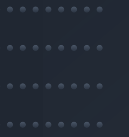


100% Eco Friendly



Introduction



- Kenya's [E-moto](#) limited incorporated in Aug 2019,
- We convert denatured alcohol from cane molasses into biofuel for use as cooking and industrial boiler fuels.
- This reduces pressure on forests and smoke in indoor air pollution.
- It is a climate change solution that sequesters and lowers carbon.

Problem



✓ No Energy Security

- $\frac{3}{4}$ population Sub Saharan Africa lacks access to modern energy and relies on biomass fuels for cooking and heating leading to environment and health implications and poverty.
- Over Reliance on Fossil fuels for cooking and transport
- Reduced Foreign Exchange and vulnerable to global price shifts.

✓ Daily incomes loss /NO JOBS Opportunities/Green Finance

- 64% of total daily earnings are spent on domestic energy use resulting in vicious poverty
- Circle
- Climate de-Risking
- Participating in Carbon investments and opening for Green Finance

✓ indoor Air Pollution

- Toxic monoxide poisoning **resulting in 1M Deaths Annually in Africa**
 - 5M families burn Kerosene and wood charcoal and breath polluted air getting respiratory problems.

✓ Forest depletion/Organic Waste litters

- 83% loss of tree cover in Kenya in 50-year period.
- Generation 125 million tonnes of municipal solid waste (MSW) was generated in Africa in 2012, which is expected to double by 2025

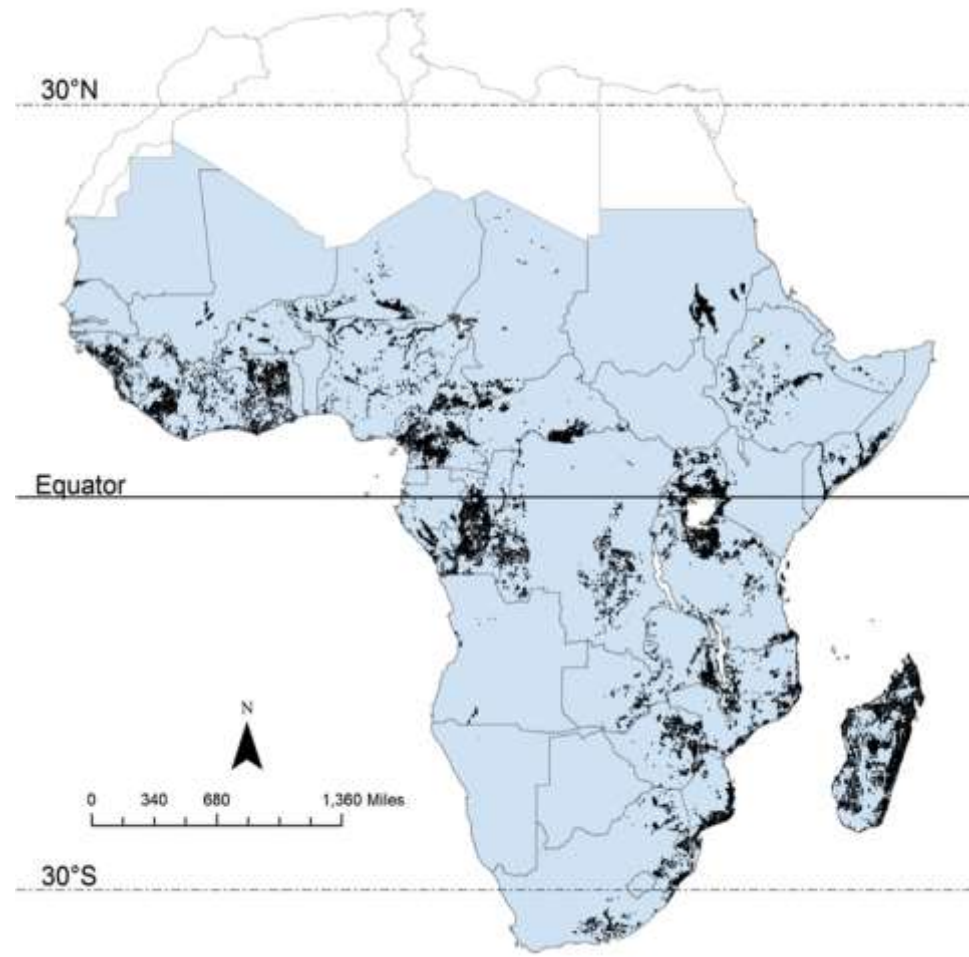
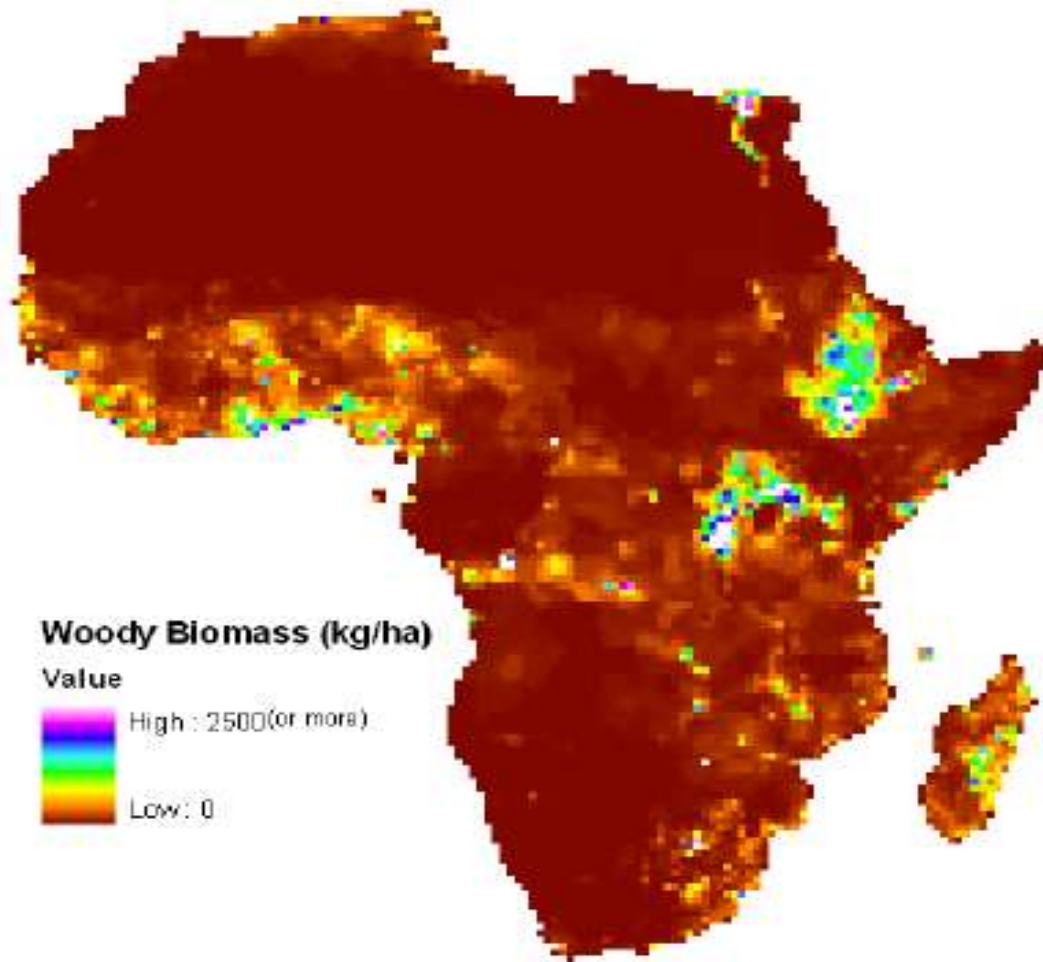
✓ Economic Time Loss/Gender equality

- Women and girls spend time and loose hours of economic productivity in fetching wood and other household fuels .

Types of Fuels used in Typical African food cooking process which all creates black carbon/ indoor pollution
(Current business images in Charcoal, Wood fuel and Sub-sidized Kerosene)



Fuel-wood demand in Africa (kg/ha/year). Estimates were derived from FAO country-level statistics and Spatial distribution of sugarcane production areas in Africa based on modelled data (After: HarvestChoice, 2015a,b).



Supporting Policies

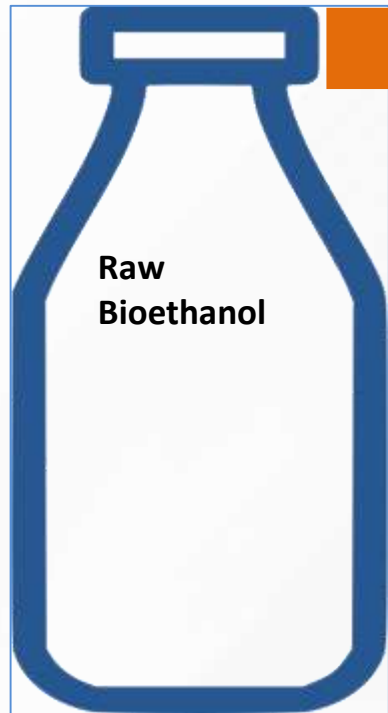
- The investment in ethanol manufacturing and distribution will boost industry and innovation in Kenya 18 Climate Action Take urgent action to combat climate change and its impacts • Up to 54 million trees could be saved over a 10-year period from households switching from charcoal to ECF • Up to 13.5 billion kgs of Co2 eq could be saved cumulatively over a ten-year period by switching to ECF
- Kenya Vision 2030 Promotes export driven manufacturing. Boost the capacity and local content of domestically manufactured goods • Investment in the Ethanol industry will provide a significant boost to manufacturing, with the potential to export into new markets 17 Increase forest cover Increase the forest cover by 10% by 2022
- • Reducing the use of charcoal will increase the forest cover, which will in turn increase water availability and reduce food security Kenya's Nationally Determined Contribution (NDC) Reduce greenhouse emissions Reduce greenhouse gas (GHG) emissions by 30% by 2030 relative to the business as usual • Up to 13.5 billion kgs of CO2 could be saved cumulatively over a ten-year period by switching to ECF Sustainable Energy for All Initiative – Kenya Action Agenda Increase the penetration rate of clean fuels Increase the penetration rate of clean fuels to 100% by 2028 • The development of a domestic ECF industry will contribute to the objective of increasing the uptake of clean fuels in Kenya National Climate Change Action Plan 2018-2022 Promote the transition to clean cooking Reduce the number of household biomass related deaths from 49% of total deaths to 20%. •
- the African Union has set an ambitious aspiration that “African cities will be recycling at least 50% of the organic waste they generate by 2023”.

Typical cooking in streets and African homes/kitchen, cooking food over wood and charcoal fire introducing black carbon/ indoor pollution



E-MOTO SOLUTION

PRODUCTS: E90+ BioFuel & Eco-future Cook stove smart system



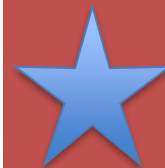
Value Addition
Dosing



- E-90+[®] ?
- Safety-Denaturing biofuel
- Standardization
- Packaging/ bulking
- Shipping out

Eco future[®] STOVES

Customer Friendly product



➤ Saves the Family income 100/- (Daily use) 💰

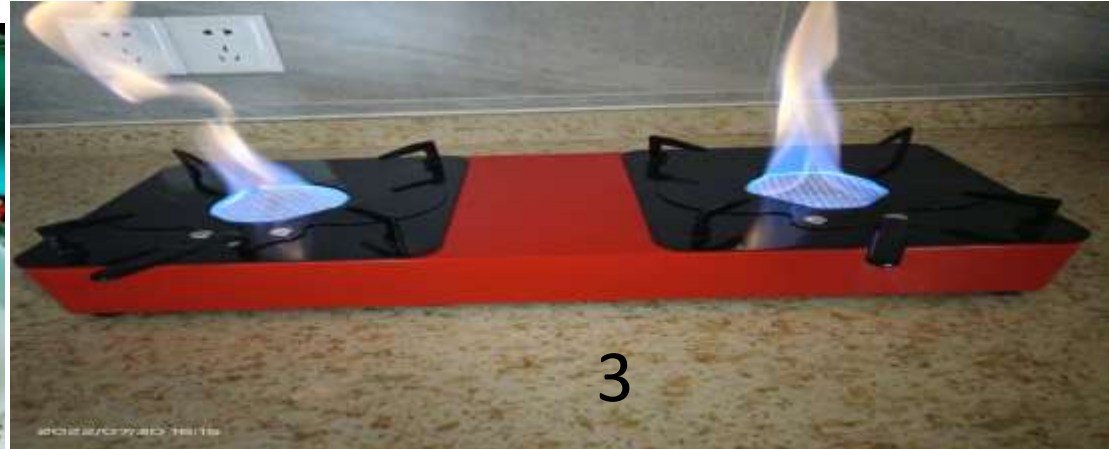
➤ Burns 50% Longer 🔥 Cooks faster



➤ 100% Eco friendly ? zero smoke

Our PRODUCTS

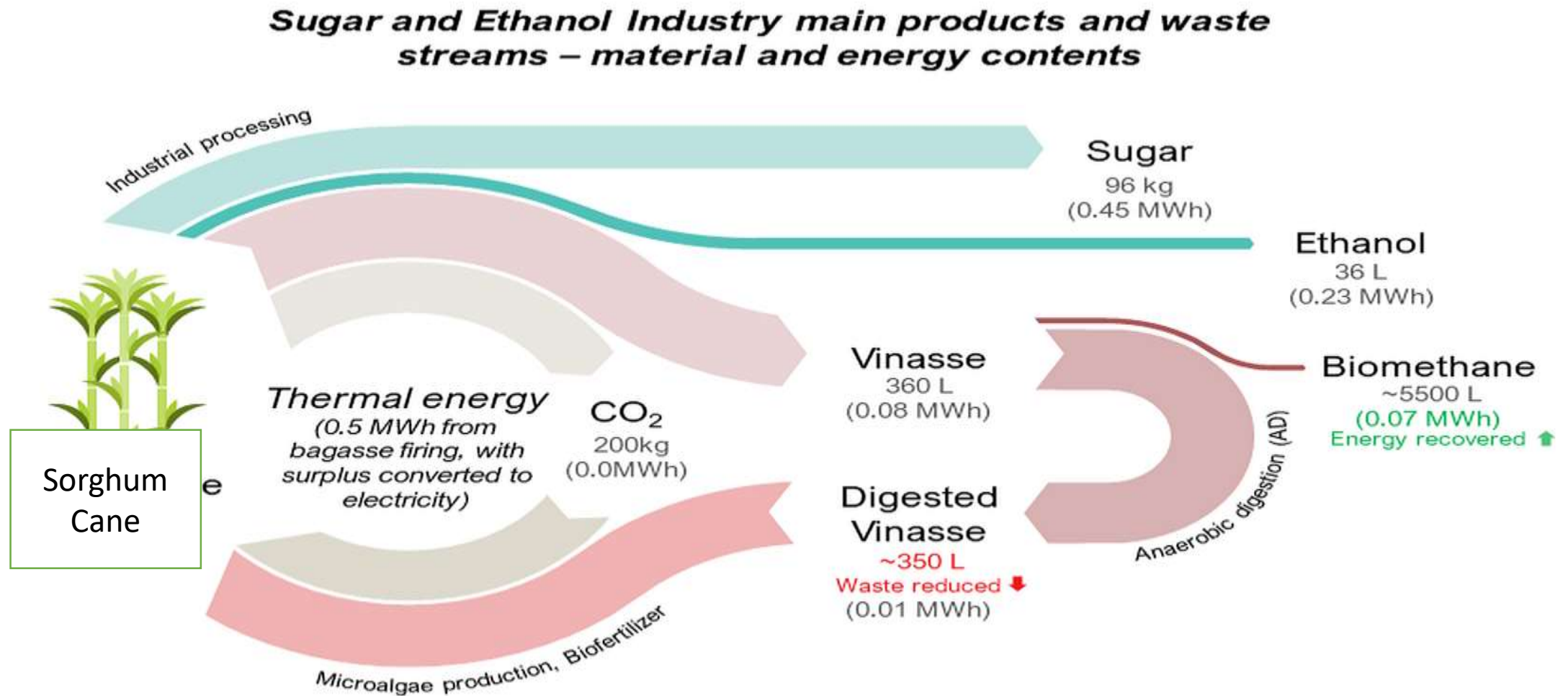
1)Eco Future Stove one 2)Canister 3)Eco future stove two 4)Denatured Alcohol 90+fuel 5)Eco-PH top Dresser fertilizer 6)Rain Barrel drums



Business model- B2B

- Cluster Aggregator community based projects/PAYGO with employers in :
 - 1) Large scale Agricultural worker concentration sites e.g tea, sugarcane and flower farms.
 - 2) Factories industrial settings
 - 3) Co-operatives, Women and Youth Groups living together in village sub counties

Industrial products and waste streams



Sales Forecast Summary- Year 1

Product Lines	Units	Sales Price Per Unit	COGS Per Unit	Margin Per Unit Inc VAT
E-90 + Biofuel Brand	Per litre	KES 140.00	KES 130.00	KES 10.00
Ecofuture stoves Both 1&2	Per unit	KES 3,250.00	KES 1,312.50	KES 1,937.50
E-moto stoves	Per unit	KES 3,250.00	KES 1,650.00	KES 1,600.00
E-90 scented/Mossi brand	Per litre	KES 165.00	KES 130.00	KES 35.00
Institutional Canisters	Per unit	KES 15,000.00	KES 6,000.00	KES 9,000.00
Used Bulk Drums	Per unit	KES 3,250.00	KES 2,500.00	KES 750.00

Product Lines	January	February	March	April	May	June	July	August	September	October	November	December	Annual Totals
E-90 + Biofuel													
Per litre Sold				15,000	20,000	25,000	30,000	35,000	40,000	45,000	50,000	55,000	315,000
Total Sales	-	-	-	2,100,000	2,800,000	3,500,000	4,200,000	4,900,000	5,600,000	6,300,000	7,000,000	7,700,000	44,100,000
Total COGS	-	-	-	1,950,000	2,600,000	3,250,000	3,900,000	4,550,000	5,200,000	5,850,000	6,500,000	7,150,000	40,950,000
Total Margin inc VAT	-	-	-	150,000	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	3,150,000
E-moto stoves- Ecofuture 1&2													
Per unit Sold				750	750	750	750	750	750	750	750	750	6,750
Total Sales	-	-	-	2,437,500	2,437,500	2,437,500	2,437,500	2,437,500	2,437,500	2,437,500	2,437,500	2,437,500	21,937,500
Total COGS	-	-	-	984,375	984,375	984,375	984,375	984,375	984,375	984,375	984,375	984,375	8,859,375
Margin in VAT	-	-	-	1,453,125	1,453,125	1,453,125	1,453,125	1,453,125	1,453,125	1,453,125	1,453,125	1,453,125	13,078,125
E-moto stove													
Per unit Sold				250	500	750	1,000	1,250	1,500	1,750	2,000	2,250	11,250
Total Sales	-	-	-	812,500	1,625,000	2,437,500	3,250,000	4,062,500	4,875,000	5,687,500	6,500,000	7,312,500	36,562,500
Total COGS	-	-	-	412,500	825,000	1,237,500	1,650,000	2,062,500	2,475,000	2,887,500	3,300,000	3,712,500	18,562,500
Margin inc VAT	-	-	-	400,000	800,000	1,200,000	1,600,000	2,000,000	2,400,000	2,800,000	3,200,000	3,600,000	18,000,000
E-90 scented/Mosi													
Per litre Sold				5,000	10,000	15,000	20,000	25,000	30,000	35,000	40,000	45,000	225,000
Total Sales	-	-	-	825,000	1,650,000	2,475,000	3,300,000	4,125,000	4,950,000	5,775,000	6,600,000	7,425,000	37,125,000
Total COGS	-	-	-	650,000	1,300,000	1,950,000	2,600,000	3,250,000	3,900,000	4,550,000	5,200,000	5,850,000	29,250,000
Margin inc VAT	-	-	-	175,000	350,000	525,000	700,000	875,000	1,050,000	1,225,000	1,400,000	1,575,000	7,875,000
Institutional Canisters													
Per unit Sold							-	-	-	2	2	2	6
Total Sales	-	-	-	-	-	-	-	-	-	30,000	30,000	30,000	90,000
Total COGS	-	-	-	-	-	-	-	-	-	12,000	12,000	12,000	36,000
Margin inc VAT	-	-	-	-	-	-	-	-	-	18,000	18,000	18,000	54,000
Drums													
Per unit Sold				80	120	160	200	240	280	320	360	400	2,160
Total Sales	-	-	-	260,000	390,000	520,000	650,000	780,000	910,000	1,040,000	1,170,000	1,300,000	7,020,000
Total COGS	-	-	-	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000	1,000,000	5,400,000
Margin inc VAT	-	-	-	60,000	90,000	120,000	150,000	180,000	210,000	240,000	270,000	300,000	1,620,000
Total Units Sold	-	-	-	21,080	31,370	41,660	51,950	62,240	72,530	82,822	93,112	103,402	560,166
Total Sales	-	-	-	6,435,000	8,902,500	11,370,000	13,837,500	16,305,000	18,772,500	21,270,000	23,737,500	26,205,000	146,835,000
Total Cost of Goods Sold	-	-	-	4,196,875	6,009,375	7,821,875	9,634,375	11,446,875	13,259,375	15,083,875	16,896,375	18,708,875	103,057,875



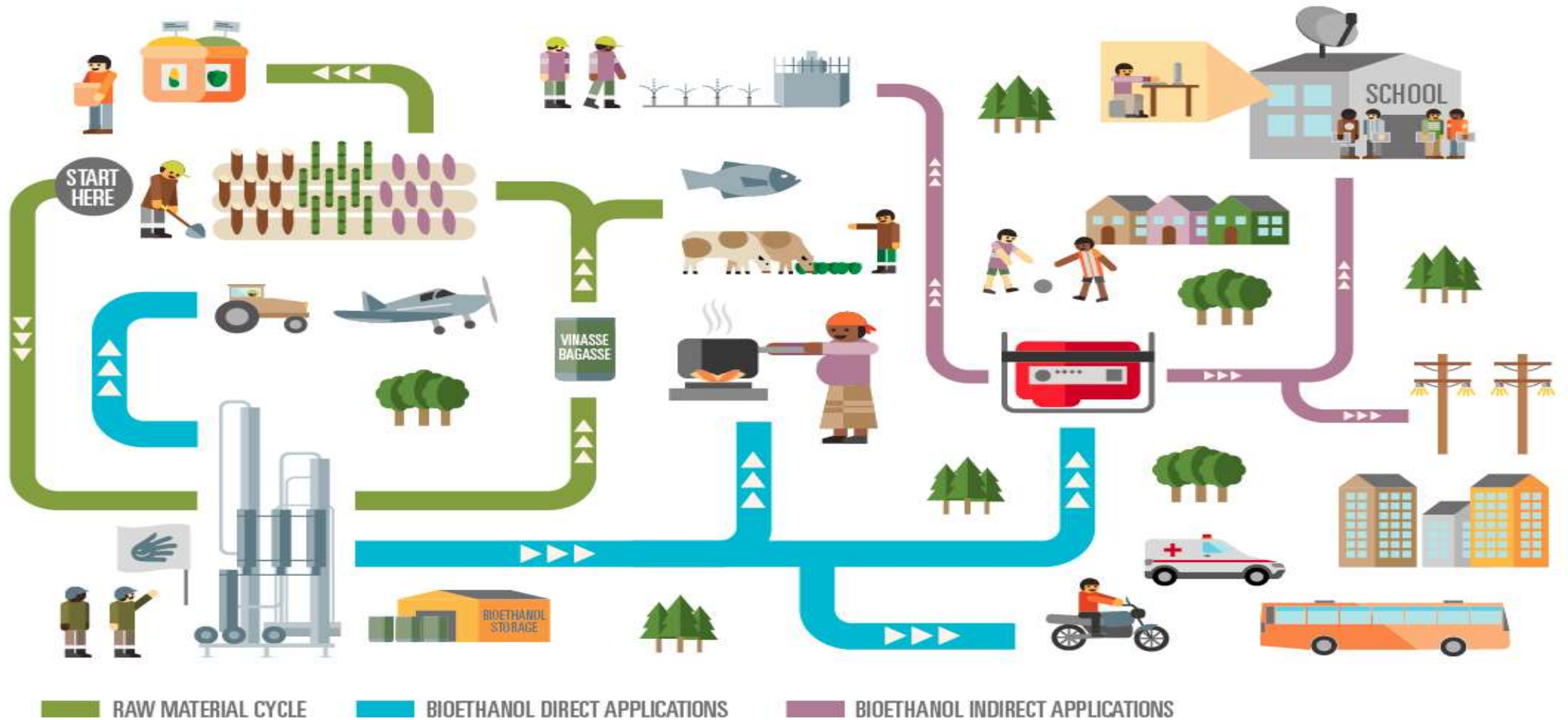
POVERTY CIRCLE

**FOREST
DEPLETION**

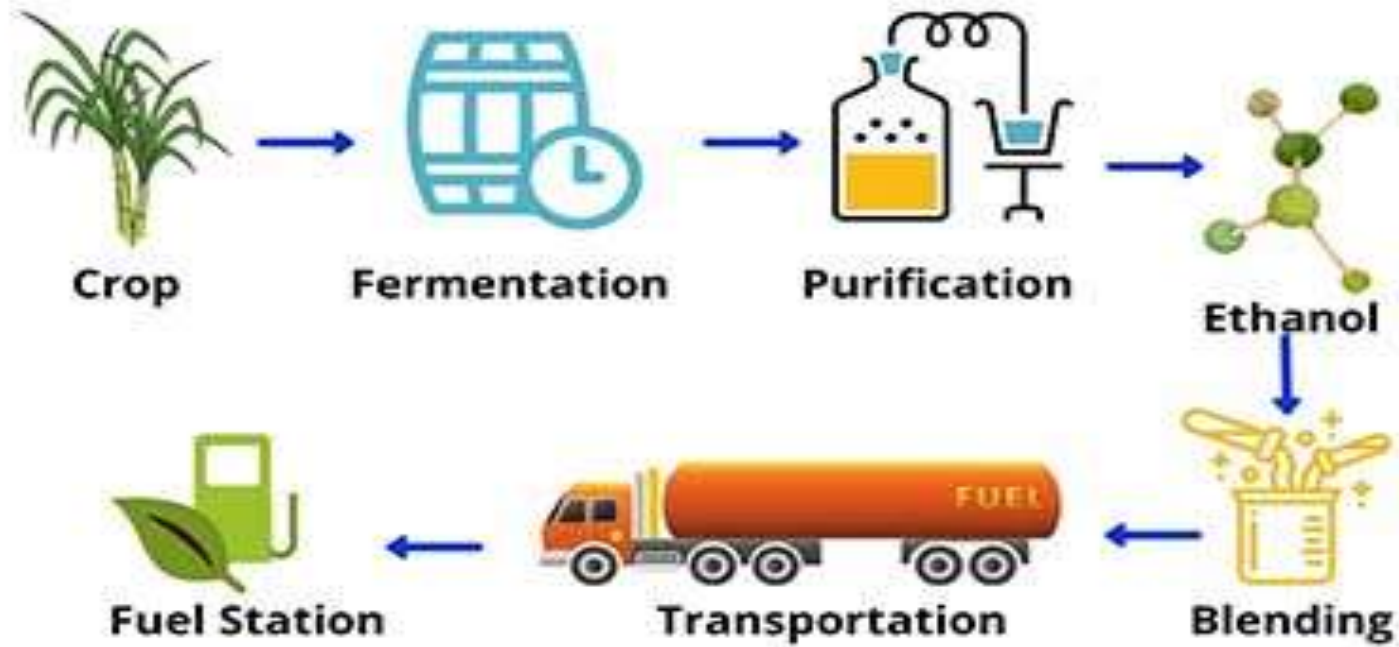
**Reduced
income**

POLLUTION

High Social Impact- CIRCULAR ECONOMY



Value Chain Analysis



Cane Biomass for African Biofuel.



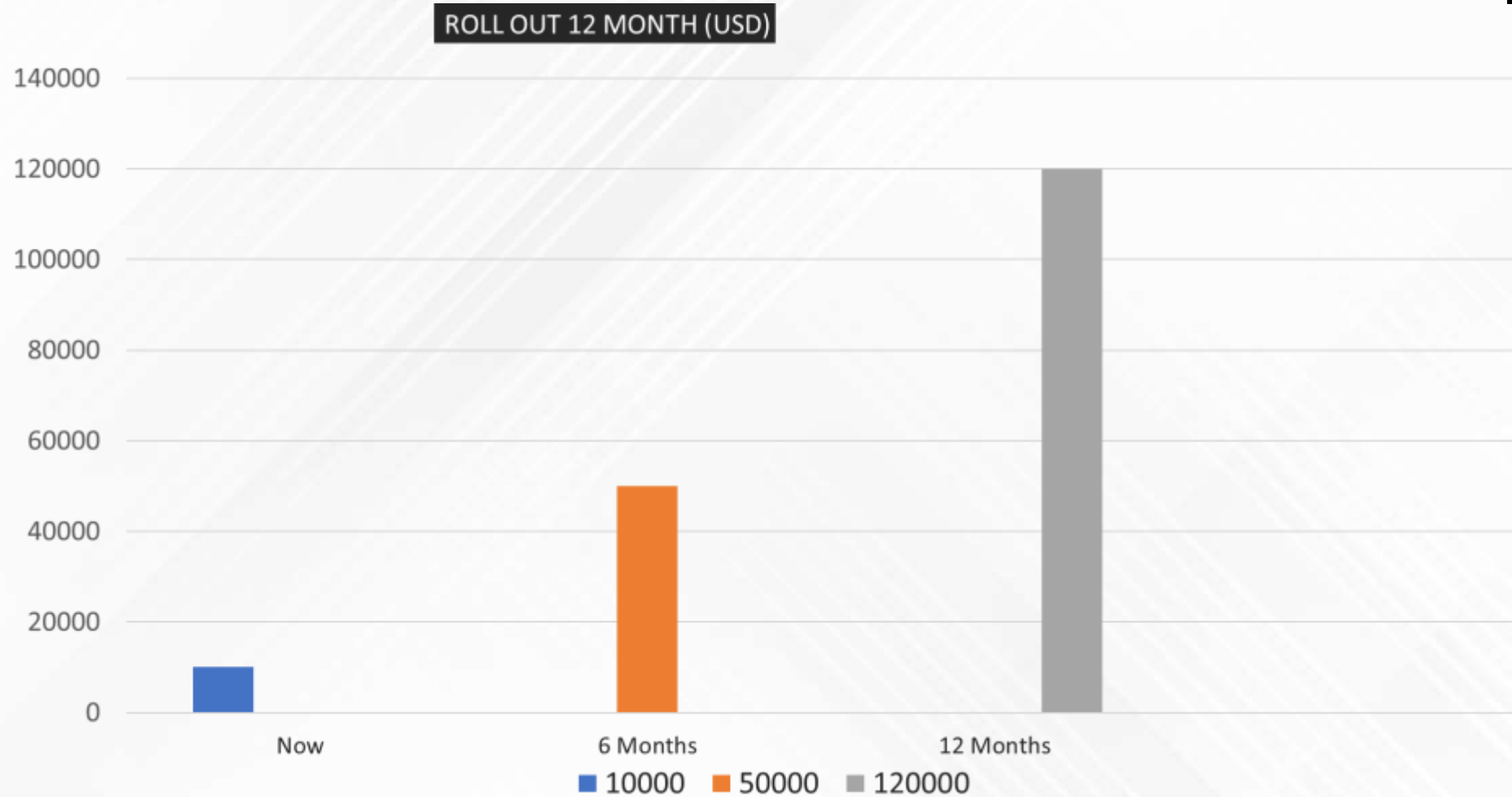
NEXT



Pilot :ETHANOL PRODUCTION

Alcohol Distilleries - 20,000 liters/Day

Growth plan mopping /Liters of Bioethanol



Revival of Natural Forests and river restoration /Carbon sequestering



OUR IMPACT

MULTIFACETED APPROACH

- **INCOME /WAGES SAVING**
 - *Boosting family budget shortfalls in direct family savings*
 - *Women & Girls can find time to participate in national building. Without worry for looking around for cooking fuel*
- **ENVIRONMENTAL IMPACT :**
 - A bioethanol fire is a **cleaner, safer, more eco-friendly way to enjoy a real fire in the home.**
 - INSTANT CLEANING
 - The fuel doesn't emit smoke or fumes, so you don't need a chimney. Bioethanol fireplaces are simple to set up - just unpack it, fill it with bioethanol fuel, and enjoy a real flame within minutes.
- **ZERO WOOD USE**
 - *Increased tree cover and land regeneration*
 - *Forest saving*
 - *Biodiversity conservation*
- **ZERO INDOOR AIR POLLUTION**
 - *Fresh Clean Homes and Air Quality improvement*
 - Bioethanol (methylated spirits) is a compelling alternative to fossil fuelled fires; **it's both environmentally friendly** and energy efficient, without the harmful greenhouse gas emissions associated with gas or wood fires.
 - *Repelling Indoor blood sucking Insects reduced*
- **Climate Action**
 - *Micro climate*
- **SOCIAL IMPACT :**
 - Quality JOBS created
- **JOB CREATION**
 - Decent Jobs
- **ECONOMIC IMPACT :**
 - **FOREX XCHANGE SAVINGS , Dependancy on fossil fuels reduction**
 - **Gender Empowerment**
 - Increased Health and Nutrition



Current constraints



Budget Available for scrutiny;	Manufacturing resources	Distribution logistics:	Target audience	Availability of fuel	Government regulation Reviews
<p>Initial Grant:</p> <ul style="list-style-type: none"> • Branding/Communication Ksh 2,000,000 • Public awareness and Capacity building/Public relations 2,000,000 • Cook stoves Units 6000 x1650/ksh9,900,000 • Bioethanol -100,000 liters x 130/ ksh 13,000,000 • Policy unlocking Interactions Sessions-(6) @1M eachx6 / Ksh 6,000,000 • Administration /Finance software/Digital transition M& E-5,000,000 <p>TOTAL:KSH 32,500,000</p> <p>USD 250,000</p>	<p>Lack of awareness on the pollution and general poverty</p> <p>Use of Existing Cook Appliance Manufacturers needing upfront materials Due to dilapidated factories /abandonment of kerosene stoves manufacturing gaps</p> <p>Low production of ethanol in sugar factories causing unfocused production of ethanol Lack of dedicated bioethanol sites Undeveloped lignocellulose feedstock value chains</p>	<p>Use of Existing Infrastructure in Kiosks/ shops / partnerships independent station owners association (POAK)</p>	<p>Cooperatives/ Societies</p> <p>Workers in Clusters/ tea/Flower farms</p>	<p>Mopping up Local sites Kibos Awassi</p> <p>Dedicated lines London distillers/Small distilleries</p> <p>Neighboring countries around East</p>	<p>EMCA</p> <p>KEBS</p> <p>KIRDI</p> <p>KIPI</p>
<p>YR1 (3) M& E sessions</p>	<p>Jua Kali –Scrap use</p>	<p>Local Hardware stores</p>	<p>Eateries/Hotel owners</p>	<p>Trans Mara</p>	<p>KRA Fiscal review</p>



MARKET SEGMENT

- Young small families Age 21+
- Casual workers in factory and self employment
- Schools or hospitals



BOARD MEMBERS- Eng.Agina I (chairman)Prof.Akinyi Nzioki(Gender)Eng.Nelson Gwara(Operations)Samora Omuodo Finance/IT Njogu (Marketing/Sales)Mbagathi S(Strategy)

STAFF MEMBERS- Ms.Lorna Omuodo(CEO)Eng Mosei G(Operations)Njogu Marketing/Sales) (Finance/IT)

Linkedin: <https://www.linkedin.com/in/israel-agina-806b6574/>
<https://www.linkedin.com/in/lorna-omuodo-b7b5651a/>

THE TEAM
50+Years Combined Experience



Mrs. Lorna Omuodo-Founder

- Chief Executive Officer 30+ Years Experience.
- BA Sociology (Punjab Uni India)
- Development Sociologist for ISO 13064
- Bioenergy Expert



Mrs. K. Muiyuro

- Marketing and Behavior Change lead-8+ Years
- B.A PR and Communication (Heidelberg SA)



MR. FRANCIS OWINO OLOO

Been General Manager In a Commissioned Ethanol Factory-16+ years
• MBA in Strategic Management University of Nairobi

.Diploma in Sales & marketing University of Nairobi
Diploma in Clearing & Forwarding Management Kenya College of Commerce



AWARDS





SUSTAINABLE DEVELOPMENT GOALS

3 GOOD HEALTH
AND WELL-BEING



5 GENDER
EQUALITY



7 AFFORDABLE AND
CLEAN ENERGY



13 CLIMATE
ACTION



15 LIFE
ON LAND



Project partnerships

2023-24

