

**FOOD WASTE INNOVATION CHALLENGE**

# **SELECTION COMMITTEE ENTREPRENEUR PROFILE REPORT**

PREPARED FOR:



# AFRICA GREEN ENERGIES

**SIBONGISENI  
GAQA**



## BIOGAS

BLACK OWNED

FEMALE OWNED

Employees: Three

Phase: Pilot & Testing Completed

Founded: 2019

Total Annual Revenue: None

Location: Eastern Cape

Service: Eastern Cape

Africa Green Energies is a biogas production company in the Eastern Cape. Their goal is to become a leading biogas producer in Africa.

In 2020 Sibongiseni imported a home biodigester for R 17 000 as a proof of concept.

The business intends to locally manufacture biodigesters for household, rural comminute and small business use.

These biodigesters will be manufactured at a total cost of R 2 500 each, making their price point accessible for lower LSM households and communities where electricity for cooking may not be accessible.

Their vision is to one day produce biogas at a large scale into the energy grid.

RAISING  
**R5  
MILLION**

ASSETS & WORKING CAPITAL

DEBT & EQUITY

Sibongiseni will use this capital to setup a manufacturing plant to produce biodigesters.

This will include the manufacturing of a prototype, for testing and product positioning and preparation for market. Including the working capital required to produce biodigesters for households and small-scale farms and eateries.



Africa Green Energies has only completed its initial trial and testing, but does not yet have an indication of the total capacity of food waste diversion from landfill or GHG reduction for as the business is still building it's first prototype.

Impact will be measured against numerous SDGs such as 12.3, 12.5 and 13.2.

# BIOBIN™ SOUTH AFRICA

**BRIAN DENIS  
KÜSEL**



## COMPOSTING

Employees: TBC

Phase: Scale Impact

Founded: 2017

Total Annual Revenue: +R2.6m

Location: Gauteng

Service: Nation Wide

BiobiN is an on-site, capture, containment and processing patented system for food and organic waste in an easily accessible vessel.

Invented in Australia in 2000 as a solution to diverting chicken mortalities from landfill sites, the BiobiN is now used in countries around the world.

No chemicals or any microbes are needed, making it the easiest and most cost effective on site food and organic waste management system.

Forcefully inducted air starts the composting process while the patented bio filter process starts turning waste into compost.

BiobiNs are available for different applications and sizes, able to produce upto 7.5 tons of organic and food waste.

RAISING  
**R3  
MILLION**

TANGIBLE ASSETS

DEBT & EQUITY

BiobiN will use the investment to purchase an additional 30+ BiobiNs to expand their current reach.

This will assist management in reaching their objectives of 150 BiobiNs in operational in South Africa.



**3 300 tons**

Over the last three years BiobiN have diverted over 3'300 tons of food and organic waste from landfill.

The increase in the number of BiobiNs will have a direct impact in scaling these diversion of food and organic waste from landfill.

# FOOD MASTERS SA

LINDA  
MANYEZA



## PRESERVATION

BLACK OWNED

FEMALE OWNED

Employees: Three  
Phase: Pilot & Testing  
Founded: 2016 / 2021  
Total Annual Revenue: None  
Location: Muldersdrift  
Service: Gauteng

Food Masters SA rescues food destined for landfill, preserving it through dehydration to extend its shelf life.

in 2019 Linda purchased her first equipment to start dehydrating and preserving food. This includes a low-tech solar dryer, tunnels using the sun to dehydrate food, as well as a small electric dryer.

Her vision is to now scale her production to meet customer demands for both health conscious consumers for convenient snacks, as well as lower LSM groups that may not have access to refrigeration to store food.

Linda is also looking into opportunities to provide dehydrated health foods for food parcels and feeding schemes. As dehydrated food has a longer shelf life and doesn't require refrigeration, while preserving healthy nutrients for a balanced diet at a low cost.

RAISING  
**R2.5  
MILLION**

ASSETS & WORKING CAPITAL

EQUITY ONLY

Linda would like to scale up their production to meet their customer demands by purchasing a 2-ton hot water dryers and hot water kettle.

The investment would also include a vehicle and working capital to purchase raw materials and market their products.



Food Masters SA rescues food destined for landfill due to quality, over supply or no market demand.

Their mission is to support the stabilisation of food security for vulnerable communities.

The hydrators make use of boilers fuelled by biomass to dry the dehydrate and preserve food.

# GLOBAL WORMING

**JULIE  
MEDHURST**



## VERMICULTURE

FEMALE OWNED

Employees: Three

Phase: Scale

Founded: 2016

Total Annual Revenue: +450k

Location: Cape Town

Service: Western Cape

Global Worming provide a range of domestic and industrial sized worm bins, worm farms and organic fertilisers.

In 2016 Julie, a successful entrepreneur, started experimenting with vermiculture as a passion, to what grew into her business Global Worming.

Today Global Worming have the largest locally produced variety of domestic and industrial sized worm farms available in South Africa.

Her business has grown to include customers such as Stodels and other nurseries, and an array of online retailers.

Julie has developed her own mould and produces her worm farms locally in South Africa which retail as a complete DIY kit that enables even a novice to start worm farming from their own home.

RAISING  
**R2  
MILLION**

ASSETS & WORKING CAPITAL

EQUITY & DEBT FUNDING

Julie would like to expand to a second premises to increase her capacity to process food waste from residents, eateries and businesses in Cape Town.

The investment will support the expansion and enable the business to develop its ecommerce and marketing efforts to sell direct to customers across South Africa.



Global Worming's worm farms are manufactured to last, and will continue to help consumers divert their food and organic waste from landfill for many years to come.

The business also offers a food waste collection service for eateries and businesses with a byproduct of worm tea and fertiliser sold to nurseries and the direct public.

# KHEPRI BIOSCIENCE

**BANDILE  
DLABANTU**



## BSFL

BLACK OWNED

Employees: Three

Phase: Pilot & Testing Completed

Founded: 2016

Total Annual Revenue: +R130k

Location: Johannesburg

Service: Gauteng

Khepri Bioscience is a bioconversion research and sustainable animal feed producer.

The business is producing sustainable and low-cost food through biotechnology and the use of black soldier flies.

Khepri Bioscience solves three problems, food waste from our kitchens which ends up in landfill sites, animal runoff from farming which enters rivers and and overfishing for fish meal to feed animals.

They are converting organic and food waste using insects into usable products such as chitin, used in manufacturing, pharmaceuticals and water treatment. As well as protein meal for animal feed to create an alternative to the expansive and unsustainable fish meal.

Bandile is currently consulting within the butchery and abattoir sectors regarding efficient and proper disposal of wastes while he looks to raise investment to scale his BSF breeding programme onto a farm.

RAISING  
**R14  
MILLION**

ASSETS & WORKING CAPITAL

DEBT & EQUITY

Bandile would like to use the funds to purchase upstream waste processing equipment and a collection vehicle.

Bandile is also finalising a grant from the DTI that will match the investment of up to R14m, enabling Khepri Bioscience to deploy up to R28m in investment in scaling production.



**252.5 tons**

Over the last three years Khepri Bioscience has diverted over 250 tons of food and organic waste from landfill.

Their solution looks to divert a further 1200 tons of food waste and produce 1800 tons of insect meal a year, replacing fish meal and soy, protecting life on land and in the ocean.

# NAMBU GROUP

LOWELL  
SCARR



## BSFL

RURAL

Employees: Eight

Phase: Scale

Founded: 2018

Total Annual Revenue: +R73k

Location: Makhanda / Grahamstown

Service: Eastern Cape, Gauteng

Nambu turns food waste into nutritious feed for chickens, pigs, fish and pets by feeding organic waste to larvae of the Black Soldier Fly.

Nambu is an early-stage Insect Protein Company that turns food 'waste' into high value insect protein.

They do this by feeding a variety of food and organic waste sources to the Black Soldier Fly larvae. The larvae are reared from hatchlings to harvest in a period of 15-17 days, at which point they are separated from their feed substrate and prepared for processing and sale.

Their methods are low tech and replicable, driving greater employment opportunities and localised solutions to food and organic waste.

RAISING  
**R25  
MILLION**

ASSETS & WORKING CAPITAL

DEBT & EQUITY

Lowell is looking to invest the capital into their expansion of new facilities in East London, Port Alfred and Gqeberha, with further plants envisaged for Tzaneen (Mopani District), Mthatha, George and Kokstad over the next three years.



Nambu's facility in Makhanda, Eastern Cape is expected to recycle up to 1 440 tons of food waste each year.

Their impact further extends to the increased food waste reclamation, supporting local food systems - particularly emerging poultry, pork and aquaculture producers. Enabling more resilient and sustainable food systems, as well as direct and indirect job creation.

# ORGANIC WASTE TO ENERGY

**ROSLEY  
SIBANDA**



## BIOGAS

BLACK OWNED

FEMALE OWNED

Employees: None, Founder Run

Phase: Pre-Seed / Start-up

Founded: 2019

Total Annual Revenue: None

Location: Cape Town

Service: Western Cape

Organic Waste to Energy (OWE) is providing sustainable waste management services with the added benefit of energy independence.

Looking to build an industrial biogas plant in Cape Town.

OWE has already secured the support of a large waste management provider, as well as a large retail complex to purchase the byproducts of the Biogas production as while producing sustainable energy for their operations.

Rosley won the Africa Green Women of the Year Award and is also Top 30 Finalists in the City of Cape Town 2021 Smart Supplier Programme.

RAISING  
**R1.5  
MILLION**

ASSETS

DEBT & EQUITY

Rosley would like to raise an investment to construct a biogas plant as an initial pilot in the Western Cape, with a vision to expand to larger plants upto 3Mw nationally.

Rosley is also negotiating with the DTI to match funding for the pilot, as well the larger industrial processing plant on commissioning.



An industrial 3Mw Biogas plant will divert 180 000 tons of food and organic waste from landfill each year, while producing a sustainable energy source.

The future expansion of these Biogas plants will furthermore contribute significantly to GHG reductions and employment for each facility awarded.

# RESCUE BITE.COM

**SAMUEL MALEDU  
& BOITUMELO  
MERAPE**



## TECH

BLACK OWNED

50% FEMALE OWNED

YOUTH OWNED

Employees: Two Founders

Phase: Concept & Testing Done

Founded: 2020

Total Annual Revenue: +R10k

Location: Johannesburg

Service: National

Rescuebite.com enables food retailers and eateries to sell their surplus food and reduced-to-clear food direct to the public at a reduced cost.

RescueBite is already available on Google Play, and the Apple App Store for download.

Marketing todate has been focused on WITS and the University of Johannesburg alone, with opportunities for expansion to other universities across South Africa.

Since they recently launched their website has already had over 10 000 hits, with an average spend of R 135 basket size. The have also already secured over 7 00 delivery drivers registered on the app.

RAISING  
**R2.5  
MILLION**

ASSETS & WORKING CAPITAL

DEBT & EQUITY

Sam and Boitumelo are looking to invest in marketing the service and growing their national footprint of retailers.

They've identified a challenge with registered drivers and hope to assist drivers with the purchase of electric bikes to deliver to their customers.



Rescuebite.com have the opportunity to deliver surplus and reduced-to-clear food directly to students at universities for a reduced cost.

Our team have also identified an opportunity to partner and collaborate with Food Forward ad SA Harvest on food that is not retailed through the app.

# THE COMPOST KITCHEN

HIMKAAR  
SINGH



## VERMICULTURE

BLACK OWNED

YOUTH OWNED

Employees: Three

Phase: Scale

Founded: 2019

Total Annual Revenue: +R510k

Location: Johannesburg

Service: National

The Compost Kitchen collect food waste from households and recycle it into vermicompost, which they give back to their customers.

The Compost Kitchen was launched in 2018, but in less than 4 years, this incredible initiative is making waves globally, and now the United Nations (UN) has chosen this brilliant environmental concept as one of the “Top 300 Best Practices on Sustainability in the world”.

Himkaar won't stop there and wants to be the first in Africa to develop a kitchen composting waste bin that produces organic waste within hours.

The first prototype has already been developed by 'Lomi', the most successful Indiegogo campaign in 2021, raising over R90m with over 18 700 backers.

RAISING  
**R3  
MILLION**

ASSETS & WORKING CAPITAL

DEBT & EQUITY

Himkaar wants to use the investment to develop and rapidly prototype The Compost Kitchen organic waste bin to take to market.

The investment includes research, development and building a prototype, to marketing the product for Crowdfunding the organic waste bin.



Compost Kitchen has grown steadily to now include +230 monthly customers and +200 ecommerce customers since launch.

Which diverted 30 tons of food waste from landfill, avoiding 50 tons of CO2-e, and have given back 2.2 tons of vermicompost to their customers.

# UNTUM SOLUTIONS

**NOMUNTU  
NDHLOVU**



## BSFL

BLACK OWNED

FEMALE OWNED

Rural

Employees: Founder Run

Phase: Pre-Seed / Start-up

Founded: 2019

Total Annual Revenue: None

Location: Malelane, Mpumalanga

Service: National

Untum Solutions is building a Black Soldier Fly Breeding system to eradicate food waste.

Nomuntu Ndhlovu is a committed and passionate young entrepreneur seeking for opportunities to not only advance her businesses personally but contribute to community through developing her businesses and other young entrepreneurs and assisting in combating social ills whilst contributing to improving sustainable environmental impact and providing awareness on climate change.

Being the Director of Nomuntu Holdings, one of the founding members of Imbewu Agricultural Primary Cooperative and a director at SiyaBuddy Recycling and Waste Management; she has vast experience in business and in waste management and agriculture.

RAISING  
**R2.7  
MILLION**

ASSETS & WORKING CAPITAL

DEBT & EQUITY

Nomuntu is seeking investment to purchase the equipment required to produce the larvae, purchasing insect pods and the black soldier production system.

With a vision to replicate a low tech solution to rural communities for small-scale farmers.



Untum Solution plan to process upto 360 tons of food waste annually through their Black Soldier Fly Larvae plant.

Assisting in reducing the use of fishmeal as a form of protein for animal feed. This helps protect fish under the sea and contributes towards stopping the extinction of fish species due to over fishing.

# FOOD WASTE INNOVATION CHALLENGE 2021 ENTREPRENEURS



**AFRICA GREEN ENERGIE**  
**GLORIA SIBONGISENI GAQA**



**BIOBIN SOUTH AFRICA**  
**BRIAN DENIS KÜSEL**



**FOOD MASTERS SA**  
**LINDA MANYEZA**



**GLOBAL WORMING**  
**JULIE MEDHURST**



**KHEPRI BIOSCIENCE**  
**BANDILE DLABANTU**



**NAMBU GROUP**  
**LOWELL SCARR**



**OWE**  
**ROSLEY SIBANDA**



**RESCUEBITE.COM**  
**SAMUEL MALEDU**



**THE COMPOST KITCHEN**  
**HIMKAAR SINGH**



**UNTUM SOLUTIONS**  
**NOMUNTU NDHLOVU**



“Through the right people focusing on the right things, we can, in time, get on top of a lot if not most of the problems of this world. And that’s what a number of us are trying to do.”

*Paul Branson*



**SCREW IT,  
LET’S DO IT!**

**BRANSON CENTRE OF  
ENTREPRENEURSHIP  
SOUTH AFRICA**  
*Branson*

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