Plan Vivo Project Idea Note (PIN)

TreeKenya

Mr John Macharia, Country Coordinator, SCOPE Kenya explaining the benefits of a Moringa tree

Prepared for: Plan Vivo Standard Accreditation

Coordinating, Lead & Managing Partner: Keystone Legacy LTD

Country (Kenya) Manager: SCOPE Kenya

Local Implementing Partners (LIPs) in Kenya:

CREPP**,** Katoloni Mission CBO**,** Manor House Agriculture Centre**,** RODI Kenya**,** RIDEP **and** SMART

Submitted: June 2020

EXECUTIVE SUMMARY

TreeKenya

Programme Location(s)- Country/Region/District	TreeKenya is located in Kenya with several sites spread across different counties throughout the country. In collaboration with our local implementing partners the locations are fully operational in the following counties: CENTRAL KENYA REGION (RODI), SOUTHERN KENYA (KATOLONI) EASTERN KENYA (RIDEP) WESTERN KENYA (CREPP, MANOR HOUSE & SMART)
Programme Coordinator and Contact Details	Julian Pycraft, Chairman Edward Pycraft, Managing Director Keystone Legacy Limited 211 Munster Road, Fulham, London, SW6 6BX, United Kingdom. Email: info@keystonelegacy.com Telephone: (+44) 0203 903 6517
Summary of Proposed Activities	An organic cooperative, gender equitable, community-based, carbon mitigation scheme aimed at reducing environmental degradation and facilitating the regeneration of the land, while diversifying and increasing income and food security for rural farmers through value-added medicinal & superfood produce. Activities include small-scale, farmer & school-led, forestry and agroforestry projects to reduce pressure on natural resources in the countryside, national parks and forest reserves.
Summary of Proposed Target Groups	The proposed target groups are rural small-holder farmers and especially women, schools and local communities that face many problems including; gender inequity, inadequate skills and knowledge in agroecology, declining soil fertility, decline in crop productivity, desertification, high incidence of pests and diseases, locust plagues, low diversification of agricultural enterprises at the farm level and low access to affordable and friendly credit.

LIST OF ABBREVIATIONS

BOMS – BOARDS OF MANAGEMENT

BOT – BOARD OF TRUSTEES

BVAT - BIOVISION AFRICA TRUST

CBO – COMMUNITY BASED ORGANISATION

CDF – COMMUNITY DEVELOPMENT FACILITATORS

CEO – CHIEF EXECUTIVE OFFICER

CM – COUNTRY MANAGER

COSALO - CCOMMUNITY SAVING AND LOANING APPROACH

CREPP (LIP) – COMMUNITY REHABILITATION AND ENVIRONMENTAL PROTECTION

DO – DIVISION OFFICE

GDP – GROSS DOMESTIC PRODUCT

KALRO - KENYA AGRICULTURAL, LIVESTOCK AND RESEARCH ORGANISATION

KATOLONI (LIP) - KATOLONI MISSION C.B.O

KFS - KENYA FORESTRY SERVICE

LIPS – LOCAL IMPLEMENTING PARTNERS

MHAC (LIP) - MANOR HOUSE AGRICULTURAL CENTRE

MOA - MINISTRY OF AGRICULTURE

MOU – MEMORANDUM OF UNDERSTANDING

MOW - MINISTRY OF WATER

NDC – INTENDED REDUCTIONS IN GREENHOUSE GAS EMISSIONS UNDER THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC).

NEMA - NATIONAL ENVIRONMENT AND MANAGEMENT AUTHORITY

NGOS – NON-GOVERNMENTAL ORGANISATION

PELUM KENYA – PARTICIPATORY ECOLOGICAL LAND USE MANAGEMENT ASSOCIATION

PEN - POVERTY ERADICATION NETWORK

PES – PAYMENTS FOR ECOSYSTEM SERVICES

RIDEP (LIP) - RURAL INITIATIVES DEVELOPMENT PROGRAMME

RODI (LIP) - RESOURCES ORIENTED DEVELOPMENT INITIATIVES

SCOPE KENYA (CM) - SCHOOLS AND COLLEGES PERMACULTURE PROGRAMME

SDGS – SUSTAINABLE DEVELOPMENT GOALS

SMART (LIP) - SUSTAINABLE MOBILIZATION OF AGRICULTURAL RESOURCE TECHNOLOGIES INITIATIVE

TOT – TRAINING OF TRAINERS

VSLAS - VILLAGE SAVINGS AND LOANS ASSOCIATIONS

A. PROGRAMME AIMS AND OBJECTIVES

A1 Describe the programme's aims and objectives and the problem(s) the programme will address.

TreeKenya has been designed as an organic cooperative, gender-equitable community-based, carbon mitigation scheme in Kenya. The aim is to integrate climate change mitigation, poverty alleviation and biodiversity enhancement. It envisions that the most significant change can be achieved through land regeneration on small-scale farmer and school-led, forestry and agroforestry projects. The programme will become financially sustainable through long-term, verifiable voluntary carbon credits and farmer offtake agreements where the high yielding indigenous and naturalised tree harvests supply value-addition cosmetic, superfood and medicinal products sold worldwide.

Climate change has been identified as the defining human development issue of our time. While often viewed as a purely scientific and technical phenomenon, climate change is in fact a social, economic and political phenomenon with profound implications for social justice and gender equality. In the early months of 2020, a swarm of desert locusts invaded some of the East African countries, Kenya being among the countries affected by the invasion. This plague was caused by the Indian Ocean heating above 27 C, creating cyclones in the Arabian Peninsula and a prefect breeding ground for locusts. Much of the agricultural produce was fed on by the swam of the desert locusts further putting a strain to an already resources constrained smallholder farmer.

For the activities to be successful, the programme must sensitise genders working together, by encouraging the distribution and sharing of resources and responsibilities. A commitment to achieving equality of opportunity starts with recognising the important contributions women as decision-makers, educators and stakeholders can make towards successful long-term climate solutions.

The programme activities are aligned with Kenya's Government policy of achieving 10% forest cover in all farmlands, where afforestation and agroforestry were the preferred climate mitigation actions (National Climate Change Action Plan 2018 – 2022). Moreover, it supports Kenya's Big Four Agenda on food security and health for the country.

The programme design will follow the UN Sustainable Development Goals (SDGs) framework, particularly SDG 15 Life on Land, SDG 13 Climate Action, SDG 11 Sustainable Cities & Communities and SDG 5 Gender Equality.

A1.1 Ultimate goal and objectives

TreeKenya's ultimate goal is to combat poverty, gender inequity, climate change, food insecurity and biodiversity losses by converting degraded land into productive, income generating, biodiversity-rich food, medicinal & nutritional forests.

To achieve the shared goal, the objectives of the programme are:

a) Gender equity

b) Reducing pressure on natural resources in protected areas while contributing to environmental conservation and climate change mitigation

c) Improving food security among rural communities in Kenya

d) Diversifying and increasing incomes for poor, rural small-scale farmers and schools through increased productivity and high value tree harvest revenues

e) Building effective institutions that contribute to social cohesion and reduction of corruption

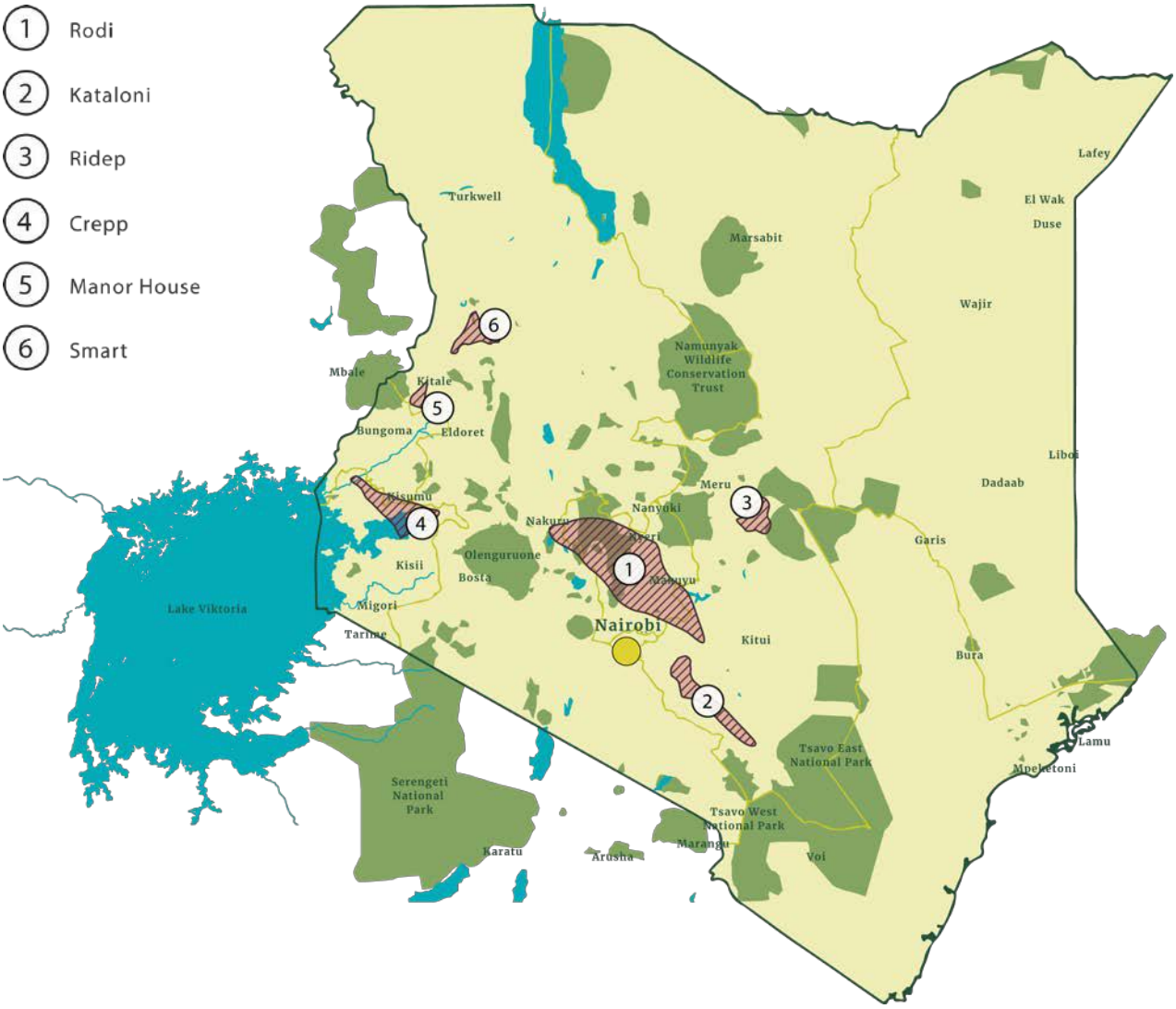
f) Reducing CO2 emissions by planting trees and by implementing agro-ecological practices

g) Creating value add from enabling communities to establish efficient sustainable organic nurseries.

h) Growing the seeds to seedlings to trees. Harvesting the trees. Turning the harvest into a high value organic food, health and medicinal brand sold in the local & global market.

A Community Information Officer tending to a tree nursery for one of the groups he educates on land regeneration activities in Makueni County.

B. PROPOSED PROGRAMME AREA



B1 Description of Programme Locations

In January & February 2020, Keystone Legacy visited 6 member organisations of SCOPE Kenya, a network of NGO's supporting permaculture in schools. This field trip was instrumental in helping us identify the Programme's Local Implementing Partners (LIPs), while mapping out the locations and developing an overall programme design.

All the communities visited faced similar challenges over providing sufficient food to their ever-increasing population. The shortages of food are attributed to socio-economic and environmental factors, declining soil fertility, low

productivity, high prevalence to diseases & emerging pests, rapid population growth and climate change among others.

Today's unpredictable, extreme weather variations are rapidly increasing the vulnerability of the small-scale farmers, schools and the community members whose livelihoods depend on agriculture in Kenya. The need to enhance resilience of all these communities is growing and one of the most realistic approaches is to support agroforestry and afforestation adopted by the targeted communities through multi-stakeholder forums with like-minded organisations and institutions.

TreeKenya is managed as a centralised programme located across several sites in different parts of the country broken down by region:

- CENTRAL KENYA (RODI),
- SOUTHERN KENYA (KATOLONI)
- EASTERN KENYA (RIDEP)
- WESTERN KENYA (CREPP, MANOR HOUSE & SMART)

Our ambition is to work across all the regions in the lifetime of the programme, so we have registered all the regions/LIPs at the PIN stage. We recognize that this would be ambitious at the PDD and implementation stage, so after agreeing on a selection criteria for the best performing organisations, the TreeKenya Team chose a 2 phased approach over a 2 to 3 year window.

Phase 1 (Year 1) – 3 organisations
KATOLONI
RODI
CREPP

Phase 2 (Year 3)– 3 organisations
MANOR HOUSE
RIDEP
SMART

B1.1 Central Kenya

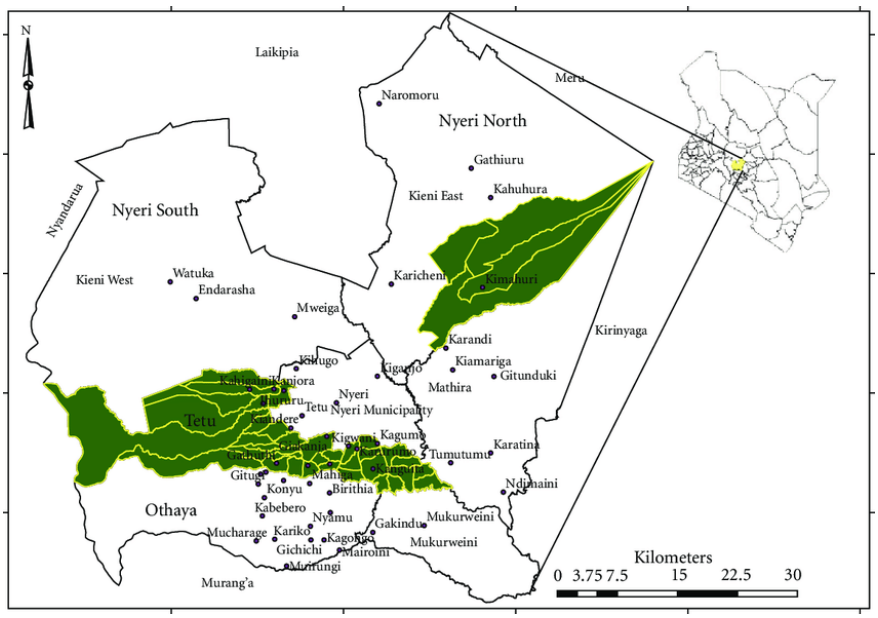
RODI – Kiambu, Machakos, Nakuru & Nyeri Counties

Kiambu is located East of Ruiru, South of Gatundu, West of Thika sub-counties and North of Machakos County covering a total area of 59.50 Km^2 with a population of 156,041 persons according to 2019 census report.

Machakos is located on East of Kangundo, South of Masinga, North of Mwala and West of Kitui Central covering an area of 1,059 Km2 with a population of 147,582 persons according to 2019 census report.

Nakuru is located on the East of Narok, South of Gilgil and West of Kingop, North of Kajiado covering a total area of 1,685.4 Km2 with a population of 253,224 persons according to the 2019 census.

Kiambu Sub-counties, Kenya



Nyeri Sub-counties, Kenya

Nyeri is located on the East of Kieni West, South of Laikipia, West of Meru and North of Kirinyaga covering a total area of 1,378 Km2 with a population of 175,812 persons.

The programme will operate in the following districts Juja (Kiambu), Yatta (Machakos), Naivasha (Nakuru) and Kieni (Nyeri). The areas all have similar terrain and are semi-arid with rainfall averages of between 500 and 1000 mm per year.

Type of Habitat

Kiambu

Kiambu County is divided into four broad topographical (Upper Highland, Lower Highland, Upper Midland and Lower Midland) zones. The areas lie between 1,200 to 2,550 meters above sea level. The soils from high-level uplands, which are from volcanic rocks are very fertile. Here it is also very wet, steep and an important water catchment area. The soils in the midland zone are dissected and are easily eroded. Other physical features include steep slopes and valleys, which are unsuitable for cultivation. Lastly, the low fertility soils are mainly found in the middle zone and the eastern part of the county which form part of the semi-arid areas. The soils are sandy or clay and can support drought-resistant crops such as soya beans.

Kiambu Lowerlands, Kenya

Machakos

The local climate is semi-arid with hilly terrain with an altitude of 1000 to 1600 meters above sea level. The County experiences erratic and unpredictable rains of less than 500mm annually, with short rains in October through to December and the long rains in late March to May. Throughout the year, the temperature typically varies from 53°F to 81°F and is rarely below 49°F or above 85°F.

Nakuru

Nakuru lies 1850 meters above sea level and is situated in the highlands of Kenya giving it a climate similar, albeit a bit colder, to Nairobi. Like most rift valley cities, Nakuru enjoys a temperate climate throughout the year but temperatures fall significantly at night and during the cold season of June to August. You can liken the climate to a warm-summer Mediterranean climate.

Nyeri

Nyeri lies at an elevation at about 1,750 metres above sea level. It is situated in the Aberdare foothills with extensive green meadows and gardens. The foothills are covered by a dense eucalyptus forest and afford a magnificent view of Mount Kenya to the Northeast.

Land use

Kiambu

The soil fertility in the high-level uplands is conducive for keeping livestock and growing various cash and food crops

such as tea, coffee, horticultural products, vegetables, maize, beans, peas and potatoes. The soils in the midland zone are dissected and easily eroded. Other physical features include steep slopes and valleys, which are unsuitable for cultivation. With the steady rise of urbanization in Kenya and rapid expansion of the Nairobi metropolis, Kiambu has ceded much of its land to residential and office blocks due to its proximity to the city and related infrastructure.

Nakuru County

Machakos

Tourist related activities such as camping, hiking safaris, ecotourism and cultural tourism, dance and music festivals among many more are more excitingly done due to the hilly terrain. While much of the county is semi-arid, the Yatta Canal provides drinking, and to some extent irrigation, water for residents of the Yatta plateau. The programme site however relies more on permaculture methods for rain water harvesting and agriculture.

Nakuru

Crop farming without irrigation is virtually a wasteful endeavour yet charcoal is harvested in the ever reducing tree cover. Kiambu and Nakuru have seen a steady conversion of the already meagre areas under crop cultivation into residential further straining the natural environment. Nakuru is the home of the world-famous flamingos, and the project site is only 3 km to the only fresh water lake in the Great Rift Valley, Lake Naivasha, 15 km to the Longonot volcanic crator and 20 km to the Hell's Gate National Park, which is home to about 75% of Kenya's geothermal electricity production.

Nyeri

Much of the surrounding area is utilised for farming, and for coffee and tea which are important cash crops. A good fraction of the county falls under protected forest reserves of Mt. Kenya and the Aberdares. It is during a vacation in one of the resorts of the Aberdares, Treetops, that Queen Elizabeth became queen upon the death of her father King George.

Environmental degradation drivers:

The situation is aggravated by overgrazing by both local and pastoralist populations, which threatens the future of natural regeneration. These among other factors compound the economic hardship facing the local people who are worst hit when rains fail.

Designated areas:

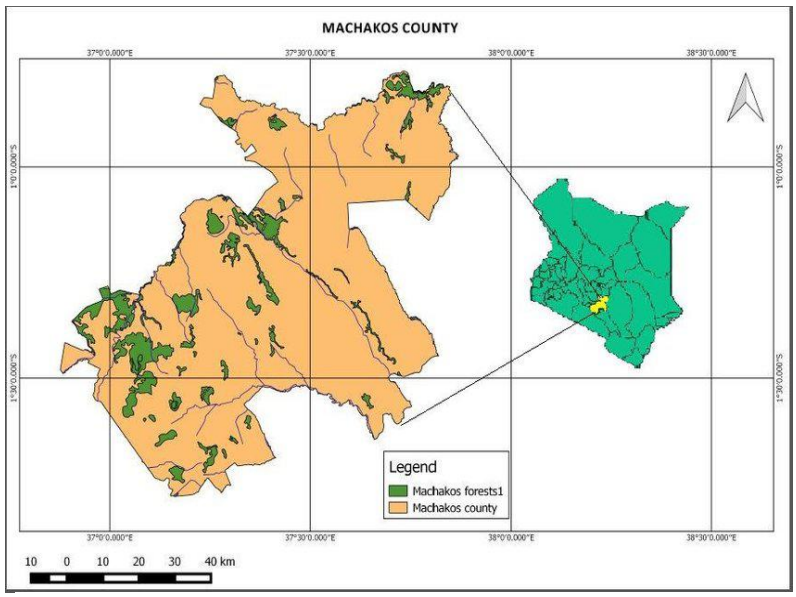
The Lake Naivasha National Park, Hell's Gate National Park and Longonot National Park all lie within 20 Km around the project area. Fifty Kilometers to the East run the Aberdares and about an hour's drive is Lake Nakuru national park.

B1.2 Southern Kenya

KATOLONI: Machakos and Makueni County

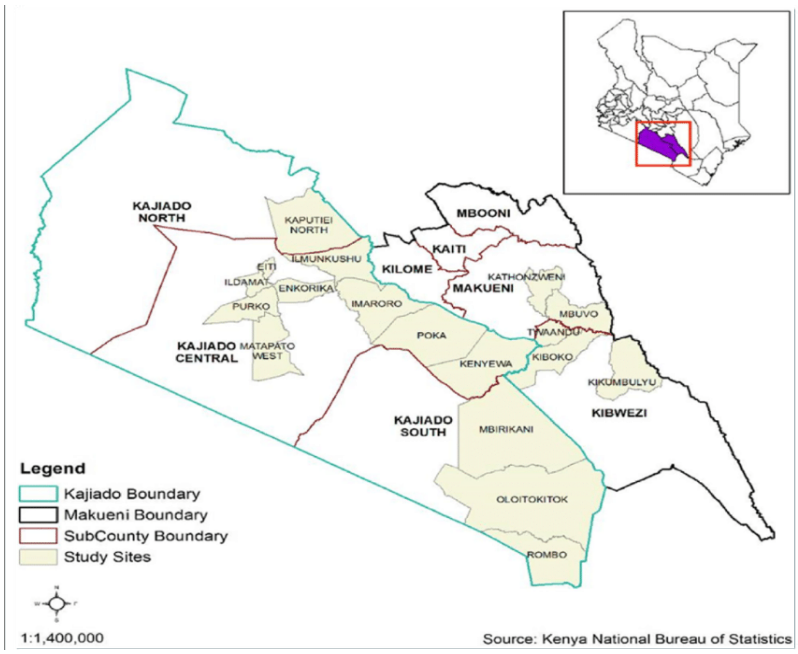
Machakos County is located 63km South East of Nairobi, and borders Kiambu county to the West, Embu County to the North, Kitui to the East, Makueni to the South, Kajiado to the South West, and Muranga and Kirinyaga to the North West.

Makueni County is located in the South Eastern part of Kenya and borders Kitui County to the East, Taita Taveta County to the South, Kajiado County to the West and Machakos County to the North.



Map of Machakos County and its geographical position in Kenya. The map shows the parts of the locations where the project will be implemented. Source: Research Gate.

Type of habitat



Map of Makueni County and its geographical position in Kenya. The map shows various locations where the project will be implemented. Source: Research Gate.

Machakos and Makueni counties are predominantly hilly places rich in natural resources such as sand, seasonal rivers, forest and stones. They are within the regions categorized as Arid to Semi-Arid Land (ASAL) due to their long spells of dry seasons throughout the year. Geologically, the two counties consist of Basement System which is part of the Mozambique Belt: a complex of metamorphic, igneous and sedimentary rocks. In a process of etching and stripping, which correlated with times of uplift and planation in Eastern Africa, a landscape of inselbergs surrounded by etch plains evolved. The inselbergs are

composed of relatively resistant granitoid gneisses, whereas the surrounding plains and uplands are composed of the relatively easily weatherable schists and gneisses. The counties have different types of soils which are red, clay and sandy soils. Their condition is infertile and acidic due to soil erosion, overuse of chemical fertilizer to increase soil fertility, poor farming methods, lack of cover crops among other factors. The climatic conditions are extreme due to climate change. Most of the months in the year are very hot and windy the temperature averaging 19.0 °C | 66.1 °F and rainfall of about 830mm in a year. The altitude is between 1,000-2,100 metres above the seas level.

Land use

Machakos and Makueni counties are among the counties that experience long dry spells throughout the year which leads to poor livelihoods, eroded infrastructure, low productivity, high migration of skilled men & women to urban centres, high population involved in unsustainable economy activities such as crop and livestock farming, social welfare reliance and growing, planting and sale of tree seedlings. Currently, the activities on the land are subsistence farming, livestock keeping, planting trees although much loss is incurred due to scanty rains and insufficient water to irrigate the crops of the trees. The land is under-utilized due to some of the factors aforementioned. Due to unpredictable varying seasons with the onset of climate change, felling off trees as sources of energy for domestic use and burning of trees to provide charcoal for sale as a source of income has led to further land degradation and soil erosion.

A member of Mutulani Poultry Self-Help Group tending to his pumpkin and local vegetables farm in Makueni County

Environmental degradation drivers:

Natural disasters, desertification, environmental pollution from charcoal burning, unsustainable use of natural resources like harvesting of sand are also some of the drivers and processes leading to further land use issues in the region.

Protected areas

None reported in the programme area.

B1.3 Eastern Kenya

RIDEP: Tharaka County

Tharaka Nithi County borders the counties of Embu to the South and South West, Meru to the North and North East, Kitui to the East and South East while sharing Mount Kenya with Kirinyiga and Nyeri to the West. The programme will be implemented in Tharaka South and Tharaka North Sub-Counties of Tharaka-Nithi County.

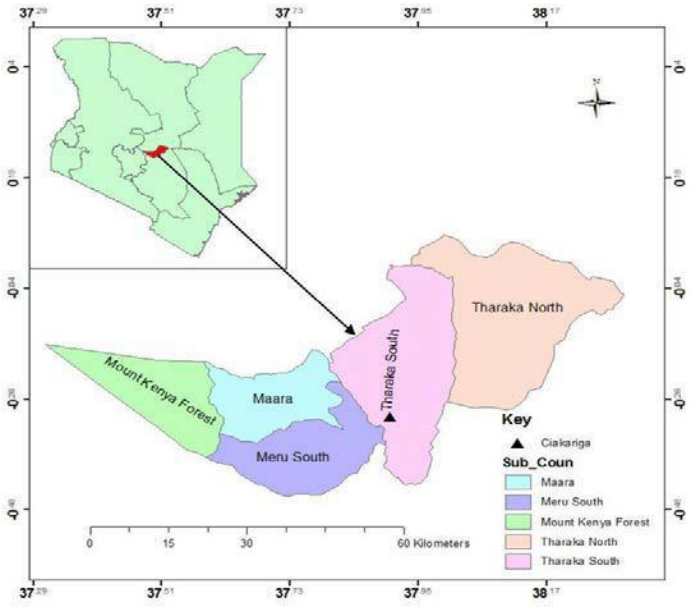


Figure: Map of Tharaka County and its geographical position in Kenya. The map shows the two subcounties where the project will be implemented. Source: Research Gate.

Type of Habitat

Tharaka-Nithi County has two main ecological conditions, which are influenced by climatic features. The County has a bi-modal rainfall pattern with the long rains falling during the months of April to June and the short rains in October to December. The short rains are more reliable than the long rains. The rainfall ranges from 2,200mm in Chogoria forest to 500mm in Tharaka. The high-altitude areas experience reliable rainfall while middle areas of the County receive medium amount. The lower regions of Tharaka North and Tharaka South Sub-Counties receive low, unreliable and poorly distributed rainfall and temperatures as high as 40°c at certain periods. Temperatures in the highland areas range between 14°c – 30°c while those of the lowland area range between 22°c to 36°c (GoK/ USAD/ DIntegrated Smart Survey, Tharaka Nithi County, Kenya, September 2016). The target programme area lies in the lower attitude and is classified as semi-arid. However, there are unusual climate variability within short distances arising from climate change and attributed to human activities. Most notable is the change in rainfall patterns with the once reliable long rains which were regular between April and June almost becoming non-existence and when experienced, they are short, unreliable and highly erratic. The altitude of the county ranges from 5200m on the peak of Mt Kenya to 500m in the lowlands of Tharaka (Tharaka-Nithi County Strategic Plan 2012-2017). The region comprises of low, hilly, stony and sandy marginal lowlands with moderate forest cover. Tharaka which is the target programme area is characterized by low laying undulating hills (mostly residual hills), poorly drained lowlands with clayey soils and sparse vegetation mostly acacia. However, in higher altitudes (Tunyai, Nkondi and Mukothima) the fertile soils support luxurious vegetation including several exotic tree species e.g. Eucalyptus and Gravellia.

A child planting crops in April 2020 on River Kathita riparian lands

The soils range from deep red loamy soils, well drained and fertile (classified as Nitisols by the FAO Classification) in the upper zones of Tunyai, Nkondi and Mukothima to sandy, highly weathered oxisols (bright red soils) and ferrasols (plinthite also known as murram soils). The most dominant soils in the programme area are vertisols (black cotton) soils which become heavy and difficult to cultivate during rainy season and hard when dry, often exhibiting wide cracks during the dry season. Most soils are of low fertility and most farmers lack knowledge especially in natural regeneration. This is further exacerbated by population pressure with encroachment being witnessed even in gazetted hills.

Both Tharaka Sub-Counties are traversed by several rivers, which originate from both Mt. Kenya and Nyambene Hills, flowing eastwards as tributaries of Tana River (the largest river in the country). These include Mutonga, Thingithu, Kathita, Thanantu, Thangatha, Kithino and Ura rivers which provide water for irrigation in the moderately densely populated locations in parts of Tharaka.

Land use

The key economic activities revolve around crop farming. According to 2009 National census, 98.2% of households in the county engage in crop farming (Tharaka-Nithi County Strategic Plan 2012-2017). Coffee, tea and horticultural crops are the major produce in high altitude areas while low altitude areas (which are targeted by the programme) are extensively dry and known for agro-pastoralism, rearing livestock such as indigenous cattle, goats, sheep and honey production. Millet, sorghum and cassava do well in the lowland areas as they are better adapted to the arid climatic conditions. Agroforestry is practiced by a few farmers especially in places where RIDEP Kenya operates, but often limited by unavailability of water, slow adoption, low farmer knowledge and declining soil fertility.

Poor methods of farming and soil conservation, charcoal burning and overgrazing have left the earth bare and rocky. The sloping areas have experienced uncontrolled soil erosion, which has resulted in deep gullies across the landscape especially in Tharaka. The drainage pattern consists of rivers and streams that ultimately drain into the Indian Ocean through Tana River.

Environmental degradation drivers

Widespread environmental degradation comes as a result of limited options for livelihoods including illegal felling of trees to make charcoal for sale, sand harvesting, encroachment of hilltops, cultivation on riparian land as well as illegal water abstraction that has not only led to the loss of important biodiversity, but has also contributed to the elements that contribute to climate change. The hilly terrain of the County leads to soil erosion and hence extensive environmental degradation.

Designated areas

The size of gazetted forests stands at 44,617 ha and 3,344 hectares for non-gazetted forests in Tharaka-Nithi County (Mt. Kenya is the largest gazetted forest). Major gazetted hills found in the target project area are Kijege and Ntugi hills in Tharaka South. However, Njuguni hills which are also gazeted, lie adjacent to the project area and also are a source of bloody tribal conflicts between Tharaka and Tigania communities.

B1.5 Western Kenya

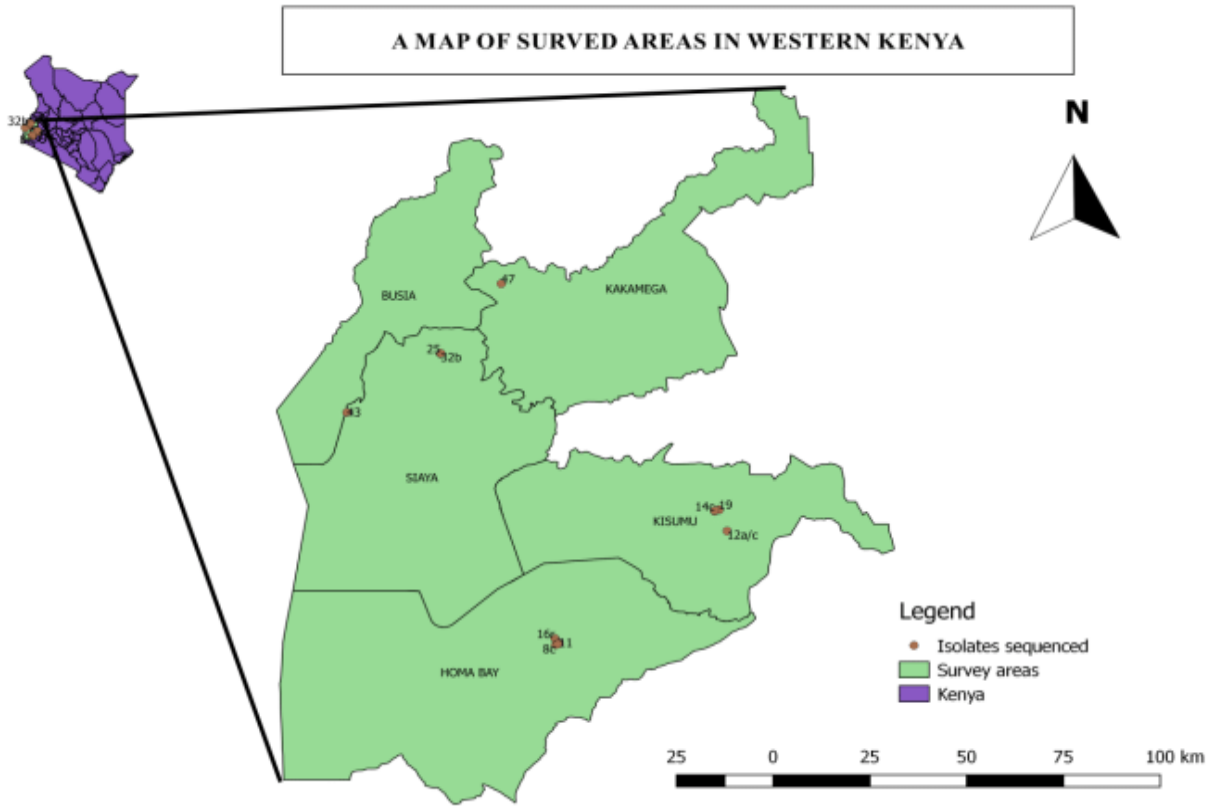


Figure : Map of Western Kenya with Kisumu and Homa Bay Counties and its geographical location in Kenya. Source: Research Gate.

CREPP: Kisumu & Homabay Counties

Kisumu County neighbours Siaya County to the West, Vihiga County to the North, Nandi County to the North East and Kericho County to the East. Its neighbour to the South is Nyamira County and Homa Bay County is to the South West. The county has a shoreline on Lake Victoria, occupying northern, western and a part of the southern shores of the Winam Gulf.

Homa Bay County is located in South Western Kenya along Lake Victoria where it borders Kisumu and Siaya counties to the North, Kisii and Nyamira counties to the East, Migori County to the South and Lake Victoria and the Republic of Uganda to the West. The county covers an area of 4,267.1 Km2 inclusive of the water surface which on its own covers an area of 1,227 km2.

Type of Habitats

Kisumu is set 24 kilometers (15 miles) south of the Equator and has moderate temperatures because of its elevation of 1130 meters above sea level. The days are always around 12 hours long and sunset is always between 1840h and

1900h. Kisumu features a tropical rainforest climate with no true dry season and significant rainfall year-round. January is the driest month while the month of April receives the most rainfall. The average temperature is 22.9 degrees Celsius.

Both Kisumu and Homabay Counties have highly fertile land and variations in temperature and rainfall with two rainy seasons per year across their region which provides a suitable environment for a broad range of agricultural crops. The geology of the area is composed of the old Nyanzian system forming exposed rocks in Ugunja Sub-county. These rocks include basalts, desites and rylites, that consist of coarse and fine aggregates used in the construction industry. The main soil type is ferrasols and its fertility ranges from moderate to low with most soils being unable to produce without the use of either organic, inorganic or in most cases both types of fertilizers. Most of these areas have underlying marram with poor moisture retention.

Land Use:

In Kisumu County, Nyando Sub County, the targeted ward, is within the Nyando catchment basin which is dominantly occupied by small scale subsistence farmer. Activities carried out on the upper area of the catchment, ward include agroforestry and subsistence farming of food crops (e.g. maize, cassava, sorghum, potatoes) and cash crops (mostly sugarcane) and dairy farming of improved goats. This area has suffered extensive deforestation in the past to create room for human settlement and farming, mostly without regard to best land use management practices, putting severe environmental strain on the lower catchment, including Nyando Wetland. On the lowlands within the Kano Plains, large-scale sugarcane plantations, rain-fed food crops and rice production, as well as cattle grazing are common.

In Homabay County, Karachuonyo North Sub County, the main Agricultural activities carried out are fishing, maize, cassava and millet production. The area has suffered from sand harvesting which has led to land degradation in most parts of the area. There has been a lot of deforestation as a result of charcoal burning, population pressure to cater for increasing human settlement human settlement.

Environmental degradation:

Quarrying in the region is leaving the land degraded and extensive pieces of land bare, caused by the population harvesting stones and marram to cater for the increasing population.

Designated areas:

In the two target counties there are a few legally designated areas, which include gazetted forests and wetlands where conservation of natural resources needs to be met but this will involve seeking partnership with the institutions that are in charge of these areas and with communities around them so that they can be the custodians of these conservation areas.

MANOR HOUSE: Trans-Nzoia County

Situated within the boundaries of the former Rift Valley Province of Kenya, Tranz-Nzoia covers an area of 2,495.6km^2. It lies on the western side of Mount Elgon 380km north west of Nairobi. It is the most North Western county in Kenya that is bordered by Uganda to the West. The county also borders neighbouring counties such as Bungoma to the West, Uasin Gishu and Kakamega to the South, Elgeyo Marakwet to the East, West Pokot to the North.

Figure: Map of Trans-Nzoia County's geographical position in Kenya. Source: Research Gate.

Type of habitat

Trans Nzoia County is generally flat with gentle undulations rising steadily towards Cherangany Hills in the east and Mt. Elgon in the northwest with an altitude of 4,313 metres above the sea level. Mt. Elgon is the second highest mountain in Kenya. The County is well endowed with forest resources which are mainly found on the two water towers namely Mt Elgon and Cherangany hills. These forest (natural and planted) together with on farm trees constitute 17% of County tree cover and play very important ecological as well as economic function. The forests on the two water towers are catchment areas for main rivers in the region which include R. Nzoia and Suam (Turkwel). They are also habitat for wildlife and biodiversity which is Kenya's main tourist attraction.

Trans Nzoia County has a cool and temperate climate with mean maximum (day time) temperatures ranging between 23.40°C and 28.40°C and mean minimum (night time) temperatures ranging between 11°C and 13.5°C. The County receives annual rainfall ranging from 1000mm to 1700mm. The soil in Trans-Nzoia is mainly acidic due to constant monocropping of maize and use of synthetic fertilizer. Most of the farmers tested their soils and their PH is under 5.0.

Land use

Biodiversity rich areas in the County are found in the forest especially the Mt. Elgon area, river banks, forest, Cherangany hills, National parks and wetlands. These include plants, animals and aquatic resources. Biodiversity is important sources of food, income and provide environmental services in the County.

Environmental Degradation

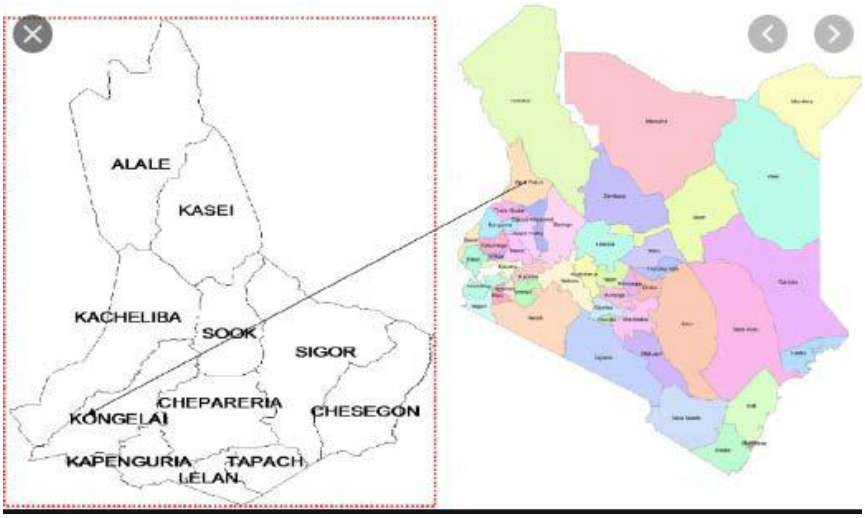
The contributors of environmental degradation in the County include: encroachment on fragile ecosystems, poor agricultural practices, climate change effects, over abstraction of natural resources including sand harvesting and timber logging. Unsanitary solid waste disposal especially Machinjoni open dump site, dilapidated sewerage treatment works, open dumping in wetlands, forests and open spaces. Deforestation is on the increase due to population pressure on forest products for construction and trade, increased demand on land for cultivation and settlement, natural calamities like fires, pest and diseases and urbanization.

Figure: Map of Trans-Nzoia sub counties Research Gate.

Designated Areas

No areas that fall within the proposed programme land.

SMART: West Pokot County



Map of West Pokot showing admirative areas. The project areas are Chepareria and Chesegon divisions

West Pokot is situated in the former rift valley province and neighbors the counties of Turkana to the North, Baringo County to the East, Elgeyo Marakwet County to the South East, Trans--Nzoia County to the South and Republic of Uganda to the West.

Type of habitat

The county is characterised by a variety of topographic features. On the northern and north eastern parts are the dry plains, with an altitude of less than 900m above sea level. On the south-eastern part are Cherangany Hills at an altitude of 3,370m above sea level. Landscapes associated within this range of altitude include spectacular escarpments of more than 700m high. The high-altitude areas have big agricultural potential while medium altitude areas lie between 1,500 m and 2,100 m above sea level and receive low rainfall in addition to being predominantly pastoral land. The low altitude areas are prone to soil erosion due to flash floods. The vegetation is steppe-like, dominated by grasslands with scattered native and exotic tree species. Common tree species include Acacia spp, Balinites aegyptiaca, kigelia Africana and Terminalia brownii while exotic tree species are Croton spp, Ficus spp, Grevillea robusta, tamarinda indica,flocotea indica (tingas) and Azadirachica indica.

The main rivers in the county are Suam, Kerio, Weiwei and Muruny. Cherangani Hills are the main source of Muruny and Weiwei rivers, while Mt Elgon is the main source of river Suam. The county has a bimodal type of rainfall. The long rains fall between April and August while the short rains fall between October and February.

Chepareria

The altitude ranges between 1200 to 1600 meters above sea level with annual average rainfall of 600 mm. The temperature varies with altitude and ranges between 24 to 30 degrees Celcius. Chepareria is highly a metamorphic bedrock area, highly rich in ferromagnesium minerals. It is from this bedrock that rocky, moderately shallow and well drained soils have developed. While the soils vary significantly in the sub County, the lower altitude and more semi arid areas of Chepareria generally have fragile infertile soils.

Chesegon

The altitude is 700 meyers above sea level with average annual rainfall of 700 mm. The temperatures in Central Pokot are 30 degrees Celsius and above. The low altitude areas are prone to soil erosion due to flash floods. The soil conditions are sandy loam, sandy clay and black cotton and are generally fragile with a lot of infertility. They are highly degraded and the top soils have been truncated by sheet erosion, so much so, that the B horizon is exposed and forms a hard-sealed surface.

Land use

Agriculture still remains the most important livelihood strategy and is still based on a combination of agriculture and livestock keeping with more than 80% of the population engaging in farming and related activities. However, due to increased urbanization and a growing demand for meat, the mobility of livestock is reduced and the management of livestock shifting towards more sedentary animal husbandry rather than pure pastoralism. With climate change, population development and economic development, land is increasingly being demarcated into small parcels which are owned and utilized by individual farmers and agro-pastoralists. Some of the main crops grown include maize, a staple ingredient grown mainly in West Pokot Sub-County, as well as finger millet, cassava, coffee, beans, onions, sweet potatoes, green grams, peas, mangoes, oranges, bananas, potatoes and pyrethrum. The latter two are mainly grown in South Pokot sub-County. In Pokot Central and North sub-counties, zebu indicine cattle have long been kept

for meat production while in West Pokot and Pokot South sub-counties dairy breeds, primarily Ayrshire and Friesian, are increasingly kept for milk production.

Main drivers of degradation:

Overgrazing, charcoal burning and poor agricultural practices have been the major drivers of deforestation and soil erosion. This has led to degradation of most of the land. In the lower fertile agricultural areas, there has been increased subdivision of the land for cultivation and also for settlements hence putting a lot of pressure on the land.

Designated areas:

The main forests in the county are found in Cherangani Hills. The gazetted forest, which forms part of the Cherangani Hills in Lelan, covers an area of 20,857 ha. The un-gazetted forest covers 15,719 ha and consists of rain forests blocks scattered all over the county. These are natural forests dominated by tree species like cedar (Juniperous procera) and bamboo (Aredinaria alpina). Plantation forests cover an area of 662 ha of which approximately 34 ha are indigenous and the rest exotic. The Gazetted areas are adjacent to the project.

B2 Description of Socio-Economic Context

According to the National Climate Change Plan of 2018 to 2022, the agricultural sector employs more than 40% of the total population and more than 70% of Kenya's rural people. The sector is key to Kenya's economy, contributing 26% of the Gross Domestic Product (GDP) and another 27% of GDP indirectly through linkages with other sectors. Agriculture includes the cultivation of crops, livestock, and fisheries, providing the means of livelihood for the majority of the rural population. Its role is pivotal for the rural economy and according to the Agricultural Sector Development Strategy 2010-2020, growth in the national economy has historically been highly correlated with growth in the agricultural sector, (NCCAP 2018-2022: Mitigation Technical Analysis Report).

The agricultural sector was one of the first to be fully devolved to the county governments, underscoring the importance of County Governments' role in ensuring food and nutrition security. A priority of the national government, as it addresses one of the 'Big Four Agenda' priority sectors, food security.

The agricultural sector at present consists almost entirely of traditional smallholder farms. Consumers in the counties have long been accustomed to depending on purchasing vegetables and other staples, in spite of the fact that these food crops can be readily grown on their lands. The main constraints to increased production reported by farmers are related to a lack of capital for seeds, technical knowledge on the better farming tools & technologies, water harvesting and storage technologies, land regeneration methods and fertilizer & pest control strategies.

All of the LIPs included are members of SCOPE Kenya (Country Manager) and actively practice permaculture in schools. Outside of this, there is varying support from the Ministry of Agriculture on developing business & value chains and Kenya Forest Service on seed supply & training groups on tree planting.

The local government organizational structures are set-up in accordance with the constitution of Kenya which was promulgated on August 27th, 2010. The smallest unit is governed by Sub-Area leader (not salaried) who reports to a sub-Chief in charge of Sub-Location (salaried by the government), then an area Chief in charge of a Location (salaried by the government), next is a Division Office (DO) in charge of a Division, then a Sub-County Commissioner in charge of a Sub-County, followed by a County Commissioner who is in charge of a County administratively through the National Government, then a County Governor who is elected to lead a County politically and finally the President of the republic of Kenya.

B2.1 Central Kenya

RODI:

Average income & main types of income:

A herd of warthogs grazes on the lush grass of Hell's Gate National Park.

The participating population is mainly small-holding in nature with some growing high value crops like moringa, neem and vegetables for income. A few of the groups keep domestic animals for milk and as a reserve when emergencies like sickness strike or when they need school fees for their children. Nakuru boasts a wide variety of tourist attractions ranging from the flamingos in Lake Nakuru National Park to the water sports on Lake Naivasha , the mountain climbing on Longonot and the Fisher's Tower in Hell's Gate National Park. These provide some seasonal income to the locals who play tour guides and occasional hosts to eco-cultural tourists. The fresh water Lake Naivasha also provides another source of income to fishermen around the lake. Majority though eke out a living working on the flower farms around Lake Naivasha which is home to some of the largest fresh flower producers in the World.

Local & national governance structures

There is sufficient local network of farmers, local churches as well as a county government department dedicated to enhancing the growth of local leadership and related coordination. Majority of farmers are member of a local self-help group with its own leadership structure. These members in turn are active members of a local church and their self-help group is registered by the department of social services and cooperative development.

B2.2 Southern Kenya

KATOLONI:

Average income & main types of income:

Machakos and Makueni remain low-income counties and according to a 2019 Census report, 59.6% and 64.1% respectively were under the national poverty line of US$1 per day. Rapid economic growth is therefore a high priority for the counties, humanitarian organizations, and the government.

Kitchen garden for Agro-Tech Self-Help Group in Machakos (maize, pawpaw, bananas, pumpkin, avocado)

According to a Group Mapping Report (2017) for Makueni and Machakos counties, over 60% of the groups were involved in productive economic activities such as table banking, crop & livestock farming, and the rest in social welfare activities. This report further revealed that the major challenges facing the groups were inadequate training on agri-business including livestock & crop farming, inadequate markets for the farm produce, lack of managerial skills and information.

The main sources of income in the area derives from growing cowpeas, sweet potatoes, maize and beans. Other income-generating jobs in the jua-kali (informal sector) sector are mainly undertaken by the youths.

Local & national governance structures:

The school and churches have administration structures that oversee the smooth running of programmes implemented in the area. Katoloni Mission CBO structure interlinks all groups from the village to the office.

Katoloni Mission CBO works with various stakeholders to support the smallholder farmers to improve on their farming activities for improved livelihoods. The selection of the partners is informed by the areas of common interest depending on the farmer's needs. Examples of such partners are National Environment and Management Authority (NEMA), Ministry of Agriculture (MOA), Kenya Forestry Service (KFS), Ministry of Water (MOW), Kenya Agricultural, Livestock and Research Organisation (KALRO), Dakoke Communication, Biovision Africa Trust (BvAT), Poverty Eradication Network (PEN) Catholic Diocese of Machakos among others. The county government has Sub-County

Administrator, Ward Administrator, Village Administrator but they lack the capacity to help the smallholder farmers to address their farming needs.

B2.5 Eastern Kenya

RIDEP:

Average income & main types of income:

The communities in Tharaka-Nithi derive their livelihoods from crop farming. Major crops in Tharaka sub-counties include sorghum, millet, cow peas, and green grams, while the other major economic activities include tea and coffee planting, subsistence crop farming, subsistence dairy farming and keeping of other livestock such as cattle, goats, and sheep.

Household demographics		Tharaka
Main occupation of household head	Livestock Herding	3.6%
	Own farm labour	71.4%
	Employed	5.9%
	Waged labour	9.5%
	Merchant/trader	5.5 %
	Charcoal burning	0.0%
	Others	3.9%
Main source of income	No income	1.2%
	Sale of livestock	7.7%
	Sale of livestock products	4.9%
	Sale of crops	51.1%
	Petty trading e.g. Sale of firewoods	3.9%
	Casual labor	18.5%
	Permanent job	6.1%
	Remittance	1.8%
	Others	4.9%

Table 1: Source - Integrated Smart Survey, Tharaka Nithi County, Kenya, September 2016.

Over 65% of the target population lives below the poverty line with the largest proportion made of peasant farmers. As Table 1 (below) shows, 51.1% of the households depend on the sale of crops for income while 7.7% depend on sale of livestock. Even though charcoal burning is not the main occupation for all the households, there is enough evidence that 3 out of 5 households practice charcoal burning for either domestic use or for sale. This is further evidenced by the hundreds (even thousands) of energy saving cook stoves distributed to the community annually by various NGOs to reduce wanton destruction of trees for charcoal. On average the annual household income can be place between US$ 180 to US$ 360 per annum. Lack of value addition for most agricultural produce places farmers in Tharaka on the receiving end with most of them selling their crop even before harvest.

With 90% of farmers relying on rain-fed agriculture, they are left exposed to even the slightest changes in weather patterns. In addition, recent infestations by locusts in December 2019 and January & February 2020 have dealt a devastating blow to the local farmers with some recording high crop losses. Communities in Tharaka have not adjusted their sources of food and livelihood support initiative to be resilient.

Local & national governance structure

The government and some Civil Society Organisations run emergency response programmes responding to drought disasters through the form of food aid, which is not sustainable and creates dependency, thus further exacerbating land degradation, food, nutrition, and income insecurity.

RIDEP's farming groups are fully registered with the government's Department of Social Services. They possess registration certificates and a governance constitution for each. They have functional governance structures comprising a chairperson, a vice chairperson (where applicable), a secretary and a treasure. Schools are governed through Boards of Management (BoMs) which are elected in accordance with the Ministry of Education guidelines.

Local Chief (right) and the Assistant-Chief (left) lead the way during the launching of Greening Manyiirani Water Intakes project being implemented by RIDEP Kenya in Aprill 2020.

B2.5 Western Kenya

CREPP:

Average income & main types of income:

In the two targeted counties the population are mainly small-scale farmers that rely on farm produce and small enterprises for their livelihood. The small-scale farmers that rely mainly on agriculture are currently facing increasing challenges due to unreliable weather variations that can be attributed to climate change. These families however sell a good portion of their harvests to be able to meet their other household needs like healthcare, education and clothing even if they don't produce surplus. The common agricultural produce include maize, cassava, beans, sorghum and ground nuts with the average household income per household ranges from about US$ 30 to US$ 90 per month.

A few farmers have started adopting water harvesting technologies and basic irrigation pumps, but these are few because of the high costs of these technologies. Small entrepreneurs sell basic household items and foods for household consumption in local markets, shops and in nearby towns. Other economic activities include fishing, sand harvesting, charcoal burning and working as casual labourers in other farms or construction sites.

Local & national governance structures:

CREPP works very closely with County governments and National governance structures, as they play a key role as a major stakeholder in community developments. At the County level the structures are well-organised systems from community council, ward council and sub county council.

National structures that the Organization works with include the Village Elders, Chiefs, Assistant County Commissioners, Sub County Commissioners, County Commissioner and Zonal Foresters.

MANOR HOUSE:

Average income & main types of income:

The main source of income in the region are farming where the average income per household is US $600 per annum. The county is endowed with natural conditions that favour growing of a variety of crops including food crops (maize, beans, potatoes, millet, bananas and wheat), industrial crops (coffee, tea) and variety of horticultural crops (tomatoes, cabbages, kales, avocados, oranges, mangoes) including export crops (23 French beans, sugar snaps, snow peas chilies and cut flowers).

Sangoo primary school located in Kinyoro Location, year 2019.

Local & national governance structures:

The Public sector comprises of the Office of the Governor, Department of Public Service Management, and County Public Service Board. It provides overall policy and leadership direction to the County, oversees formulation of County policies, legislation and human resource management and development. The sector is also responsible for coordination of public participation, civic education, intergovernmental relations, special programmes and promotion of peace and cohesion among County communities (CIDP 2018-2022 Trans-Nzoia County)

Manor House is a training research and extension agricultural centre. They have a strong governance structure, working with registered farmers groups that have leadership order e.g. chairperson, secretary, treasurer and community recourse person. They have extensions through farmers who exchange skills between each other. Their network also reaches out to County government and National government on related activities.

SMART:

Average income & main types of income

The main types of income in the area are derived from subsistence farming maize, beans, sorghum, millet, cassava, bananas, mangoes, pawpaws), artisanal bee keeping, livestock keeping (cattle, goats, sheep, donkeys and poultry), artisanal mining and small businesses. The average income per household per annum is USD 600.

Local & national governance structures:

There is the devolved governance right from the County leadership down to Ward representatives and Ward administrators. There is also the provincial administration that includes the County commissioner, district commissioner, division officer, the area chief and assistant chief and village elders.

Chepkor Self help group, Senetwo village korelach location, South Pokot Sub County.

At the community group level, group members choose a committee of 5 who include their chairperson, treasurer, secretary and two members. The committee is responsible for decision making on group matters in consultation with all members. The board of management (BOM) is responsible for decision making in schools while the principal/head teachers are responsible day to day running of schools.

C Identification of Target Groups and Communities

TreeKenya operates through SCOPE Kenya's network of organisations across two specific target groups: small scale farmers and schools respectively. At conception, to identify which communities we would work with, we engaged with the 6 member organisations, the LIPs aforementioned.

Various participatory methods have since been instructed to select specific farming groups and schools from each LIPs. The first was an independent report written by each LIPs recognising their operating structures, target groups, direct and indirect beneficiaries and local community. This was followed by specific questionnaires drawn up by Keystone Legacy for completion by the recommended small-scale farmers & schools and separately the governing LIP. (SEE ADDENDUM 1 – 3)

The famers we surveyed were typically organised by the LIPs into farming groups numbering 5 – 50 individuals already engaged in agro-ecological practices. Likewise, the schools we surveyed were already involved in permaculture activities under SCOPE's guidance. The fact that these groups were sensitised and participating in land regenerative techniques strengthened the programme's robustness.

The community groups are organized groups duly registered which have their own governing structures consisting of the Treasurer, Secretary and the Chairperson. The groups also have coordinators that help in mobilizing farmers during project activities assisted by technical staffs, directing the groups in what is supposed to be done. The Schools are managed by their administration assisted by schools' patrons.

What this means for the two target groups.

The schools and famers will be involved in tree planting. We believe the schools are a good place within the community to set up nurseries and cultivate the positive mindset of planting and nurturing trees to young minds-pupils.

Digging on school farms used to be a form of punishment. Stereotypes in most communities are that farming activities are a reserve for people who are not academically talented. Hence, farming and agricultural activities are not prestigious professions. We will also consider nurseries in other community spaces, farmland and LIPs compounds.

In schools, pupils will learn sustainable land use practices, life skills, about the value of trees for food, family income and the contribution of trees to a cleaner, better environment for everyone. They will participate in activities like, seed harvesting and storage, preparation of the tree nursery beds, planting, transplanting of tree seedlings, tending the saplings, and eventually in the harvesting during which they can learn business skills.

The farming groups will benefit from the proceeds of harvested trees and ES payments from the carbon credits. Individually members will benefit from training, tree seedlings through their own nurseries, fodder for their livestock,

firewood, fruits, shade, soil erosion control and enhanced soil fertility. The individual surplus can then be sold to generate more income for the family, while farming groups can enjoy higher incomes through collective marketing ventures.

Holistically, we are creating value add from enabling communities to establish efficient sustainable organic nurseries. Growing the seeds to seedlings to trees. Harvesting the trees. Turning the harvest into high value organic food, health and medicinal brands sold in the global market.

This will not only help create employment in the local area, but for the wider society it is evident that a cleaner environment translates into a healthier environment.

It follows then that for the community, there are two types of beneficiaries; one is at the community level (primary) who are defined as active members of community structures that take part in trainings and are directly mobilised, and the other, are people from the wider community (secondary) where the interventions take place. Both target groups are frequently exposed to general economic marginalisation - a lack of access to basic services, public budgets and opportunities for development of resources, as well as social and political marginalisation in terms of poor access to participation and decision-making.

TreeKenya is henceforth designed as a Programme of Activities with provisions to allow expansion through the development of Technical Specifications that introduce new activities into the Programme to enable the participation of new communities.

The total target group are smallholder farmers organised and registered as CBOs or SHGs groups and schools as indicated in Addendum 4 (attached). Total target group including farmers, pupils and teachers = 5,369. Farmers = 2,676 individuals receiving payments. Primary/Schools = 2,693 pupils (11 schools) in total.

This total number we start with is subject to change due to the phasing process. Once this has been ascertained, we will provide more information on the cumulative number of their direct and indirect beneficiaries. The remaining LIPs, their direct and indirect beneficiaries will join the programme in the second phase.

Since the groups have defined governance structures in place, we aim to distribute payments to the farmers through their respective farming groups as opposed to individuals. With clear records of the farmers mainstreamed in the programme according to the number of trees they have planted.

C1.1 Central Kenya

RODI:

Participants

All participants are small-holder farmers who practice subsistence farming with a keen eye on diversifying their family revenues. They use permaculture approaches and harvest rainwater for growing crops in their small farms. Each belongs to a small group of farmers who learn and share ideas on developing their household units in the most environment-friendly ways possible. The farmers in each location share different ethnic profiles with those in Nakuru and Kiambu being fairly cosmopolitan while those in Nyeri and Machakos belonging to Gikuyu and Kamba respectively.

Female farm owner, Nakuru County, Kenya

Beneficiaries

The direct beneficiaries are the small holder farmers and their families. The environment is a big beneficiary to the tree planting programme as the degraded lands get forest cover and recover as natural regeneration takes place. The schools and local communities will benefit from the nurseries that will be established as more trees will be grown than the direct beneficiaries can plant. The Local economy will also witness some boost especially when the first harvests are realized.

A farm in Yatta Region, Kenya

Local Organisational Capacity

The small holder farmers are organized in small groups with own leadership structures. They also belong to respective local churches which form another level of interaction and governance. Administratively each farmer falls under the authority of a local chief and an assistant chief who oversee the enaction of national government policies. These together with the County Government provide the support any local farmer group may need for any project at the grassroots.

C1.2 Southern Kenya

KATOLONI:

Participants

All the groups' leaders and members belong to the ethnic groups in the region.

The farming groups are formed into 50 small-holder farmers' groups with mixed ages and genders. The 4 participating schools Kavyuni, Mutulani, Lumbwa Vocational Training and Pope Paul VI Junior Seminary have strong existing governance structures. Although the schools have large parcels of land, they have not utilized the land well due to water challenges, insufficient funds to purchase equipment, seeds to grow exotic trees.

Programme beneficiaries:

A member of Mutulani Poultry Self-Help Group tending to his pumpkin and local vegetables farm in

The primary beneficiaries of the project are 2,245 households who are 1,166 females and 1,079 males.

The indirect beneficiaries form a large ecosystem of other players where the activities will run concurrently within the project. The programme is envisioned to impact positively on the livelihoods, incomes, nutrition and decent jobs for the direct and indirect players of the project besides restoration of soil fertility, improved health of the environment and the livestock. The school enrolment and attendance are anticipated to increase, the academic performance improved, holistic health of the pupil improved and the environment around the schools. By the closure of the programme, we expect 60% of both beneficiaries to have sustainable agribusinesses for sustained support.

Local organisational capacity:

Katoloni Mission CBO is one of the Local Implementing Partners (LIPs). It is run as a local organization with a good governance structure, group leaders, a board member from each Sub-County and ward representative. Katoloni's Board coordinates all the activities concerning projects they undertake. Due to lack of funds to employ a full-time CEO to oversee the day-to-day running of the CBO activities, members of the board volunteer their time. There is a need for governance, leadership, monitoring and evaluation short courses to improve efficiency in project implementation and management. But, lack of funds to support such training for the staff and the relevant groups' leaders is an impediment.

Chairperson of Katoloni Mission CBO watering one of the groups' tree nursery

The heads of the 4 schools embrace the consultative style of leadership where pupils' leaders and parents' representatives attend the school management meetings to represent the interests of their groups.

	Life Expectancy (yrs)	Adult Literacy (%)	School Enrolment (%)	GDP (%)	HDI (%)
National	56.6	71.4	70.5	0.4447	0.5608
County	63.7	69.75	78.1	0.3882	0.5533

Source: KNBS, Population and Housing Census, 2009

The above chart shows the groups representatives in Makueni.

C1.3 Eastern Kenya

RIDEP:

Participants

The programme targets 200 households represented by the 10 groups as direct beneficiaries. The majority of group members are women and youth in some cases comprising 100% of the group membership. The target population are a sub-ethnic group of the Ameru tribe called the Tharaka. Their cultural behavior closely resembles that of the greater Ameru tribe but also bears some resemblance with the Akamba especially in the use of arrows as weapons or hunting tools. Social groups closely follow clan and family patterns where children and youth are taught to avoid or dissociate from certain clans and in some extreme cases, a clan member can not intermarry nor even associate with another clan. Social distancing induced by clanism is a way of life practiced by Tharaka people for centuries. The way people relate in their everyday life is highly controlled and determined by their clans.

Women participating in Tree Planting activity organised by RIDEP Kenya, April 2020 to protect Manyiirani riparian vegetation.

Programme beneficiaries

The programme through the wide range of stakeholders is expected to benefit 500 households indirectly through participation as actors along the many agricultural value chains. Their participation as a result of this project will inevitably contribute to increased household income. School going children estimated at over 450 presently will access nutritious and well-balanced diet from vegetables and fruits grown on their school compounds.

Local organizational capacity

Rural Initiatives Development Programme (RIDEP) is one of the Local Implementing Partners (LIPs). It is run as a local organization with a functional governance structure, farmer group leaders and a Board of Trustees who oversee the programme operations. Board members are drawn from a wide range of professionals ranging from education, health, hydrology, finance and agriculture.

Manyiirani Project Patron (foreground), RIDEP Kenya Chairman (middle) and RIDEP Kenya CEO, April 2020.

RIDEP Kenya full-time staff include a CEO, Finance Manager, 2 Community Development Facilitators (CDF), 2 gardeners, an intern, a security guard and 1 support staff. The staff oversee the day-to-day running of the CBO activities while Board members volunteer their time (they are facilitated when possible to reach the office either by phone or transport). The staff are fairly trained in their areas of expertise and bear several years of experience in implementing various development interventions including food security (ecological agriculture, agroforestry, permaculture and organic farming), collective marketing and livestock production. The staff size is lean compared to the target area, therefore there is a need for at least one more CDF. There also for staff capacity development in the areas of project programming especially project/programme design, monitoring and evaluation by offering short courses to improve efficiency and effectiveness in project implementation and management. Limited financial resources have also restricted the capacity of the demonstration plot and the tree nursery from operating at their full potential. Frequent electric power failure and lack of a back-up system (power generator or solar power) have greatly hampered programme operations. RIDEP Kenya offices are situated in the remote lower part of Tharaka, where internet communication is limited and cellphone connectivity is not guaranteed.

C1.4 Western Kenya

CREPP:

Participants:

The Programme will be implemented by the following forms of groups: farmer, women, youth, widows, physically challenged, retirees and groups of people living with HIV/AIDS. The Programme targets 325 households represented by the 10 farming groups as direct beneficiaries with an additional 639 pupils from 2 schools.

Programme beneficiaries:

The wide range of stakeholder benefits is expected to indirectly reach 975 households and 1600 pupils.

Local organisational capacity:

CREPP is a one of the Local Implementing Partners (LIPs). As a Nongovernmental Organization, it has a well-defined governance structure. The board supervises the activities while the management coordinates all the activities of the organisation. The Finance and Administration Manager control the organizational finances supervised by the Board. The Programme Officer oversees the implementation of the programme activities, while technical staffs carry out the implementation of activities in the field.

MANOR HOUSE:

Participants

Manor House works with culturally, diverse small-scale farmers from young, old and vulnerable groups. All groups are well organized and facilitate leadership trainings in other the groups.

The programme will work directly with 4 farming groups (350 farmers)

Nakwakwa Women Group located in Kiminini, 2019.

Beneficiaries

Over the programme period it is expected to indirectly benefit over 500 households through field days and farmer to farmer tours.

Local organizational capacity

Manor House is one of the Local Implementing Partners (LIPs). It has a full-time director and five other full-time trainers. However, to scale up this project an extra extension officer might be hired. The Centre also has a big piece of land where part of it can be used as demonstration area for agroforestry under this project.

SMART:

Participants

CHESTA GIRLS SEC young farmers

The participating community groups come from the Pokot ethnic community, with ages ranging from 18 - 70 and women comprising 60%. The programme will work directly with 11 farming groups (344 farmers) and 2 schools - Chesta Girls (200 pupils) and Aniken Primary School (80 pupils).

Beneficiaries

With an average number of 6 persons per household, this project targets 5000 indirect beneficiaries through farmer to farmer learning approach.

Local organizational capacity

SMART is one of the Local Implementing Partners (LIPs). SMART employs the bottom up approach in its development initiatives. Community members are identified through their common interest groups, that means they are bound by common objectives and aspirations. SMART will use focus group discussions to engage the community about the project. SMART staff recruit community group members who share the same vision and aspire to fulfill the project objectives. Trainings are done weekly either involving one group before the other or using farmer leaders from each group.

Ipet youth group in katugh village_weiwei location_Pokot Central Sub County

D. LAND TENURE AND CARBON RIGHTS

The opportunities presented by Kenya's Constitution 2010 for devolving national resource and public participation are the key entry points to this intervention. Starting at the national level, the programme will be registered with Kenya Forest Service (KFS) to affirm that the carbon rights belong to the farmers and schools under the TreeKenya Programme. Extensive research and due diligence has already been employed to comply with Kenya's NDC and retain our future carbon credits.

So far, the programme has received assurances from Sub-County Forest Officer, KFS, for Machakos County, Ester Mwanthi (Addendum 14) that they support forestry programmes and carbon credits in the Country. Furthermore, each LIPs has received the same support from KFS (Kenya Forestry Service) or County Government.

Land in Kenya is categorized into public, private and community land. Public land is under ownership of public institutions, while private land is owned by individuals or registered private groups, organization or companies. Majority of land is under private ownership as either leasehold or freehold. With most lands demarcated, adjudicated and title deeds issued, there are fewer cases, typically in pastoral communities, where community land is practiced.

All the LIPs have shown that their farmers have their title deeds for their farms, while a few have allotment letters (where some documents are still in the names of their parents as the land is mainly inherited and therefore usually requires subdivision among siblings).

As for the schools, majority of them already their land registered with the government with a few reportedly processing their titles.

Small holders

Most land ownership is through family inheritance and acquisition by purchase where the farms are owned freehold with no land tenure issues. This programme will operate through farming groups, which do not face challenge to how their land is used. So, benefits accrued from planting trees, crops and other land regeneration activities, which do not affect climate change, will belong to the small-holder farmer.

School land

Kenyan Government is issuing title deeds to public institutions, so the land primary schools own is protected. Within the participating schools in the programme, they all have title deeds except in Ntujia, Gakirwe and Pope Paul VI Junior Seminary schools where they are still following up on their title deeds.

Typical size of land

The typical land holding in this programme is 1 hectare for small farm holders and 10 hectares for schools. The mean holding land size is however continuously reducing due to subdivision of land occasioned by population pressure.

Any conflicts

Within the participating groups, there are no conflicts associated to land ownership or tenure recorded up to date. In West Pokot, there are however boundaries disputes with neighbouring counties due to livestock browsing, natural resource conflicts (water & fodder) and human wildlife conflicts.

Proving land tenure & carbon rights

We do not foresee any difficulties in this, but more engagement would be helpful to clarify carbon and ES rights accruing to individual farmers, farming groups and schools. To strengthen our position over land tenure affirmations, we will sign individual memorandums of understandings.

E. PROGRAMME INTERVENTIONS AND ACTIVITIES

The participating groups in this programme will implement activities aimed at regenerating their land and achieving long-term sustainable income. These activities include:

E1. Ecosystem Regeneration

Tree nursery establishment & management, water harvesting, agroforestry and afforestation planting of indigenous & naturalised species.

The programme will encourage the farmers, school communities and the local community to continue with agroforestry on the same agricultural land ensuring continued food production and minimum soil erosion.

Any major challenges that prevent successful interventions will be tackled; namely lack of water and finances to buy the right agricultural equipment and seeds.

See Addendum 5 – TreeKenya Seed & Harvest Appraisal and Addendum 6 – Tree Aggregation Totals (tbc)

E2. Disease & Pest Management

We are looking at the following mitigation strategies:

a.) Establish a good monitoring system: proper planning to reduce impact through GIS mapping of locusts.

b.) Build the capacity of local people by training them on specialized subjects on invasive species.

c.) Sensitize the smallholder farmers on the management and mitigation measures to apply should desert locusts or pests invade in the future. For example, the type of soil and climatic conditions.

d.) Organic fertilizers build up soils and vigorous growth of plants. When locusts attack, they re-grow quickly as they are rich in organic matter and micro-organisms that feeds on each other to destroy the eggs.

E3. Value Addition

There is more value than just adding to the forest cover especially if organic practices are adopted. These practices add value to food production as well as increase the number of beneficiaries. This is clearly shown by the increase in market value of organic farming products over the years and the fact that countries in Africa, Asia and South America lead in the number of organic producers.[1]

[1] Organic versus Conventional Cropping Sustainability: A Comparative System Analysis Tiffany L. Fess ID and Vagner A. Benedito * ID Division of Plant & Soil Sciences, West Virginia University, Published: 21 January 2018

Once the programme has support of carbon financing, we aim to certify the tree & crop harvests as organic and produce value-added superfoods, cosmetics and medicine for sale in domestic and international markets.

For example, moringa and neem are outstanding naturalised species which we plan to promote their use for health and wealth of the people. By up-scaling these products, we shall be giving more value to the farmer and thereby enticing farmers to grow more trees.

See Addendum 7 – African Superfood Landscape

E4 Capacity Building

For the success of both carbon sequestration and ecosystem benefits, capacity building is a crucial component. This is the process by which individuals and organisations improve on and retain the skills, knowledge, tools, equipment and other resources needed to do their jobs competently and to a greater capacity. The importance of trees, biodiversity and combating climate change, can be achieved through farmer-to-farmer training, school and village meetings as well as local leaders' meetings.

Moreover, focus will also be on further sensitization for activities that endanger the environment. Although small-holder farmers' tree harvests can support cooking and sale of charcoal, communities are cognizant of the negative impact such activities have on the land, animals and their health. We strongly believe that the activities chosen will help lead communities out of poverty and enable the practice of sustainable, environmentally friendly and land regenerative farming activities.

E5 Proposed Training Manual

Keystone have already produced a presentation to explain the Plan Vivo process to the LIPs, which has been very useful to not only help engage them in the process, but to also explain next steps such as the PDD and technical specifications, validation and registration, and the various monitoring and evaluation processes.

Keystone think the best way to do this is, is by developing training manuals and modules for both the proposed participants and for new participants joining the programme. The proposed manual will include a contents page, purpose section that details an overview of the document, a scope section that details what is covered, a troubleshooting sections that details any possible problems that may occur and how to fix them, a frequently asked questions (FAQ), relevant contact details and a glossary. It will be designed in such a way that it acts as a written guide and include associated images that act as a visual aid.

The user manual will act in conjunction with a training day that will consist of a morning and afternoon session. The day will provide the farmers with a greater understanding of the value that trees provide with regards to environmental/ecosystem benefits and food production. Subsequently, the training programme will describe the benefits of running their own tree nurseries, showcasing how they can get the best quality and high yielding trees if they grow seedlings from their own seeds.

F. IDENTIFICATION OF ANY NON-ELIGIBLE ACTIVITIES

Aside from capacity building, planting and harvesting trees, this programme will promote practices and principles that continue to regenerate degraded land, provide food for the community and generate diversified income streams. Some of the interventions will include agroecology, agri-business and cultural exchanges.

F1 Agroecology and permaculture

While conventional agriculture focuses on maximizing on large scale growth of single crops, hence focusing on fertilizers to enrich the soil and chemicals to control pests, organic farming takes a holistic approach to crop production giving attention to environmental conservation, soil fertility and water systems. Organic farming helps produce high value crops while benefiting the environment.

Many organizations in Kenya are already practicing organic farming. Leaders in the pack are the 50 plus members of PELUM Kenya, one of TreeKenya's programme partners. RODI, a member of both associations has gone further to host two international workshops on biofertilizers and other organic farming inputs, which not only rival their chemical counterparts but leave the soils richer and plants hardier to withstand the shocks of climatic changes or pest infestation

Examples are planting of bracharia, nappier and desmodium grasses, which improve phosphorous in the soil, fodder for animals and preparation of compost manure from tree leaves that will improve soil fertility to increase crop yields.

F2 Agribusiness

Another area is to train community members on agri-business, for instance training on community savings and loaning through marketing and table banking (Village Savings and Loans Associations – VSLAs).

F3 Cultural exchanges

Cultural activities promoted include cultural dances, traditional dances, drama, all to support local cultural museums and eco-tourism. These activities in turn will help attract local, regional and international tourists who will in turn buy our value-added products.

Kikonot Self Help Group, Chesta village, Central Pokot Sub County

G. LONG-TERM SUSTAINABILITY DRIVERS

The memorandum of understanding (MOU) defines the scope and purpose of discussions and signals the willingness of the involved parties to move forward and perform the outlined roles and responsibilities. In this context, Keystone has clearly defined that they are responsible for the design and development of the land regeneration programme, securing funding from impact investors and non-governmental organisation (NGOs), and overseeing capital expenditure. Furthermore, Keystone are in charge of reporting, registering and negotiating the sales of carbon credits, managing all public relations and marketing activities, while building the capacity of the Country Managers and LIPs.

SCOPE Kenya ('The Country Manager') will act on behalf of Keystone in Kenya to provide administrative, financial and technical support to the approved LIPs. They will mentor and develop local capacities, coordinate the implementation of the programme, monitor and evaluate, while providing technical back up where required to ensure that programme meets the requirements of the Plan Vivo Standard.

The LIPs will develop the programme proposal and activities within the Plan Vivo framework and objectives set by Keystone. They will also receive and manage funds for the agreed programme, regularly monitor and evaluate the progress as scheduled, document best practices for dissemination and wider sharing, and work with Country Mangers to ensure that the projects are shared and replicated across Kenya. *See Addendum 8 – Draft MOU with SCOPE Kenya.*

Technical:

The programme has been designed in such a way that the target communities and local leadership actively participate in the development of the overall design and plans. The interventions proposed are there to address the challenges that the communities are facing due to environmental degradation and climate change. The project will use a training of trainers (ToT) approach, where lead farmers and committee members are adequately trained; then empowered to cascade the knowledge acquired to other farmers. This will create a bank of information within the community, enabling farmers to constantly refer to one another even after the programme is finished. The programme will employ the Farmer Field School; a participatory, empowering and experimental learning approach within organised groups.

Advocacy

Formulation of strategic advocacy and communication plans will be implemented to sensitize the various publics on the importance of gender equity and land regeneration at the grassroots, national, regional and international levels. The constant flow of information and strong community participation among smallholder farmers and schools will help achieve this. In addition, through strategic, effective and efficient lobbying and advocacy framework we can develop in-depth understanding, goodwill and formulation of the policies, or a review of the existing policies relevant to land regeneration and climate change. Ultimately, this will attract support from various policymakers, more like-minded players, certification of the various end products from the programme, market linkages and attraction of other

donors to the programme.

Other activities will include, collaboration with the community and mainstream media, writing advocacy briefs, strategic publishing and disseminating policy briefs, developing policy work and activities, implementing organizational principles, preparing and marketing proposals for fundraising, overseeing the implementation of the programme's advocacy activities and representing the programme's keynotes at high-level meetings for increased collaborations and partnerships. With few resources, we can improve the livelihoods of the target communities, regenerate land, promote environmental health, foster better animal health and leave a better inheritance to the generations to come.

Economic:

The programme interventions will follow a strict financial model enabling it to run beyond the programme period. To build the business model, the local community will be supported by external actors (consultants) who will help initiate interventions and train community resource persons to continue supporting the programme initiatives. The programme will also focus on a community saving & loaning (COSALO) approach amongst targeted communities to enhance cohesion, commitment and continuity in groups. The strengthening of existing community groups, institutions and structures for improved community governance and resilience building will ensure that they continue supporting not only the initiated activities but also engage in other economic enterprises. The commercial aspect, turning seeds into value-add products, will strengthen all the actors in the value chain and build strong economic base to up scale the interventions to achieve diversification adaptable to climate change. In a worst-case scenario, where the carbon market collapse, farmers will still be able to access the market and create value addition products, allowing them to remain resistant to a fluctuating carbon market.

Policy:

Involvement of local authorities, government ministries & departments and other stakeholders means that even after the termination of the programme, efforts made during the programme lifetime will be taken forward. The knowledge imparted on conservation and sustainable use of plant genetic resources and appropriate environmental management will be passed down to new generations to come. Empowering the communities to influence programmes and policies will also ensure that the voice of the smallholder farmers can continue to be heard after the programme has been completed. The value addition enterprise will generate income for the project beneficiaries and create interest and enthusiasm to continue working on the project beyond its lifespan and sustain smallholder farmers' activities. Programme closure discussions will be done prior to the end where a community-led committee involving local and national government representatives to ensure a smooth exit of the donor at the end of the programme phase.

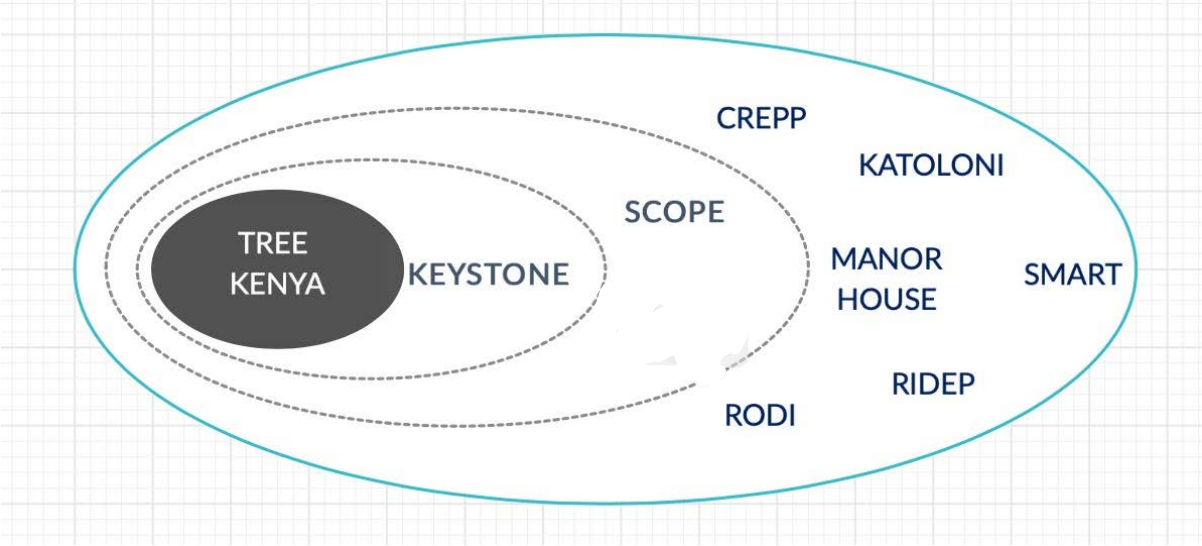
H. ORGANISATION AND PROPOSED GOVERNANCE STRUCTURE

H1 PROGRAMME ORGANISATIONAL STRUCTURE

TreeKenya is a cooperative programme with a Global Programme Coordinator (Keystone Legacy Limited), Country Coordinator (SCOPE Kenya) and 6 Local Implementing Partners (CREPP, KATOLONI, MANOR HOUSE, RIDEP, RODI, SMART).

See Addendum 9 for each organisation's staff and credentials

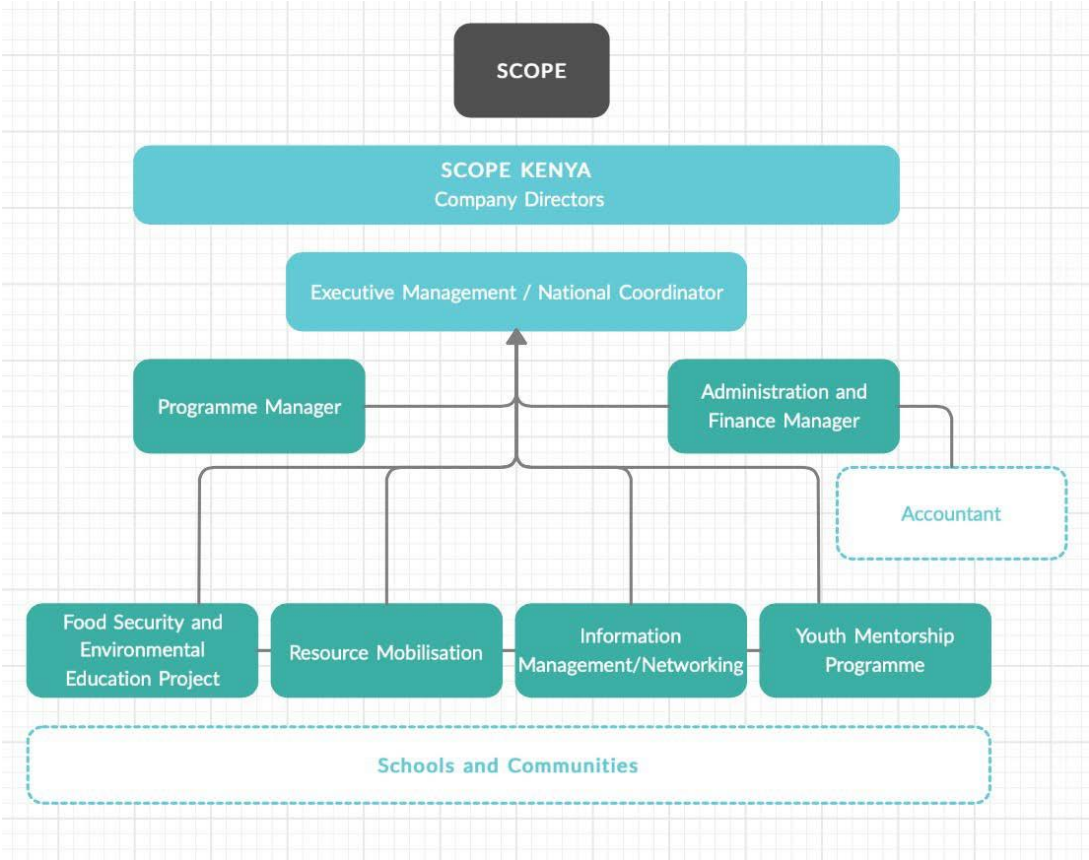
The structure is below:



H2 COUNTRY MANAGER

H2.1 SCOPE Kenya:

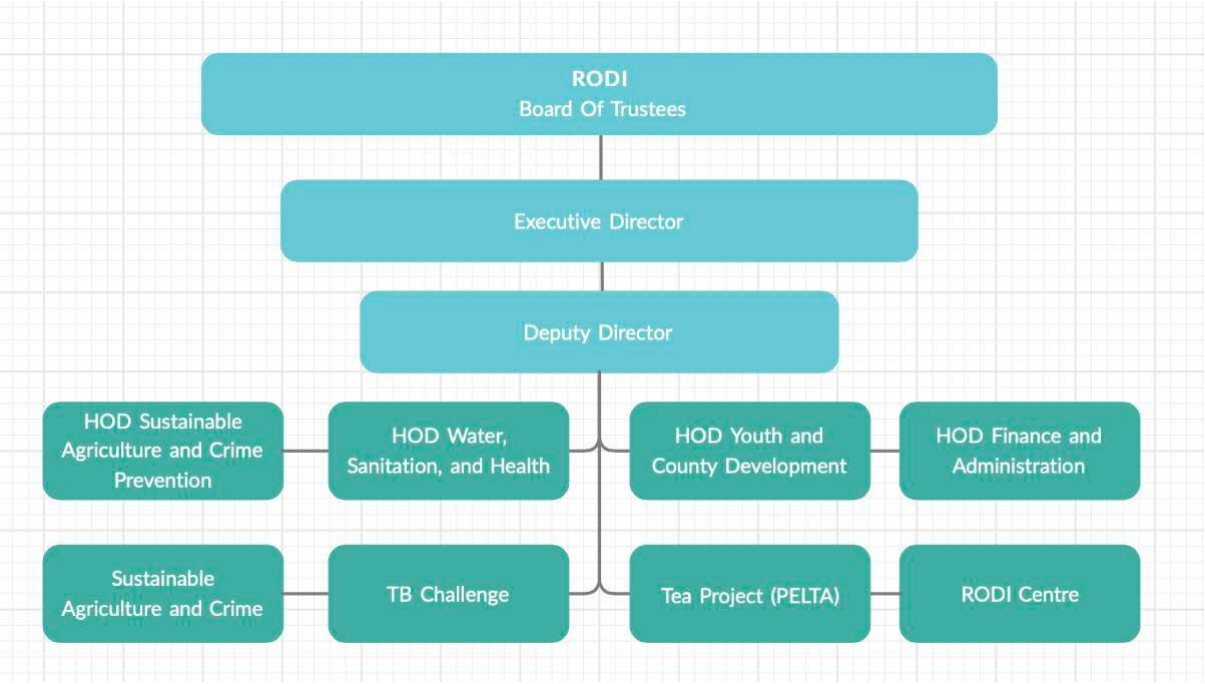
Schools and Colleges Permaculture Programme (SCOPE) Kenya, is a local capacity building and Networking Organization founded in 2014. The organization is registered as company Limited by Guarantee, under the companies Act 2015. Currently SCOPE has a Membership of 16 Civil Society Organizations working with a total of 33 schools across 11 counties in Kenya. SCOPE Kenya facilitates schools community to redesign and transform their already degraded land into productive food forest, through permaculture practices, to ensure children access safe nutritious food, learn and interact with nature for improved health and academic excellence.



H3 Central Kenya

H3.1 RODI:

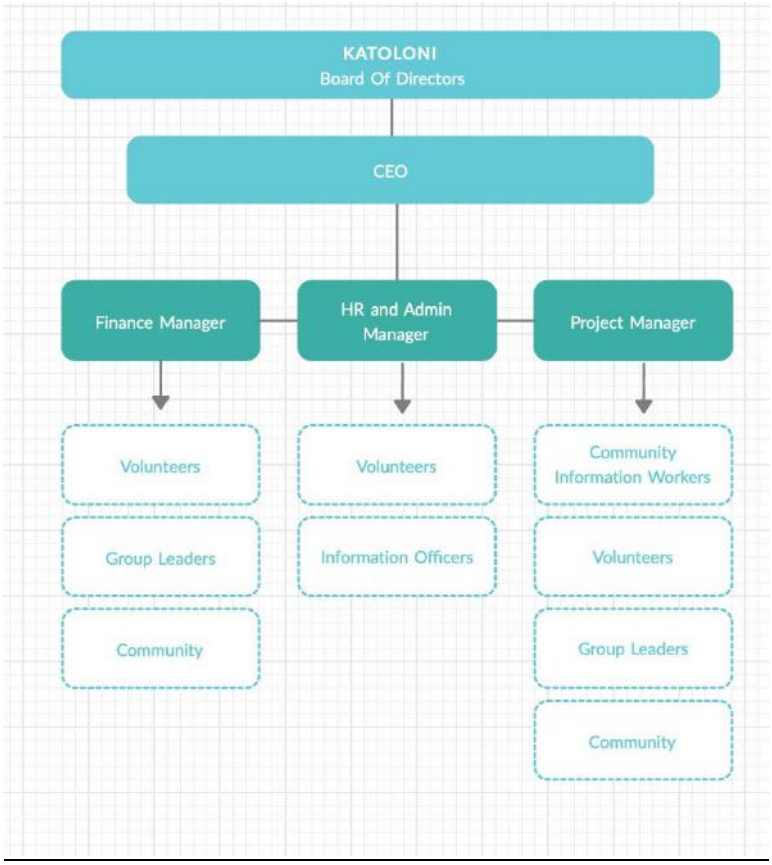
Resources Oriented Development Initiatives (RODI) is a registered national NGO with over 20 years of development experience in Kenya. The vision of RODI is to promote human dignity through a sustainable, food secure, healthy and crime-free society. RODI is led by a Board of Directors each of whom brings different professional skills and expertise. The day-to-day operations are run by a competent team of staff whose expertise is diverse. RODI operates in 13 counties spread across the country



H4 Southern Kenya

KATOLONI:

Katoloni Mission C.B.O was formed in the year 2004 and registered with the Ministry of Gender, Culture and Social Services in Machakos County in Kenya on September 14th, 2010. Their vision is to promote the concept of sustainable farming methods, land management and regeneration for improved human nutrition, animals, plants and environmental health in a changing climate. Women and the vulnerable groups suffered food insufficiency, schools in the community experienced high dropouts and poor grades due to many challenges that faced the school going children including a lack of food. Family strife was the norm. Hence, the formation of the CBO to address some of these challenges to alleviate poverty, reduce family conflicts, improve school attendance and performance through knowledge and information on sustainable farming methods for improved livelihoods using the scanty water available, a common characteristic in arid and semi-arid regions where Katoloni Mission CBO operates. Katoloni Mission CBO is hosted within KALRO Katumani offices in Machakos County.



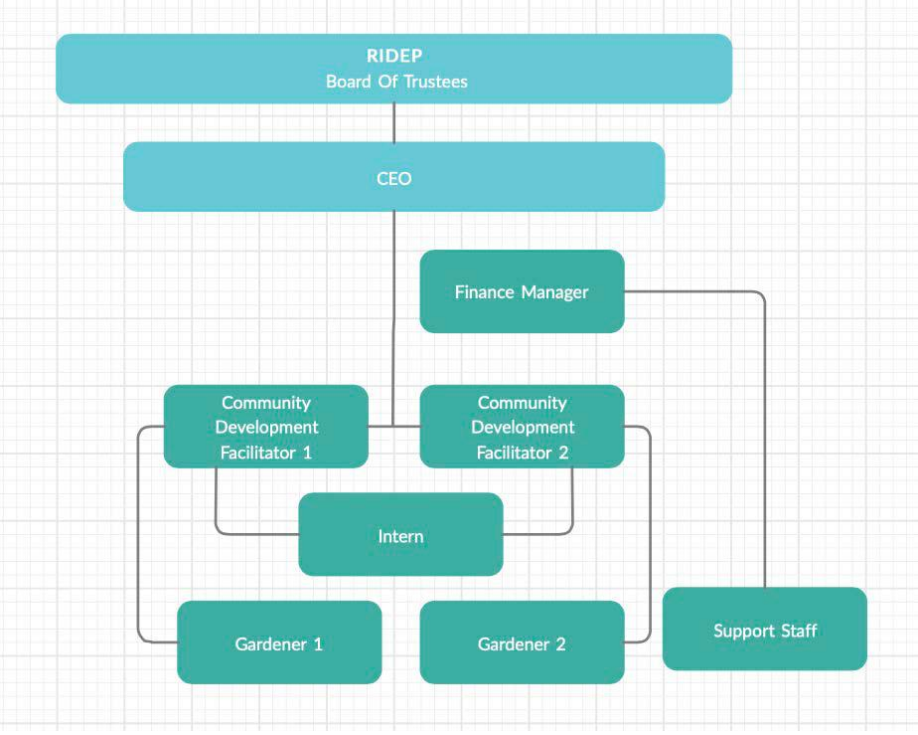
H5 Eastern Kenya

RIDEP:

Rural Initiatives Development Programme (RIDEP) is a Community Based Organization, registered in 2012 and implements its programmes in the semi-arid Sub-Counties of Tharaka North and Tharaka South in Tharaka-Nithi County located in the Eastern region of Kenya. RIDEP was founded with the objective of enhancing development in Tharaka Constituency focusing on reducing food insecurity, alleviating poverty and mitigating against environmental degradation. To achieve its development objective, RIDEP endeavors to build the capacity of the members of community organized in groups, and schools in utilizing the untapped locally available resources. Like many other Kenyan communities, Tharaka community largely depends on agriculture for livelihood.

RIDEP has the required staff capacity and experience needed to implement the proposed intervention. With a combined 17 years' experience and 7 years post registration at CBO status, the organization boosts several completed projects.

Their vision is to empower rural communities to live in a healthy environment and sustainably making use of available local resources and opportunities for improved quality of life.



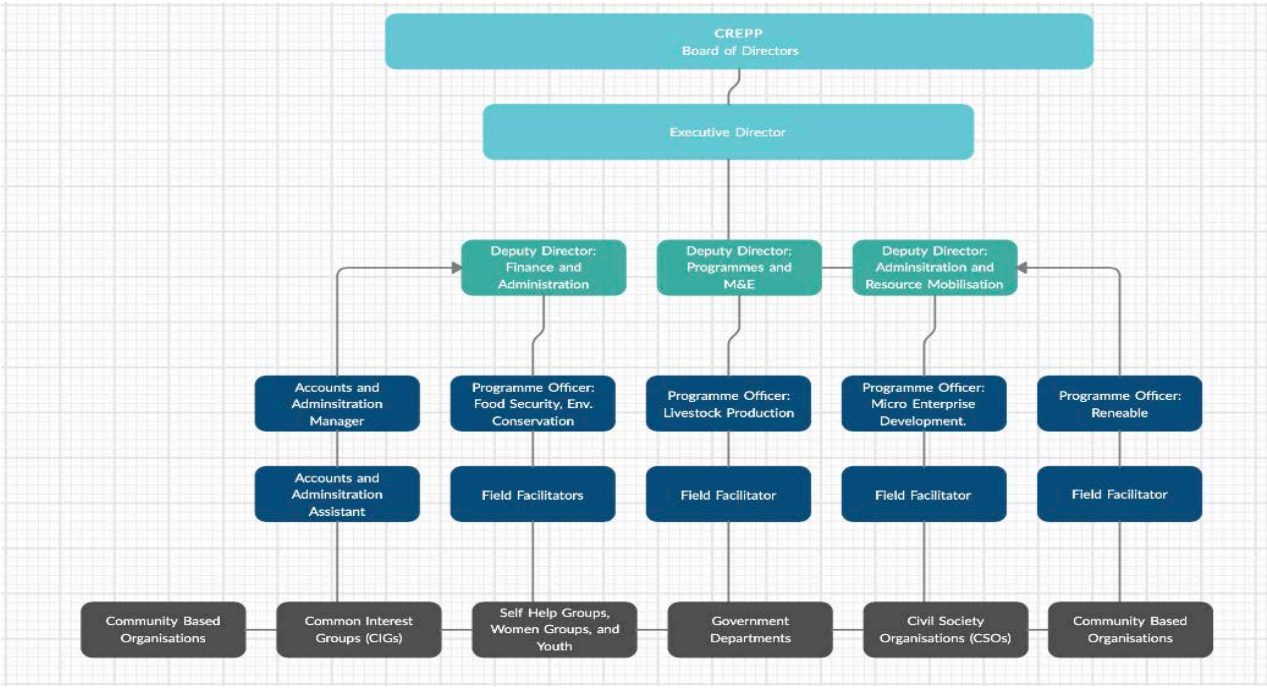
H6 Western Kenya

H6.1 CREPP:

Community Rehabilitation & Environmental Protection Programme (CREP Programme) is a Kenyan organization that initially started as a relief and rehabilitation C.B.O (Community Based Organization) during the ethnic clashes that characterized Kenya in 1992 and 1993 at the onset of multiparty politics.

The organization was finally registered as a Non-Governmental Organization (NGO) in March 1997 and it has been continuously involved in the implementation of various community-based projects in Western part of Kenya.

The organization has since then increased its development initiatives to cover food and nutritional security, environmental rehabilitation and conservation, promotion of renewable energy use, mitigating the impact of HIV & AIDS, enhancing access to clean and safe water, improving hygiene and sanitation, micro-enterprise and development, enhancing gender equality and equity, floods disaster mitigation and Policy advocacy.

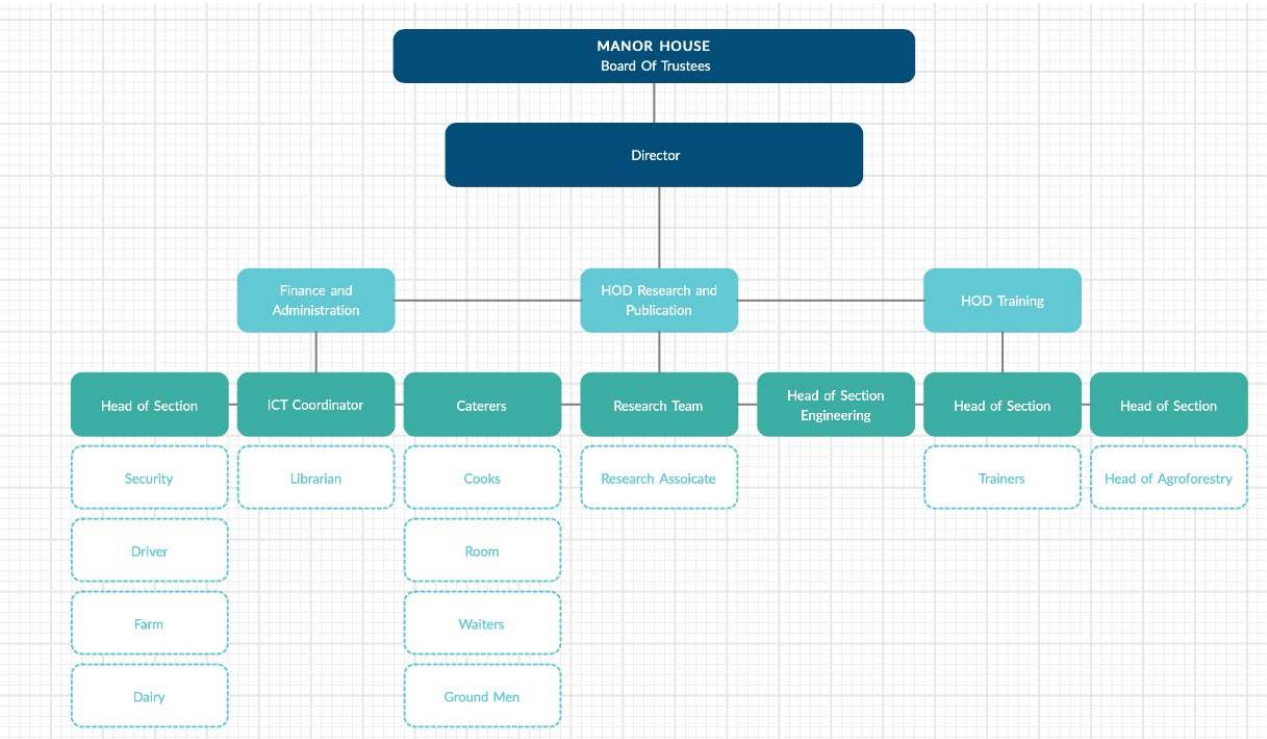


H6.2 MANOR HOUSE:

Manor House Agricultural Centre (MHAC) is registered as a Nonprofit Trust, established in 1984 in response to a 3-year drought that caused severe hunger in many areas of rural Kenya and precipitated the need to find sustainable approaches to farming.

The Centre is located 10 km west of Kitale town in Trans-Nzoia County of the Rift valley along Kitale to Kinyoro road. Since its inception, MHAC has continued to offer training on sustainable agriculture practices that help in improving livelihoods in the community. As the first institution of its kind in East and Central Africa, MHAC has assumed a significant responsibility for the promotion of sustainable Agriculture throughout the East Africa region. The Institution's main activities include; training, research and extension. Other activities include provision of conference facility and fabrication of agricultural tools and equipment.

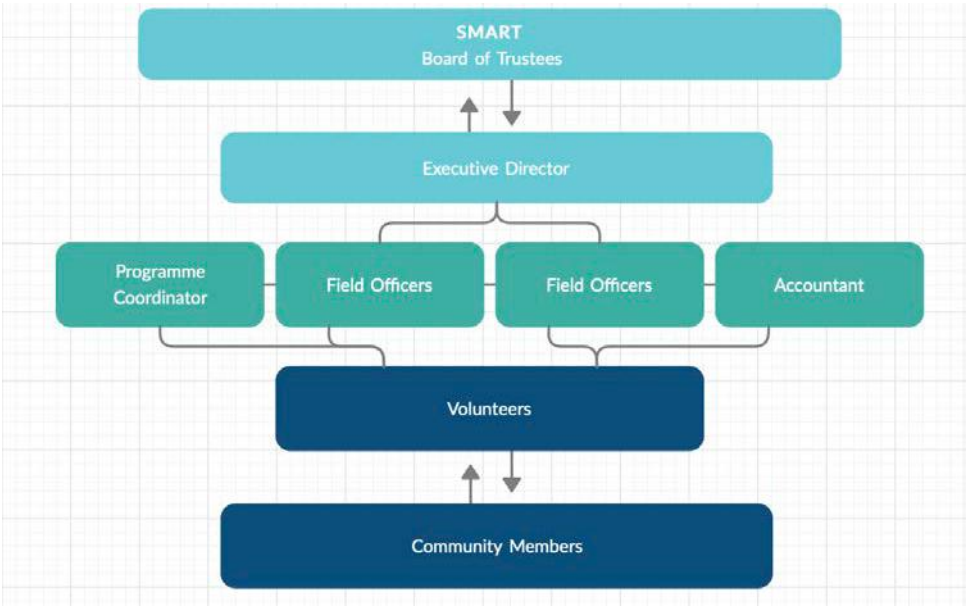
Their vision to be the leading training and research Institution for ecological agriculture, empowering farming communities in sustainable livelihoods and environmental conservation.



H6.3 SMART:

SMART is a registered NGO which is mandated to operate in the Country and abides by relevant national and international regulations. Sustainable Mobilization of Agricultural Resource Technologies (SMART Initiative) is a registered Non-Governmental Organization operating in West Pokot and Trans-Nzoia counties in the North rift of Kenya. SMART works to improve the livelihoods of small holder families through agro ecology practices which contribute to the reduction of poverty.

SMART Initiative disseminates appropriate low-cost agricultural technologies through community education and participation in addressing food security. This is through fostering realistic, practical economic and scientific agricultural technologies geared towards alleviating poverty, increasing environmental resilience, community empowerment and participation in improving biodiversity and working towards sustainability. SMART believes that everybody should be food secure and live in a better environment.



H2 Applicant organisation (not necessarily the project coordinator) must provide the following information about itself.

Keystone Legacy Limited is the applicant organization. A UK registered business (11775406) with offices in: 585A Fulham Road, London, SW6 5UA, United Kingdom.

Keystone is a business for impact. They design and manage cooperative, carbon mitigation schemes aimed at reducing environmental degradation and diversifying incomes for rural communities.

Keystone understands the need for creating a world where people and nature can thrive. Our goals are to create meaningful change for beneficiaries through our community-led programmes, that serve to encourage sustainable land management, reverse desertification, regenerate ecosystems and provide a mechanism for indigenous communities to be financially sustainable.

Keystone commissioned an ethnographic report and produced a film documentary in Spring 2019 on the needs and priorities of the Maasai in Amboseli, Kenya.

Adopting similar methodologies, Keystone targeted a group of top performing ecological NGOs (now LIPs) to research and build effective interventions with. This included field trips and baseline survey questionnaires to determine the environmental and socioeconomic situation within the selected farming groups and schools.

Keystone is working full-time on this programme and developing our relationship with SCOPE Kenya to act as our Keystone office in Kenya where they will oversee day-to-day operations of the programme.

Personnel to be involved in the project with details of relevant skills and experience.

Julian Pycraft, Founder and Chairman

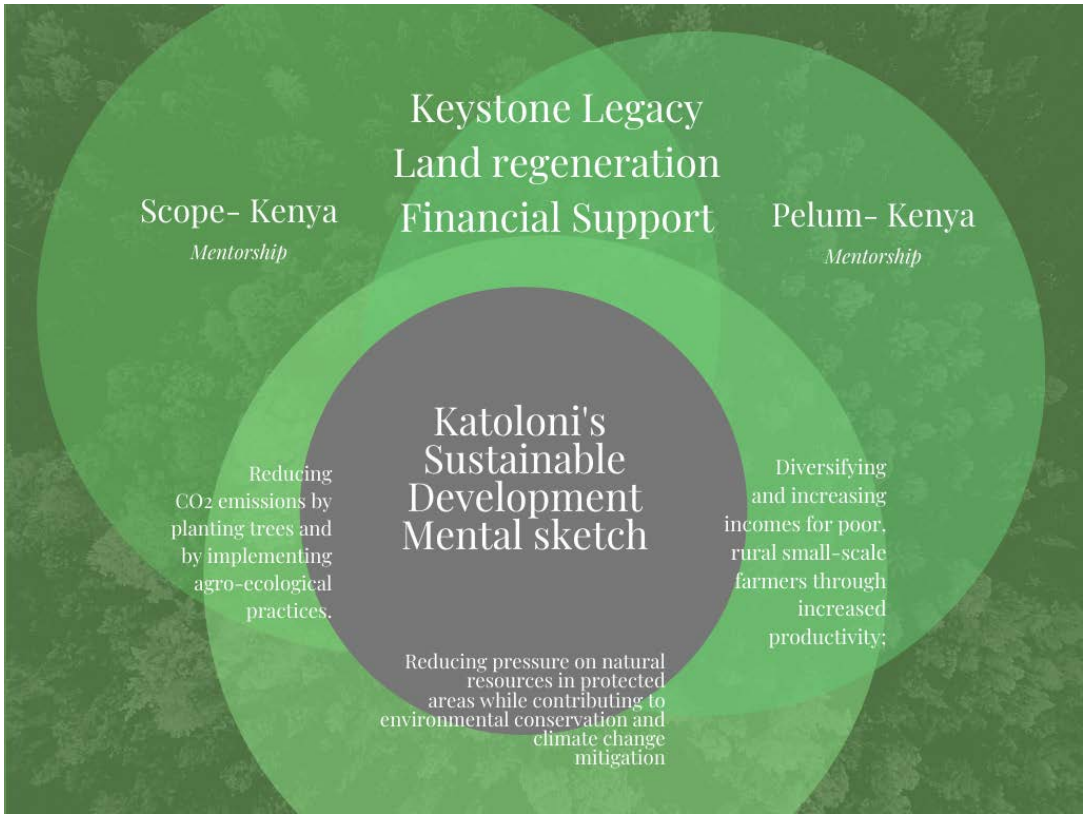
Edward Pycraft, Managing Director

Shannon Laker, Head of Operations

Olivia Wallis, Research and Public Relations

Mrs Ruth Barry, Non-Executive Director

I. COMMUNITY-LED DESIGN PLAN



Above is condensed sketch presentation of how Katoloni envisages to connect with country coordinators and donors to successfully implement the land regeneration programme in Machakos and Makueni Counties.

A programme launch will be held in all the targeted sub counties with relevant stakeholders to bring them up to speed with the new development and to seek their support through ideas, resources and partnership. This will include relevant government departments like the department of agriculture, forestry, environment, water, energy and like-minded CSOs working in these sectors, as well as a few community leaders from the targeted communities. This stakeholder engagement will help us gather approval for this programme and consequently stakeholder buy in.

After the programme launch, mobilization and sensitization of the targeted communities will be done so that they understand the goals and objectives, as well as the programme approach.

This will be followed with basic training on the modality of the programme and development of community governance structures in all the targeted wards for ease of communication and sustainability over the ownership of the programme.

Community members are identified through their common interest groups, that means they are bound by common objectives and aspirations. Focus group discussions will be used to engage the community and help LIPs staff recruit community group members who share the same vision to fulfill the project objectives. Trainings will be done weekly either involving one group before the other or using farmer leaders from each group.

Training of Trainers (TOTs) will be responsible for programme development and monitoring. The LIPs will monitor the progress of the programme through its staff who will gather information from the field on a periodic basis. This will help the community to understand and internalize the objectives, hence owning the process.

SCOPE Kenya will provide supervision, mentorship and guidance through frequent consultations. They will also play a critical role during the development of the MOUs and in ensuring that all the players in the programme will benefit and are protected by law. In case of disputes, they will also help with arbitration between the parties involved.

Once the programme commences, then the LIP staff members involved will implement planning, controlling, directing, organizing, training, monitoring and reviewing the progress. This will require facilitation through provision of a percentage of the staff time, transport and meals and administration overheads. These LIPs staff members, once they are trained, will implement the disbursement of Payments for Ecosystem Services (PES) to the farmers, groups and institutions involved in the programme.

Keystone Legacy Ltd will facilitate the development of the MOUs and support in the mobilization of resources that will help kick start the activities of the project as they act as an intermediary responsible for project development and representing the project to all third parties.

Each member farming group or school will raise a percentage (%) of the activities' revenue to be kept in a central account once the programme has finished. Our overall objective is that, by the end of the programme, each individual farmer, farming group and school should have a market to stock their farm and value addition produce.

Period	Activities

Before	Developing MoUs, partnerships and building networks Start-up funding for activities Develop financial model with ground rules on how income from carbon trade will be shared Baseline scenario - Identifying and quantifying trees to be planted Develop cloud based digital platforms Focus on creation of nurseries – infrastructure Conceptualise an organic, plastic-free cosmetic and superfood brand
1-3 years	Establishment of community/individual nurseries Train on water management and harvesting Implement rigorous tree planting activities Close monitoring of tree growing and satellite images provided by Keystone Ltd on the growing. Calculations on ex-anti carbon credits commence and benefits shared according to MoUs Annual validation of trees planted Begin harvesting existing produce to create value addition products
3-5 years	Planting and replacing drying trees Trees that were planted are harvested annually and turned into value added products 5 yearly external verification of the trees
15-20 years	An exit strategy is negotiated with all partners and Kenyan Government

J. ADDITIONALITY ANALYSIS

J1 Description of how project activities are additional

The challenges the programme already face in order to be successful and sustainable removes any question of additionality. This starts with knowledge shortages within each LIPs to plant trees and create value added produce from the harvest. This is compounded with a lack of finance to purchase seeds, skills to combat water shortages, pests & diseases and gender inequity in the localities.

The proposed activities are not the product of legislative decree or commercial land-used initiatives, without the programme support the targeted small-scale farmers & schools would generally grow very few trees due to financial constraints and lack of vision over the holistic benefits of such a venture.

The initial barrier to this programme starting would be inadequate financial support to facilitate the LIPs implementation of the activities including funding to the targeted community groups for tree seeds and seedlings, even if it is on a cost-sharing basis.

Also limited knowledge on carbon financing, climate change, global health pandemic and economic crises. We hope to address some of the challenges through advocacy using community conflict resolution mechanisms, training and use of volunteers whenever possible. Collaboration with County government and key National government agencies like the Metrological Department, Kenya Forest Service, National Disaster Management Authority among others will be key.

Technical expertise is available with the LIPs and the relevant government departments but they will require facilitation to be able to deliver the project efficiently and effectively. We look to address the skills gap through capacity building where training can be provided by agro-forestry and carbon quantification experts. From conception, LIPs staff have also been researching ways to support the programme, proving themselves to be committed.

The above diagram shows Katoloni's Mission CBO Theory of Change for the Land Regeneration Project with elements of the project including, input, output, short-term outcomes, immediate outcomes, long-term outcomes and the anticipated change in the communities implementing the project.

K. NOTIFICATION OF RELEVANT BODIES AND REGULATIONS

K1 Provide both of the following (scanned copy of letter/email)

See Addendum 10 – An example of LIPs evidence of notification of the relevant national regulatory body of the project proposal

See Addendum 11: An example of LIPs statement of intention to comply with all relevant national and international regulations.

See Addendum 12: An example of LIPs Organisation Registration Certificate

L. IDENTIFICATION OF START-UP FUNDING

L1 Provide details of how the project will be financed in the development phase before full project registration.

Each party is self-financing the proposed programme at the development phase through the organization's income generating activities and administration overheads from other projects.

Once the PIN Is registered, Keystone Legacy Ltd will explore start-up funding for the PDD and direct programme costs through grant, impact investors and philanthropy.