

Climate Change Adaptation, Green Transition and the Bioeconomy

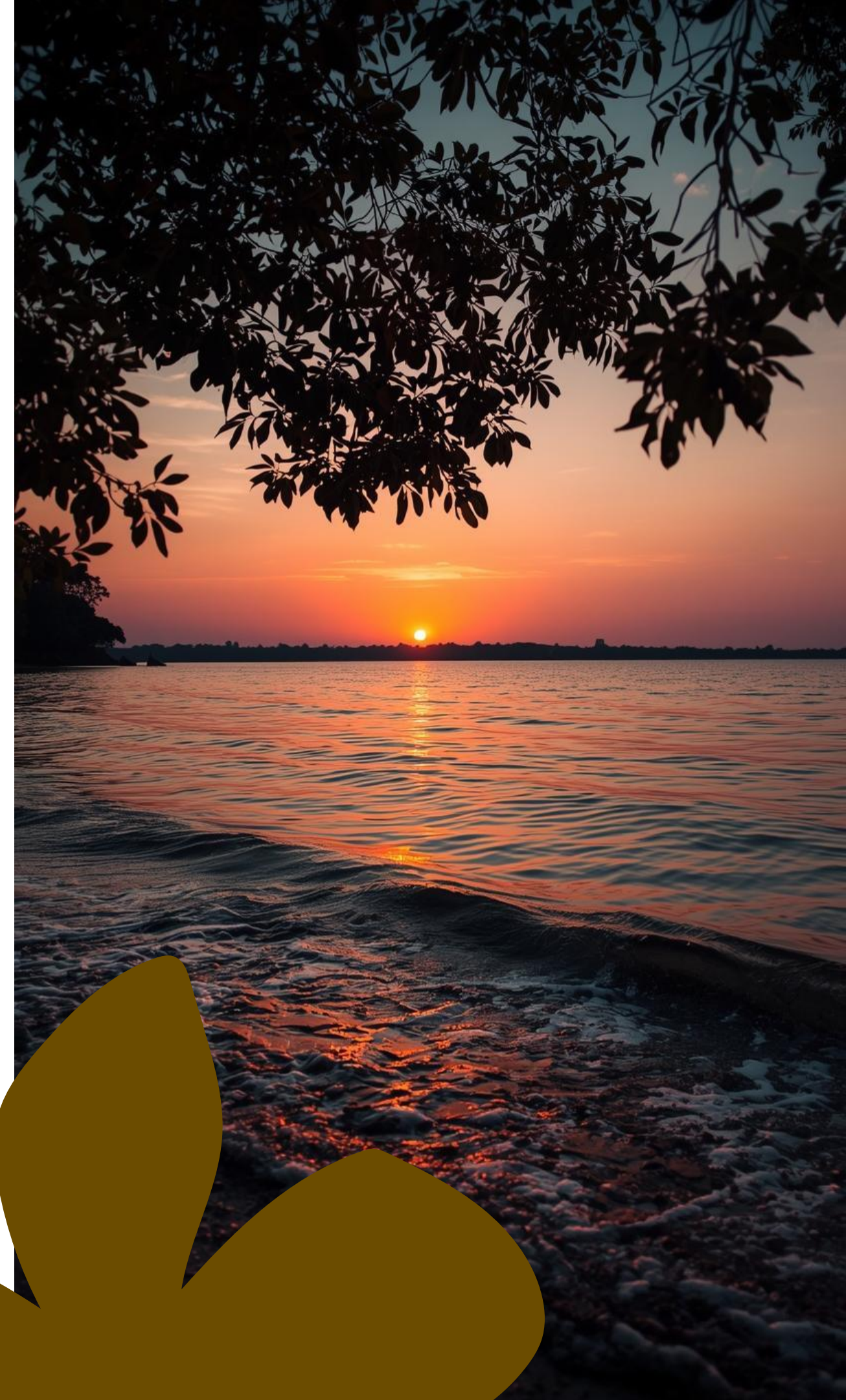


BDCG Inclusive Markets Symposium

26th-28th November, 2025.

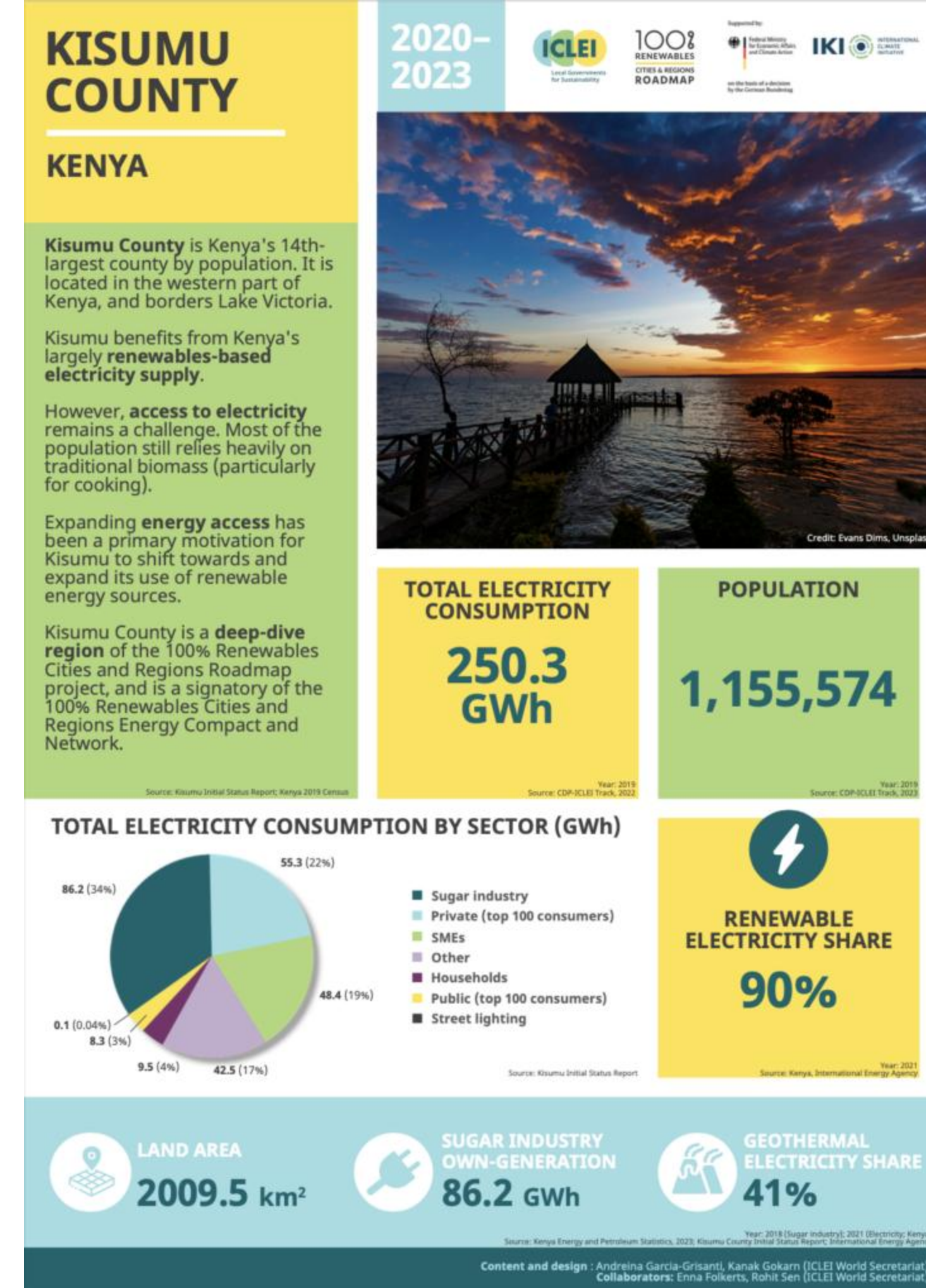
CIALA Resort, Kisumu, Kenya.

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MESPT



Kisumu & Our Shared Future

- A city whose vibrance, warmth and entrepreneurial spirit reflect the future we are working towards.
- A future where communities are empowered, markets are resilient, and prosperity is shared.



A Defining Moment for Africa

URGENCY OF CLIMATE IMPACTS

- Africa is experiencing **devastating climate effects**.
- Floods, droughts, and rising temperatures threaten livelihoods.
- Farmers face the deepest impacts, with markets destabilized.
- We must act to mitigate these effects and empower communities for a resilient future.





Africa's Climate Reality

TEMPERATURE INCREASE

- Africa is warming faster than the global average.
- The world has just recorded its warmest year in history.
- Over 60% of livelihoods depend on rain-fed agriculture.
- Africa loses an estimated USD 70 billion every year to climate shocks.
- Only 40% of Africans have access to early warning systems.

Why We Must Act — and Act Together

FROM EXTRACTION TO REGENERATION

- Transforming an extractive, linear economy into one that is circular, regenerative and bio-driven.
- Building food systems that are productive, sustainable, equitable and resilient.
- Creating markets that work for people and the planet.



Simple Truths About Our Future

01 BIO-BASED

The **bio-based economy** utilizes renewable biological resources, transforming them into sustainable products that enhance environmental health and economic stability for communities across Africa.

02 GREEN

A **green economy** emphasizes sustainability, focusing on resource efficiency and reducing emissions, fostering innovation that creates jobs and promotes social equity within local economies.

03 CIRCULAR

In a **circular economy**, materials are reused and recycled, minimizing waste and maximizing resource efficiency, which leads to economic growth while protecting the environment for future generations.

The Green Economy: Smart Economics

01

RISK REDUCTION

A green economy helps **reduce risks** associated with climate change, ensuring that communities are better prepared for environmental shocks and can swiftly recover from adverse events.

02

RESOURCE EFFICIENCY

By improving resource efficiency, a green economy minimizes waste, optimizes production processes, and promotes sustainable practices that contribute to the long-term viability of our natural resources.

03

JOB CREATION

Transitioning to a green economy **creates jobs for youth**, fostering innovation and providing employment opportunities in sectors like renewable energy, sustainable agriculture, and eco-friendly technologies.



Circular Economy Principles

REUSE

Reusing products reduces waste and resource extraction, extending the life cycle of materials and fostering a sustainable consumption model.

RECYCLING

Recycling materials minimizes environmental impact by converting waste into valuable resources, enhancing resource efficiency and supporting circular economic growth.

RESTORATION

Restoring ecosystems strengthens natural cycles, helping to regenerate materials and create a resilient environment that supports both people and wildlife.

The Bioeconomy Converts Resources into Value



BAOBAB

Nutrient-rich powders from dried fruit and seeds



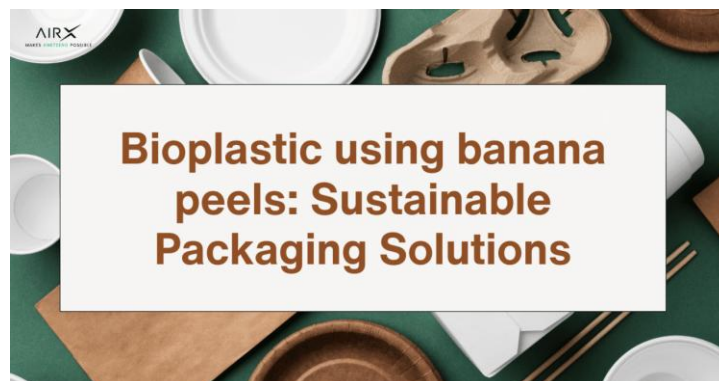
SORGHUM

Fortified flours derived from local crops



MORINGA

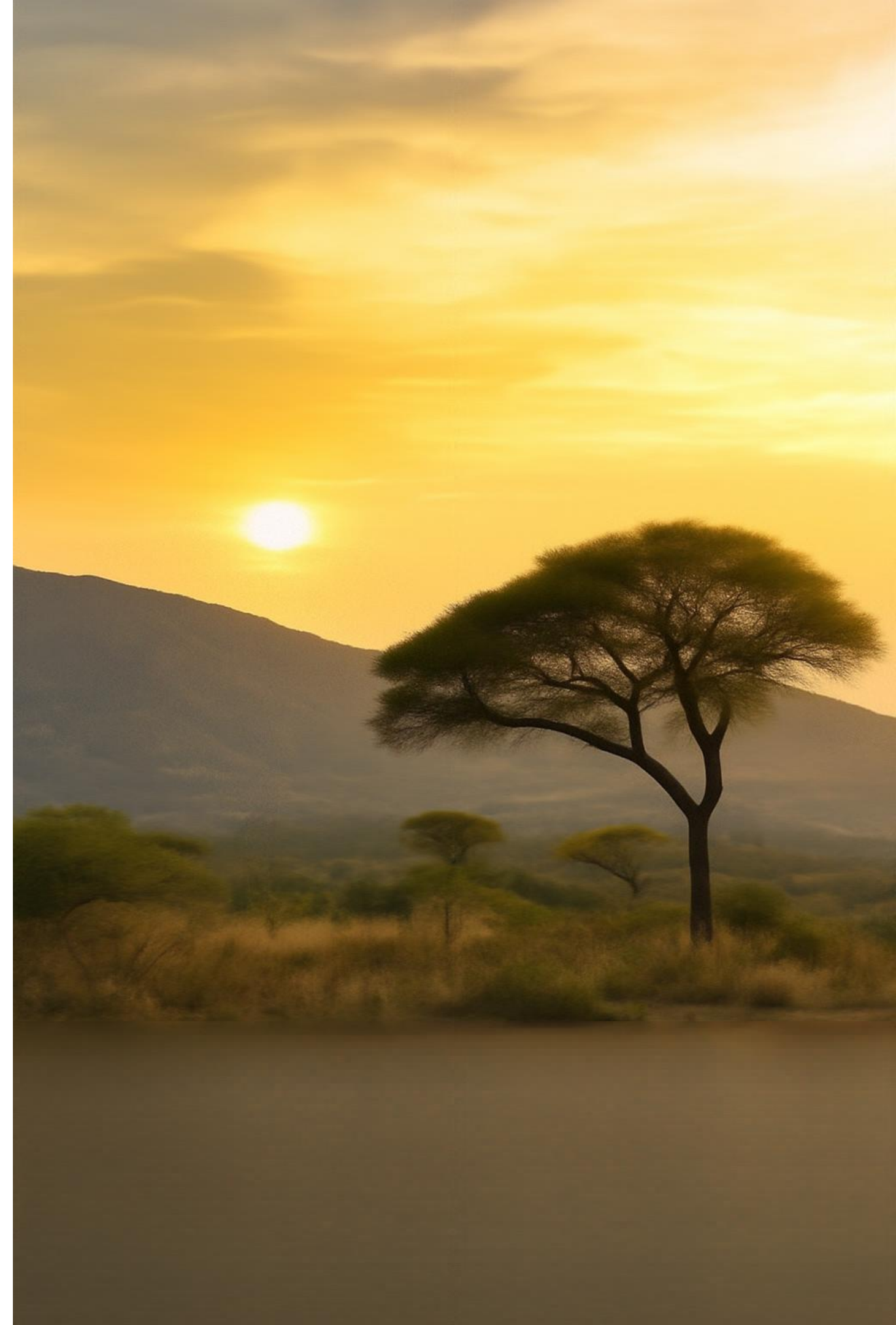
Health supplements made from leaf extracts



Sisal and banana fibres into biodegradable packaging

What Kenya Is Doing

- ✓ 15-billion tree-growing programme.
- ✓ National Climate Change Action Plan (NCCAP).
- ✓ Green Economy Strategy (GESIP).
- ✓ Bamboo Strategy for climate mitigation and green livelihoods.
- ✓ Investments in solar, waste-to-energy, clean cooking and sustainable mobility.



Innovation Beyond Government

- Youth movements, civil society and researchers.
- Private sector actors driving new solutions.
- Electric mobility.
- Solar cold storage.
- Biodegradable materials.
- Community-led restoration.

A Kenya that puts climate resilience at the centre of its development agenda.



YOUTH

Empowering the next generation of leaders



SUSTAINABILITY

Implementing eco-friendly practices in communities



MOBILITY

Advancing electric transport solutions across cities



INNOVATION

Creating solutions for a greener future

MESPT's Contribution

Practical solutions that farmers can adopt today and scale tomorrow



Solar-powered drip irrigation

Efficient water delivery ensures healthy crop growth.



WATER HARVESTING

Capturing rain supports sustainable agriculture practices.



DROUGHT RESISTANCE

Resilient crops thrive in changing climates.

- Regenerative soil fertility management.
- Pest surveillance and digital alerts to combat pest threats.

Digital Climate Advisory Systems

EMPOWERING FARMERS THROUGH TECHNOLOGY

These systems provide **real-time alerts** and tailored recommendations to help farmers make informed decisions about climate-smart practices and pest management.



Circularity in MESPT's Work



SOLAR DRYERS

Efficiently harnessing sunlight to preserve food sustainability.



COMPOSTING

Transforming organic waste into nutrient-rich soil amendments.



WASTE TO FEED

Converting waste into high-value feed solutions for livestock.

- Supporting indigenous and underutilised crops.

Bioeconomy in the Avocado Value Chain

- Regenerative agroforestry.
- Organic certification.
- Composting, mulching and soil regeneration.
- Tree planting for carbon sequestration.

Markets become resilient when they are rooted in ecosystems that thrive.



Africa's Resilience: A Testament to Innovation

EMBRACING OUR STRENGTHS

Africans are **not victims**, but rather innovators, committed to preserving biodiversity and leveraging ancestral wisdom for sustainable futures.



Collective Action for Resilience

SHARED RESPONSIBILITY IS KEY

Governments, private sector, farmers, youth, researchers, and partners must collaborate.

Together, we can create resilient markets.

- Regenerate soils
- Empower local communities
- Enhance sustainable practices
- Foster innovation and shared knowledge



Embracing Regeneration for a Sustainable Future

Choosing **regeneration over degradation** fosters innovation and hope, empowering communities and creating resilient ecosystems for generations to come.



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Thank You