



# **Fostering Intra-ECOWAS Cooperation and Advancing Intra-African Trade in West African Agrifood Value Chains**

**Leveraging Agricultural Waste Value Chains for Economic  
Empowerment and Sustainability**

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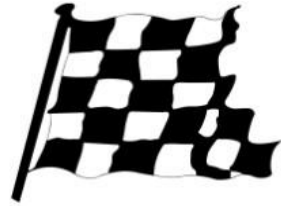
# Outline

- ▶ Introduction
- ▶ SMEP
- ▶ The Project
- ▶ Products & Customers
- ▶ Call to Action

# The Consortium



MANANASI  
FIBRE LTD



**THE CHEQUERED  
FLAG LTD**

**ananas anam**  
New materials for a new world

## Sub contractors

Steelstone Kenya Ltd (machine sub-component manufacture)

Steel Structures Limited (Site facilities)

Ken's Metal Industries Limited (machine sub-component manufacture, waterjet cutting)

Location: Del Monte Pineapple Plantation, Thika , Kenya

Project duration – 31 months





Sustainable Manufacturing and  
Environmental Pollution

The complete utilisation of pineapple plant waste for the  
production of textile grade fibres and compost



SOUTH  
SOUTH  
NORTH

## The Past

**Knock**



**Dry**



**Burn**



52,000 tons of CO<sub>2</sub> along with particulate air pollutants

Smoke drifts into densely populated areas on farm boundaries

1200 hecatres (390,000 tons) disposed of in this way per year

**Soil health and Soil microorganisms**

# Now going into the Future

Harvest  
2900 t/month



Transport to  
factory



Sorting



Decortication



Drying



Shredding (rejected material)



Decorticator pulp



Brushing



Baling  
10 t/month



ASP  
Aerated static pile composting  
85.7 tons per month



- The concept is aimed at the industrial producers of pineapples such as Del Monte. The pilot hopes to:
  - Demonstrate a potential increase in turnover of 6.5%,
  - with profit margins of up to 40%,
  - And compelling evidence to enter for Del Monte to invest in a joint venture to utilize more of their available feedstock.
- The concept has worldwide potential. Listed below are the top SMEP member countries in terms of their pineapple production (tons)

Nigeria 1,508,201

Ghana 668,946

Tanzania 368,811

Kenya 330,331

Bangladesh 218,048

Congo 191,014

- Ananas Anam will look to deploy the technology if successful in their existing operations:
  - Philippines
  - Bangladesh
  - Ivory coast

The concept has potential in other industries that produce fibrous plant waste such as banana plantations.

# Competitive Advantage

1. Waste exploitation
2. Automatic decorticator
3. In house design
4. Local sourcing
5. In house assembly and optimization



# Economic Benefits

- ▶ Fibre worth \$6.50 per kg. Del monte have the potential to produce 365 tones worth \$8.9M.
- ▶ Mineral fertilizers displaced by compost (2100 tonnes worth \$1.06M in savings)
- ▶ Immediate turning over of fields (crop cycle 3.5 yrs to 3.2 yrs)

## Other Benefits

- ❖ Displacement of polyester and cotton fibres from the textile industry
- ❖ Soil Improvement
- ❖ Air pollution mitigation
- ❖ Employment and local wealth generation
- ❖ Skill development
- ❖ Intra-regional trade and Knowledge transfer- Campagnie Fruitiere in Senegal, Ivory Coast, Cameroon and Ghana- Grands Domaines du Senegal (GDS)

# Products and Customers

1. Pineapple Fibre
  - ▶ Textiles
  - ▶ Leather alternatives
  - ▶ Pineapple yarn
  - ▶ Hair extensions
  - ▶ Sanitary towels
  - ▶ Evaporative cooling pad material
  - ▶ Weaved products and ropes
2. Compost
3. Bio-Char
4. Bromalaine
5. Carbon Credits
6. Animal Feed (BSF flies)
7. Technology (Automatic Decorticator)
8. R&D

# What are you willing to do for the planet? Regenerative agriculture and sustainability being key

Synthetic Fibres ✘ → Natural Fibres (alternatives to plastic) ✔

## Thank You for your Time