

KENYA NATIONAL LANDSCAPE RESTORATION SCALING CONFERENCE

ENTREPRENEURSHIP AND BUSINESS APPROACHES IN RESTORATION

July 15, 2021



THEME 1:

Private sector engagement in landscape restoration through CSI/CSR



TOPIC:

Role of KTDA Foundation in restoration

Presenter: George Oselu, Kenya Tea Development Agency
Foundation



Kenya Tea Development Agency Ltd (KTDA)



Restoration and Sustainability Highlights



- Formation of KTDA Foundation was to spearhead Corporate Social Investment activities across KTDA Group.
- The Key objective of the Foundation is to initiate interventions that improve the welfare of small holders' tea farmers in Kenya through strategic partnerships.
- Vision: “Enabled and progressive small holder tea farmers”
- Mission: To empower the small holder tea farmers and their communities economically and socially through sustainable programmes and partnerships

How:



Strategic Objective	Specific Objective	Key Activities
<p>To promote climate change mitigation, adaptation and resilience among smallholder tea farmers for sustainable tea production</p>	<p>To promote climate adaptation mechanisms among the small holder tea farmers</p>	<ul style="list-style-type: none"> • Awareness and educational campaigns on environmental sustainability • Sustainable management of forests in the communities through planting of trees • Sustainable efficient management of soil and water resources • Catchment and riverine protection • Water harvesting structures • Early warning systems for action • Carbon credit programmes • Youth in tea production
	<p>To promote climate change mitigation to maximize tea production among the small holder tea farmers</p>	<ul style="list-style-type: none"> • Establishment of tree nurseries in schools, as the centres, that brings together parents and the students • National partnerships on tree planting • Promotion of use of solar energy • Promotion of renewable energy use • Waste management
	<p>Development of wood fuel plantations</p>	<ul style="list-style-type: none"> • A total of about 16000 acres (9.6million trees) of plantation already set up by factories for future provision of firewood for steam generation. • 30% of the 16000 representing about 4800acres under indigenous tree for conservation.

Ongoing collaborative conservation work



1. Empowering Rural Communities and Households in Kenya with Renewable Energy (ERCHRE) Supported by RA and IKEA Foundation

Budget: Kes. 15.2 Million over 18 months but extended for another 12 months

The project's overall objective is to improve the incomes, livelihoods, health and self-reliance of rural communities and simultaneously lower deforestation rates and greenhouse gas (GHG) emissions, with the following objectives:

- ✓ To reduce the amount of firewood used by households in the tea producing landscape. Focusing on sensitizing farmers and promotion of other alternative sources of energy such as biomass, solar and improved/energy saving cooking stoves with an aim of conserving the environment. **So far 119,000 trees have been planted small-holder tea farmers and their communities. 12 tree nurseries developed with each over 300,000 trees ready for planting during April - May rains.**
- ✓ To reduce the amount of firewood consumed in the tea factories by supporting the use of industrial briquettes as a thermal energy option for steam generation. **The current financial year about 1million Kgs of Briquettes has been used, representing a saving of about 1666 cubic meters of wood, equivalent to 5000 trees.**



Coordinated Tree Growing- 'Greening Kenya One Tree At a Time Campaign'



Status: On-going campaign

The overall aim of this campaign is to conserve the environment by planting over 1 million trees annually across our tea growing catchment areas.

Impact and progress so far:

- Developed 16 nurseries in each with 285,000 seedlings planted between March-May 2021
- 146,000 trees planted under the TOH-KTDA-TIST Programme in March-April 2020 rains
- 12,664 fruit trees (mango, avocado, pawpaw and white sapote) planted by farmers

Clean and affordable Energy solutions to the farmers

- Pilot biogas project funded by the Mitsubishi Corporate Fund Europe and Africa (MCFEA) through RA
- The MCFEA Energy project aims to provide alternative means to power cooking, lighting and basic farm production by turning farm waste into a clean and affordable energy resource, biogas. Meanwhile, the by-product (referred to as slurry) can provide organic farm manure, which can improve soil fertility by increasing nutrient and water retention.









End



TOPIC:

Community engagement (projects done with communities)

Presenter: Tommaso Menini, African Agency for Arid Resources AGAR Ltd

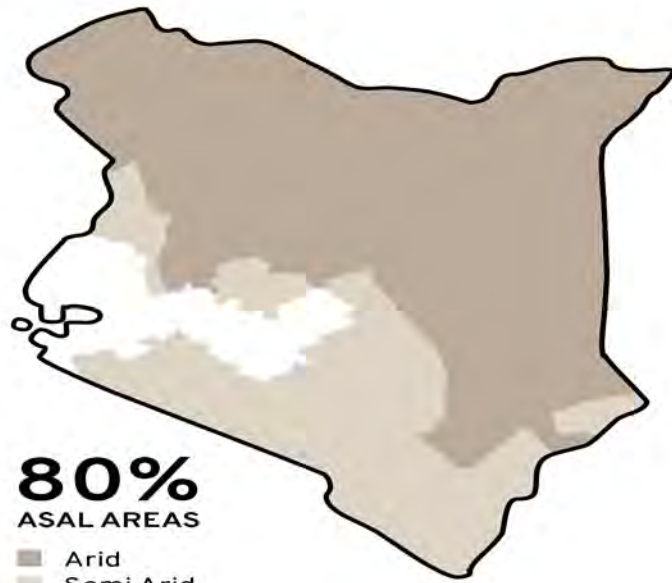




African Agency for Arid Resources Ltd
Conservation - Sustainability - Bio-Diversity - Empowerment

KAVADI – KENYA ARID LANDS VALUE CHAIN INITIATIVE

Agar Ltd –2020



ARID AND SEMI ARID LANDS

Arid lands cover around 80 % of Kenya but comprise only 10% of the population. Their primary livelihood is livestock, which has led to increased poverty and land degradation.

The Causes

- **Over-reliance on low productivity livestock rearing.**
- **Desertification and deforestation.**
- Cyclic droughts have increased in frequency and intensity due to climate change.
- Years of neglect from public and private sectors.

The Result

Poverty index of around 70-80% (UNDP 2018), vs. a **Kenya average of 35.6%** (WB 2017)





OPPORTUNITIES AND CHALLENGES

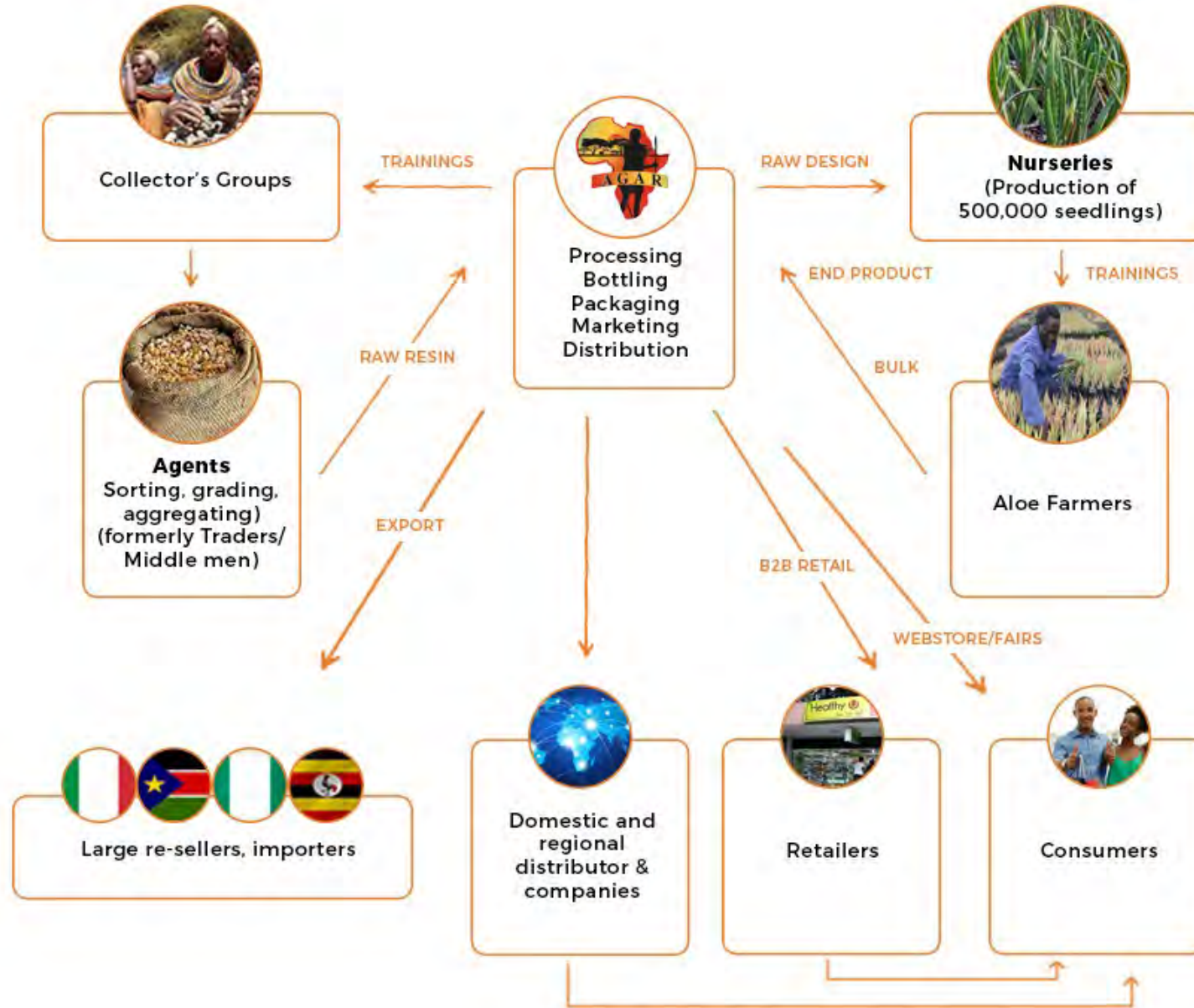
Yet, Kenya's ASALs are endowed with a rich diversity of **high quality** non-timber forest resources, especially:

- Acacia Senegal (**gum Arabic**)
- Commiphoras (**Myrrh**)
- Boswellias (**Frankincense**)
- Indigenous **Aloe** (mostly *Secundiflora*)
- Agave **Sisal**

Development actors have shown interest in the sector, but challenges remain:

1. NGOs **lack market expertise** and outlets in their initiatives.
2. **Unsustainable tapping** and collection of raw resources.
3. Inefficiency of the **informal market systems** and lack of standards.





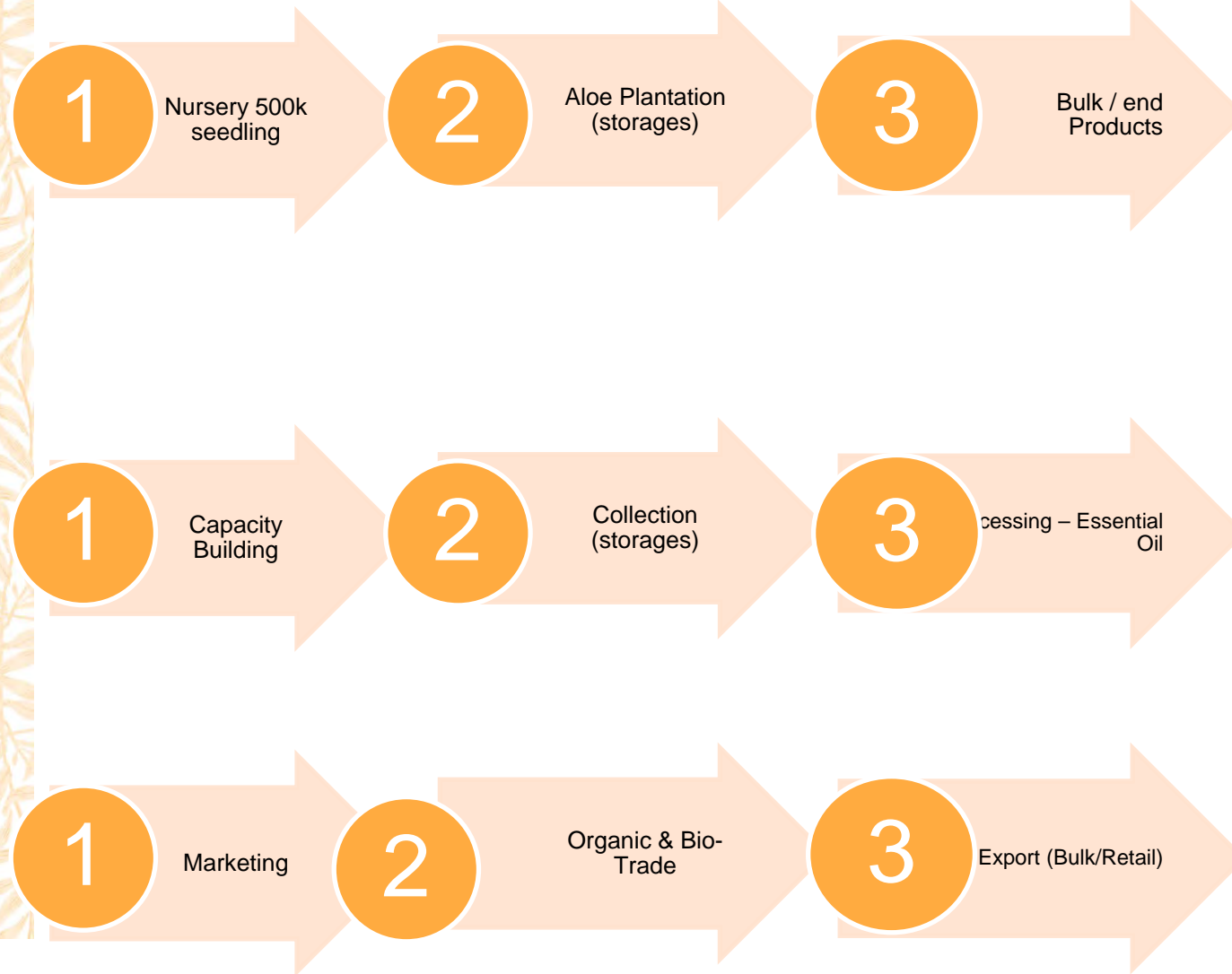
BUSINESS MODEL

- Only company in Kenya collecting from trees and farms and sell to end-customers.
- 1 Field Office (Isiolo)
3 Field Storages
4 Agents
- 50 collectors registered collectors trained and equipped (Wajir, Marsabit)

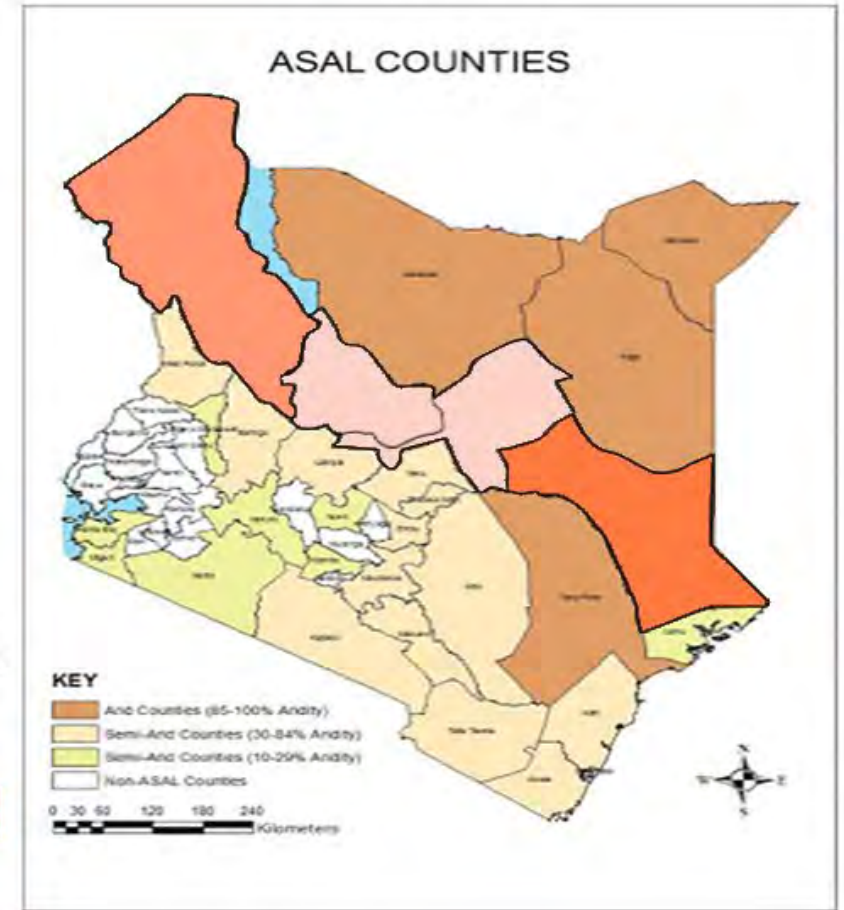
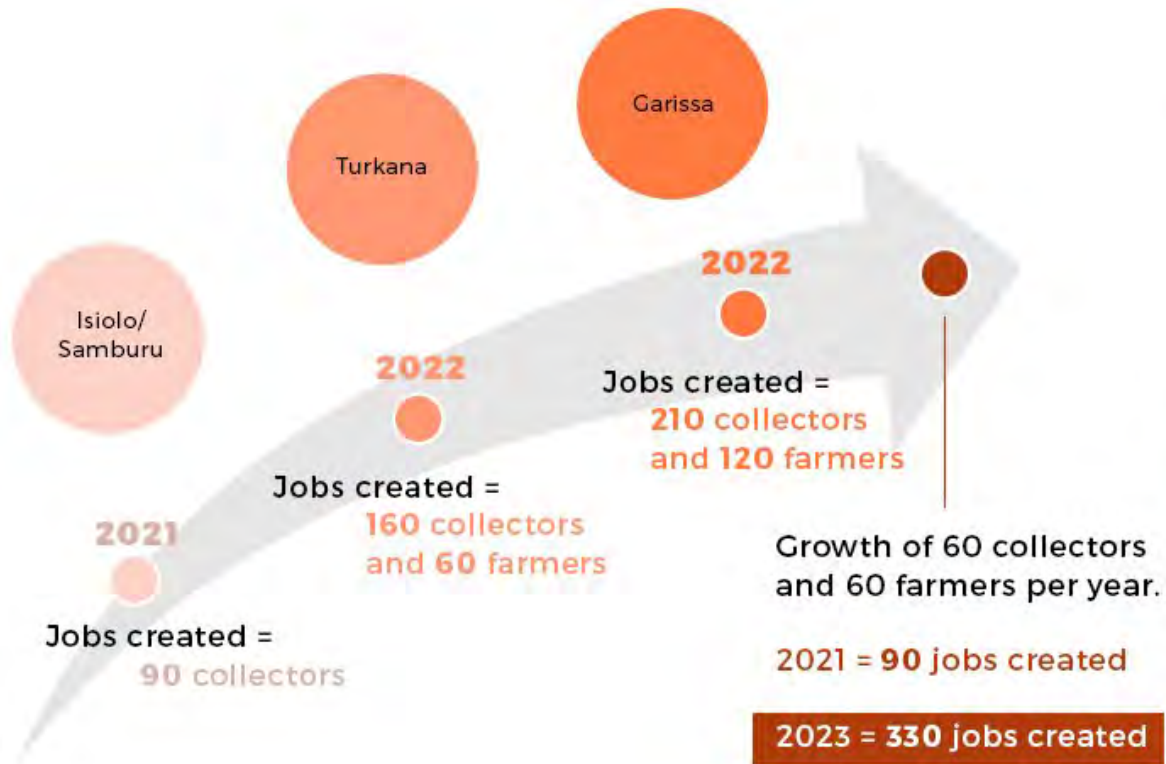




Our Innovation



Growth Plan



Current counties: **Marsabit – Wajir**

Regional: **Uganda, S.Sudan; Ethiopia**

TOPIC:

Schools Green Initiative Challenge

Presenter: Anthony Igecha, KENGEN Foundation



Schools' green initiative challenge

**Presenter: ANTHONY IGECHA, MANAGING TRUSTEE
KENGEN FOUNDATION**



ABOUT GIC

- ▶ The **Schools' Green Initiative Challenge** is a unique project implemented by KenGen Foundation in partnership with **KenGen, Better Globe Forestry, and Bamburi Cement Ltd.**
- ▶ It is the flagship project of the KenGen Foundation's **Environment pillar**, the other two being Education and Water and Sanitation.
- ▶ The project aims to **conserve the Tana River water catchment** area that feeds to the 7-Forks power plants which generate 40% of Kenya's electricity.



PROGRAM STRUCTURE



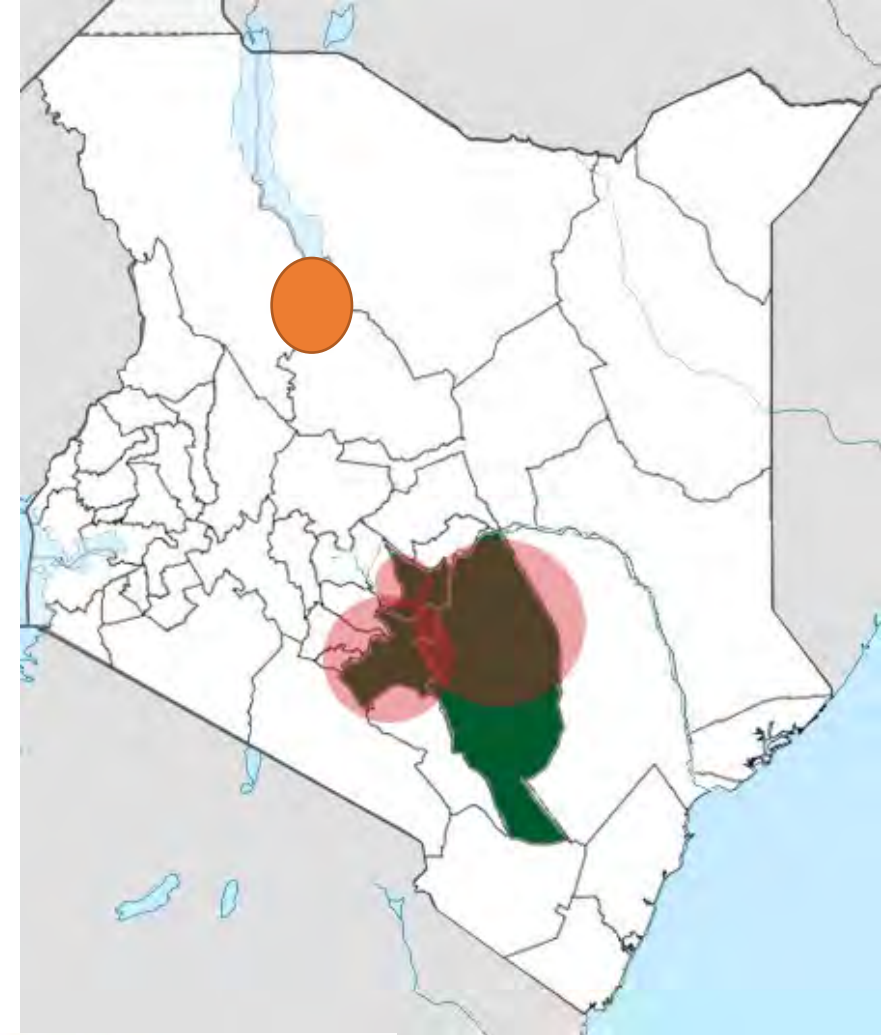
- ▶ The GIC is structured as a **competition** to participating schools, mainly due to the dry weather conditions in their locations.
- ▶ **Prizes** are awarded based on the highest **survival rate** of seedlings, the use of **innovation**, and **community inclusion**.
- ▶ The GIC project is exceptional as all schools within the country can easily adopt it. It is also **sustainable** since it targets school children turning them into **conservation ambassadors**.



OBJECTIVES

The main objectives of the GIC are:

1. The greening of over **460 acres** in the semi-arid counties of **Embu, Kitui and Machakos** with **Mukau (*M. Volkensii*)**, **Muveshi (*S. Siamea*)**, and **Muuku (*Terminallia brownie*)** tree species
2. Mitigate **climate change** and providing **wood fuel** and **alternative income** opportunities for the local communities
3. Establish a **tree-planting culture** for multiple benefits in dry-land areas
4. Reduction of **greenhouse gases** through carbon sequestration
5. Control soil erosion by increasing topsoil infiltration and reducing runoff into the **Tana River catchment area**
6. Nurturing of environmental ambassadors to change the culture of environmental degradation to that of conservation



ACHIEVEMENTS

Eastern Region – (GIC)

- Over 1000 teachers trained
- Total of 748 schools in arid and semi-arid areas
- More than 200,000 trees planted
- 374 acres under conservation
- 3 counties – Embu, Kitui and Machakos

Western Region (Turkwel GIC)

- 28 schools from Turkana & West Pokot Counties
- 56 teachers and head teachers trained for the pilot phase of Turkwel GIC.
- 7400 seedlings planted
- 7 acres under conservation
- Total Investment: **Kes 115 Million.**
- Beneficiaries: Over 600,000 community members
- 602 schools covered in Phases: 1,2,3,4,5 & 6 schools



AWARDS AND RECOGNITION

The GIC challenge has been recognized both locally and internationally through the following awards:

- 1st position under the Best Corporate Category (State Agency) 2017 for its exceptional performance at the Kenya Forest Service tree growing and forest conservation award
- Winner KenGen Good 2 Great (G2G) Energy and Innovation Seminar 2018
- Best Social environment program Africa & middle east under -Lafarge ecosystem 2019



THANK YOU



TOPIC:

SAVE OUR WATER TOWERS PROJECT

Presenter: John Kariuki, BIDCO Africa Ltd





SAVE OUR WATER TOWERS PROJECT

JOHN KARIUKI

BIDCO AFRICA LTD

THANKS
FAQ

WHY BAMBOO FOR LAND RESTORATION?

ADVANTAGES OF BAMBOO

- GREEN ENERGY
- RENEWABLE ENERGY
- GROWS FAST
- HIGH CAROLIFIC VALUE
- LESS CARBON EMISSIONS
- GOOD AT ENVIRONMENT PROTECTION & CONSERVATION



	FACTORS	EUCALYPTUS	BAMBOO
1.	Calorific value (MJ/kg)	19.0 - 19.8	19.0 - 19.6
2.	Planting to maturity.	6-7 years.	Fast growing 4-5 years
3	Ash content on combustion.	Has high ash content of about 4.8%.	Low ash content of about 3.70%
4.	Type of energy.	Non-renewable.	Renewable energy, regenerates itself.
5	Yield per ha/year	20 MT	30 MT
6.	Comparative land use, equivalent in terms of yield.	4.5 ha	1 ha
7	Combating global warming through reduction of carbon footprints.	Absorbs less carbon-dioxide.	Bamboo absorbs Carbon-dioxide and releases Oxygen into the atmosphere 3 to 4 times higher than many other trees.
8.	Environment protection.	Less ground cover, requires fertile soils.	Good ground cover, rehabilitates degraded marginal soils.

• BAMBOO FOR ENVIRONMENT CONSERVATION

- RIPARIAN ALND
- IDLE LAND
- DEGRADED LAND





SAVE OUR WATER TOWERS

- ❑ PLAN IS TO PLANT 1 MILLION BAMBOO SEEDLINGS IN OUR WATER TOWERS
- ❑ COMMISSION IN 2017 BY CS PROF.WAKHUNGU
- ❑ PLANTED BAMBOO AT NDAKAINI& RUIRU DAM

A photograph of a dense bamboo forest. The ground is covered with a thick layer of fallen bamboo leaves and branches, creating a brown, textured path. The bamboo stalks are green and segmented, with some showing signs of being cut or broken. The background is filled with more bamboo, creating a sense of depth and a lush, green environment.

BIDCO AFRICA PROMOTING PRODUCTION AND USE OF BAMBOO

- Bamboo contract farming
- Bidco offtake bamboo for biomass production.



BAMBOO FOR BIOMASS PRODUCTION

- ❑ To meet its growing energy requirements, Bidco Africa has a state-of-the-art **Co-generation plant** that generates up to 70% of its energy requirements.
- ❑ • The company has a monthly requirement of **6,000 MT of biomass** which mainly includes agro-waste (coffee, macadamia , cashew nut husks) and wood fuel.
- ❑ • Bidco is seeking alternative sources of **RENEWABLE AND SUSTAINABLE ENERGY** to meet its present and growing energy needs.

TOPIC:

Role of SMEs in Landscape Restoration

Presenter: Samuel Kabiru, World Resources Institute
WRI





WORLD
RESOURCES
INSTITUTE

Role of SMEs in Landscape Restoration : Entrepreneurship and business approaches in restoration

National Landscape Restoration Scaling Conference,
15th July 2021



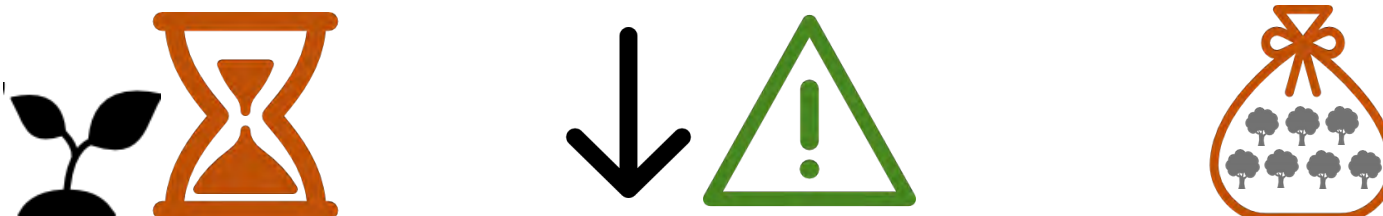
RESTORATION MOVEMENT

Role of SMEs in Restoration Agenda



Primary barriers FOR RESTORATION ENTERPRISES in Africa

Project Characteristics




1. Long time horizon required

2. Considered risky

3. Projects are often small


Market forces



4. Mismatch of capital and needs

5. Market links are missing

Capacity

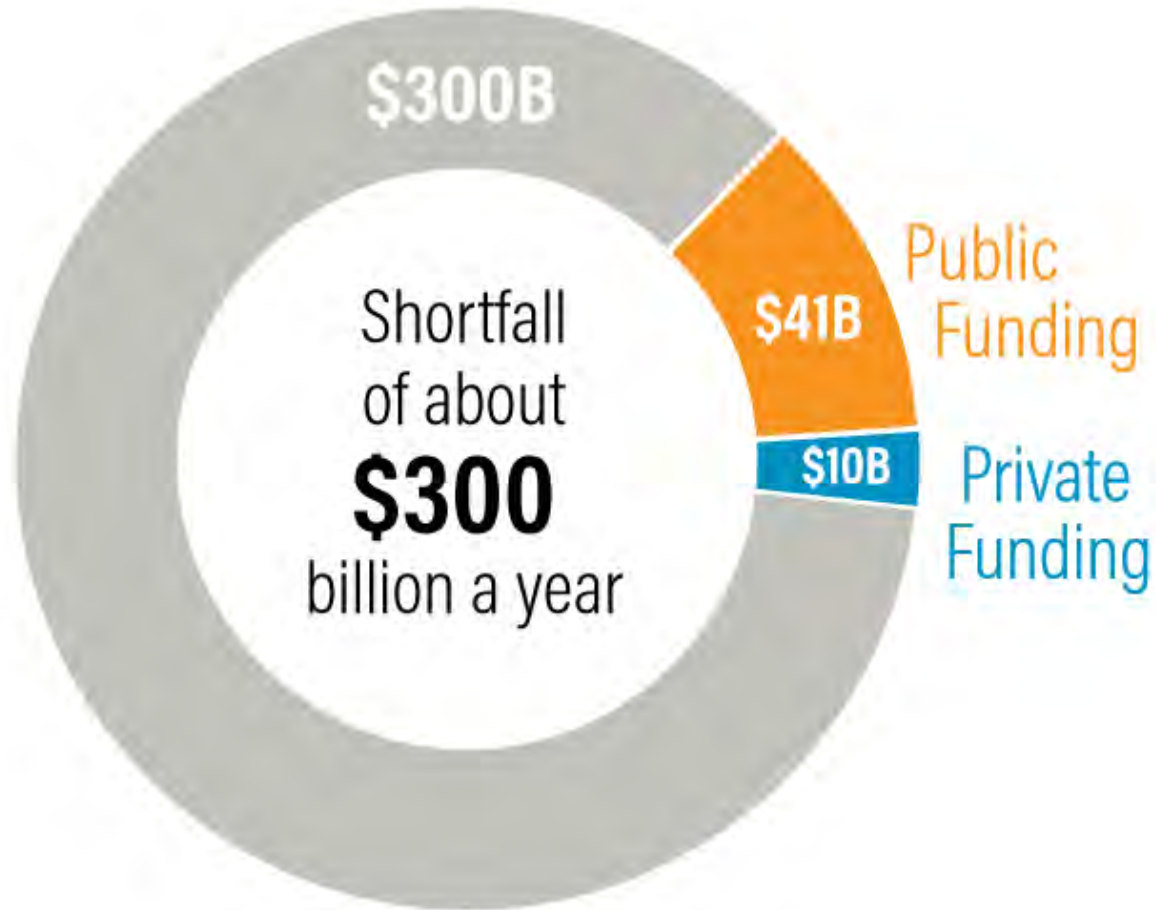


6. Insufficient technical capacity

7. Investment readiness is low

RESTORATION FACES A MAJOR FINANCE GAP

Funding Shortfall for Restoration and Conservation



Reliable numbers on restoration finance are sparse, but all indications are that there is a large gap. We anticipate this is true in every region, including Africa.

Private investment has been particularly lacking for two reasons:

1. Restoration generates many positive externalities that are hard to monetize (biodiversity, carbon sequestration, water & air quality...).
2. The business approach to restoration is fairly new and has not been socialized yet. Most mainstream investors are unaware of the opportunity. The strongest interest right now is from impact investors, who tend to make small investments.





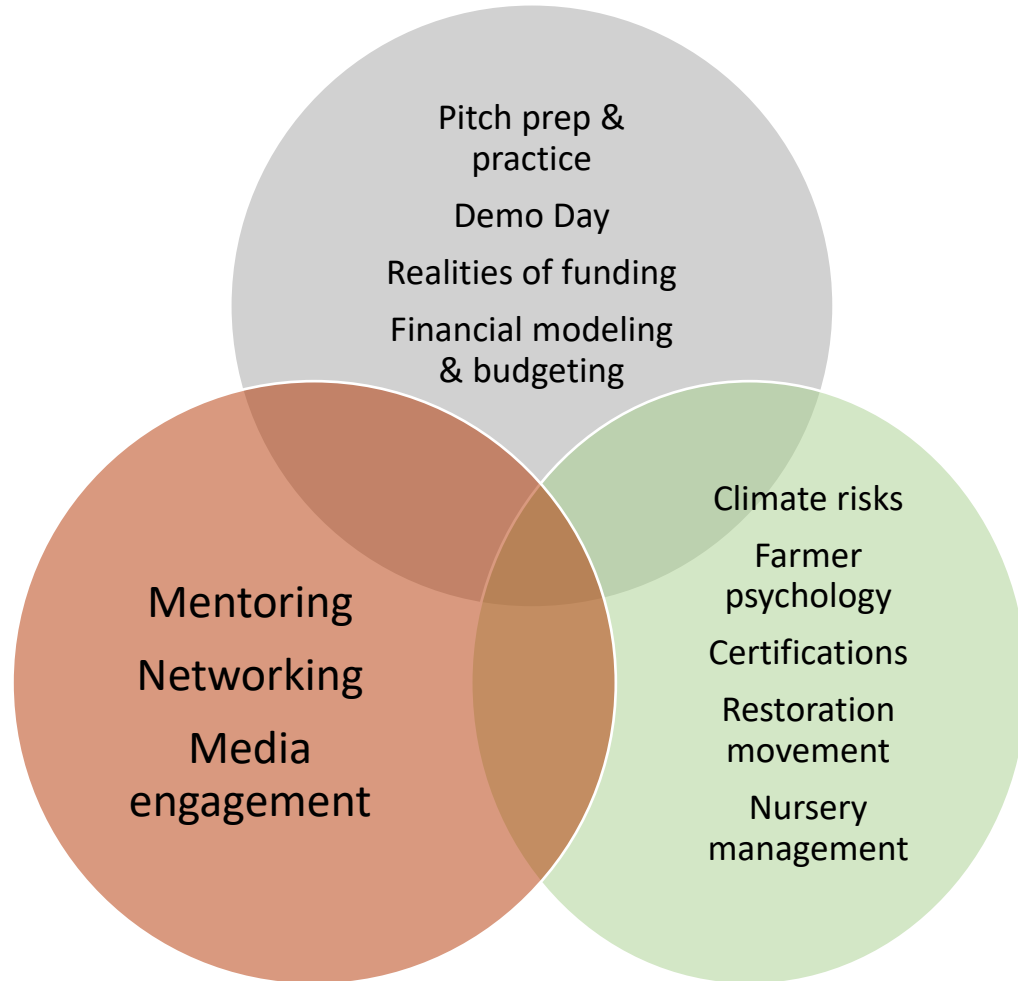
The
Land Accelerator

Six months acceleration and matchmaking program with a
curated curriculum

Small businesses and entrepreneurs who restore land AND
create profits for themselves and the community



UNIQUE, CUSTOMIZED PROGRAM

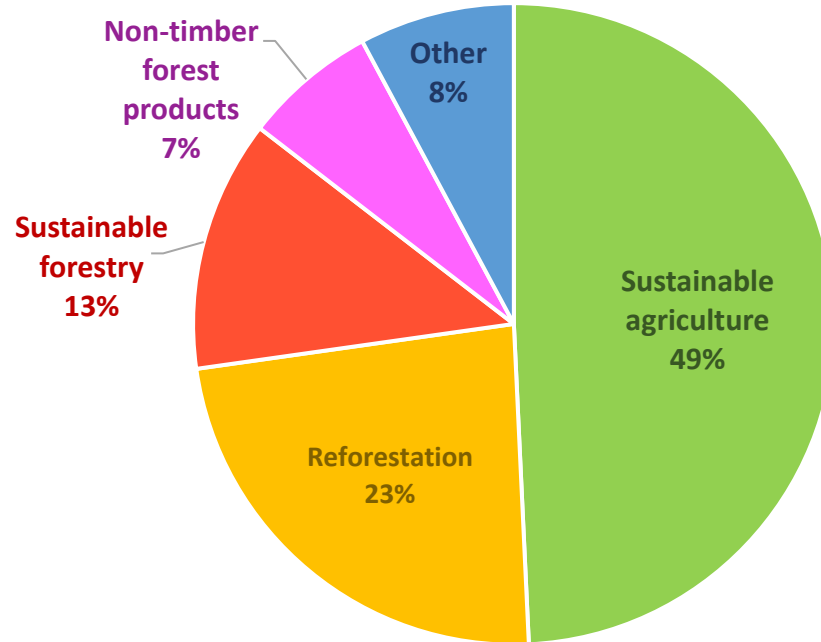


OVERVIEW OF 2019 DIVERSE RANGE OF APPLICANTS

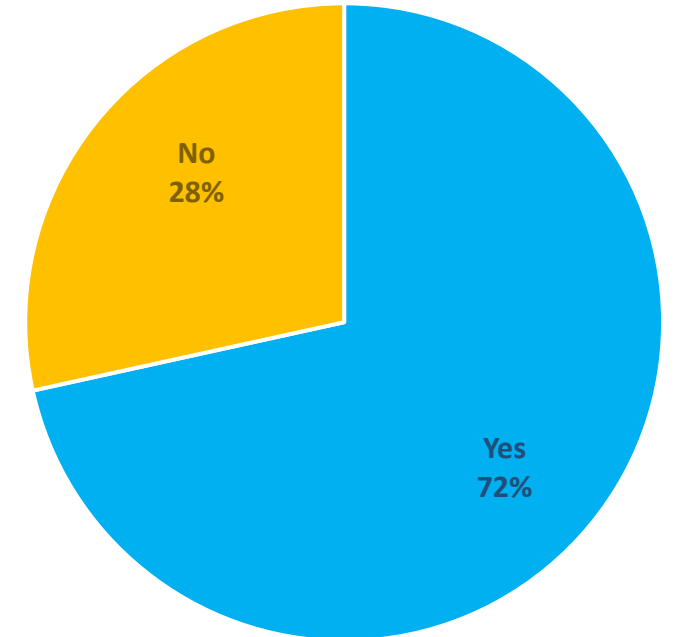
STAGES OF GROWTH



SECTORS



FEMALE (CO)FOUNDER



*this breakdown may not be accurate -- 35% of applicants did not respond to this question, and based on interviews, some that responded "Yes" did not respond accurately



Key outcomes

- 10 of 26 African Founders have raised \$540,000 USD cumulatively since participation
- The 2018 cohort doubled employment; 1,100 employed in 2019, vs 494 in 2018
- \$7.5 Million in annual revenue, which averages to \$288,000/company

Figures are self-reported by the participating founders



APPLY NOW TO THE AFRICA Land Accelerator 2022

- *3 months virtual trainings hosted in English and French in collaboration with AUDA-NEPAD*
- *Up to Top 100 Land Restoration Entrepreneurs will receive \$5,000 Grants*
- *We especially encourage women and young entrepreneurs of all stages of businesses to apply*

Applications are currently open until March, 2022.



For more information:

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