, the project will facilitate system innovation through its multi-stakeholder approach spanning across both target countries and beyond. Through various formats for network building, multi-disciplinary collaboration, and creation of sector linkages, a new regional system of support and community of practice for innovative adaptation SMEs with the participation of the private, financial and public sector will be mobilised and strengthened. With the support of the Adaptation Action Steering Committee and facilitated by the RCP, the project will develop a solid foundation for the roll-out of these system innovations and long-lasting networks and cooperation opportunities that are set to remain active after the duration of the project and will be sustainable drivers of support and innovation in the adaptation space.
- 122. Beyond these three pillars, the project will have overarching and cross-cutting principles and systems in place for scaling up and rolling out successful innovative adaptation practices, tools and technologies. The system of continuous monitoring and impact assessment will provide a strong basis for the EE's principle of reiterative cycles of innovation, learning, testing, and improving in preparation and throughout the roll-out of innovations. For this reason, the project will have an approach with two implementation cycles in which insights and learnings from the first cycle inform the improvement of the second one. Examples include the selection criteria for identifying the right SMEs or the reconfiguration of the piloted innovative financing mechanisms.
- 123. This idea of constant optimisation as a driver for effective scale-up of innovations will be fostered by the RCP and the regional approach of the project across the two countries that will facilitate cross-border learning. Through comprehensively analysing and collecting learnings as well as documenting and broadly sharing these, the project will make best practices, lessons learned, and tested innovations available to a wide set of stakeholders. This will be instrumental for reconfiguring early stage innovations and developing new innovative solutions that are effective and market-ready on the basis of existing evidence, knowledge, and learnings.
- 124. Pathways to scale this project beyond this pilot to be funded by Adaptation Fund will be paved during project implementation: The capital injection facilitated through the project will result in catalysing enterprises to qualify for next-level finance (e.g. higher loan ticket sizes, impact / equity investments etc.). The financing facility as well as the Adaptation Finance Academy will prepare Fls to access and deploy international green finance and related climate finance instruments (such as green and sustainability bonds, blended finance, green credit lines, insurance microfinance, etc.), since they will not only be able to demonstrate an increased understanding of the climate finance landscape, instruments and requirements, familiarity with ESG assessments and a track record in deploying climate finance to adaptation enterprises. Once established and operational, the financing facility will set the benchmark of revolutionizing access to finance interventions for adaptation SMEs. The EE entity in cooperation with Finding XY and KCV, will explore further possibilities to scale its operations.

D. Economic, social and environmental benefits

125. Based on the analysis of climate change risks for the focal sectors and the resulting challenges for the affected vulnerable groups (Part I), the EEs have identified various economic, social and environmental benefits the project will provide to direct beneficiaries that include gender- and youth inclusive adaptation SMEs and FIs and the indirect beneficiaries of vulnerable groups and communities who make up suppliers and consumers in the SME value chains as well as their wider communities. The project will assess and monitor beneficiary inclusion (disaggregated by gender) through the SME selection process (Outcome 2.1), the Catalyser and Accelerator programme (Output 2.2. - continuous monitoring through impact dashboard), the ESMS (Outcome 2.4) and an annual impact assessment (Output 1.2). Ea

126. Economic benefits for the direct beneficiaries include:

- Enable gender- and youth inclusive adaptation SMEs to increase their resilience to climatic or economic shocks in the future.
- Capacity Building and financial support for gender- and youth inclusive adaptation SMEs to maintain and create additional local jobs in their communities, reaching out to additional vulnerable groups to generate local income and integrating communities into local economies and value chains.
- Increased access to adaptation finance for early-growth stage gender- and youth inclusive SMEs through training provided for FIs (Component III) on climate adaptation finance (e.g. incorporating ESG criteria in loan appraisals).

Economic Benefits for the indirect beneficiaries include:

- Stabilises and improve incomes and future livelihoods, ultimately strengthening the local and regional economy
- Increased access to a wider variety of green and climate adaptive products and services.
- Partake in knowledge exchange and dissemination as well as set examples to other non-participating local SMEs and communities to become more resilient to climate risks through the RCP and its digital platform and events.
- Active decision making and influence in the design and implementation of the project components through consultative and co-creative formats. Active decision making and influence in the design and implementation of the project components through consultative and co-creative formats.

127. Social benefits:

In general, increased climate resilience of businesses, local communities, and marginalised groups not only creates direct positive existential social impacts but also leads to a wide variety of social co-benefits ranging from health and education impacts to poverty reduction, equality, and livelihoods. Some of these, for indirect beneficiaries, are further highlighted below.

- Reduction of food poverty and the stabilisation of food and water security for vulnerable groups will be improved tremendously through stable incomes.
- Develop resilient and stable food and water supply to communities and/or self-supporters through dissemination of innovative water and agricultural adaptation solutions.
- Improve the overall health and well-being of vulnerable groups and communities by freeing up time and resources typically spent
 on providing basic needs for themselves and enabling especially the youth and women to attend schools and other educational
 institutions for capacity building and upskilling.
- Contribute to eliminating key reasons for social inequalities that women, youth and marginalised groups face, through provision of
 access to financing and know-how about adaptation business development.
- Reduction of eco-social conflicts between settled communities and moving communities, like agri-pastoralists, on food and water resources through supported adaptative technologies on irrigation, water storage, soil treatment and drought-resistant crops.
- Reduce the risk or need for forced migration of communities since using adaptative technologies and systems makes communities

less likely to degrade the land or water resources.

128. Environmental benefits:

Positive environmental impacts are at the core of the project through the roll out of an innovative mechanism for climate adaptation finance and invigoration of ecosystem investors and FIs with an interest in investing in green and climate finance. Additionally, the RCP will play a strong role in documenting and disseminating good practices, lessons learned and tested solutions for climate adaptation and further sustainability- and climate related impacts.

- Eliminating conflicts between mankind and wildlife which will accelerate wildlife protection through the fostering of green adaptation solutions that reduces the distress on natural resources (e.g. water, soil, biodiversity).
- Increase the application of nature-based solutions that in turn replace other harmful technologies and systems.
- Support the regeneration of natural resources and also support biodiversity conservation through green products and services
 provided by local SMEs. SMEs
- Lead to more considerate and efficient usage and interaction with a fragile environment and scarce resources.

The non-financial support provided to the selected adaptation SMEs will include several specific tools for maximizing the positive environmental impact of the businesses as well as measures to assess and evaluate potential negative effects. In addition, the project will prepare and establish an Environment and Social Risk Management Plan which will be implemented and monitored by the EEs for the project implementation (as basis for this see risk analyses in Chapter N). Maladaptation and any other negative developments will be prevented by the application of a comprehensive ESMS (Outcome 2.4) as part of the SME selection process (Outcome 2.1). In order to avoid maladaptation in the enterprise solutions supported throughout project implementation the project will closely monitor the participating businesses by conducting regular field visits and using Catalyser programme touchpoints to request data and information on the business operations. An annual impact assessment will further aggregate data and information on SME development. For those enterprises participating in the Accelerator programme, a tight monitoring in terms of adaptation impacts will take place through the performance-based payment scheme.

E. Cost-effectiveness analysis

- 129. The project's cost-effectiveness was a key consideration of the overall project design and builds on the following lessons learned of the EEs: a) An early-on involvement of FIs in designing the finance facility is crucial to create ownership, develop instruments that are in line with established processes and procedures of the FIs (e.g. loan appraisal) and ensure their active participation in the project; b) Conducting climate strategy workshops with banks to go beyond capacity building and anchor climate (adaptation) considerations institutionally has proven successfully in other contexts; c) The piloting of performance-based payments in addition to funding facilitation and other de-risking/ incentivising mechanisms is a promising approach to safeguard adaptation impacts of participating SMEs. The performance-based payments will not only allow to track the adaptation impacts achieved, but will also allow to emphasize the financing of activities that generate the best possible impact with each dollar spent. The performance-based payments will hereby build on a robust impact monitoring and the quantification of results against each dollar spent.
- 130. The project will focus on activities characterised by a high scale-up and replication potential. This will not only generate best possible impacts which can be tracked at the end of the project but will also fuel impacts at scale beyond the project period. All adaptation SME solutions piloted and validated with the project financing will with the further expansion of the SME growth be multiplied and consolidated with the life-time of the supported gender- and youth inclusive adaptation SMEs.
- 131. Beyond the cost-effective use of the money spent, the grant will be used to leverage private sector capital. This means that with each selected adaptation SME that receives financial support, additional private sector capital (provided by FIs) will be leveraged. The "leveraging factor" will be an integral design criterion for the financial instruments designed, ensuring that every dollar spent catalyses additional capital, thus scaling the impacts of this project. The capital leveraged will be equally tracked by the project being an integral part of the performance-based payment tracking.
- 132. A break-down of the budget shares dedicated for financial support to SMEs, technical assistance and project management is given below.

Table 6: Budget break-down and leveraged private sector capital.

No of direct beneficiaries	Budget for financial support to SMEs	Budget for technical assistance & ecosystem activities	Project Management Fee	Leveraged private sector capital
30 adaptation SMEs At least 15 FIs	1,4 – 2 Mio USD*	3.208.295 Mio – 2.608.295 USD*	391.705 USD	2,8 – 6 Mio USD*
	28 - 40% of overall budget	64 - 52% of overall budget	8% of overall budget	

^{*} Depending on design and combination of financial instruments

- 133. The proposed financing options for the finance facility are cost-effective compared to other instruments considered: Matching grants: The leveraging factor of matching grants where the enterprise has to top up the grant amount paid out with own resources (usually ranging between 20 and 35% of the grant amount) is substantially lower compared to the proposed instruments and the overall investment is equally lower compared to additional private capital to be leveraged. Matchmaking with Impact Investors: Impact investors do only invest in a very small number of businesses, thus, the targeted number of 30 adaptation SMEs to be financed could not be achieved/ would be substantially lower. Matchmaking efforts also require substantial personnel resources from the SMEs and the project (e.g. establish matchmaking platform/ organise matchmaking events; develop pitch decks) that would not reflect in the success rate of maches achieved. Green loans: The uptake of new and innovative financial instruments such as green loans by commercial banks as the main FI target group of this project is a lengthy process that requires long-term preparation and buy-in of the bank's management board. This requires substantial project resources and the expected success rate to have a green loan instrument introduced that is up and running for SMEs to apply within the duration of the project is very low.
- 134. Therefore, incentive/de-risking mechanisms as proposed here to encourage FIs to finance adaptation SMEs are the more cost-effective option in terms of the following factors: Maximising enterprise outreach and access, fast implementation time, low transaction costs,

leveraging existing funds, scalability (beyond project period); openness to multiple partners as the proposed finance facility will not only involve commercial banks but also impact investors/ funds to leverage additional financing.

- 135. The project takes a flexible approach, catering to the realities of the SME portfolio and FIs mobilised for the catalytic financing facility. Upon graduating from the finance-ready Catalyser support, SMEs will already have achieved readiness for external investment options, allowing them to apply to any external funding sources. During the first financing cycle, the project will deploy a number of blended financing approaches agreed upon with local FIs. In case the first financing cycle should not successfully leverage the expected capital, the project will evaluate the reasons and conditions that hindered private capital investments in the selected SMEs. Based on this evaluation, the financing mechanisms for the second financing cycle will be adjusted to meet the specific needs of the selected SMEs and to cater to the concerns of the participating FIs. In this scenario, a larger share of AF grant funds will be paid directly to the selected SMEs (e.g. as a matching grant) for them to use these funds to increase overall finance-readiness (e.g. by purchasing machinery/ land that can be used as collateral for commercial finance). As such, event in the event that SMEs will not be able to sign contract with FIs, they will still get grants from the project to deploy their technologies and hence achieve the objectives of this project. The mobilisation of additional financing will support the scaling up of results that this project will achieve.
- 136. Risk prevention and mitigation measures to ensure that the participating SMEs successfully obtain a financing agreement with a local FI include: a) Provision of finance-readiness Catalyser support to ensure SME's eligibility for commercial loan agreements; b) Strong involvement of FIs in the design of the finance facility and the selection of appropriate de-risking instruments and incentive schemes including flexibility to adjust these instruments after the mid-term review for the second funding cycle; c) Financial incentives for SMEs (e.g. performance-based payments, cash flow gap cover) and FIs (e.g. grant paid out to FIs as part of the partial repayment scheme) to sign a finance agreement.
- 137. The cost-effectiveness will be further strengthened by minimising transaction costs at all levels. This will be of crucial importance for FIs as providers of investment capital for adaptation SMEs. Their financing process will follow their well-established procedures. The project will support their decision making and selection process by supporting the banks in their due diligence and later on, through the performance-based tracking of impacts.
- 138. By building on existing processes, structures, toolkits and relationships of the EEs, the project will further minimise transactions costs allowing the project partners to have a head start and effectively start from day one with the project implementation. This will reduce the overall programme set-up costs and will allow the project partners to focus on the implementation of programme activities to maximise the impacts of the supported gender- and youth inclusive adaptation SMEs.
- 139. The regional approach of the project will allow the project partners to use learnings and results from the target countries and replicate these within the scale-up of the project activities in the second financing cycle across the target countries. The grant spent within one country will herewith benefit the cost-effective implementation in the second target country. This will also allow for a benchmarking of results across the two countries.
- 140. Where possible, the project will aim to benchmark the project results across other SME adaptation portfolios. In order to do this, the EEs will research the cost-effectiveness of other programmes at the start of the project. This benchmarking shall emphasize the cost-effective ambition of the EEs throughout the project.

F. Consistence with national/ sub-national sustainable development strategies

- 141. With the deterioration of living standards and underperforming economic systems, in 2003, the Government of Kenya (GoK) formulated and implemented Kenya's Economic Recovery Strategy for Wealth and Employment Creation (ERS), built with the objection of restoring high economic growth, accelerating in industry success and improving the quality of life of its population. In addition, this strategy created a paradigm shift where for the first time in economic planning vulnerable groups and important sectors lay at the heart of economic planning as the government began prioritizing education, development and implementation of social support in arid and semi-arid region, and improving living conditions of urban dwellers in low quality housing infrastructure. With the great success of the ERS, Kenya then began expanding its vision "to sustain the recovery and move into a higher growth and development path". In 2008 the GoK announced its 'blueprint plan' for accelerating transformation into an industrialized middle-income nation by 2030. The vision 2030 agenda was anchored on several strategic principles to improve the social, economic, and governmental standings of Kenya and its vulnerable communities.
- 142. In early 2010 Uganda announced its first national scale development plan with their vision 2040 agenda "strengthening Uganda's competitiveness for sustainable wealth creation, inclusive growth and employment," to ensure the country reaches middle income status by 2040. Unlike Kenya, Uganda has taken a sectoral approach to achieving its vision 2040, prioritizing the following six sectors: Agriculture; Tourism; Minerals, Oil and Gas; Infrastructure; and Human Capital Development. An additional planning document of the vision 2040 agenda was created known as the Uganda Green Growth Development Strategy 2017/18 2030/31 and aiming for an "inclusive low emissions economic growth process that emphasizes effective and efficient use of the country's natural, human, and physical capital while ensuring that natural assets continue to provide for present and future generations" (Vision 2040, 2017:8).
- 143. This project strongly relates to the national agendas of Kenya and Uganda as it strives to improve climate change resilience of vulnerable communities, who usually have low social indicators (e.g. life expectancy, poverty ratio, income), by improving their access to adaptation solutions through locally embedded adaptation SMEs. It also promotes a gender- and youth-inclusive approach to enhance inclusion and livelihoods of women and young people. Additionally, through the promotion of adaptation enterprises this project likewise contributes to the development and diversification of the country's economies, a feature that both governments have highlighted as an integral part of their planning. The tables below give an overview of all relevant policies and strategies identified, and a brief description of how the project is consistent with core strategic points.

Table 7: Overview of relevant policies and strategies, and project alignment.	
Plans/ strategies/ policies	Relevant strategic points and alignment with the project
Regional cooperation	
East African Community (EAC) Vision 2050: Recognizes the role of MSEs in regional industrial development agendas, underscoring the need for enhanced competitiveness through innovation and value addition to tap into intra and inter-regional trade opportunities. EAC Development Strategy & EAC Agriculture and Rural Development Policy: Achieve food security by increasing output, quality and availability of food and rational agricultural production through promoting complementarities and specialization under sustainable use and management of soil, water, fisheries and forests in order to conserve the environment.	The project fosters regional exchange on SME support and finance mechanisms with regards to the coordination of policies, strategies and efforts of public, private and civil society actors (Output 1.1.1) as well as by knowledge exchange and peer-learning within and between sectors and markets (Output 1.2.1/ 1.2.2, Output 1.3.1).
Agriculture	
Kenya Agricultural Policy 2021: Attain household and national food and nutrition security through innovative and sustainable interventions linked to the country's long-term development targets. Increase productivity and income growth, especially for smallholders; enhanced food security and equity, emphasis on irrigation to introduce stability in agricultural output, commercialisation and intensification of production especially among small scale farmers; appropriate and participatory policy formulation and environmental sustainability. Agricultural Sector Transformation and Growth Strategy: Towards Sustainable Agricultural Transformation and Food Security in Kenya 2019-2029: 3 core principles: (1) Increase small-scale farmers, pastoralists and fisherfolk incomes; (2) Increase agricultural output and value added; (3) Increase household food resilience to improve food security, the economic viability of agriculture and its resilience to climate change Uganda National Agricultural Policy (NAP) 2013: As overall objective, achieve food and nutrition security and improve household incomes through coordinated interventions that focus on enhancing sustainable agricultural productivity and value addition; providing employment opportunities, and promoting domestic and international trade. Uganda Agriculture Sector Strategic Plan 2016: The plan seeks to operationalise the NAP 2013 by transforming the sector from subsistence farming to commercial agriculture towards a competitive, profitable and sustainable sector. Four strategic objectives guide this process: 1) Increase production and productivity of agricultural commodities and enterprises; 2) Increase access to critical farm inputs; 3) Improve access to markets and value addition and strengthen the quality of agricultural commodities; and 4) Strengthen the agricultural services institutions and the enabling environment. Uganda National Agricultural Organic Policy 2019: Eight strategic targets formulated, among them the Increase in the annual growth rate in Organic	The project will promote gender and youth inclusive adaptation SMEs with a focus on the agriculture (and water) sector. According to the county-based vulnerabilities displayed in the Climate Risk and Adaptation SME Solution Matrix (see Part I, Chapter 1.8), the selected adaptation SMEs (Outcome 2.1) will provide innovative adaptation solutions that – by further scale-up and replication of these business models (Outcome 2.2. and 2.3) - will specifically benefit smallholder farmers in rural and remote areas to enhance their productivity and competitiveness while being severely affected by climate-induced risks. At the same time, these SMEs will promote gender equality and the inclusion of youth and other marginalized groups, creating employment opportunities and enhanced household incomes. Moreover, preference will be given to nature-based solutions, catering to the principles of organic agriculture production. By improving the coordination of SME support approaches through multi-stakeholder networking and platform building and the dissemination of knowledge products and good practices (Outcome 1.1), the project will contribute to develop an enabling environment to strengthen agricultural services towards small and medium-sized business actors.
Water sector management	
 Kenya Water Act 2012: Provide for the management, conservation, use and control of water resources a) to satisfy basic human needs (b) to protect aquatic ecosystems in order to secure ecologically sustainable development. Kenya Irrigation Act 2019: Development, management and regulation of irrigation, to support sustainable food security and socioeconomic development in Kenya. Uganda Water Act 1997: Allow for the orderly development and use of water resources for domestic use, watering of stock, irrigation and agriculture, industrial, commercial, [], fishing, preservation of flora and fauna in ways which minimize harmful effects to the environment. Uganda National Irrigation Policy 2017: Vision of an additional 1,500,000 Ha under irrigated agriculture by 2040 by 	This project specifically relates to these national objectives as it will focuses on gender- and youth inclusive adaptation SMEs from the water (and agriculture) sector. The selected and supported SMEs under this project (Outcome 2.1, 2.2., 2.3) create improved water availability through the provision of technologies that improve storage, purification and reduced agricultural water usage systems including drip irrigation and hydroponic systems. Selected SMEs also improve access and
adhering to principles such as promotion of IWRM, commercial and market orientation, environmental principles, gender and	availability of water resources for women, youth and other marginalized groups.
equity and water use efficiency. Women and Youth	marginanzea groups.
Kenya National Policy on Gender and Development (NPGAD) 2000: Legitimate point of reference for addressing gender inequalities at all levels of government and by all stakeholders; avenue for gender mainstreaming across all sectors in order to generate efficient and equitable development outcomes Kenya Labor Act 2002: Legal improvements in women labor by increasing wages, implementing gender divisions in unions, and expanding maternity leave.	Contributing to the national priorities of Kenya and Uganda, this project will provide support for women, youth and other marginalized groups that are highly vulnerable to climate change in two ways: 1) Specific focus on women and youth entrepreneurs as they have greater restriction to financial

Kenya Youth Development Policy 2019: Develop and improve the state of vulnerability of youth in the country

Uganda National Gender Policy 2007 (first introduced in 1997): Ensure improvements in gender equality regarding: Income, decision making, accessing justice systems, public and health care services, education, gender-based violence, access to land and financial systems.

Uganda National Youth Action Plan (UNYAP) 2016: Improve youths' income, education status, health status, participation to foster better socio-economic performance for youth

instruments and other resources. 2) Women, youth and other vulnerable groups are the primary beneficiaries of the adaptation solutions provided by gender and youth-inclusive SMEs supported.

SME development

Kenya Vision 2030: Strengthening SMEs to become key industries of tomorrow by improving their productivity and innovation

Kenya Micro and Small Enterprises Policy 2020: Provide an integrated enabling business environment for the growth and development of productive MSEs that make significant socio-economic contributions. Enhance skills & capacity development, aaccess to domestic and export markets, access to a diversified and affordable range of financial products and services, access to decent and affordable infrastructure, enhanced coordination and implementation of support programmes.

Uganda Vision 2040: SMEs are a keystone to macroeconomic planning that takes an emphasis towards development of new industries.

Uganda Micro, Small and Medium Enterprise (MSME) Policy 2015: Create a critical mass of viable, dynamic and competitive MSMEs, significantly contributing to the socio-economic development under the guiding principles of (among others): Policy coherence; Promoting intra and inter regional trade, Environmentally friendly and cleaner consumption and production technologies.

In accordance with national priorities in Kenya and Uganda, the project has a specific focus on supporting adaptation SMEs (Component II) as well as to create enabling conditions for these SMEs (Component I) to scale up and replicate their business models. The project will enhance the skills and knowledge of selected SMEs to become finance ready while facilitating access to affordable commercial finance. It creates SME role models for transformation of SME support mechanisms, especially of financial systems to provide accessible and affordable instruments for SMEs in the two countries (Component III).

National Climate (Adaptation) Strategies

Kenya Nationally Determined Contribution (NDC) 2020: Agriculture and water sectors are among 13 priority sectors. Focus on agriculture includes: Mainstream climate smart agriculture; Build resilience of agricultural systems; Strengthen communication systems on climate smart agriculture and agro-weather issues.

Kenya National Adaptation Plan 2015-2030, 2016: Priority adaptation actions, among others, are economic growth, increase in employment opportunities and improved wages of Kenyans. Sub-actions to achieve this include capacity building on 'green jobs' and enterprises, access to the Kenya Climate Fund for climate proofing investments for SMEs and upscaling of climate resilient enterprises.

Technology Needs Assessment and Technology Action Plans for Climate Adaptation 2013 (TNA Kenya): Identifies key technologies (e.g. drip irrigation, orphan crops, rain water harvesting) for certain sectors which will enable Kenya, its population and economy to adapt to the effects of climate change.

Technnology Action Plan for Climate Change Technologies, Adaptation 2013 (TAP Kenya): Identifies for the defined key technologies the barriers to wide spread implementation and distribution and suggests actions to foster the utilization and implementation of the key technologies.

Uganda NDC 2007: Priority adaptation strategies that reduce land degradation, improve metrological services and water management practices.

Uganda NDC 2022 (interim draft): Provision of current baselines of important data points and desired targets for 2030. Multifaceted and multi sectoral approach to ensure climate resilience but to also support (not hinder) their vision 2030 and vision 2040 development agendas. Water and agriculture being core focal sectors.

Uganda National Adaptation Programmes of Action 2007: Agriculture and water resources identified as highly vulnerable sectors; among the 10 intervention areas by participating communities, indigenous knowledge documentation and awareness creation, water resources and weather and climate information ranked among top 4 priorities.

Uganda National Adaptation Plan for the Agriculture Sector (NAP-Ag) 2008: Among others, objectives are the promotion of: Climate resilient cropping and livestock production and value chains; Climate smart agricultural innovations; Knowledge of good practices and partnerships to reduce agricultural vulnerability; gendered climate smart agriculture programme to reduce the vulnerability of women, youth and other groups.

Final Report on Technical Need Assessment for Mitigation of GHG in Uganda 2006 (TNA Uganda): Identifies key technologies (e.g. photovoltaig, organic fertilizer, solar thermal energy, hydro power) for certain sectors which will enable Uganda, its population and economy to reduce GHG emissions and mitigate climate change effects. It also identifies current obstacles in the implementation and distribution of such technologies and suggests actions to foster the utilization and implementation of such key technologies.

The intended impact of the project is in line with the overall objectives of national climate adaptation strategies as it proposes to support gender and youth inclusive adaptation SMEs in Kenya and Uganda to improve the vulnerabilities of local communities with a specific focus on marginalized groups. The project will focus on the water and agriculture sector, identified as two of the main priority sectors by the respective strategy documents and plans. According to the Climate Risk and Adaptation SME Solution Matrix (see Part I). supported adaptation solutions will be selected on the basis of county-level vulnerabilities. Furthermore, preference will be given to gender- and vouth-inclusive business models. solutions that are based on local/indigenous knowledge. nature-based solutions/ eco-system-based approaches and business models that have awareness raising/ capacity development elements as an integral part (see also selection criteria under Output 2.1.1). The project objectives also support the strategy of the TNA Kenya, TAP Kenya and TNA Uganda as technologies such as photovoltaics, small hydro power, drought or dry resistant crops, orphan crops, drip irrigation systems, PV powered boreholes or roof rain water harvesting systems (depending on the selected SMEs) will be eligible that are corresponding with the key technologies in the TNA/TPAs. In both countries high initial investment costs, lack of appropriate credit lines and local availability were found to be the biggest barriers for climate adaptation technologies. The project will help to overcome these barriers with the provision of blended financing, provision of knowledge to financial institutions, policy makers and businesses on those technologies.

G. Relevant national technical standards

144. The actions undertaken within this project will be at all times in full compliance with the relevant national environmental and social safeguards and technical standards applicable in Uganda and Kenya. Based on the analysis of the most vulnerable sector groups (see Part I, 1.5 "Climate Risk and Adaptation SME Solution Matrix") and the possible adaptation solutions, for each country a range of relevant national policies and laws were identified for the project to comply with:

Table8: Overview of relevant technical standards.

Sectors	Uganda	Kenya
Agriculture	 The Animal Breeding Act, 2001 The Fish (Amendment) Act, 2011 The Fish Act, 1951 The Fish (Aquaculture) Rules, 2003 National Agricultural Organic Policy, 2019 The National Seed Policy, 2018 National Agricultural Policy, 2013 The National Animal Feed Policy, 2004 	The Agriculture Act, 2012 The Irrigation Act, 2019 The Crops (Amendment) Act, 2019 The Seed and Plant Varieties (Amendment) Act, 2015 The Agriculture and Food Authority (AFA) Act, 2013 The Livestock bill, 2021 National Agriculture Insurance policy, 2021 National Livestock Policy, 2019 The National Irrigation Policy, 2015 The National Livestock Policy (Sessional Paper Number 2 of 2008)
Water and land	 The Water Act, 1995 The Water Resources Regulation, 1998 Water Act (General Rates) Instrument, 2017 The Land (Amendment) Act, 2010 The Land (Amendment) Act, 2004 The Land Act, 1988 	The Water Act, 2012 Water rules, 2012 Water Quality Regulations, 2006 The National Land Policy (Sessional Paper Number 3 of 2009)
Health	Second National Health Policy, 2010	The Biosafety Act, 2009 (as amended in 2018) National Food and Nutrition Security Policy, 2011
Biodiversity	 The National Environmental Act, 2019 National Forestry and Tree Planting Act, 2003 The National Environment (Environmental and Social Assessment) Regulations, 2020 National Environment (Minimum Standards for Management of Soil Quality) Regulations, 2001 National Environment (Wetlands; River Banks and Lake Shores Management) Regulations, 2000 	The Environmental Management and Co-ordination (Amendment) Act, 2015
Electricity	 The Electricity Act, 1999 The Renewable Energy Policy for Uganda, 2007 	The Energy Act, 2019The 2021 FiT Policy

- 145. Compliance with national technical standards and laws will mostly be relevant for the supported adaptation SMEs to legally conduct their businesses and to be eligible for obtaining external financing. Especially for activities such as fishery, livestock and forestry, permits or licences issued by governmental agencies are required, both in Kenya and Uganda. To hold the relevant licences and/or permits is an important factor to consider a business model as finance-ready since a missing licence/permit bears the risk of fines or shut-down.
- 146. In Uganda, the National Environmental Act (1999) provides a legal framework to protect, develop and manage environmental sensitive areas. For the prevention harming the environment through any business or activity, together with the National Environmental Regulations (2020) it implies the obligation to conduct an environmental and social impact assessment (ESIA) for specific activities carried out in protected areas or utilizing natural resources.
- 147. The project will ensure compliance with relevant national technical standards at different stages of the SME program. Starting in the application process the SMEs are asked to specify their business model and used technologies (Output 2.1.2.2). The EEs evaluate if relevant standards are met (e.g. through due diligence) and select the SMEs for the program (Output 2.1.2.3). There may be SMEs which business ideas do not consider all technical standards but are relevant adaptation solutions. Therefore the local EEs advise and support the SMEs to identify and fulfil all relevant national technical standards and/or prepare an ESIA if required as part of the capacity building in the Catalyser program (Output 2.2.1.1). At the pre-financing stage the local EEs advise the partnering Fls to collect all available information on technical data, ESIAs, licences or permits (or applications for these) as part of a due diligence process before signing a financing agreement. The local EEs support partnering Fls with the evaluation of the information (Output 2.3.2.1 and Output 2.3.3.1). After the implementation of the business the Fls shall collect information as evidence for compliance such as invoices for technical equipment or obtained licences or permits. The local EEs support the SMEs to monitor the compliance with relevant technical standards as part of their ESMS (Output 2.4.1.1).

H. Duplication of project with other funding sources

148. During the design of this project and at the time of conducting stakeholder consultations, it was ensured that there is no duplication of project interventions in the two target countries. The regularly enforced synergy scouting guideline developed under Activity 1.1.2.1 further ensures continued screening for existing projects to integrate possible synergies and cooperation throughout project implementation. The project complements a series of other projects within the target countries. Therefore, the EEs will engage with such initiatives upon project approval to scope potential linkages. Among the screened initiatives so far, we find no significant evidence for risk of duplication. Further duplications will be continuously investigated throughout project implementation. Some of the projects and/or initiatives identified that the proposed project will complement in Uganda and Kenya are listed below.

Table9: Complementarity with ongoing projects.

Other currently ongoing projects	Summary of project	Complementarity and synergies
Regional/Global		
Adaptation Fund-UNDP Innovation Small Grant Aggregator Platform (ISGAP) under Adaptation Fund Climate Innovation Accelerator - Grant funding for Not-for-Profit entities from developing countries to develop and diffuse innovative adaptation practices, tools, and technologies	Provides grants to promote innovative adaptation practices, business models and technologies at both ideation and scale-up stages. Provides grant funding on a competitive basis to from Notfor-profit, Civil Society Organisations (CSOs) including Non-Governmental Organisations (NGOs), and Business Member Associations (BMOs).	ISGAP project excludes for-profit entities and there is no concrete focus on building investment readiness of the grantees, which the proposed project targets. The ISGAP grant provision also has no commercial cofinance component, thus financial leverage is limited. Lessons learned will be explored during inception phase.
Africa SME Programme by the African Development Bank (AfDB) (2013-2023) https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/access-to-finance-for-smes-through-fis	Supports local FIs with long term liquidity and technical assistance to successfully provide relevant financing to local SMEs. Supports SME clients to ensure better loan application preparations. A key eligibility criterion is adherence to best practices in social and environmental protection.	AfDB does not finance SMEs directly. AfDB supports local FIs so they will increasingly consider SMEs for market opportunities. It focuses on increasing the capabilities and expertise of FIs to provide necessary services to SMEs which has a complementary aspect to the proposed project (Output 3.1.1).
Adaptation SME Accelerator The Adaptation SME Accelerator is an initiative led by the Lightsmith Group, in partnership with the Inter-American Development Bank, the Global Environment Facility, and Conservation International.	Builds an ecosystem for early-stage companies in emerging markets with technologies, products, and services that build resilience to the impacts of climate change. Includes the identification of adaptation SMEs, the development of a taxonomy to define "climate resilience & adaptation solutions", regional conferences for adaptation SMEs and other stakeholders, and partnerships with incubator and accelerator programs to develop adaptation, resilience and social impact-focused curriculum.	The Adaptation SME Accelerator connects companies and related stakeholders with SMEs that provide climate adaptation solutions through regional conferences, a community platform, and directory. The proposed project's regional coordination platform will rather promote knowledge management and cross-learning between SMEs and involves other components that complement the networking opportunities. Cooperation for knowledge products will be investigated, especially methodologies for supporting adaptation SMEs in developing and expanding their businesses
Climate Resilient Agribusiness for Tomorrow (CRAFT) (2018-2023) of the Netherlands Ministry of Foreign Affairs, implemented by SNV	Increases the availability of climate smart foods for the growing population in Kenya, Tanzania and Uganda. Targets small and medium entrepreneurial farmers, SME agribusinesses, and SME service providers, as well as FIs and government agencies who create an enabling environment toto foster large-scale roll-out of climate smart agriculture.	CRAFT's activities include similar areas such as business case development and facilitating access to finance with FIs, however only target business opportunities that address climate risks in agriculture. Synergies with agricultural enterprise support will be explored.
USAID Feed the Future initiative in Kenya and Uganda	Equips small-scale producers and MSMEs (especially women- or youth-owned)) with capacities to participate and engage in agricultural market systems. Includes expanding access to markets, increasing access to finance as well as expanding demand-driven, market-oriented training programs to build skills for entrepreneurship and workforce development.	USAID's Initiative has a strong focus on agriculture market systems and MSMEs operating within these systems. The strategy of the program follows a centralized approach and does not seek to induce cooperation or knowledge-sharing between stakeholders. The particular focus on women- and youth-led businesses provides a synergy opportunity with the proposed project.
Africa Biodigester Component (ABC) (2020-2025) project of SNV, GIZ, Netherlands Enterprise Agency, is a 5-year programme that builds on the results of the Africa Biogas Partnership Programme (ABPP) in Kenya, Uganda and Burkina Faso and helps develop and strengthen demand and supply to create sustainable biodigester markets.	Improves the end-user business case with existing agricultural programmes; increases access to finance for end-users and enterprises; strengthens biogas business case through development services and result-based finance incentives; increases support for suppliers of prefabricated biogas technology helping them enter markets and expand their activities.	TABC program targets biogas enterprises that will receive business development support as well as result-based financing. Given the specific scope of action of the ABC incentives, there is little thematic nor strategic overlap with the proposed project.
Adaptation Private Sector Initiative (PSI) project by UN Framework Convention on Climate Change (UNFCCC)	Increases the involvement of the private sector in the wider adaptation community. Developed a PSI case study database, featuring good practices and profitable climate change adaptation	Both the proposed project and the PSI database offer a platform of private sector engagement with adaptation solutions. While the PSI database focuses on corporates (such as Nestlé and Microsoft), the

	activities by private companies from a range of regions and	proposed project focuses on MSMEMSME adaptation business models.
	sectors.	Opportunities for cross-learning will be explored.
Uganda	360013.	Opportunities for cross-learning will be explored.
Uganda Green Enterprise Finance Accelerator	Business Development Support for green enterprises to build their	Both UGEFA and the proposed project seek to enhance access to
(UGEFA) financed by the European Commission and the Delegation of the European Union to Uganda, implemented by adelphi.	financial capacity and strengthen their business models. Works with banks to co-create opportunities to increase accessibility and tailoring of loans to green business models and technologies. Facilitates access to tailored finance for green SMEs, to scale their	finance for green MSMEs by working with Fls to raise awareness on green lending opportunities. Both projects also offer a financing mechanism to SMEs. However, UGEFA promotes increased access to finance for green SMEs, without focusing on a specific sector or climate
2020-2023	sustainability impacts, including the creation of green jobs. Reduces the risk of financing change by working together with commercial banks to provide green SME lending.	focus, whereas the proposed project focuses on adaptation technologies. The proposed project also has a regional focus, fosters peer-learning between stakeholders in Kenya and Uganda and the East African region. The UGEFA project will be in the concluding stages once the proposed action will take off and the project will benefit from UGEFA learnings and networks.
Mastercard Foundation Young Africa Works (2018-2030) with country-specific strategies to tackle youth un- and underemployment.	Focuses on finding solutions for Africa's youth employment challenge. Supports agri-food systems and agribusiness through the commercialization of agriculture; strengthens Uganda's tourism and hospitality sector; improves vocational training and expands access to financial services for MSMEs working in construction; unlocks domestic and international investments to spur growth in MSMEs.	The Young Africa Works project seeks to improve the conditions for youth employment in Kenya and focuses on the training and development of young people entering the domestic labor market. There are activities that support SMEs but there is no direct focus on improving the financial ecosystem to facilitate financing opportunities for climate adaptive SMEs. Collaborations to tap into the foundation's network and potential pipeline of youth-inclusive enterprises will be explored.
Kenya		
End Drought Emergencies (EDE-CPIRA) (2020-2023) implemented by ASAL communities, the Government of Kenya, SNV, and Water Sector Fund Kenya – with funding from the European Union (EU).	Implements Public-Private-Community Partnerships to improve the functionality and climate resilience of rural water systems. Engages the local private sector as service contractors, managers, investors, or innovative technology providers to improve water service delivery.	SNV involves private enterprises in the management of rural water systems and thus improves their revenue enhancement and cost reduction strategies, as well as climate mitigation and adaptation mechanisms. There is no direct overlap with the proposed project, however, the EEs will reach out inquire about market opportunities for adaptation SMEs to join public-private partnerships and engage in the water management sector (Activity 1.2.3.1).
Water & Energy For Food (WE4F): A Grand Challenge for Development (2020-2023) implemented by GIZ as a joint international initiative of the German Federal Ministry for Economic Cooperation and Development (BMZ), the European Union (EU), the Ministry of Foreign Affairs of the Government of the Netherlands, Sweden through the Swedish International Development Cooperation Agency (Sida), and the U.S. Agency for International Development (USAID).	Focuses on environmentally sustainable innovations aiming to improve energy and water efficiency in the agricultural sector, implemented through several Regional Innovation Hubs that facilitate regional exchange and local activities. Strengthens the skills of the selected innovators, develops skills for end users and multipliers, improves access to suitable financing, improves political and sectoral framework conditions, and strengthens exchange among specialists ((regional and global).)	Both WE4F and the proposed project follow a decentralised approach to enhance regional cooperation and improving the local framework conditions for MSMEs. The proposed project furthermore involves cross-community and cross-country exchanges. The WE4F program puts a strong focus on innovations within the water-agriculture-food nexus. The EEs will reach out to the WE4F project executives to scope potential synergies and cooperation opportunities for innovation showcasing and innovator network access.
USAID Kenya Investment Mechanism (KIM) is facilitating investment in key sectors of Kenya's economy, including agriculture and provides regional trade and investment opportunities. 2018-2023	Builds the capacity of FIs and business advisory service providers through training and technical assistance to facilitate private finance and investment for smallholder farmers and SMEs. Leads policy reform efforts focused on removing barriers inhibiting large-scale investment into these sectors. Serves as an investment platform that mobilises capital from the private sector and builds partnerships between stakeholders in the financial ecosystem.	KIM allocates a substantial amount of financial support in the capacity-building of Fls to improve the structure and framework conditions of financial markets in Kenya. The trade and investment efforts focus on two-way trade and investment between the United States and Africa. The EEs, will engage with KIM executives to explore potential linkages in the framework of Fls capacity building implemented under Output 3.1.1.

I. Learning and knowledge management component

- 149. Iterative learning through **feedback loops** and knowledge management will be key principles of the approach for the collaboration with early-growth gender- and youth inclusive adaptation SMEs, Fls, vulnerable groups and public stakeholders.
- 150. Within the project team and structure, the EEs will ensure learning and knowledge management through the promotion of regular exchange and feedback. All project team members will develop systems and means to promote learning and knowledge management, including in terms of capacity building, project management and institutionalisation of knowledge. A fully-fledged Knowledge Management (KM) strategy including adaptive management approaches, dedicated project activities that ensure KM and the dissemination of lessons learned, learning objectives and specific indicators will be presented at full proposal stage.
- 151. Internally, the **project's ability to learn and adapt** will be enabled through a proven and **agile adaptive management approach** that includes constant optimisation iterations and reconfiguration of project processes and activities wherever such need arises or potential for improvement is identified. In addition to the described KM and learning instruments and processes, these needs, potentials, possible innovations, and tangible steps for optimisation will be discussed, identified, and tackled in regular meetings and co-creation sessions of project staff. This constant improvement and innovation process will be closely aligned with and supported by the project's M&E activities. Additionally, the mid-term evaluation between the two funding cycles will be used for a more comprehensive re-evaluation of project processes and instruments in order to adjust and improve these wherever necessary.
- 152. Looking at the specific project activities, Component I focuses on the Regional Coordination Platform (RCP), which, at its core, fosters multi-stakeholder interactions, **sharing and learning through cross-community and cross-country exchanges.** A regional learning and knowledge management approach is critical for this project since Kenya and Uganda face similar climate risks with regards to agriculture and water sectors. Therefore, the learning and knowledge generation will allow learning from each other, sharing experiences among the countries and replicating successful approaches. The knowledge products developed in this context will be disseminated through national, regional, and international fora by the EEs, UNIDO outreach unit, and other networks.
- 153. The RCP will serve the purpose of knowledge provision, management and exchange through steering interactions between different stakeholders, offering regular **Adaptation Action Events**, **and acting as a knowledge hub** and distributor for profitable adaptation technologies and products. This will be guided by a multi-stakeholder Adaptation Action Steering Committee.
- 154. The Adaptation Action Events will link gender- and youth inclusive adaptation SMEs with other stakeholders and facilitate the exchange of adaptation entrepreneurship knowledge and learnings. Examples of such planned events are adaptation roundtables, sectorial study tours, and access to market events. Beyond this, high-level Adaptation Finance Symposia will be organised to increase knowledge of adaptation finance among key finance actors and policy makers as well as to allow for exchange and dissemination of new ideas and approaches. The piloted performance-based blended financing instruments under Component II will serve as a key source of information for the Adaptation Finance Symposia.
- 155. Another key pillar of learning and knowledge management covers documenting and disseminating the impact of the roll-out, opportunities and barriers of adaptation technologies and products by gender- and youth inclusive adaptation SMEs. This includes elements such as an Adaptation Market Analysis Report, an Evidence-based Adaptation SMEs Taxonomy, an Adaptation SME Finance Scoping Study, multimedia case study films to showcase adaptation business models and their impacts, and a digital platform for adaptation entrepreneurship practitioners and ecosystem actors. A database of adaptation products, services and technologies will facilitate cross-country replication of suitable business models.
- 156. Crucially, via its annual impact assessment, the project will provide single, double and triple learning loops. The impact assessment will offer evidence for project impact delivery and its efficacy (both regarding scaling of adaptation SME impact and its effect on vulnerable groups) and re-assess the necessity and appropriateness of delivery of adaptation solutions to vulnerable groups. Participatory and multi-perspective evaluation of impact assessment data is ensured by the inclusive set-up of the leading organisational body, the Adaptation Action Steering Committee. Impact assessment learnings are shared on the RCP's digital platform. Lastly, policy recommendations on developing the market for gender- and youth inclusive adaptation SMEs will be developed and disseminated in the form of Action Plan Flagship Report.
- 157. The RCP will further provide a comprehensive **process guidebook** that consolidates all relevant learnings and processes developed in the project for potential project takeover.
- 158. The design of the co-creatively (with FIs) designed pilot performance-based blended-finance mechanism, central to Component II, is guided by learnings derived from the Adaptation SME Finance Scoping Study. The mechanism will be evaluated after completion of its first investment cycle, and refinement areas will be identified and implemented to ensure a validated and efficient mechanism for the second cycle and further scale-up in a potential project extension. The mechanism's detailed processes are further subject to regular scrutiny e.g. the adaptation SME scorecard will be incrementally refined based on the annual impact assessment, in which one section critically explores vulnerable groups' adaptation needs.
- 159. As part of Component III, the cross-country Adaptation Finance Academy will serve as an events-based knowledge hub to tackle the insufficient portfolio of adaptation finance products tailored to (gender- and youth inclusive) adaptation SMEs. Climate strategy workshops allow local FIs to learn from their more advanced peers to anchor strategic adaptation considerations within participating FIs, serving as the strategic foundation for adaptation action.
- 160. Knowledge management will be continuously integrated into the processes in the form of efficient live documentation. The project will make use of interactive digital tools such as Mural and Miro, and the focus will be on multimedia documentation. Furthermore, the project team will systematise the learning products and store them in a shared storage system / platform that is easily accessible to the client and key partners. This shared storage will contain all documents created during project implementation. In addition, management tools such as the actor landscape, the steering system, the timetable of activities, etc. will also be stored here. In this way, the stakeholders get both a general overview of the project implementation and access to findings and results, and can discuss this knowledge with the project team in trainings or regular meetings.

The very strong partnership approach of this project proposal is a further success factor for effective learning and knowledge management. Through a wide set of partnerships with international and national stakeholders learning and knowledge management can be promoted and boosted. Beyond the networks of SMEs and FIs and the strong and diverse project team, partnerships with a particularly strong relevance for learning and knowledge management include collaborations with other key actors from the adaptation finance, enterprise, and innovation ecosystem.

J. CConsultative processes

- 161. A wide range of stakeholders were consulted by the Kenyan and Ugandan EEs for the design of this project, in compliance with the Adaptation Funds' ESP and GP. The consultations focused on government agencies, private sector actors and civil society organizations directly engaged with SMEs in the agriculture and water sectors, respectively working with vulnerable groups such as women and youth as the final beneficiaries of the targeted adaptation SMEs. SMEs from different sectors as the main target group of this project were consulted to find out about current challenges and opportunities in the Kenyan and Ugandan market.
- 162. The National Focal Points in Kenya (MoEF Office of the Cabinet Secretary) and Uganda (MoFPED Uganda) were consulted throughout the design process and gave valuable feedback on the draft concept note. In addition, the local EEs held consultation sessions with government agencies such as the Ministry of Finance (MoFPED) in Uganda or the Water Resources Management Authority in Kenya and a series of international organisations promoting private sector development such as UNDP, RTI International/ USAID, WWF. Due to the prevailing COVID-19 pandemic, most of these consultations were held virtually.
- 163. As to the specific target group of this project, gender- and youth inclusive adaptation SMEs, consultations with a series of this type of SMEs were conducted to seek clarity on their specific challenges. To this end, the local EEs interviewed adaptation SMEs that are women-led and/or owned, such as for Uganda, Hamwe Enterprises (digitalisation of agriculture for smallholders), Bhundu Base Limited (sustainable tourism) and Barbets Davids Farms (land restoration and holistic livestock management); and for Kenya Mace Foods (food processing), Hydroponics Africa Limited (hydroponic farming technology) and Acacia Innovations (eco-briquettes). The majority of these enterprises also has a strong focus on youth employment as part of their business models. Specific challenges mentioned with regards to access to finance were related to the lack of collateral many women entrepreneurs face, hence, the project should pay close attention to women ownership of resources and explore alternative approaches such as movable collateral. Another important point mentioned here was the lack of access to information and data, faced by women smallholder farmers that often lack the necessary technology and face language barriers (e.g. if information is only provided in English).
- 164. In order to also reach out to the final beneficiaries of this project, highly vulnerable groups with a specific focus on women and youth, the local EEs spoke to a series of non-governmental organisations and government authorities involved with these focus groups. For Uganda, for instance, Finding XY was in close touch with MAAIF engaged in supporting women through the village saving groups and SACCOs and with Sustainable Development Systems (SDS) Africa, working with poor women groups in remote areas on livelihood creation and economic diversification. Likewise, in Kenya, KCV interviewed WUSC and AGRA, both supporting youth employment and women empowerment. Issues raised here related to the purposeful inclusion of women and youth in both, urban and rural communities, as their vulnerability is closely linked to water access (e.g. water prices in urban areas make women more vulnerable than in rural communities where water units are cheaper). It was also said that existing initiatives to support youth should be linked to financial support for them to gain market access.
- 165. In the course of a mission to Kenya by the international EE, adelphi, in March 2022, a series of FIs were interviewed to explore the most suitable interventions (capacity building & financial support) to unlock growth finance for green SMEs to scale. For that purpose, the interviews were geared to understand the level of experience and interest in green sector financing, specifically the strategic importance and the integration of Environmental Social Governance (ESG) criteria in lending decisions. On the other hand, KCV is implementing a revolving risk capital facility fund in Kenya through which climate adaptation enterprises access early stage capital and business growth support. For 6 years, KCV investments have been leveraged by FIs like, Equity Bank, NCBA, KCB, RaboBank and Cooperative Bank of Kenya; and impact investors/ venture funds like, Root Capital, OPES LCEF, RaboRural Fund and KfW; and Capacity developers like, Open Capital Advisors, Africa Management Institute.
- 166. In the course of the EEs (adelphi's and Finding XY's) engagement with the Ugandan banking sector under the UGEFA project, adelphi has signed MoUs with Equity Bank, Yako Bank und Opportunity Bank that, among other FIs from Uganda, took part in a survey on challenges to deploy green finance to SMEs in the Ugandan market has been conducted (see results in table below).
- 167. KCV has MoUs with peer impact fund Nordic Impact Funds www.nordicimpactfunds.com, and investment facilitation services provider- Private Financing Advisory Network https://pfan.net/. Other follow -on investment / co-financing collaborations with the following Fls work on a case by case basis, guided by relevance and suitability of individual deals: Equity Bank, NCBA, RaboRural Fund, OPES Fund. KCV has leveraged US\$ 5.2 million follow on capital investments into KCV pipeline / portfolio.
- 168. The process of interactive consultation has been highly successful, and it is planned to continue in the same spirit of collegial technical collaboration among project stakeholders and their representatives for the preparation of the proposal.

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Date 10.		Stakahaldara Canaultad
Date	Scope and Outcome of Consultation	Stakeholders Consulted
March-	Discussion relating to the role of governments and the vulnerability	<u>KENYA</u>
April	of communities to climate change	Government actors: Kenyan Ministry of Environment
2022	Outcome:	and Forestry, Water Resources Management Authority,
	1	Nairobi Securities Exchange
	of climate vulnerability; however, they have focused mainly on	UGANDA
	disaster minimization and less of adaptation and capacity	Government actors: Ministry of Finance, Planning and
	building	Economic Development (MoFPED) – National Focal
	Women and youth are particularly vulnerable due to their lack	Point; Ministry of Agriculture, Animal Industry and
		Fisheries (MAAIF); National Planning Authority (NPA)
	of access to money and jobs.	
March	Discussion about barriers and opportunities related to climate	<u>KENYA</u>
2022	adaptation financing	Financial institutions: Pula Advisors, Equity Group,
	Outcome:	East African Development Bank, Stanbic Bank
	Ugandan FIs struggle most with complex nature of green	Foundation, Kenya Bankers Association, African
	business models and the lack of respective appraisal processes	Guarantee Fund, E4Impact, ANDE, DANIDA
	Substantial lack of pipeline of bankable green business models	UGANDA
	 Low awareness or interest of banking sector in financing green 	Financial institutions: Bank of Africa, Centenary Bank,
	SMEs as they are considered high-risk and complex in nature.	Equity Bank, Finca Uganda, Housing Finance Bank,
	Regulatory pressure for banking sector: Requirement to develop,	NCBA Bank Uganda Limited, Opportunity Bank, United
	implement and disclose appropriate climate-related information	Bank for Africa, Stanbic Bank, Yako Bank, Uganda
	Pledges and commitment of banking sector to international	Development Bank
	sustainability frameworks ut lack of tailored green products	
1	Scattered support landscape for (green) SMEs and financial	
	sector	
June	Discussion about drivers of the vulnerabilities and potential	KENYA
2022	avenues to reduce pressures on these groups.	Vulnerable groups: Enterprise Development Officers
	<u>Outcome</u>	and key representatives of Pastoralists, Communities
	Lack of access to capital especially from banks and other	without access to safe drinking water, Women in
	financial institutions are a main reason for the existence of all	Agriculture, smallholder farmers, youth in agriculture
	vulnerable groups	consulted in the counties of Wajir and Bungoma
	• .	UGANDA
	Competition from larger existing businesses which stifle the	
	growth of enterprise owned by vulnerable community	Vulnerable groups: Uganda Women Entrepreneurs
	members (especially women and youth).	Association Limited, Farming groups of smallholder
	Climate change is the greatest challenge for small holder	farmers in Luweero District/ Central Region and Kitenga
	farmers, pastoralists and communities with low access to	Sub-County, Uganda Red Cross (Wastepreneurship
		programme for Youths, Food and Livelihoods Program
	water. Understanding the issues and addressing them is	
	multifaceted and complicated.	for CBOs in Moyo & Yumbe, Adjumani and Karamoja),
March-	Discussion about the role of NGOs and international organizations and	<u>KENYA</u>
April	the type of climate adaptation support/ programs they offer	Non-Governmental Organisations /
2022	Outcome:	International Organisations: World University Service of
	Mitigation and disaster reduction have dominated climate action,	Canada, WWF country office
	more effort needs to focus on developing early warning systems,	Gariada, TTTT Godiniy Gilloo
		UGANDA
	flood protection, etc	Non-Governmental Organisations /
	There is a great opportunity to take climate smart products to	
	scale but consumers lack awareness of the products and their	International Organisations: CHEMONICS
	benefits	(USAID/Uganda strategic investments activity), UNDP
]	There has been a low mobility of climate finance that jeopordizes	Uganda, UNFCC (Regional collaboration center (RCC)
]	the opportunity for MSME development	Kampala), Red Cross Red Crescent Climate Centre,
]	Due to both financing constraints and market challenges there a	Sustainable Development Systems (SDS)
1	few adaptation MSMEs present in Uganda and Kenya	
Marah		KENIVA
March-	Discussion on the barriers and opportunities related to SME	KENYA
April	development both within and outside the climate adaptation sphere	Business association: SME Support centre, Alliance for a
2022	Outcome:	green revolution in Africa
1	MSMEs face strong financial and market challenges that	<u>UGANDA</u>
]	compromises their ability to be developed.	Business association: National union of coffee,
	Red tapes (paper work and documentation) are complicated and	agribusiness and farm enterprises (NUCAFE)
	people tend not to formalise their organizations. The compounded	, , , , , , , , , , , , , , , , , , , ,
	effect of this and lack of collateral restrict enterprises from	
]		
Merr	accessing FI	LENVA
May	Discussion related to the barriers and opportunities to developing	KENYA
2022	adaptation enterprises	Adaptation enterprises: Acacia innovation limited,
]	Outcome:	Sistema bio limited, hydroponics Africa limited, Good
]	There is an abundance of opportunities for developing adaptation	farmland management limited, Mace foods limited, Sunken
	MSMEs in Kenya and Uganda, enterprises just lack access to	limited
	finance and technical training	UGANDA
	Financial institutions need to become more accessible to ensure	Adaptation enterprises: Hamwe enterprise, Bhundu Base
]		Limited, Barbets Davids Farms (all women-led enterprises)
	promotion of such enterprises.	Limiteu, Darbets Davius Famis (all Women-leu enterprises)
1	Women face specific challenges with attaining collateral	
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- 169. A multi-level consultation process will be initiated during the development phase of the full proposal. Each country will hold consultative meetings and workshops with relevant business associations, adaptation enterprises and their value chain partners (including micro enterprises and informal sector) as well as customer and beneficiary groups.
- 170. A specific focus will be on gender- and youth-focused SMEs as the primary target group of this project. As a result of the interviews and additional research, an adaptation SME market assessment for Kenya and Uganda will be developed that identifies the main challenges and opportunities for gender- and youth-focused adaptation SMEs and compiles a first pipeline of eligible adaptation SMEs for the proposed action. It should be noted that vulnerable groups such as women, youth, marginalised groups and indigenous peoples will be effectively integrated into the consultative process.
- 171. At the same time, the EEs will get back to the consulted FIs in both countries to seek Letters for Expression of Interest to participate in the project activities. In the course of these follow-up meetings with FIs, the EEs will present in more detail the conceptual outline of the proposed performance-based blended financing mechanisms to discuss potential financial products to be offered by FIs under the project. A specific focus will be laid on gender and youth lens investing to take into consideration gender-based factors and specific obstacles for youth to access and better inform investment decisions. This will inform the planned co-creation process to develop new and innovative performance-based blended financing instruments in the project's inception phase.
- 172. The project grievance mechanism will also be presented and promoted during these consultations. This approach permits to meet the needs of the stakeholders and adjust the project activities at the national levels. The inputs from these workshops will be combined and aggregated by EEs for the validation of the project document. National focal points will be invited to a regional session to present the project outline in detail and seek their feedback and advice.
- 173. Consultation reports for communities, FIs, SMEs involved in consultations including detailed information on stakeholders met, dates, topics discussed and how the outcomes were integrated in the project design are available upon request and will be attached to the fully developed project proposal.

K. Multiple perspectives on innovation

- 174. The EEs' methodology is fundamentally guided by its validated focus on building multi-stakeholder and co-creation structures and processes. Co-creation as a collaboration principle of participatory design, development and implementation; fundamentally benefits from a multitude of views, positions, explicit and implicit knowledge as well as expert and non-expert participation. By integrating local expertise on lived realities, opportunities, challenges and vulnerabilities; the innovation output of such participatory action is enhanced with integrated, inclusive and customised solutions aligned with local complexities.
- 175. The proposed project is informed and led by multi-stakeholder and co-creative structures and processes in multiple ways: Firstly, the Adaptation Action Steering committee, the guiding body for the activities in Component I and supporting element in Component II, will consist of key actors from finance, entrepreneurship and governmental institutions as well as representatives of vulnerable groups (such as rural women associations and youth-based organisations, 1.1.1). This ensures both that 1) the RCP's activities are designed and implemented in an inclusive manner incorporating the wishes and concerns of vulnerable communities and 2) that project oversight is not blind to potential issues due to silos of expertise and particular interests. Specifically, vulnerable groups will be consulted for the Market Analysis Report, the SME Finance Scoping Study and other knowledge products.
- 176. Secondly, the RCP's activities are structured by its strategic framework. Within this framework, the formulation of strategic inclusion and participation safeguards will be ensured as well as the incorporation of adherence to multi-perspective and inclusivity elements for all activities throughout project implementation.
- 177. Thirdly, the ecosystem building Adaptation Action Events (1.2.1) and Annual Adaptation Finance Symposia (1.2.2) are highly collaborative formats enriched by valuable inputs of adaptation (entrepreneurship) practitioners that ensure that ideas, knowledge and expertise of ecosystem actors from a variety of sectors and geographies are leveraged. Cross-sectoral and cross-country collaborative events within these sub-components strengthen a holistic view on adaptation entrepreneurship and finance as well as foster peer-learning and -networking. Through dedicated formats such as panel discussions, exhibitions and roundtable discussions, each of these events will give a stage and voice to vulnerable groups.
- 178. Fourthly, co-creation processes in particular depend on an active engagement, trust and input by participants from different organisations and levels. Based on adelphi's validated method of co-creating meaningful and innovative outputs with FIs together with other actor groups (such as entrepreneurs and vulnerable communities), the EEs will implement the Adaptation Finance Product Innovation Practitioner Labs and Adaptation Finance Trainings. By being made conscious about the actual issues of adaptation entrepreneurs on the ground (and the needs of those most affected by climate change), financial products are prototyped in an inclusive and multi-perspective fashion. The EE acknowledge the potential of participatory design thinking process and its potential to create ownership for developed solutions among involved actors.
- 179. Fifthly, the financial mechanism developed under 2.3.1 will be designed in a highly collaborative manner in a co-creation process between the EEs and partnering Fls.
- 180. Lastly, and based on the eligibility criteria defined in the scorecard used to select enterprises (2.1.1.3), gender- and youth inclusive adaptation SMEs that 1) offer business models and adaptation impacts that address regional vulnerabilities and 2) have a gender- and youth focus are likely to represent the majority of supported and funded enterprises and, thus, offer innovative products, technologies or services tailored to their local target customers, who are predominantly climate change-vulnerable communities. As many aadaptation solutions have been agriculture-focused in previous projects supported by the EEs, it is further estimated that a significant share of supported entrepreneurs will have some touchpoints with the agricultural sector representing one of the most vulnerable sectors while at the same time, forming the backbone of Kenya's and Uganda's economy. As part of the capacity building, adaptation SMEs will be supported to develop customer and community engagement strategies.

L. Justification for funding

- 181. The project aims to promote a shift away from the baseline scenario characterised by
 - Women and youth in Kenya and Uganda often lacking access to resources to absorb climate-related stressors appropriately, being most severely affected by climate change
 - Missing middle financing for (adaptation) SMEs as they lack access to adequate financing
 - Insufficient awareness and knowledge of local FIs on climate adaptation concepts and markets, resulting in insufficient investment
 opportunities provided for gender- and youth inclusive adaptation SMEs

- Lack of coordination and exchange on adaptation entrepreneurship opportunities between policy, financial and other supporting actors in Kenya and Uganda and across countries
- 182. The table below outlines the baseline and the alternative adaptation scenario that the Adaptation Fund will help materialise in targeted areas and focal sectors.

Table 11: Baseline and alternative adaptation scenario

Baseline scenario

Adaptation Fund impact

Component I

Climate change: Kenya and Uganda's economic structures being highly dependent on agriculture and the availability of water are increasingly threatened by rising temperatures and the prevalence of extreme weather events. Precipitation is becoming more and more unpredictable, droughts and extreme rainfall events are more severe and frequent, thus drastically altering agricultural yields and leaving communities with low access to water. Smallholders constituting the main agricultural producers in both countries are particularly vulnerable due to their lack of financial resources, technological integration, awareness and training on climate change, climate adaptation solutions, and distance from urban centres.

Women and youth: Female-headed households in Kenya and Uganda are less likely to take part in commercial farming as they mostly plant low-value crops. Women are also often the main victims of climate change-induced social, political and economic tensions, resulting in hikes in gender-based violence. Kenya's and Uganda's youth are highly vulnerable to change-related stressors such as floods or droughts, as they lack resources to absorb shocks appropriately.

National and regional responses: Although consideration of adaptation action and SME support are two themes identified in Kenya's and Uganda's National Development and Climate Strategies and Plans (see Part II, Chapter F), the nexus of and adaptation solution-oriented climate adaptation entrepreneurship is still nascent in the two countries and the wider region. Due to the insufficient awareness among financiers, policy makers and other ecosystem stakeholders of the adaptation impact potential of early-growth gender- and youth inclusive adaptation SMEs in the region, these lack financing opportunities. There is furthermore a lack of institutional knowledge and coordination between the abovementioned actor groups with respect to the right mechanisms to support adaptation SMEs for scale up and replication.

Component II

Missing middle financing gap: SMEs generally and adaptation SMEs in particular suffer from a substantial financing gap (see Part I: Adaptation SMEs and Part 2: J). Adaptation SMEs are disproportionately affected by the 'missing middle' financing gap between financiers and SMEs as their 1) investments often require longer time horizons to capitalise and 2) a lack of monetary indicators for returns on adaptation business models among financial products further limits their attractiveness to local Fls. In Uganda and Kenya, there is a substantial lack of finance products that (adaptation) SMEs can access.

Women and youth: Although women in Kenya and Uganda provide an important contribution to agriculture, female-headed households still have a lower output and are less likely to take part in commercial farming as they mostly plant low-value crops. They tend to have a very low access to land in terms of ownership and management choices resulting in lack of collateral that is a prerequisite to access commercial financing.

Market-based adaptation solutions: By supporting the scale-up and replication of gender- and youth inclusive adaptation SMEs in Kenya and Uganda through a catalytic financing mechanism, the project will collect evidence-based good practices and approaches to successfully support market-based adaptation solutions. The information will be made accessible through an online database and tailored knowledge products to inform policy makers, financiers and other adaptation entrepreneurship practitioners and ecosystem actors accordingly. A series of multi-stakeholder dialogues and peer-learning events will facilitate adaptation SME access to critical networks, markets and finance.

Women and youth: The project will specifically empower genderand youth inclusive adaptation SMEs providing products and services that close gender gaps or meet the needs of women, girls or youth, supporting gender diversity and the participation of youth through internal policies, practices and participation in the workforce, and strengthening inclusion and diversity of women and youth across the value chain. As a result of the offered gender- and youth inclusive adaptation solutions, the targeted SMEs increase women and youth's resilience to climate change.

Cross-border coordination and knowledge exchange: A Regional Coordination Platform (RCP) will be established to raise the awareness and knowledge of key stakeholders and to foster cross-country exchange about the role of gender- and youth inclusive adaptation SMEs. The RCP connects actors of adaptation, (climate-smart) finance and entrepreneurship, encourages action to sustain and create adaptation markets and serves as a pioneering regional knowledge platform on adaptation entrepreneurship. The RCP will be led by the Adaptation Action Steering Committee, made up of core actors from finance, entrepreneurship, governmental institutions and representatives of vulnerable groups. The committee will develop a sustainable strategic framework to guide the project implementation and serve as a manual for post-project engagements of core actors.

Catalytic financing facility: The project will allow gender- and youth inclusive adaptation SMEs in Kenya and Uganda to access concessional finance on favourable terms to scale up and replicate their businesses and adaptation impacts. The AF grant will be utilised to blend existing loan products offered by local FIs that are often not eligible for these SMEs. The provision of targeted non-financial support towards SME investment readiness will increase their eligibility for external investments. In the event that no private sector capital can be leveraged under the project, the project will still be able to achieve its objective as it takes a flexible approach towards paying out larger amounts of direct grant funds to further lower investment barriers of the participating SMEs.

Women and youth: The business advisory and investment brokerage support offered under Component II is targeted at adaptation SMEs that intentionally seek to rectify gender and/or other socio-economic inequalities in the sectors and geographical areas they operate in. Complementary to selecting this specific target group, the business advisory offers tailored tools and modules to specifically promote finance-readiness of gender- and youth-led adaptation SMEs.

Component III

Limited financing portfolios: The financing of gender- and youth inclusive adaptation SMEs is limited by the lack of awareness among Fls in Kenya and Uganda about the business opportunities of accessing adaptation finance and channelling it into adaptation entrepreneurship. At the same time, adaptation-

Adaptation-based lending: Local FIs in Kenya and Uganda will be trained in climate adaptation concepts and methodologies while showcasing to them successful adaptation business models and raising their awareness on adaptation SME markets and business opportunities. By participating in the Adaptation Finance Academy,

based lending is insufficiently anchored in FI investment strategies as many FIs in Kenya and Uganda do not have guiding climate (adaptation) strategies that lay out lending guidelines and indicators for adaptation-based finance in line with national climate action policies.

local FIs will 1) be trained on climate adaptation concepts and adaptation SME market opportunities, 2) be capacitated to develop Climate Strategies, outlining strategic pillars for climate action, and 3) be guided through a co-creative multi-stakeholder process to prototype innovative adaptation finance instruments.

M. Sustainability of the project

183. All project components and outcomes are inherently designed to ensure long-term sustainability of the action. Not only are impacts expected to continue beyond the closure of the project but a strong orientation towards vertical and horizontal scale-up is a key intention and design feature which further fuels project sustainability at an even larger scale, adhering to two main principles:

184. (1) Scaling Up:

Scaling adaptation SMEs' business: Through the unique combination of capacity building and financial support, truly bridging the missing middle finance gap, the project effectively supports adaptation SMEs to scale. With its focus on viable business models, instead of adaptation projects relying on grant funding, the target group has an intrinsic motivation to ensure long-term sustainability. Stimulating lenders' appetite in adaptation SMEs: The Adaptation Finance Facility, complemented by the technical assistance provided to FIs as part of the Adaptation Finance Academy, will familiarise FIs with the needs, technologies, products and services offered by adaptation SMEs, their growth journeys and investment needs. It will catalyse the appetite and familiarity of loan officers to extend debt finance to adaptation SMEs and will strategically anchor the topic of climate adaptation in corporate strategies and commitment on management level of participating FIs.

(2) Replication:

<u>Business model replication:</u> In order to avoid that aspiring entrepreneurs, have to re-invent the wheel, adaptation SMEs will be selected according to their replication potential, characterised by easy-to-understand, adaptable business models with relatively low upfront investment costs to start a business. Replication blueprints ("adaptation business-in-a-box") will be shared through various channels, including the RCP, capacity building formats provided to SMEs and the website.

<u>Financial instrument replication:</u> Involved FIs will be engaged in joint fundraising to replicate the adaptation finance instruments developed as part of the project in order to ensure long-term sustainability beyond the project duration.

- 185. Under Component I, the established RCP will continue to create linkages between the private sector and FIs to ensure the long-term growth and support of adaptation SMEs. Also, the facilitated networks and linkages are expected to result in self-sustaining partnerships and informal communities of practice that will generate their own dynamics and lead to sustainable benefits and impacts for adaptation SMEs. In that sense, the project will act as a trigger and leverage that mobilizes and unleashes the potential of better collaboration and synergy creation in the sector, leading to long lasting impacts and self-reinforcing mechanisms of cooperation. Sustainability is achieved through the RCP's strategic framework, which acts both as a guide for project implementation and for future government organisation to carry on the project after the project duration. It also included an impact assessment strategy including a long-term vision to scale impact, a process handbook to facilitate efficient project takeover, as well as an open-source adaptation solution database (institutional sustainability).
- 186. The documentation and dissemination of knowledge, best practices, innovations, and lessons learned of performance-based blended lending to early-growth adaptation SMEs will play an important role in showcasing how financing for these companies could be systematically approached. This will help stakeholders to create appropriate financing instruments that will benefit more enterprises in the two countries and region, even after the duration of the project. Furthermore, the project will closely coordinate with other similar international efforts, players, and initiatives as to share and document best practices and gained knowledge.
- 187. The innovative Adaptation Finance Facility under Component II will enforce this long-term growth and support by providing early-growth adaptation SMEs with bespoken advisory support and catalytic financing. This will leverage the systematic strengthening and long-term sustainability of adaptation SMEs in order to unlock further investments for them to operate in difficult, changing and different markets beyond the project. It is expected that the innovative financing mechanism will showcase to FIs the business opportunities in financing early-growth SMEs, with a specific focus on gender- and youth-inclusive SMEs, and will sustainably encourage the scale-up of their lending to such companies in the future (economic sustainability).
- 188. One aim of this piloting approach is to provide a tested and proven mechanism to DFIs and other FIs with an interest in channelling adaptation finance capital via commercial banks and other local FIs to SMEs. This can be instrumental for mobilising green finance for adaptation SMEs in the future and will create sustainable impacts beyond the project itself. Connected to this aspect, a key sustainability-related outcome of this approach will be the unlocking of capital for adaptation enterprises in future and the creation of links to various follow-on investors beyond the ones included in the pilot of the project itself (*financial sustainability*).
- 189. The described piloting approach of the facility entails that it will act as a trigger for adaptation SME investments and make itself redundant in the future rather than becoming an institution that requires continued support. This will be achieved firstly through demonstrating that adaptation SMEs are bankable businesses with a viable investment proposition to enlargen Fls portfolios (Component II) while supporting Fls to develop the appropriate financing instruments to deploy capital to these SMEs and access new sources of funding (e.g. climate funding provided by Development Finance Institutions (Component III). Secondly, the project's collaboration with KCV and other impact investors/ venture funds enables a seamless transition to strengthened SME financing opportunities beyond the project lifecycle. Lastly, the improved investment readiness of the supported SMEs will enable them to approach more financing opportunities such as commercial banks in the future and other adaptation SMEs will be in a position to learn from their examples through networking opportunities and dedicated knowledge products (Component I).
- 190. Specific additional key features of Component II that will lead to enhanced sustainability include the screening, shortlisting, and selection criteria as particular attention will be paid to their potential for business scale-up and impact of their adaptation technologies, products and services in order to ensure long-lasting sustainability of project support. The inclusiveness of the business will be another key selection criterion, as the project aims to support SMEs that have a transformational impact on local socio-economic structures by including highly vulnerable groups with a focus on women, youth, marginalised groups and indigenous peoples –

actively in their value chains and/or as final ustomers or beneficiaries. In addition, the provision of catalytic business development support at pre-and post-investment levels to the early-growth adaptation SMEs will be instrumental for their future ability to approach relevant investors and access finance which will create sustainable benefits and significantly improve their investment readiness and potential for growth and scale (social sustainability))

- 191. More specifically, the Catalyser (Output 2.2.2) will focus on shortlisted SMEs and improve their business management capacity and assists them in developing a comprehensive business plan in order to achieve funding readiness. The Accelerator (Output 2.2.3) then focuses on strengthening and scaling-up existing adaptation SMEs through support in securing funding, improving their financial resilience, catalyzing growth, developing finance readiness, and building in-house financial management capacities. The combination of these support activities and the additional one-on-one support elements demonstrate the strong focus of the project on long-lasting impacts and the development of resilient, growing, and flourishing enterprises way beyond the duration of the project itself.
- 192. In line with the point above, the sustainability of the business models (nature-based solutions, circular business models, agribusinesses etc.) beyond the project lifecycle is an integral core principle of the described enterprise support approach. The selection and further strengthening of self-sustaining businesses will ensure that no further support will be needed for these enterprises beyond the project in order to sustain and create additional impact in the future. For all supported enterprises, positive social and environmental impacts are an integral part of their business models and financial sustainability will be ensured. Both dimensions are further strengthened through explicit tools and dedicated sessions in the curriculum of the Catalyser and other support activities of the project. Additionally, the cooperation of the project with and strengthening of local BDS providers ensures that SMEs that require additional consulting after the project can access this at their own costs.
- 193. The achievement of positive environmental impacts will be part of the DNA of selected adaptation SMEs. Besides their adaptation impacts, these SMEs have developed nature-based solutions and business models, reducing greenhouse gas emissions, and applying circular approaches to reduce and reuse waste, water and the consumption of other scarce resources. By supporting these SMEs to grow, the project ensures long term environmental sustainability (*environmental sustainability*).
- 194. Aiming at a transformational change in the current financial market structures in Kenya and Uganda that lack appropriate and affordable financial products for SMEs and awareness of climate adaptation related market opportunities, Component III will complement the efforts of Component II in developing new and innovative financing approaches. The Adaptation Finance Academy (Output 3.1.1) will offer the local banking sectors the opportunity to expand on their nascent knowledge on adaptation finance and entrepreneurship as a lever for new financial business opportunities. Climate Strategy Workshops will be one element to ensure that the suggested funding facility will be strategically anchored within partner FIs beyond the project duration. Cross-country learning and exchange between more advanced FIs (mainly from Kenya) that already have climate strategies in place and those FIs interested in developing such strategies will further contribute to fostering regional networks and collaborations beyond project implementation.
- 195. Regular monitoring and evaluation of activities according to the project's Monitoring and Evaluation Framework (to be developed for the full proposal submission), coupled with an annual impact assessment of the direct enterprise support components will continuously inform project implementation to foresee any risks of achieving the expected outcome and sustainability of the project.
- 196. Lastly, any training material developed will continue to be used after the end of the project locally. Good practices of adaptation business models and financing pathways will further be disseminated through the RCP to stakeholders interested and involved in similar business support activities. In general, the RCP will span across the two focus countries and beyond and will thus increase the potential reach of project impacts and of the supported companies as they scale up their operations after the end of this project.

N. Environmental and social impacts and risks

- 197. The project is designed to fully align with the Adaptation Fund's Environmental and Social Policy (ESP). Below is a summary of the evaluation and assessment process carried out against AF's Policy. The objective of this project is to facilitate investments and capacity building in early growth stage SMEs that operate climate adaptative business models in order to support them in rolling out adaptation solutions and scale their operations, ultimately building community resilience to climate change. With a particular focus on supporting female- and youth-inclusive enterprises, the project is designed to generate positive economic, social and environmental impacts through the three key Components and the respective Outputs and Outcomes.
- 198. A risk screening was conducted for the planned activities under Components I, II and III and as a result the project is categorised as potential adverse (low) risk (Category B).
- 199. Specific activities in component II, e.g. the selection of SMEs which will receive support to effectively deliver localized adaptation solutions on the ground, constitute unidentified sub-projects. As per AF ESP Policy, unidentified Sub-Projects are classified as activities or components that are not identified at the proposal stage to the level where adequate and comprehensive environmental and social risk assessment is possible. Hence this requires the project to screen, assess and monitor the unidentified subprojects accordingly in the course of the implementation period.
- 200. In line with the AF ESP policy the methodology of the Environmental and Social Management System (ESMS) will be developed during the fully developed proposal stage. The ESMS will contain a process for identifying environmental and social risks for the unidentified activities/sub-projects and, when needed, the development of commensurate environmental and social management elements that will complement and be integrated in the overall ESMP. The project/programme ESMS will specify any other related procedures, roles, and responsibilities.
- 201. The ESMS will guide the E&S risk screenings and assessments for any subprojects (SMEs) that will be supported through this project and will incorporate additional site-specific mitigation measures in the overall ESMP, if needed. This approach will ensure that all subprojects avoid, minimise, and/or mitigate any potential adverse E&S impacts that may emerge from their interventions/ activities across all stages of their respective project cycles (planning, implementation, post-implementation). The table below provides an overview of the assessment against AF's Environmental and Social Policy. Principles that require management and mitigation actions are subsequently discussed in more detail. The mitigation measures to address the potential risks highlighted in the principles above are captured in the table below.

Table12: Potential environmental and social impacts and risks – further assessment and management requirements

AF Environmental and Social Principles	Further assessment required?	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	No	The proposed project is in full compliance with Kenyan, Ugandan and international laws and regulations. It also has the endorsement of Kenyan Ministry of Environment and Forestry (Office of the Cabinet Secretary) and Ugandan Ministry of Finance, Planning and Economic Development. Every unidentified subproject (SME) that will be supported through this project will be assessed for its compliance with national law.
Access and Equity	Yes	Components of the proposed project support locally-led, early-stage gender- and youth inclusive adaptation SMEs. Considering existing gender gaps in regards to access to resources for business (such as financing opportunities and land access), there is a low risk that the project may exacerbate these inequities. Notably, the project is also designed to focus on improving access to finance and capacity building for marginalised climate adaptation business owners. Any forthcoming unidentified subproject (SMEs) that will be supported through this project will be screened for their access and equity as it will be determined in the ESMS.
Marginalised and Vulnerable Groups	Yes	The proposed project has an extended focus to support gender- and youth inclusive adaptation SMEs led by women and/or youth in the community. It supports gender- and youth inclusive adaptation SMEs who operate within existing default social biases, and may pose a minor risk of excluding marginalised groups in the implementation of the project activities – whether as direct beneficiaries or indirect beneficiaries of the project activities. Any forthcoming unidentified subproject (SMEs) that will be supported through this project will be screened for its impact on marginalised and vulnerable groups as per ESMS
Human Rights	No	No activities in the proposed project will impede on international human rights. Unidentified subproject (SMEs) will be screened for their impact on human rights as a part of the ESMS
Gender Equality and Women's Empowerment	Yes	The proposed project targets communities where the gender gap is significant, and may pose a risk that women may not benefit equally from the project activities. Positive social impacts of the project are also dependent on receiving sufficient applications and participants from female (and youth) led SMEs as well as SMEs with business models that empower women and youths through provision of climate change adaptation solutions (gender- and youth inclusive adaptation SMEs).). Unidentified subproject (SMEs) will be screened for their impact on gender equality as a part of the ESMS.
Core Labour Rights	Yes	It may be likely that a large number of early-stage gender- and youth inclusive adaptation SMEs targeted by the project may operate informal businesses and utilise informal contracts when hiring staff, lack compliant working conditions, or lack enforcement for occupational health and safety standards in line with International Labour Organisation standards.
Indigenous Peoples	Yes	The proposed action has an extended focus to support gender- and youth inclusive adaptation SMEs that increase the resilience of vulnerable groups including indigenous peoples, where applicable. ⁵⁵ The peoples who identify with the indigenous movement in Uganda face risks from the creation of conservation areas and mining activities that deny them access to land, livelihoods, protection and democratic rights. In Uganda, indigenous people all face land and resource tenure insecurity, poor service delivery, poor political representation, discrimination and exclusion. While the action aims to support locally embedded adaptation SMEs that promote socially-inclusive business models aiming to increase not only local climate resilience but also providing socio-economic co-benefits such as alternative income or job creation, there is a risk that selected SMEs operate within existing default social biases that exclude indigenous peoples to partake in the promoted business activities, thus denying them the improvement of livelihoods or business services. Unidentified subproject (SMEs) will be screened for their impact on indigenous peoples as a part of the ESMS.
Involuntary Resettlement	No	Activities in the proposed project will not cause involuntary settlement of local communities. Unidentified subproject (SMEs) will be screened to avoid supporting any projects leading to resettlement as a part of the ESMS.
Protection of Natural Habitats	Yes	The project's direct activities are not expected to have any adverse impact on the environment or natural habitats. However, while working with early-stage gender- and youth inclusive adaptation SMEs that offer products and services to help communities increase

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⁵⁵ The peoples who identify with the indigenous movement in Kenya and Uganda are mainly pastoralists and hunter-gatherers, including for Uganda mainly Benet, Batwa, Ik and the Karamojong and Basongora pastoralists – while the latter are not recognized specifically as Indigenous Peoples by the government. For Kenya indigenous peoples include the hunter-gatherers Ogiek, Sengwer, Yiaku, Waata and Awer (Boni) and pastoralists Turkana, Rendille, Borana, Maasai, Samburu, Ilchamus, Somali, Gabra, Pokot, Endorois and others. (Berger et al., 2022).

		resilience to climate change, we recognise it may be likely that they operate business activities that may cause harm to natural habitats. For example, as a result of lack of resources and technology, they adopt poor waste management in the value chain, leading to pollution of local water ways and ecosystems. Unidentified subproject (SMEs) will be screened for their impact on natural habitats as a part of the ESMS.
Conservation of Biological Diversity	Yes	The project is not expected to have any adverse impact on the environment or biodiversity. Similarly, early-stage gender- and youth inclusive adaptation SMEs offer products, services and employment that help local communities increase their resilience to climate change effects. However, in doing so, they may risk overlooking maladaptation practices (e.g. doing reforestation with invasive species). These are often caused by the lack of complete information or lack of resources in implementing business activities, where businesses resort to the cheapest or quickest option available. The project aims to address these support gaps through the proposed components and activities. Unidentified subproject (SMEs) will be screened for their impact on biodiversity as a part of the ESMS.
Climate Change	Yes	The project is designed to recognise, incentivise and support gender- and youth inclusive adaptation SMEs with business models that generate climate-adaptation benefits for the local community. It will not generate significant and/ or unjustified increase in greenhouse gas emissions or other drivers of climate change. Moreover, mitigation co-benefits provided by the applying adaptation SMEs will be considered as an asset. However, the gender- and youth inclusive adaptation SMEs may still engage with conventional production activities such as the employment of carbon-intensive machinery that produces GHG emissions. Given that the project will give preference to business models that increase the adaptative capacity, respectively decrease the sensitivity of customers/ beneficiaries, the risk for the project to cause maladaptation is perceived low. Specific Assessment Frameworks will be used to identify maladaptive action and to derive scoring criteria for the selection of adaptation SMEs under the project (see Part II, Chapter A, Activity 2.1.1.3 Screening and shortlisting of applicants). In addition, a detailed set of additional mitigation measures will be outlined in the environmental and social risk management plan at full proposal stage (see Part II, Chapter N for initial concepts). Unidentified subproject (SMEs) will be screened for their impact on biodiversity as a part of the ESMS.
Pollution Prevention and Resource Efficiency	Yes	It may be the case that the value chains of early-stage gender- and youth inclusive adaptation SMEs still employ resource inefficient production methods and are unable to minimise material use effectively, due to constraints such as lack of finance to obtain modern low carbon machinery. Notably the proposed project aims to work with these SMEs to improve sustainability in their value chain to be able to attract green finance opportunities. Unidentified subproject (SMEs) will be screened for their impact on biodiversity as a part of the ESMS.
Public Health	No	No activities in the proposed project are foreseen to generate any significant negative impacts on public health.
Physical and Cultural Heritage	No	No activities in the proposed project are foreseen to cause any alteration, damage or removal of physical cultural resources, cultural sites, and sites with unique natural values. Neither does it permanently interfere with existing access and use of such physical and cultural resources. Unidentified subproject (SMEs) will be screened for their impact on biodiversity as a part of the ESMS.
Lands and Soil Conservation	No	The proposed project supports local gender- and youth inclusive adaptation SMEs that promote climate-adaptation for local populations in Kenya and Uganda, including promoting soil restoration and conservation as well as avoiding further degradation or conversion of productive lands. Unidentified subproject (SMEs) will be screened for their impact on biodiversity as a part of the ESMS.

Timeline for Risk Management and Monitoring Implementation

202. Details of each of the mitigation measures will be developed during project design and planning and revisited with all relevant implementing partners during the kick-off of each project component. For example, the setting of indicator benchmarks will be done at this stage. Monitoring will be conducted throughout project implementation, in particular, during regular jour fixe meetings. During the monitoring process, should new risks arise or further mitigation efforts are required, this will be addressed before the next stage of project implementation begins through an iterative and inclusive process. After the complete implementation of each programme component, a risk management and monitoring assessment will be conducted again to check that mitigation measures were successful in avoiding or reducing identified project risks.

Project implementation arrangements

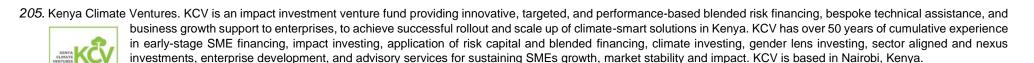
203. adelphi is Europe's largest think-and-do-tank based in Germany, working on the intersection of green entrepreneurship and green finance in various countries around the globe.



adelphi is committed to a just transition and creating a liveable, sustainable society and works together with financial institutions, green enterprises and policy makers to unlock finance at scale to secure a climate-neutral and resilient tomorrow. Partners and clients include the European Union, European Investment Bank, AFD, KfW, the International Development Finance Club, the Federal Ministry for Environment, Nature Conservation and Nuclear Safety, the Government of Flanders and IKEA Foundation. adelphi is leading the Uganda Green Enterprise Finance Accelerator (funded by the European Union) and the Circular Economy Catalyst Kenya (funded by IKEA Foundation). Based on adelphi's experience in the implementation of green entrepreneurship programmes in more than 35 countries globally, and its portfolio of

tested and proven toolkits for SMEs and FIs, adelphi will be responsible for managing the conceptual and methodological approach, including the oversight of the SME selection mechanism and approach, the training methodologies and toolkits, the co-creation of the financial instruments as well as the steering of the set-up and implementation of the Adaptation Finance Academy. Furthermore, adelphi will provide backstopping and quality management as well as M&E support.

204. Founded in 2017, Finding XY is an innovation center that designs and implements innovative programs that provide access to low-risk capital, capacity development and markets-based research. Through our services we want to create communities where there is no Poverty (SDG1), with Gender Equality (SDG 5), creating opportunities for economic growth with decent work (SDG 8) and empowering SMEs through innovation (SDG 9). This is achieved through building global partnerships with the goal of mitigating climate change and conserving the environment. (SDG 13 and 17). Finding XY is based in Kampala, Uganda.



206. Finding XY and Kenya Climate Ventures will be responsible for managing and backstopping of local outreach and the creation of a pipeline of relevant SMEs for the project, as well as steering sub-contracted Business Development Service (BDS) providers in the delivery of the Catalyser and Accelerator Support to selected enterprises (Finding XY: Uganda; KCV: Kenya), the set up and coordination of the RCP and Adaptation Action Committee as well as the coordination of all local ecosystem activities as well as local M&E in Uganda and Kenya respectively.

PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government⁵⁶ Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project / programme. Add more lines as necessary. The endorsement letters should be attached as an annex to the project/programme proposal. Please attach the endorsement letters with this template; add as many participating governments if a regional project/programme:

Dr. Chris Kiptoo	Date: 5 th July 2021
Principal Secretary	
Ministry of Environment and Forestry	
Office of the Cabinet Secretary	
HonMatia Kasaija,	Date: 17 August 2021
Minister of Finance, Planning and Economic Development	

B. Implementing Entity certification Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (Kenya's NAP, NCCRS and INDC, Uganda Vision 2040, Uganda's NAP, NAPA and the Climate Smart Agriculture Program (2015-2025)) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Mr. Akos KOESZEGVARY
Implementing Entity Coordinator

Date: (Month, Day, Year)

Tel. and email: +43 1 26026 4573

A.Koeszegvary@unido.org

Project Contact Person: Mr. Alois Mhlanga

Tel. And Email: +43 1 26026 5169; a.mhlanga@unido.org

^{6.} Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.



MINISTRY OF ENVIRONMENT AND FORESTRY Office of the Principal Secretary

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NAIROBI

Ref: MEF/EMC/6/VOL.VIII/85

5th July, 2021

The Adaptation Fund Board c/o Adaptation Fund Board Secretariat Email: Secretariat@Adaptation-Fund.org

Letter of Endorsement

ENDORSEMENT FOR "UNLOCKING INVESTMENTS IN EARLY-GROWTH STAGE ADAPTATION MSMES IN KENYA AND UGANDA"

In my capacity as designated authority for the Adaptation Fund in Kenya, I confirm that the above regional project/programme proposal is in accordance with the Government's National priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the region.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the United Nations Industrial Development Organization and executed by Kenya Climate Ventures and Uganda Green Enterprises Finance Accelerator, in close collaboration with the relevant Government Agencies under the coordination of the Climate Change Directorate.

Dr. Chris Kiptoo, CBS
PRINCIPAL SECRETARY



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

OFFICE OF THE UNIDO REPRESENTATIVE TO KENYA, ERITREA, SOUTH SUDAN, COMOROS AND SEYCHELLES

UNITED NATIONS OFFICE AT NAIROBI, GIGIRI

P.O. BOX 41609, 00100 GPO NAIROBI, KENYA

TELEPHONE: (+254 20) 7624369/70

FAX: (+254 20) 7625286 E-MAIL: office.kenya@unido.org

File: AF/01/2021

25 May 2021

Dear Dr. Chris Kiptoo,

Subject: Request for endorsement letter to the Adaptation Fund for the unlocking investment in early growth adaptation MSMEs in Kenya and Uganda proposal

UNIDO presents its compliments to the Ministry of Environment and Forestry and has the honor to thank you for your continuous support, guidance, partnership and trust.

UNIDO was recently accredited to the Adaptation Fund (AF), which means that the organization can now submit proposals for funding. The Adaptation Fund has recently issued a call for Large Innovation Grants: https://www.adaptation-fund.org/adaptation-fund-launches-call-for-proposals-for-projects-up-to-us-5m-to-support-innovation-and-enhanced-direct-access/. The application and endorsement of the Large Innovation Grants does not reduce the country allocations under the Adaptation Fund.

In response to the call for proposals, UNIDO has developed the attached draft proposal that seeks to unlock funding for early-growth adaptation MSMEs in Kenya and Uganda. As we work towards finalization of the proposal and as per the Adaptation Fund guidelines on their submission, we kindly request an endorsement letter from you, as the Designated Authority, confirming that the proposed activity is in accordance with government adaptation priorities. Templates for endorsement letters are available on: https://www.adaptation-fund.org/generic/government-endorsement-letter-template-submitted-through-niesriesmies/

We will be happy to schedule a call to discuss the proposal.

Yours Sincerely,

UNIDO Country Representative, OIC

Dr. Chris Kiptoo, CBSPrincipal Secretary,
Ministry of Environment and Forestry,
Nairobi.

Telephone : 256 41 4707 000 : 256 41 4232 095

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In any correspondence on this subject please quote No. ALD 72/251/02



THE REPUBLIC OF UGANDA

Ministry of Finance, Planning & Economic Development Plot 2-12, Apollo Kaggwa Road P.O. Box 8147 Kampala Uganda

17th August 2021

The Adaptation Fund Board C/o Adaptation Fund Board Secretariat Email: secretariat@Adaptation-Fund.org

Fax: 202 522 3240/5

ENDORSEMENT FOR A PROJECT PROPOSAL: UNLOCKING INVESTMENTS IN FEMALE AND YOUTH-LED EARLY-GROWTH STAGE ADAPTATION MICRO, SMALL AND MEDIUM-SIZED ENTERPRISES (MSME) IN KENYA AND UGANDA

I have the honor to refer to your call for proposal under the Large Innovation Grants to support innovations and enhanced direct access.

With the support of the United Nations Industrial Development Organization (UNIDO), Uganda has developed a project proposal aimed at Unlocking investments in female and youth-led early-growth stage adaptation Micro, Small and Medium-sized Enterprises in Kenya and Uganda. The Project aims at:

- Developing Regional coordination platform to connect adaptation, climate-smart lending, entrepreneurship, knowledge management and promote cross-learning
- Developing Innovative blended financing mechanism and investment brokerage services
- Building Capacities of Local financing institutions to support adaptation MSMEs

In my Capacity as the appointing Authority of the Designated Authority for the Adaptation Fund in Uganda, I confirm that the above project proposal is in accordance with the National Climate Adaptation Priorities of the Government of Uganda.

Accordingly, I am pleased to endorse this project proposal for support from the Adaptation Fund. If approved, the project will be executed by the Uganda Green Enterprise Finance Accelerator and Implemented by the United Nations Industrial Development Organization.

Mana Kasaija (M.Pi

MINISTER OF FINANCE, PLANNING AND ECONOMIC DEVELOPMENT

Copy:

-The Permanent Secretary / Secretary to the Treasury -The Country Representative, UNIDO Uganda Office



Project Formulation Grant (PFG).

Submission Date: 08.August 2022

, Adaptation Fund Project ID: AF00000276

Country/ies: Kenya, Uganda

Title of Project/Programme: Unlocking investments in gender and youth-inclusive early-growth

stage adaptation Small and Medium-sized Enterprises in Kenya and Uganda

Type of IE (NIE/MIE): Multilateral Implementing Entity (MIE)

Implementing Entity: United Nations Industrial Development Organization (UNIDO)

Executing Entity/ies: adelphi, Kenya Climate Ventures (KCV), Finding XY)

A. Project Preparation Timeframe

Start date of PFG	November 1, 2022
Completion date of PFG	March 30, 2022

B. Proposed Project Preparation Activities (\$)

Describe the PFG activities and justifications:

List of Proposed Project	Output of the PFG Activities	USD Amount
Preparation Activities		
Coordinate with project	Finalization of the project	15,000
Executing Entities to finalize	outline and definition of	
project outline and develop	implementation arrangements	
implementation arrangement,		
including micro-assessments		
of the Executing entities		
Finalize the gender	Gender Assessment Report	10,000
assessment and development	Environmental and Social	
of the Environmental and	Management System	
Social Management System		
Further stakeholder	Validation	5,000
consultation and validation of		
the final project outline	of the project outline through	
	a consultative process,	
	including the respective	
	community consultation	
	reports	
Total Project Formulation		30,000
Grant		

C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Mr. Akos KOESZEGVARY	h W	August, 4, 2022	Mr. Alois MHLANGA	+43 1 26026 5169	A.Mhlanga@UNIDO.org

Annex I - Initial Gender Assessment in line with the Fund's Gender Policy

1. Background and purpose of the assessment

This initial gender assessment is created to provide an overview of the gender-responsive components in the project proposal *Unlocking investments in gender and youth-inclusive early-growth stage adaptation Small, and Medium-sized Enterprises in Kenya and Uganda.* Data regarding gender is available for both countries, with the latest data being from 2020, both Kenya and Uganda will be presented below, and the values reflect the situation of gender nation-wide. The initial gender assessment focuses on the following main issues, 1) basic overview gender-related information in the countries (health, gender-based violence, education and economic activities in both countries) 2) the gender-responsive aspects for the project outcomes and 3) a brief overview of policies focused on enhancing female empowerment. The concept behind the initial gender assessment is to contribute to a more inclusive project and goals, specifically the creation of a Gender Action Plan (GAP) which will be created for the full project proposal.

2. Basic overview of gender-related information in the countries

Kenya ranks 126th out of 162 in the Gender Inequality Index (GII)⁵⁷ of 2020 and 95th out of 156 in the Global Gender Gap Index 2022⁵⁸, which means there is also considerable effort needed to empower females. The World Bank estimates that 50.3% of the population of Kenya is female⁵⁹. 23.3% of the seats in the Kenyan parliament are held by females⁶⁰. According to the Malaria Indicator Survey of 2020, 31% of Kenyan households have a female head⁶¹. These indicators point to a large overall disparity between the genders in this country. Uganda ranks 131st out of 162 in the Gender Inequality Index (GII) of 2020¹ and 66th out of 156 in the Global Gender Gap Index 2022², meaning there is a significant effort needed to reach equality of genders. 50.7% of the Ugandan population is female as per World Bank estimates³. As of 2020, 34.9% of the seats in the Ugandan parliament are held by women⁴. According to the Malaria Indicator Survey of 2019, 28.3% of Ugandan households have a female head⁵. These numbers show the apparent significant gender gap with the country.

Health

Kenya: According to the UN Population Division, the fertility rate is 3.4, which points to a significant decrease in births over the past 50 years, with the fertility rate being at 8.1 in 1970⁶². The maternal mortality in Kenya is estimated at 342 per 100,000 live births, while the adolescent birth rate is at 75.1 per 1000 women aged 15-19, as per the Gender Inequality Index¹. Childbearing continues to pose an additional risk to women in Kenya. The percentage of married women using a form of modern contraceptive from the ages 15-49 in 2018 is 60.5%⁶³. The general life expectancy at birth in Kenya is 67, for men its 65 and women its 69⁶⁴. The World Health Organization Global Health Expenditure states that the out-of-pocket expenditure on health for Kenyans is 24.3% of their total health expenditure in 2019⁶⁵. Uganda: The fertility rate is 4.7 according to the UN Population Division. While there is also a significant decrease in births over the past 50 years here, it's not as staggering as in Kenya, with the fertility rate being at 7.1 in 1970 in Uganda⁶. The Gender Inequality estimates Uganda's maternal mortality at 375 per 100,000 live births and the adolescent birth rate 118.8 per 1000 women aged 15-19¹. The percentage of married women using a form of modern contraceptive from the ages 15-49 in 2018, is 36.5%⁷. Life expectancy at birth is a total of 64 years, with men's rate lying at 61 and the women's rate at 66⁸. The World Health Organization Global Health Expenditure states that the out-of-pocket expenditure on health for Ugandans is 38.3% of their total health expenditure in 2019⁹. Uganda tends to have more out-of-pocket expenditure than Kenya and a significantly higher fertility rate, this along with the other statistics points to a health system lagging.

Gender-based violence

Based on the UN's global database on violence against women⁶⁶, <u>Kenya</u> has a high prevalence of multiple forms of violence. 40.7% of Kenyan women aged 15 to 49 will experience physical and/or sexual intimate partner violence in their lifetime. 25.5% of Kenyan women aged 15 to 49 have experienced physical and/or sexual intimate partner violence in the last 12 months. 22.9% of Kenyan women aged 20 to 24, were first married before the age of 18, i.e., as a minor. 21% of Kenyan women aged 15 to 49 have undergone some type of female genital mutilation or cutting. There have been past and current efforts to lower the number of women in Kenya that suffer from these multiple forms of gender-based violence.

Based on the same data set from the UN's global database on violence against women, <u>Ugandan</u> women face a high prevalence of multiple forms of violence as well⁶⁷. 49.9% of Ugandan women aged 15 to 49 will experience physical and/or sexual intimate partner violence in their lifetime. 29.9% of Ugandan women aged 15 to 49 have experienced physical and/or sexual intimate partner violence in the last 12 months. 34% of Ugandan women aged 20 to 24, were first married before the age of 18, i.e., as a minor. 0.3% of Ugandan women aged 15 to 49 have undergone some type of female genital mutilation or cutting, a significantly lower number than in Kenya. Like Kenya, in Uganda there is significant effort to lower these numbers via policies as well.

Education

According to the Education Statistics by the World Bank estimates of 2010, the following percentage of the female **Kenyan** population over 25 have obtained these levels of education, 47.1% have primary schooling (54.1% of males in comparison), 18% have secondary

⁵⁷ UNDP Human Development Reports, Gender Inequality Index 2020 https://hdr.undp.org/data-center/thematic-composite-indices/gender-inequality-index#/indicies/GII

⁵⁸ World Economic Forum, Global Gender Gap Report 2022 https://www.weforum.org/reports/global-gender-gap-report-2022

⁵⁹ United Nations Population Division. World Population Prospects: 2019 Revision https://data.worldbank.org/indicator/SP.POP.TOTL.FE.IN

⁶⁰ World Economic Forum, Global Gender Gap Report 2022 https://www.weforum.org/reports/global-gender-gap-report-2022

⁶¹ UNDP Human Development Reports, Gender Inequality Index 2020 https://hdr.undp.org/data-center/thematic-composite-indices/gender-inequality-index#/indicies/GII

⁶² United Nations Population Division. World Population Prospects: 2019 Revision https://data.worldbank.org/indicator/SP.DYN.TFRT.IN

⁶³ United Nations Population Division https://data.worldbank.org/indicator/SP.DYN.CONM.ZS

⁶⁴ United Nations Population Division. World Population Prospects: 2019 Revision https://data.worldbank.org/indicator/SP.DYN.LE00.FE.IN

⁶⁵ World Health Organization Global Health Expenditure database 2022 https://apps.who.int/nha/database

⁶⁶ United Nations Women. Global Database on Violence against Women https://evaw-global-database.unwomen.org/en/countries/africa/kenya

⁶⁷ United Nations Women. Global Database on Violence against Women https://evaw-global-database.unwomen.org/en/countries/africa/uganda

schooling (25.7% for males), and 1.5% have tertiary schooling (2.9% for males)⁶⁸. The numbers for **Ugandan** females in 2012 over 25 are the following, 24% have primary schooling (42.3% of males in comparison), 6.4% have secondary schooling (13.9% for males), and 5.5% have tertiary schooling (11.1% for males). These all indicate a large gender gap in the realm of education, and throughout the educational path⁶⁹.

Women in economic activities

According to the World Bank the labor force participation rate for ages 15 and older is 72.1% of females and 77.3% of males in Kenya; and 67% of females and 73.9% of males in Uganda⁷⁰. The 2019 World Development Indicators by the World Bank estimates that the following percentage of the Kenyans population are employed in these sectors, 1.6% of females and 10.6% of males are employed in the industry, 39% of females and 39.8% of males are engaged in the service industry, and 59.3% of females and 49.6% of males work in agriculture¹⁴. For Uganda, 3.2% of females and 9.7% of males are employed in the industry, 20% of females and 22.6% of males are engaged in the service industry, and 76.8% of females and 67.7% of males work in agriculture¹⁴. The sectors of service and agriculture play the leading roles in Kenyan society, while Uganda is heavily focused on agriculture. Kenyans and Ugandans are also mainly self-employed. The Global Findex Database estimates that in 2017 27.2% of Ugandan women and 31.4% of Kenyan women started saving or setting aside any money in the past 12 months to start, operate, or expand a farm or business⁷¹. However, here is a low number of enterprises with a majority female ownership, 13.2% in Kenya (2018) and 10.2% in Uganda (2013) ¹⁴.

3. Gender-responsive considerations for the Project outcomes

Gender and adaptation to climate risks

Studies have shown that climate change is not neutral and it has more adverse impacts on women then men. Multiple factors contribute to this related to the vulnerabilities of women, and coping capacities, the main factor being associated with the socio-economic status of women and their gender-specific roles in agriculture⁷². As shown in the previous section, Kenya and Uganda's economies are highly dependent on agriculture, which makes them also reliant on the climate and water. These areas are becoming increasingly affected by climate change and feel the implications immediately, especially for smallholder farmers which lack access to means to address the impacts on their crops. Additionally, agriculture is the central area of employment for females in both countries, in which females tend to be smallholder farmers. Female smallholder farmers tend to have less diversified forms of income, lower land ownership rates, and cultivate fewer cash crops than their male counterparts. In combination with less decision-making power and access to financial resources, this makes women in agriculture highly susceptible to the implications of climate change.

The project aims to tackle the susceptibilities by focusing on gender-inclusive and market-based climate adaptation solutions. The notion is to support the scale-up and replication of inclusive SMEs in Kenya and Uganda to empower women and make their business models more resilient to adverse effects. Through a catalytic financing mechanism, the creation of knowledge products, and multi-stakeholder dialogues, this project addresses adaptation SMEs' access to critical networks, markets, and finance, addressing the key vulnerabilities women in agriculture currently have. Despite SMEs generally being considered highly inclusionary, part of the nonfinancial technical support this project offers will also include gender, youth and vulnerable group components to ensure the business models can be adapted so that these groups are more accurately included.

Gender sensitivity and inclusion in the SME segment and access to finance

According to the SME Survey conducted by the Central Bank of Kenya in 2016, the distribution of SMEs by gender of business owners in Kenya was as follows: 47.9% of the licensed establishments were owned by males; 31.4% were owned by females, and 20.7% were jointly owned. Further, 60.7% of unlicensed establishments were solely owned by females⁷³. While no data on such distributions was found for Uganda, it can be assumed that similar structures exist in Uganda. Despite the presence of women ownership of SMEs, women experience several barriers towards engaging with entrepreneurship.

- 1) Due to customary law and patriarchal structures, women are less involved within the labor force as they are often restricted to child care and household management roles. As a result, they tend to be more engaged in smallholder agricultural practices, where they have limited control over their agricultural and financial resources.
- 2) Women are also less likely to access financial services offered by banks, such as loans. This is a crucial barrier to SMEs' success. In a sample survey on the Ugandan SME sector, 23% claimed that access to finance was their most significant obstacle to success. This is related to the disbursement of loans against collateral, which is often titled in the name of a male relative or not formally titled at all⁷⁴. This ultimately makes a woman on her own a 'risky' client in the eyes of a financial institution.
- 3) Women tend to have an educational background in areas other than business. Often capacity development programs do not provide tailored support for female entrepreneurs in this area while also providing the necessary skill to access funding. The report by Value for Women also identified a lack of access to networks as a key factor inhibiting the access to finance by women ¹⁷.

The project proposed addresses these challenges by focusing on the following areas. First, the importance of the inclusion of women must already happen from the onset of the project by ensuring that the selection criteria of SMEs have specific sections that seek to maximize the inclusion, with the goal being that 50% of the company's employees or target group are women or youth. Second, the inclusion must go beyond the selection and into the programs, i.e., providing additional support such as subsidies for child care and travel costs, which are cultural factors that may inhibit female participation. Thirdly, the concept of the project offers opportunities to establish networks needed to access finance and capacity building for the financial readiness of female entrepreneurs.

⁶⁸ Education Statistics. World Bank https://datatopics.worldbank.org/education/country/kenya

⁶⁹ Education Statistics. World Bank https://datatopics.worldbank.org/education/country/uganda

⁷⁰ World Devlopment Indicators. World Bank https://datacatalog.worldbank.org/search/dataset/0037712

⁷¹ Global Findex Report. World Bank. https://www.worldbank.org/en/publication/globalfindex

⁷² Glazebrook, T., Noll, S., & Opoku, E. (2020). Gender matters: Climate change, gender bias, and women's farming in the global South and North. Agriculture, 10(7), 267.

⁷³ Central Bank of Kenya. (2016). SME Survey 2016 Micro, Small and Medium Enterprises (MSME) Survey Basic Report - Kenya National Bureau of Statistics (knbs.or.ke)

⁷⁴ Schiff, H., Fries, R., & Chambers, T. (2013). Beyond the Threshold: Investing in Women-led Small and Growing Businesses. Value for Women.

In general, MSMEs are highly inclusionary as they create avenues for youth, women, and vulnerable groups to be included in national economies. Women and/or youth-inclusive adaptation enterprises as a sub-group and primary target group of this project are intrinsically motivated to overcome existing gender and/or other socio-economic inequalities in the socio-economic systems they operate in, aiming for a 50% gender and youth balance in their workforce and/or their primary customer base, and/or providing products that address the needs of women, girls or youth. The promotion of such enterprises ensures greater inclusion of women and youth in economic activities and local value chains while increasing their climate resilience. The initial gender assessment presented here utilized in-depth desk research, key informant interviews and regional expert consultations to clarify

- (a) the current challenges and opportunities women face in their involvement in entrepreneurship;
- (b) specific vulnerabilities women face in their communities and economic sectors
- (c) how the project design can be further improved to ensure greater favorability for their inclusion.



Figure 3. Project gender inclusion approach

Gender-lens financing

The 2013 report by Value for Women identifies areas in which financial institutions are lacking gender-inclusive approaches⁷⁵. While these financial institutions may not be outright discriminating against women, there is a lack of awareness on how 'gender-neutral' practices may still be creating gaps between men and women's access to finance. First, SMEs fall in the missing middle of enterprise finance as their needs are too large for micro-financing but too small and risky for commercial lenders, meaning they are not currently in the realm targeted by financial institutions. Commercial markets do not serve these early-growth stage companies because of inherent risks and unattractive returns. Yet there is a business case for these types of enterprises and, therefore, a lack of awareness from financial institutions on the benefits of investing in these enterprises. Second, these SMEs operate on low margins (e.g., grow low value crops, are culturally not involved in cash crop farming/ cattle rearing) and cannot afford to pay interest rates that would cover the operating costs and risks inherent for financial institutions to provide the seasonal working capital these businesses need. Some financial institutions lack tailored repayment approaches, thus not accommodating to the volatility of these types of SMEs. At the same time, financial institutions do not generally focus on agricultural enterprises, which is the sector in which most women in Kenya and Uganda are employed as smallholder farmers unless they are operating on a large scale. Lastly, they lack meaningful collateral as they often do not have customary land rights; or do not have the requisite credit track record (e.g., as they operate in the informal sector), which is mentioned section above as well.

This project approaches these issues from two crucial angles. First adaptation-based lending, in which financial institutions in both countries are trained on adaptation concepts, SME market opportunities, climate strategies, and a co-creative multi-stakeholder process to prototype innovative adaptation finance instruments. All of this training is to be done under a gender-inclusive lens, meaning it addresses the identified factors that restrict women from accessing finance. Second, catalytic financing for gender- and youth-inclusive adaptation SMEs, meaning a performance-based blended financing mechanism, will be implemented. This will be used to provide access to loan products to SMEs that generally wouldn't access to these mechanisms. In combination with the training of the SMEs on financial readiness, all these project components will make gender- and youth inclusive adaptation SMEs in Kenya and Uganda attractive clients to financial institutions, and vice versa support financial institutions in their journey to becoming greener and gender- and youth-inclusive.

4. Conclusion

Overall the project tackles the vulnerabilities of females in the agriculture and water sectors by addressing the barriers to resources that can help them establish more resilient and adapted business models. Moreover, SMEs play a significant role in reducing the gender gap as they promote and ensure the effective participation of women in national economies, and thus can also catalyzers for political change. This project has a multi-stakeholder approach to specifically focus on the obstacles women and youth face, such as access to collateral, networks, and legal/policy hurdles.

⁷⁵ Schiff, H., Fries, R., & Chambers, T. (2013). Beyond the Threshold: Investing in Women-led Small and Growing Businesses. Value for Women.

Concept Note:

Unlocking investments in gender and youth-inclusive early-growth stage adaptation Small and Medium-sized Enterprises in Kenya and Uganda

Annex II: Stakeholder Consultation Report

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1. Overview Stakeholder Consultations – Kenya

Stakeholder Type/Organization	Name of invitee	Male/ Female	Name of invitee	Date
Public sector / Government	Nairobi Securities Exchange - Environmental Sustainability Department		Loice Wangui	23 rd March 2022
	Water Resources Management Authority	F	Elizabeth Diego	10 th March 2022
Business Associations / Incubators/ Industry	SME Support Centre AGRA- Alliance for a green Revolution in	F	Linda Onyango	18 th March 2022
Networks	Africa	M	Ezra Onyango, Evaline Obiero	18 th March 2022
NGOs / International Organisations/ Foundations	Stanbic Bank Foundation WWF	F M	Pauline Mbayah James Kakeeto	28 th May 2022 28 th May 2022
Financial institutions/ Financiers/ Impact Investors / Venture Funds/. Financial Access Support	PULA World University service of Canada (WUSC) Equity Group Foundation European Investment Bank East African Development Bank Stanbic Bank Foundation Financial Sector Deepening Kenya Kenya Banker's Association	F F 9xM, 7xF (all FIs)	Richi Raithatha Roseirene Githige 16 FI representatives	30 th March 2022 15 th March 2022 24th February 2022 25th February 2022 25th February 2022 28th February 2022 1st March 2022
Vulnerable communities and groups	Pastoralists (Wajir county) Women in agriculture (Bungoma county) Youth in agriculture (Bungoma county) Smallholder farmers (Bungoma county) Communities without access to safe drinking water (Wajir county)	4xF / 3xM 8xF 2xF / 5xM 2xF / 6xM 5xF / 2xM	7 pastoralists 8 women farmers 7 youth representatives 8 smallholder farmers 7 community members	21 st July 2022 20 th July 2022 20 th July 2022 20 th July 2022 21 st July 2022
Sampled Adaptation SMEs	Acacia Innovations Ltd Sunken Ltd	F F/M	Elana Laichena Christine Atego and Bonigace Oteino	23 rd May 2022 24 th May 2022
	Mace Foods Ltd Hydroponic Africa Ltd Seitsema Ltd	F M F	Margaret Komen Peter Chege Esther Altofer	23 rd May 2022 31 st May 2022 23 rd May 20223

1.1 Collated Stakeholder Interview Summary – Kenya

	Interview questions	Main findings/ replies	Key learnings and insights for project design
1	What are the main climate-related risks in Kenya currently? Which economic sectors and regions are mostly affected by climate change?	 Drought Greenhouse gas emissions of course majority of this is created by a human activity as with all other climate risk The related effects of this as their views were: Diseases and pests (Locusts) Crop Failure Death of livestock Loss of livelihoods Water strain – causes conflict from the water users (domestic, irrigation and Industrial use Destruction of infrastructure (water pangs, sun dunes) Erratic weather Key sectors affected were: Agriculture Education Health Water in agriculture as the main sector affected, especially the food chains for agro input; SMEs and stakeholders are investing research on inputs that adapt to climate change Identified regions affected mostly were: Northern and North-Eastern parts Lake Victoria basin Lake Tana The rift valley religion Central Kenya 	 Climate challenges predominantly relate to the water and agricultural sectors. These interviews aided in ensuring adaptation MSMEs focus on creating adaptation solutions in these two sectors. All stakeholders emphasised on the heterogeneity of climate pressures throughout Kenya. As presented in Climate Risk and Adaptation SME Solutions Matrix Similar to the point above it helped in highlighting the communities within these vulnerable regions that are particularly vulnerable to climactic changes. As shown in the Climate Risk and Adaptation SME Solutions Matrix
2	What are the main actors (e.g., government actors, international organisations / donors, NGOs, accelerators and incubators, networks, education / research, corporates) that engage in climate change adaptation	 NGOs: World vision, mercy cops, ED Advisory, SNV, KCIC, AGRA, BIDCO, WUSC, Global alliance for nutrition, climate technology network, Association of energy professionals of East Africa, Government (National determined commitments) CSOs implemented climate adaption, lobbying and raise awareness (waste disposal and management SMEs (Practicing adaption initiatives); Kenya practical action, AMIRAN, Murefu Baraka, 	This component did not have direct influence on project structures, however, it aided in assessing, comparing and aligning our project objectives with existing initiatives and will help to set up the Adaptation Action Committee (under Component I)

	Interview questions	Main findings/ replies	Key learnings and insights for project design
	in Kenya and what is their specific focus of work (e.g. project activities, funding schemes)?	 Financial institutions: KCB foundation, stanbic foundation Donor keen on climate resilience in agriculture are: French/Scandinavian countries, UN bodies (UNEP, WFP), Germans (BMZ and GIZ), World Bank, WFP, Climate Justice Fund, Master Card Foundation, Swedish Government, DANIDA Specific focus of work: Kenya meteorological information dissemination Kenya Forestry Research Institute— certified seed Financing focuses on green business acceleration especially green energy Irrigation Conservation agriculture Afforestation (Guts Bay) Policy of cutting one tree and plant two Policy on charcoal trade Scheme in western Kenya implementing agroforestry KFW is designing programs for youth and women in resilience agroforestry AGRA's climate resilience program in Northern Kenya (Marsabit) 	
3	In what way do public institutions address and counter-act climate threats in Kenya?	 Government plays a regulatory role that enables adaption to climate change in terms on policies and regulation through national and county legislation Bilateral funding through agreements in resilience within the country through loan to mitigation measures like plating 10% of the country to be having trees Public institutions are involved in research through public universities Awareness creation on how to best adapt new technologies on climate change Government of Kenya is implementing a Livestock Development Fund for North and North-Eastern Kenya to restock or destock prior to drought and after drought Protection of wetlands and no farming beyond 10 meters Flood alerts 	There is an evident distrust and lack of awareness that interviewees had with financial institutions. The tailored support package for financial institutions (Adaptation Finance Academy – Component III) should aid in ensuring FIs are more aware and take greater action on adaptation enterprise support.

	Interview questions	Main findings/ replies	Key learnings and insights for project design
		 Drought alerts Food supplements and feed conservation Water storage (rationing water) 	
4	Do you know about any public policies and/or private initiatives targeted at climate resilience or adaptation entrepreneurship?	 Government programmes & SME business should be complimentary but they often rather overlap Supporting water resources associations Contingency planning at county level Sub catchment management activity: Water storage to reduce the threat of water loss and soil and water conservation to be able to reduce the sediment into the river Flood forecasts to mobilize the community to move to higher grounds just before floods Meetings to ration water during drought Seed capital from KCIC Investment fund from KCV Water aid WWF conservation funds for animal and indigenous trees ACF fund on climate mitigation Sustainable lending by banks through Kenya bankers' association Contract farming 	This information aided in assessing, comparing and aligning our project objectives as can be seen in Table 4: Overview of relevant policies and strategies, and project alignment and point F. Consistence with national/ sub-national sustainable development strategies
5	Do you know of any programmes/ projects/ funding schemes for MSMEs contributing to climate change adaptation in Kenya?	 National and county adaption plans National determined commitments Climate smart agriculture is being promoted by Sarificom Solar solutions (D-light) (lighting, irrigation, and other products Supplementary feeling Community action planning Water storage and rationing MSMEs help aggregate farmers to access insurance packages Green agriculture market place is being Implemented in Uganda through the IKEA program (SNV, GIZ) to green agriculture by focusing on productive use of clean energy 	- See above
6	What role do MSMEs play in building resilience to	 SMEs at forefront of providing adaptation solutions/ technologies (e.g. drip/solar irrigation etc.) 	This question aided in understating how SMEs can influence vulnerabilities as unique players familiar

	Interview questions	Main findings/ replies	Key learnings and insights for project design
	climate change for local communities, vulnerable and marginalised groups in Kenya?	 SMEs play a role in ensuring that their products are climate smart are easily accessible and affordable to most vulnerable populations Playing an innovation role, creating, and testing new products that are adaptive to climate change Understand the mindset: smallholder farmers - it is all about subsistence; SMEs look to grow Ensuring that products do not generate green gas emissions Improving livelihoods Scaling technologies Mitigation of risks 	with local contexts. This reaffirmed the project actions and focus on vulnerable groups.
7	Are you aware of product or service innovations introduced by MSMEs in the field of climate change adaptation (e.g., new crop varieties, innovative irrigation technologies)?	 Water rationing during drought Feed conservation Waste recycling and bio waste Alternative cooking fuels Green energy trasnprotation Supplementary feeding Soil and water conservation Water storage Preservation of catchments and other resources Diversification of crops (tree and staple foods mixed cropping) Solar pumps accessed by small scale farmers Drought resistant crops Drip irrigation is being promoted in horticulture 	These interviews (included examples) helped completing the Climate Risk and Adaptation SME Solutions Matrix by providing insight into the options of solutions possible.
8	What are market opportunities for MSMEs in Kenya in the field of climate change adaptation?	 Business lens on adaptation efforts extremely important - access to markets! Biggest barrier are investment costs to take up CCA measures Carbon trading Atmosphere water harvesting High and growing markets for technologies Waste Management products that are recycled, reused, and remoulded Opportunity to develop bioproducts (Bio inputs) Climate smart agricultural product and services 	 These interviews (included examples) helped completing the Climate Risk and Adaptation SME Solutions Matrix by providing insight into the options of solutions possible. Outcome 2.2 will directly support these enterprises by guiding them in how to make more profitable and stable businesses

	Interview questions	Main findings/ replies	Key learnings and insights for project design
9	What are main barriers to	 Opportunity in hydroponics without necessarily needing land much land use Coordination and collaboration strengthening Technology for development Trade for sustainable development (T4SD) Enterprises are not sufficiently trained and thus require greater capacity building Exclusion of Small SMEs 	- This question enabled the project to gain deeper
9	resilience among communities in Kenya?	 Limited understanding of culture and cultural practices High cost of insurance Unfavourable governmental and legal systems Power inequalities for men and women Low financing (climate financing less attractive) and Fls are very suspicious in funding new innovations Government policies are not implemented or absent on land uses Women and youth lack capacity to utilise new technology due to education and cultural barriers Cultural orientation in rural communities take a larger part of a woman's days calendar to explore new information and technology. (Cultural dualism) Knowledge and skills Information Technologies are costly Lack of exposure 	 This question enabled the project to gain deeper insight into the vulnerabilities One of the elements we noted from these interviews is that it would be hard to have predominantly women and youth led enterprises thus these interview s helped shift the focus to being inclusive rather than just enterprises led or owned by this group. This point has been addressed throughout the project proposal. Gender and youth inclusivity were also included as a major focal point to ensure improvements in their access to adaptation technologies. This also helped further shape the planned adaptation finance academy and to include the concept of gender-lens investing
		Timely delivery of inputsMost adaption technologies are male dominated	

1.2 Interview Results - Vulnerable Groups Kenya

Communities without access to safe drinking water

Which challenges are you facing with regard to climate change and accessing measures/products/services to adapt to climate change/ increase your resilience?

- Limited knowledge of available services and products relating to adaptation, specifically to do with water capture, storage, and harvesting.
- Low access to financial services, thus plans to implement adaptation are restricted.
- High costs of veterinary services and products
- Over-reliance on livestock with limited alternatives
- What hampers your access to climate change adaptation measures/products/services?
 - High living costs and low/ unstable earnings from livestock

Pastoralists

- Which challenges are you facing with regard to climate change and accessing measures/products/services to adapt to climate change/ increase your resilience?
 - o Lack of financing to enable communities to purchase water storage equipment
 - o Lack of sufficient knowledge on income diversification avenues
 - Lack of technical know-how to solve climate change challenges
 - o Minimal to zero governmental involvement, especially in the water sector.
- What hampers your access to climate change adaptation measures/products/services?
 - o Insufficient knowledge on different avenues of raising financing
 - Corruption and abandonment by political actors
 - Limited literacy levels

Women in agriculture

- Which challenges are you facing with regard to climate change and accessing measures/products/services to adapt to climate change/ increase your resilience?
 - Lack of finance to purchase important technologies (hydroponics, irrigation, etc.).
 - o Lack of knowledge of alternative finance methods
 - Limited knowledge of drought resistance crops
 - Lack of adequate government support for climate smart seed varieties, pesticides, extension services.
- What hampers your access to climate change adaptation measures/products/services?
 - Lack and barriers to collateral to access financing
 - Limited capacity building programs
 - Higher illiteracy rates in rural communities, limited likelihood to partake in capacity building programs
 - o Corruption hampering availability of necessary resources

Youth in agriculture

- Which challenges are you facing with regard to climate change and accessing measures/products/services to adapt to climate change/ increase your resilience?
 - Inadequate access to financial support
 - Lack of access and availability of irrigation systems leaves youth dependent on rainfed agriculture
 - Most programs target farms that are already existing or have larger land areas. Youth are often ignored from this.
 - Lack of knowledge/trust amongst the youth of available adaptation products and services
- What hampers your access to climate change adaptation measures/products/services?
 - o Poor attitude of the youth towards changes in products and services
 - Lack of political will to engage with the youth

Smallholder farmers- Farm forestry, assorted fruit farming, cereals farming (focus on women)

- Which challenges are women in Kenya facing in starting and growing their own business?
 - Lack of access to capital
 - Competition from larger existing businesses
 - Traditional beliefs that restrict women from employment, starting business or managing finances
- Which specific challenges with regard to access to finance are women in Kenya facing?
 - Lack of knowledge of where and how to source funds
 - Lack of collateral
 - Fear of defaulting loans due to high interest rates
 - Fear getting problems at home in regard to having money.
- Which specific challenges with regards to access to the capacity building are women in Kenya facing?
 - High cost of trainings which the women are unable to afford
 - High illiteracy rates restrict their participation in trainings
 - o Gender bias, as men can refuse their wives from partaking in trainings.

Key learnings and insights for project design

- Adaptation markets are extremely broad and the project recognizes the importance of interdisciplinary and fluid selection criteria for enterprises to ensure all relevant enterprise are selected.
- Most enterprises noted a lack of capacity building programs being available to aid them in developing sound business paperwork and operational processes to become eligible for financing. The planned Catalyzer enterprise support program will support enterprises to reach finance-readiness (e.g. putting the necessary financial structures and processes in place, developing a sound business and financial plan);
- Planned outreach campaigns will focus on vulnerable sectors and community members (women and youth) to ensure a high amount of diverse applications for the enterprise support program;
- Capacity building and co-creation of innovative finance instruments with local FI will enhance their awareness and willingness to work with adaptation SMEs. The adaptation finance academy serves as an events-based knowledge hub to tackle the insufficient FI portfolio of adaptation finance instruments tailored to gender- and youth inclusive adaptation SMEs, as well as to contribute to increasing efficiently channelled adaptation finance to local interventions and adaptation entrepreneurs.
- The interviews emphasized the lack of investment capital for MSMEs to look into climate-smart technologies or practices. This emphasized the need for the proposed catalytic finance facility and also led to the complementary performance-based payment approach to more specifically encourage MSMEs investments into climate adaptation solutions.

1.3 Adaptation SME Interview Results - Kenya

MACE FOODLIMITED

Enterprise: Mace food Itd are producers, processors and exporters of chili in southern Africa. These chilis grown in Kenya and then packaged and shipped to consumers in Europe, the US, Etc. The enterprise seeks to tackle climate change adaptation through its production techniques that seek to increase sustainable and climate suitable practices as shown below. Adaptation primarily takes the form of alternative energy inputs, water savings techniques and crop input and production practices.

- Recycle all the water used for washing vegetable
- Use solar driers as opposed to electric driers
- Produce their own climate resilient seed varieties
- Encourage climate adaptation technologies: crop rotation, mulching etc.

While the enterprise recognized that extensive support from technical expertise, financial institutions (accelerators/investors), certification schemes and market demand for their product. They did not that SME markets are volatile and found that there were several barriers to their own development as listed below:

- Erratic cost changes/switching costs by brokers
- Impact of COVID 19 creating massive cost changes over time
- Government regulations are not straight forward and transparent to comply
- Devolution came with hidden regulations which are not easy to access
- Economies of scale, have a demand to meet EU market of 600 metric tons of chilies and they are only meeting 120 metric tons
- Capital requirements are high. Agribusiness is something so many people are willing to invest in, a typical consignment to Germany for example needs 12 weeks investment.
- They need working capital to move consignments (it costs them 5million KEs to export a single consignment)

SUNKEN LTD

Sunken ltd is a company that works in partnership with institutions throughout the Kenyan region to provide integrated services and innovative business solutions to commercial enterprises. They specialize in economic and social development by providing green energy solutions to small scale farmers, communities, and commercial projects. And supply a package of services designed to provide clients with solutions to improve productivity and profitability in their enterprise. They provide three different products, they manufacture clean cooking appliances and supply them to surrounding communities, produce sustainable agricultural products, they supply sustainable water pumps. The enterprise tackles climate change adaptation issues by providing sustainable resource alternative (especially energy related) these help in ensuring communities with access to water or cooking equipment. However, despite these benefits the enterprise expresses several barriers to their own business growth:

- Regulatory barriers, Kes 50,000 per stove for artisanal cook stoves license
- Kes 5000 for accessing license for water pumping
- High cost of standardization and licensing
- Bureaucracies of services accreditation and certification
- Corruption tendencies
- High taxes of inputs
- Scope of work in hard-to-reach areas

SISTEMA BIO LTD

Sistemabio is a prefabricated modular biodigester package that includes a full suite of biogas appliances and connections. Easy to install and use, their patented high efficiency biodigesters receive organic waste and transform into renewable biogas and a powerful organic fertilizer. This organization tackles climate adaptation by reducing the pressures from GHG emissions as it found that in east Africa they have:

- 5,466 Sistema bio digesters installed
- 32,796 People impacted with clean renewable energy and organic fertilizer
- 65,800 tons of CO2 emissions mitigated
- 2,300 Metric tons of waste treated
- 14,800 M cubic meter per year of biogas produced
- 96,200 ha per year fertilized with bio fertilizer

The enterprise similar to those listed above has received significant help from multinational actors (GIZ, SNV, ETC) and financial institutions. However, despite these benefits the organizations still note clear challenges they have received with regards to their product as listed below:

- Awareness of existence of high-quality bio digesters
- Financing to biodigesters
- Long standing reputation and Perception that biodigester are of poor quality
- Cost associated with biogas products

HYDROPONICS LTD

They are the pioneers of simplified hydroponic farming technology and sole distributor of a superior subsurface plant responsive drip in East and Central Africa. They have collaborated with different

entities in the agribusiness and climate smart space like; Kenya Climate Innovation Centre (KCIC), Kenya Climate Ventures (KCV), Responsive Drip Plc USA and implemented major project with development partners such as USAID, UNWFP, Welthilfe Hunger, Dubai Expo 2020, Aqua for All, Kenya's Water Resources Management Authority (WARMA) and the Kenyan Ministry of Agriculture. According to their founder, the organization provides climate change adaptation solutions in four ways:

- Co2 absorption reduction through food miles/kilometres covered by vehicles to deliver food to deserts, in some place's food access is up to 1000km away and for them to grow food in that locality saves the CO2released by vehicles to deliver food
- Water saving, been able up 80% water usage in crop production, 1 billion waters saved since inception of hydroponics Africa Limited.
- Major cause of deforestation is Agriculture, Hydroponics Can grow vertically up to 4 meters high and this reduces production space and deforestation, the production area per square meter is released 6-7 times.
- Space is saved and farmers do not have to cut trees or own large chunks of land for crop production

However, despite the gains and extensive support the organization has received, the founder noted that there were also specific barriers that their enterprise development faced as listed below.

- Capital requires for smallholder farmers to purchase hydrotropic
- Banks are shy to fund agribusiness and require collateral
- Sometimes farmers are hesitant to surrender collateral

ACACIA INNOVATIONS LIMITED

Acacia Innovations LTD: manufactures and distribute Kuni Safi briquettes, a nearly smokeless alternative to firewood made of sugarcane waste, and affordable Kuni Safi cookstoves. This enterprise takes a specific angle of reducing pressures of deforestation by reducing resource waste and dependency on forested products by creating adaptation strategies that reduce deforestation -a major cause and impact of climate change- and ensuring availability in sustainable alternatives. Similar to the above-mentioned enterprises, the enterprise was supported by external actors (multinational organizations) and regional organizations during their development and growth. However, the founder also noted similar challenges to markets (both consumption and production side) and financing as the founder stated five core issues their enterprise had:

- Cheap price of firewood in the market
- Lack of regulation for logging of trees for firewood
- informality of different players in the renewable energy market
- No clear quality standards for briquettes
- Attitudes (skepticism from the cooks) to use briquettes

Key learnings and insights for project design

<u>Products struggle to attain market entry</u>: due to high price, lack of awareness, cheap undesirable alternatives MSMEs struggle to fully develop markets and reach fast growth potentials. All enterprise involved noted that due to these three factors they struggled to rapidly grow. Likewise, the production and development of such products is also limited in terms of their production due to taxes and other regulations that restrict enterprises from providing these products at lower prices.

Resulting changes to project structure:

The project has ensured that it shall provide technical trainings to enterprises selected. This involves giving enterprises tools that give insight into assessing their markets, defining and acting to reaching customers, etc. In addition, the project design now includes activities that aim to foster market access for MSMEs (as part of Component I)

Opportunities lay in access to finance, tailored trainings, expert guidance: Despite the challenges of selling and getting the product to the market, one of the main solutions enterprises noted that could improve their performance was attaining technical trainings and expert guidance on specific issues such as supply chain management, market analysis and access,

Resulting changes to project structure:

- In addition to the point on specified tools, this project will likewise include the involvement of industry experts and business development support experts that will directly support the enterprise development journey. This will be complimented by sessions sound adaptation practices. Peer-learning and exchange between sectors/ regions/ countries was included as another cornerstone of the project to allow MSMEs to learn from their peers, especially adaptation champions.
- Another challenge to be tackled by the project is the mind set of potential consumers about innovative adaptation solutions. Selling new ideas to communities that are bound to traditions with little exposure to larger industry markets can be challenging for MSMEs. The project will specifically support MSMEs to build sound communications and marketing strategies. At the same time, the project aims to raise awareness of adaptation solutions in the country through visibility and outreach activities planned under Component I.

1.4 Financial institutions stakeholder consultations - Kenya

In the course of a mission to Kenya by adelphi in March 2022, a series of FIs were interviewed with the objective to identify success factors to support the SME sector in Kenya to scale their contributions to a green and circular economy, biodiversity conservation and climate mitigation and adaptation. At the same time, the mission aimed to explore the most salient challenges for green SMEs to access growth finance in Kenya to identify the most suitable interventions (capacity building & financial support) to unlock growth finance for green SMEs to scale their sustainability contributions. For that purpose, the interviews were geared to understand the level of experience and interest in green sector financing, specifically the strategic importance and the integration of Environmental Social Governance (ESG) criteria in lending decisions.

The term "green" in this regard, refers to SMEs with a business model that has a positive impact on the environment while actively contributing to climate change mitigation and/or adaptation. The following aspects resulted from the consultations of the broad range of Kenyan FIs interviewed (for full list see table under 1.):

- Regulatory pressure for banking sector: Requirement to develop & implement appropriate climate-related and to disclose climate-related information (issued by the Central Bank of Kenya)
- Pledges and commitment of banking sector to international sustainability frameworks. However, tailored green financial products are missing
- Scattered support landscape for (green) SMEs and financial sector: Anecdotal matchmaking between SMEs & commercial banks, but no systemic solutions
- Missing link between finance demand & supply: (Green) SME Support and Green Finance Technical Assistance
- Enabling entrepreneurship environment: Kenya Start-up Bill 2021 (forthcoming) to foster entrepreneurship

Key learnings and insights for project design

With an increasing amount of international climate capital available and regulatory reforms, the Kenyan financial market is under increasing pressure to include climate financing opportunities into their portfolios. This momentum will be used by the project to support local FIs develop targeted financing instruments and to anchor climate considerations institutionally by developing climate strategies. The project will also focus on closing the gap between the finance demand and supply side while piloting a catalytic financing approach that can be taken up widely by other climate finance providers to move away from only anecdotal matchmaking between FIs and MSMEs.

2. Overview Stakeholder Consultations – Uganda

Stakeholder Type/Organization	Name of invitee	Male/ Female	Name of invitee	Date interviewed
Public sector / Government	Ministry of Finance, Planning and Economic Development	М	Muguga Denis	5 th April 2022
Business Associations / Incubators/ Industry Networks	National Union of Coffee Agribusiness and Farm Expertise	M	Mosses Abuce	17 th May 2022
NGOs / International Organisations/ Foundations	UNDP UNFCCC Chemonics RTI	F M M M	Gloria Namande Jyri Jantti Kenneth Nkumiro Juraj Ujhazy	18 th March 2022 5 th April 2022 17 th March 2022 17 th March 2022
Financial institutions/ Financiers/ Impact Investors / Venture Funds/. Financial Access Support	Bank of Africa Centenary Bank Equity Bank Finca Uganda Housing Finance Bank NCBA Bank Uganda Limited Opportunity Bank United Bank for Africa Stanbic Bank Yako Bank Uganda Development Bank	7xF / 19xM	Survey with 26 representatives from: Risk Department, Corporate Social Responsibility, Relationship Management, SME Banking, Social Investments, Sustainability Department, Credit Department	March 2022
Vulnerable communities and groups	Ugandan Red Cross (Food Livelihoods Program & Climate Action and Environment Program) Ugandan Women Entrepreneurs' Association Limited (UWEAL)	M M F	Thomas Edward Akol Emmanuel Ntale Constance Kekihembo	20 th July 2022 20 th July 2022 21 st July 2022
	Mukisa Mpweo Farmers Field School Buzooba Farmers Field School	M M	Semakula Francis Salongo Luwaga Sulaiman	22 nd July 2022 22 nd July 2022
Climate adaptation MSME	Hamwe Enterprsie East Africa Marine Barbets Davids Farms Bhundu Base Limited	F M F F	Stella Lugalambi John Obedi Martha Byanyima Katie Roberts	16 th May 2022 12 th May 2022 19 th May 2022 19 th May 2022

2.1 Collated Stakeholder Interview Summary – Uganda

Interview questions	Main findings/ replies	Key learnings and insights for project design
What are current climate adaptation projects/ programs??	 SIA is a USAID funded programme supporting investment readiness focus on agriculture, energy and energy for productive use both on-grid and offgrid. Through this programme, USAID is looking at supporting Uganda towards self-reliance and the private sector is very vital. The kind support to be investment ready for commercial finance. It is a purely commercial programme to provide private sector with commercial financial instruments. SIA is not directly engaged in climate change adaptation but rather mainstreams it through its activities. The programme has screening tools relating to how the investment is going to impact the environment complemented by those from the funder. UNDP is scaling up climate adaptation through a project jointly implemented by FAO and UNDP. The two organizations are looking at cattle corridor and value chains. It has a component on private sector engagement. In the cattle corridor it is tackling issues to do with coffee and the opportunities across the value chain in terms of value addition. Farmers are planting certain cash crops that are more vulnerable and at risk to impacts of climate change. The project is also looking at the issues of marketing and value addition UNFCCC has been working with IOM/ IGAD Nairobi on green SMEs. It is looking at specific areas of agriculture and land use especially, energy and waste. UNFCCC is specifically looking at mobilization of funds under the AF. UNFCCC – RCC Kampala is also implementing the Needs Based Support Project that is supporting the EAC in the mobilization of climate finance East African Development Bank is implementing Biodiversity Investment Fund. MoFPED's small funds for SMEs that have been affected by Covid19. They are not climate change focused but climate change SMEs are also supported. MoFPED is working with a number of government finance institutions including BoU, Pride Microfinance, Posta Uganda and Uganda Development Bank. MoFPED also provides USD	No additional changes made to the project. However, there is a clear interest shown by the interviewed stakeholders in the private sector as a solution provider for adaptation issues that supports the underlying project concept and objectives. The project will further look into synergies/ complementarities with the projects/ programs (see also section H - Duplication of project with other funding sources)

	- GoU is implementing the Agricultural Credit Finance programme through commercial banks	
What challenges has your organization/institution had with implementing projects and programs?	 Raising money for programs takes very long and sometimes ineffective if minimal thresholds are not met Biggest issue is the lack of awareness and behavioral change Issues of lack of information and availability of climate smart technologies Women are often neglected from the discussions and processes relating to tackling climate change Limited data on gendered vulnerability. Most organizations take strides to focus on mitigation and not adaptation. It is hard to create projects in this sphere. GoU has been undertaking capacity building for commercial banks e.g. Stanbic bank, Post bank, Centenary Finance are coming on board, however the sector needs a lot of capacity building. 	There is a general lack of capacity building for FIs in Uganda on green finance opportunities that will be tackled by the planned Adaptation Finance Academy (Component III). Gender inclusion will be crucial, not only for the selection of businesses but also throughout the support programs to involve women throughout all activities.
What are the lessons your organization has learnt from project implementation/ operation/etc?	 Climate smart agric, conservation agriculture these can get lost in translation. As they may not actually create the intended impact they were designed to create (regional variation). CSA needs to be implemented with local knowledge to ensure water efficiency Technical solutions to adaptation can be expensive and more needs to be done to bring affordable products to the market. Nature-based solutions are often the best option - more accessible and affordable Climate change adaptation solutions need to go hand in hand with nature-based solutions There is need for more technical and advisory services to implement climate adaptation initiatives that will deliver results Holistic support on CCA is required, especially in agro-sector (just planting drought-resistant crops is not adaptation) - expert advisory needed Be aware of mal-adaptation, e.g. planting eucalyptus trees Learnings are there but need to feed into implementation more 	For the scoring of enterprise applications, a holistic view on the adaptation products/ services offered by applicant SMEs needs to be taken as climate adaptation is a complex issue. The involvement of local adaptation experts in the final selection of enterprises for the support programs will be planned for (also to avoid maladaptation).
What opportunities does your	- The agricultural sector has seen a lot of programs but there is still a lot more that needs to be done.	- Dissemination of innovative climate adaptation practices for the agriculture and water sectors

organization/institution see in the climate adaption sphere in Uganda?	 Promotions of more climate smart technologies to farmers so they do not have to rely on nature for their agri-practices There needs to be a greater development of the renewable energy sector, especially from Ugandan based enterprises Circularity has yet to be introduced in Uganda and it can help in providing organic fertilizers (cheap affordable and help in ensuring plant growth). Charcoal briquettes to scale can help in reducing pressures on forested areas. The power of the private sector has yet to be fully implemented into development and adaptation work in Uganda Rising women participation in coffee-growing businesses who were historically excluded – but still in the nascent stages Support initiatives that help primary producers meet formalization and standardization and quality standards 	will be key to make sure they are taken up more widely in the country; There is evidence that women become more active in growing cash crops and running profitable businesses that sustains the project's focus on women-inclusive business support Access to markets is an important barrier and will be addressed by Component I – access-tomarket events and related activities
What recommendations would you have for implementing climate change adaptation projects in Uganda?	 There is a need for more technical advisory services to banks and SMEs to implement climate adaptation initiatives Governments struggle with providing disaster risk reduction services due to the heterogeneity in climate problems. SMEs can provide early warning solutions, floor protections, insurances, etc. that can ensure regional specific products and services. Private sector needs to be further developed especially in regions far away from urban centers as this is usually where the greatest vulnerability exists. Regional coordination platforms are essential as they can help steer efforts 	 Outreach campaigns for enterprise support programs need to be designed in a way that they also reach SMEs located in remote areas of the country (e.g. plan for local road shows, radio podcasts) The results sustained the holistic approach taken by the project, targeting SMEs and the financial sector jointly and facilitating a national dialogue.
What are your experiences in working with local banks on climate change-related issues?	 A variety of tools and methodology has been developed but, the banks do not have the time and capacity to properly spend energy on climate change activities. There is need to work with banks to ensure the processes and tools can be implemented. It is important to organize farmers in cooperatives to ensure access to finance 	 The adaptation finance academy will be designed in a way to provide hands-on support and advisory for banks on how to implement climate adaptation financing instead of providing rather theoretical knowledge. The academy will furthermore take strides towards the institutionalization of climate change considerations in the banks.

2.2 Interview Results - Vulnerable Groups Uganda

Red Cross - Food and livelihoods program

- Which challenges are women in Kenya / Uganda facing in starting and growing their own business?
 - o Limited food security and livelihood interventions in communities
 - Refugees in western Nile region have limed interventions and face significant additional burdens
 - Lack of food storage facilities, post-harvest handling techniques
 - o Low literacy rates reducing the complexity within jargon in trainings
- Which specific challenges with regard to access to finance are women in Kenya / Uganda facing?
 - Due to livelihood avenues despite financial stimulus from donors, there is limited capacity for individuals to borrow and save within their programs.
- Which specific challenges with regard to access to capacity building are women in Kenya / Uganda facing?
 - Limited literacy rates
 - Lack of market linkages for agricultural produce, limited storage facilities.
 - There is the occurrence of double dipping (when single member or group benefit from interventions thus denying opportunities to other groups.

Red Cross - Climate action and environment

- Which challenges are women in Kenya / Uganda facing in starting and growing their own business?
 - o Conflict in dryland areas affects women disproportionally more.
 - Large influx of refugees increases the prices of commodities, price shifts also generally affect women more than men.
 - Flooding can restrict women's ability to invest in new businesses, especially agriculturedependent households.
- Which specific challenges with regard to access to capacity building are women in Kenya / Uganda facing?
 - o Interventions supporting women are hard to sustain due to limited resources and interventions that worked have not been replicated.
 - There is a need for capacity building on the entrepreneurial mindsets, business models should be replicated when successful.

Uganda Women Entrepreneurs Association

- Which challenges are women in Kenya / Uganda facing in starting and growing their own business?
 - Lack of basic financial literacy
 - Business is normally not competitive enough, they need basic training to be prepared on best practices, how to provide quality products and services, and investment strategies.
- Which specific challenges with regard to access to finance are women in Kenya / Uganda facing?
 - cultural and customary laws generally bar women from attaining back accounts and other financial services.
 - There is a lack of accounting system and processes so the financials support should include technical support on how to manage finances and documents
- Which specific challenges with regard to access to capacity building are women in Kenya / Uganda facing?
 - There is a need for professional support on business operations, financial organizations and tax related issues

Mukisa Mpewo Farmers Field School Group

- Which challenges are women in Kenya / Uganda facing in starting and growing their own business?
 - limited training on how to operationalise cash crops and sustainable larger scale farming practices
 - Changing famers mindset in terms of production practices is hard and quite limited as they
 want to stick to cultural practices (type of crop/livestock and their method of production).
- Which specific challenges with regard to access to finance are women in Kenya / Uganda facing?

 Farmers struggle with manging their finances due to high living expenses and fluctuations in prices for crops.

Buzzoba Farmers Field School

- Which challenges are women in Kenya / Uganda facing in starting and growing their own business?
 - They have challenges managing droughts of crops due to limited water capture, storage and harvest technologies.
 - Limited post-harvest storage facilities
 - Limited trainings on land management, soil consecration, alternative seed varieties
 - Limited and poor-quality weather forecast services
- Which specific challenges with regard to access to finance are women in Kenya / Uganda facing?
 - o Small and unstable capital available from sale of crops
 - Borrowing is common in groups but limited returns on loans
 - o Low available savings in groups (chamma, sacco, etc)

Key learnings and insights for project design

- Local vulnerabilities reported through stakeholder consultations have been taken up for the design of the Climate Risk and Adaptation SME Solutions Matrix
- Adaptation markets are extremely broad and thus the project recognizes the importance of interdisciplinary and fluid selection criteria for enterprises to ensure all relevant enterprise are selected.
- Smallholder farmers in East Africa mostly lack information on climate adaptation practices and good quality weather data. They often do not have access to phones and hardware to access data and information and if hardware is available, information is often provided not provided in local languages. SMEs can play a key role to connect "last mile" smallholder farmers with markets and good quality data and information.
- SMEs are at the forefront of providing adaptation solutions/ technologies to farmers (e.g. drip/solar irrigation). However, smallholder farmers' biggest barrier are investment costs to take up climate-smart agriculture measures as for them it is all about subsistence.
- The catalytic financing facility will help SMEs grow their outreach to remote communities for the provision of targeted adaptation products and services. The project will pay specific attention to SMEs operating in remote areas and selection criteria has been adjusted accordingly.

2.3 Adaptation SME Interview Results - Uganda

HAMWE ENTERPRISE- 16th May 2022

This agricultural focused enterprise and has the goal to work with last mile farmers. They deal with the digitization of agricultural sector through information services, data collection, mobile payments, and apps. The enterprise creates simple and effective app solutions that level the playing field for small holder farmers, giving them equal access to technologies and providing them with the capabilities to take advantage of the new mobile economy. However, despite their successes they noted challenges to:

- Attaining accurate information on weather and connection to agricultural producers
- Technology knowledge and access is limited for small holder farmers

The farmers noted that there needs to be more products and services made available and affordable for these smallholder farmers. They argue that this would dramatically improve the climate resilience of small holders as they are most often the ones being overlooked.

EAST AFRICA MARINE- 12th May 2022

This organization focuses on water-based transportation with the aim of building vessels that will use less fuel and thus have energy efficiency and protection of the environment. There primary challenges relate to their relationship with the government that tends to restrict or slow the progress of project implementation.

BARBETS DAVIDS FARMS- 19TH May 2022

The enterprise is concerned with land restoration and holistic livestock management in lake Mburo region by implementing regenerating and disease management practices such as intensive rotational grazing to allow pastures to regenerate and stop bush clearing. According to this organization the main progress challenges it has faced are:

- The main cattle breed they have in Uganda are not favorable for meat harvesting (low financial gain and higher vulnerability).
- Government interventions with diseases have not been sufficient to enable for better cattle rearing potentials.

According to their CEO, there is a need for a development partner to support the training and capacity building in land restoration practices. Likewise, grant money is necessary to expand their outreach and intervention programs to ensure more farmers can learn proper management and resilience practices.

BHUNDU BASE LIMITED- 19th May 2022

This enterprise operations Sustainable tourism space, offering walks and cycling safaris withing rural communities and promoting other economic activities like beekeeping to create alternative income for local families Production of cooking briquettes from lantana Kamara, an invasive weed in the area.

<u>Products struggle to attain market entry</u>: due to high price, lack of awareness, cheap undesirable alternatives MSMEs struggle to fully develop markets and reach fast growth potentials. All enterprise involved noted that due to these three factors they struggled to rapidly grow. Likewise, the production and development of such products is also limited in terms of their production due to taxes and other regulations that restrict enterprises from providing these products at lower prices.

Key learnings and insights for project design

The project has ensured that it shall provide technical trainings to enterprises selected including adaptation/ technical experts to provide specific inputs. This technical component will also be supported by toolkits that will aid in the facilitation of workshops or specific tailored support.

Opportunities lay in access to finance, tailored trainings, expert guidance: Despite the challenges of selling and getting the product to the market, one of the main solutions enterprises noted that could improve their performance was attaining technical trainings and expert guidance on specific issues such as supply chain management, market analysis and access,

Key learnings and insights for project design

In addition to the point on specified tools, this project will likewise include the involvement of industry experts and business development support experts that will directly support the enterprise development journey. This will be complimented by tools that will directly train enterprises on making adaptation work. These tools will be designed to support experts' actions, responses and provide guidelines on how entrepreneurship can effectively and efficiently contribute to adaptation efforts.

Financial planning within the project has seen the involvement of innovative performance-based financing. This program recognized the need to create "additional de-risking and incentivising components may be built in as needed to further tackle investment-related challenges (e.g. using AF grant funds to value collateral for an SME to fulfil this prerequisite for the loan agreement).

2.4 Financial institutions stakeholder consultations – Uganda

Survey conducted with selected FIs in Uganda (see list under 2.) in the frame of the Green Finance Academy Uganda, implemented in March 2022, conducted within the Uganda Green Enterprise Finance Accelerator (UGEFA) – an EU-funded project with the aim to facilitate funding between local commercial banks and green SMEs in Uganda (managed by adelphi & Finding XY. The following insights from the workshop and survey have been taken up for this concept note as part of the stakeholder consultations:

What is the main challenge of the banking sector to deploy green finance?

- Ugandan FIs struggle most with complex nature of green business models and the lack of respective appraisal processes.
- There is a substantial lack of pipeline of bankable green business models

- The banking sector overall has a low awareness or interest in financing green SMEs as they are considered high-risk and complex in nature.

Which features do you regard to be most impactful to finance green SMEs?

 The features mentioned with highest priority (in the order of occurrence): Capacity building for green SMEs; Guarantees; Partial Repayment Grants; Concessional Loans and Technical Assistance to Banks

Which green sectors do you see as most promising?

- Sectors mentioned with highest priority (in order of occurrence): Energy, agriculture, manufacturing, waste management.

Key learnings and insights for project design

- The consultations with Ugandan FIs showed that capacity building of SMEs is key for them to become finance ready and apply for commercial funding sources. Thus, finance-readiness will be an integral part of the enterprise support scheme proposed by the project
- Bridging the gap between the financial sector and adaptation SMEs will be key for FIs to raise knowledge and understanding of adaptation business models as a bankable business opportunity while it will also help SMEs to better understand the specific requirements to access green finance. Against this background, the project will initiate a dialogue between these stakeholders to foster mutual understanding and cooperation through 1) an early-on involvement of FIs in the set-up of the catalytic financing facility (Component II); 2) national and regional dialogues in the frame of the Regional Coordination Platform (Component I); 3) targeted capacity building and strategy advice to FIs in the frame of the Adaptation Finance Academy (Component III)